# 2024-2025 Kentucky White-Tailed Deer Harvest and Population Report

Kentucky Department of Fish and Wildlife Resources





| e of Contents                                | Page |
|--|------|
| Introduction                                 | 2    |
| Deer in Kentucky                             | 2    |
| General Information about the 2024-25 Season | 2    |
| Licenses and Permit Fees                     | 2    |
| Season Dates and Bag Limits                  | 3    |
| 2024-25 Deer Hunting Zones                   | 3    |
| Changes for the 2024-25 season               | 3    |
| Changes for the 2025-26 season               |      |
| Population Status                            |      |
| 2024-25 Harvest Results                      |      |
| Total Harvest Summary                        |      |
| Antlered Buck Harvest Results                |      |
| Female Harvest Results                       |      |
| Male Fawn Harvest Results                    |      |
| Male Harvest Age Class Comparison            |      |
| 2024-25 Management Goals                     |      |
| Weapon Type Harvest Summary                  |      |
| Monthly Harvest Results                      |      |
| Harvest Results by Permit Type               |      |
| Public Land Harvest                          |      |
| Public Land Harvest by Region                |      |
| Deer Quota Hunt                              | 14   |
| Deer Permit Sales                            | 15   |
| Habitat Management                           |      |
| Current Research  Damage Mitigation          |      |
| Disease Surveillance                         |      |
| Hemorrhagic Disease (HD/Blue Tongue)         |      |
| 2024 Chronic Wasting Disease (CWD) Response  |      |
| CWD Regulations                              |      |
| Contacts                                     | 22   |

### Introduction

The Deer Program is administered under the Wildlife Division of the Kentucky Department of Fish and Wildlife Resources (KDFWR). It is overseen by a nine-member commission who are nominated by Kentucky's sportsmen and sportswomen and appointed by the Governor. The department employs about 450 full-time staff, which includes conservation officers, wildlife and fisheries biologists, conservation educators, and information and technology, public relations, customer service, and administrative professionals.

KDFWR funding is provided primarily by the sale of hunting and fishing licenses, boating registration fees, and federal funds, including grants based on the number of licenses sold in the state.

The Deer Program is tasked with managing the white-tailed deer herd in the state to provide ample hunting opportunities while balancing the needs of consumptive and non-consumptive user groups. The Deer Program is comprised of the Program Coordinator, Joe McDermott, and two Deer Program Biologists, David Yancy and Tommy Apostolopoulos. Deer Program staff are based out of the KDFWR Headquarters in Frankfort.

# **History of Deer in Kentucky**

White tailed deer are native to Kentucky and were first reported by Dr. Thomas Walker in 1750 to be "plentiful" in portions of what is now southeastern Kentucky. This report was corroborated in 1773 by explorer Robert McAffee, stating that the number of deer around Henry County was "astonishing." However, due to unregulated harvest, the deer population began to decline rapidly in subsequent years. By 1810, naturalist John James Audubon noted that the vast numbers of deer that once roamed the Ohio River valley of Kentucky had already "ceased to exist." In 1946, KDFWR (known then as the Division of Game and Fish) initiated a comprehensive three-pronged white tailed deer project to facilitate the restoration of this important species. Components of this project consisted of refuge establishment, trapping and translocation of live deer, and habitat improvement work across the entire Commonwealth. Active restoration efforts concluded in March of 1999 and, after 52 years of trapping and translocation, 10,096 white-tailed deer had been stocked around the state. Kentucky now has a high-quality deer population that ranks sixth for all-time Boone & Crockett buck production and is estimated to be over one million animals strong.

### General Information about the 2024-25 Season

### Resident Nonresident License **Annual Hunting License** \$27 \$160 Senior/Disabled License \$12 N/A Sportsman's License \$95 N/A Youth Sportsman's License \$30 N/A **Statewide Deer Permit** \$35 \$235 **Bonus Antlerless Permit** \$15 \$15 **Youth Deer Permit** \$10 \$15

### **License and Permit Fees**

|                       | Early Season                   | Late Season        |  |  |  |
|-----------------------|--------------------------------|--------------------|--|--|--|
| Archery               | Cont. 7, 2024 Jan. 20, 2025    |                    |  |  |  |
| Youth/Senior Crossbow | Sept. 7, 2024 – Jan. 20, 2025  |                    |  |  |  |
| Crossbow              | Sept. 21, 2024 – Jan. 20, 2025 |                    |  |  |  |
| Youth-only Gun        | Oct. 12 – 13, 2024             |                    |  |  |  |
| Muzzle-loader         | Oct. 19 – 20, 2024             | Dec. 14 – 22, 2024 |  |  |  |
| Modern Gun            | Nov. 9 – 24, 2024              |                    |  |  |  |
| Free Youth Weekend    | Dec. 28 – 29, 2024             |                    |  |  |  |

|        | Antlerless Bag Limit   | Antlered Bag Limit |
|--------|--|--------------------|
| Zone 1 | Unlimited with statewide and additional deer permits               |                    |
| Zone 2 | No more than 4 deer  |                    |
| Zone 3 | No more than 4 deer, no more than 1 antlerless with modern firearm | 1 statewide        |
| Zone 4 | No more than 2 deer, no antierless with modern firearm             |                    |

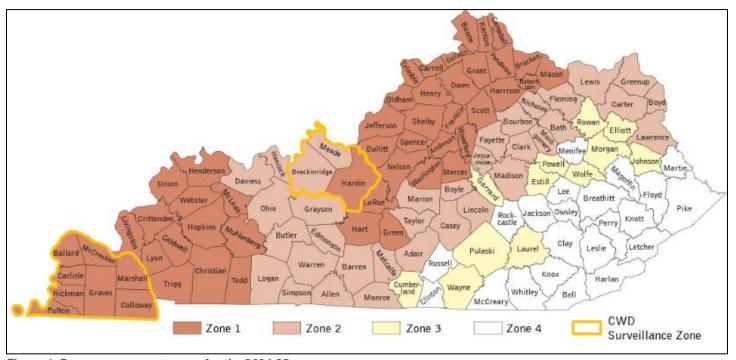


Figure 1. Deer management zones for the 2024-25 season.

# Changes for the 2024-25 Season

- The December Antlerless-Only Quota Hunt on Veteran's Memorial WMA has been removed.
- o The 3-day January Firearms Open Hunt on West Kentucky WMA has been removed.
- Language was clarified from "female" to "antlerless" deer that qualify for Preference Points on Ballard, Clay, and Taylorsville Lake WMA Quota Hunts.

- The additional deer permit granted by the Commissioner to an unsuccessful quota hunt applicant has been removed.
- Tree stands on WMAs can now be labeled with the hunter's KDFWR Customer ID Number.
- Breckinridge, Meade, and Hardin counties were added to the CWD Surveillance Zone following the detection of a captive CWD case in Breckinridge County.

# Changes for the 2025-26 Season

- o Baiting and feeding ban is rescinded in CWD Surveillance Zones, per Commissioner Authority
- A 2-day Early Antlerless Firearms season is in effect September 27-28, 2025, per Commissioner Authority
- Henderson, Union, and Webster counties added to the CWD Surveillance Zone following a wild CWD detection <2mi from KY border in Posey County, Indiana</li>

# **Population Status**

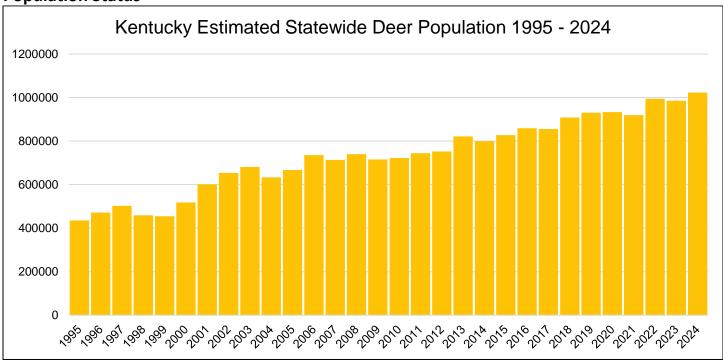


Figure 2. Estimated statewide deer population, 1995-2024.

Overall, the statewide deer population estimate shows a stable to increasing trend (**Figure 2**). The 2024 statewide estimate was 1,022,977 deer at the start of the 2024-25 hunting season, which is a 4% increase from 2023-24 (985,386). Despite the unlimited antlerless bag limits in Zone 1 counties, these areas are still witnessing growth along with the rest of the state. This population estimate is generated from harvest and age structure data, which is collected through tele-check reporting and by KDFWR staff.

Of the 120 counties in Kentucky, 51 are designated as Zone 1, 34 as Zone 2, 13 as Zone 3, and 22 as Zone 4. Zone 1 counties have the highest deer densities in the state, are considered reduction zones, and have an unlimited bag limit on antierless deer. At the other end of the spectrum are Zone 4 counties where the deer densities are the lowest and antierless take is very limited. Zone 2 and 3 counties are at or near population goals and bag limits aim to maintain the densities present in those counties.

Statewide and county deer population trends are important; however, it is also important to acknowledge that deer populations can vary considerably within a region and even within a county.

# 2024 - 2025 Total Harvest Summary

The total number of deer harvested during the 2024-25 deer season (**Figure 3**) was 149,868 which is the second highest harvest on record. We observed a 6.4% increase from the 2023-24 season (140,811) and the 2024-25 season was over 6,000 deer more than the 10-year average (143,030). An average white and red oak mast drop coupled with desirable hunting weather during most of the season led to one of the best total harvests on record. The 2024-25 season was the third season in a row that over 100,000 hunters had at least one successful harvest. Hardin County saw the highest deer harvest this season with 3,228 deer, followed by Christian (3,092), Breckinridge (2,916), Grayson (2,834), and Hart (2,816) counties (**Figure 4**).

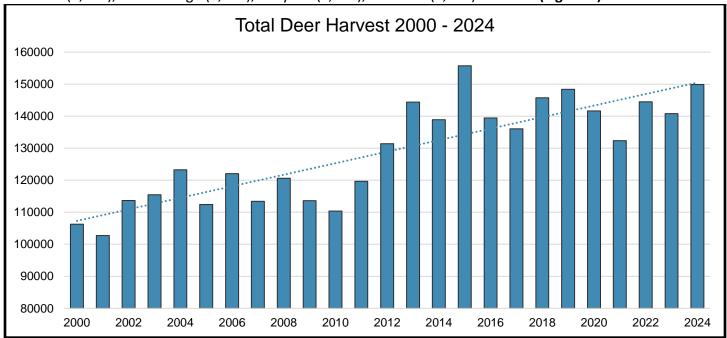


Figure 3. Total deer harvest by season; 2000-2024.

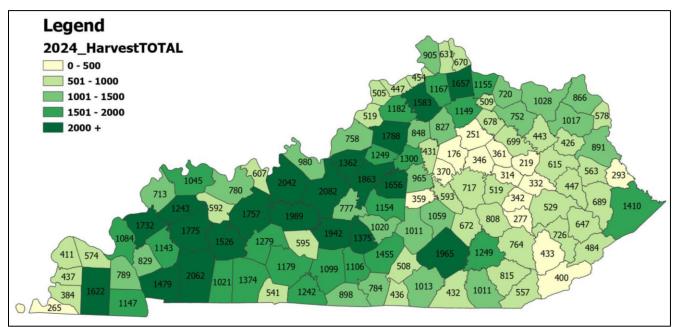


Figure 4. Total harvest by county for the 2024-25 deer season.

### **Antlered Buck Harvest**

The total antlered deer harvest (**Figure 5**) was 78,568 during the 2024-25 season, which is nearly 10% above the ten-year average (71,478) and the highest antlered buck harvest on record. Antlered buck harvest rose for the third time in three years, indicating population growth statewide. When comparing antlered deer harvested per square mile of habitat, Spencer County (4.7 antlered deer/sq. mi.) harvested the most antlered bucks with Anderson County (4.6 antlered deer/sq. mi.) coming in second, and Washington County (4.0 antlered deer/sq. mi.) coming in third. Fayette County (0.5 antlered deer/sq. mi.) harvested the fewest antlered bucks per square mile during the 2024-25 season (**Figure 6**).

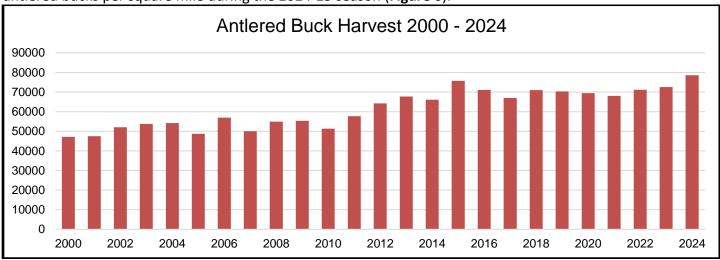


Figure 5. Antlered buck harvest, 2000-2024.

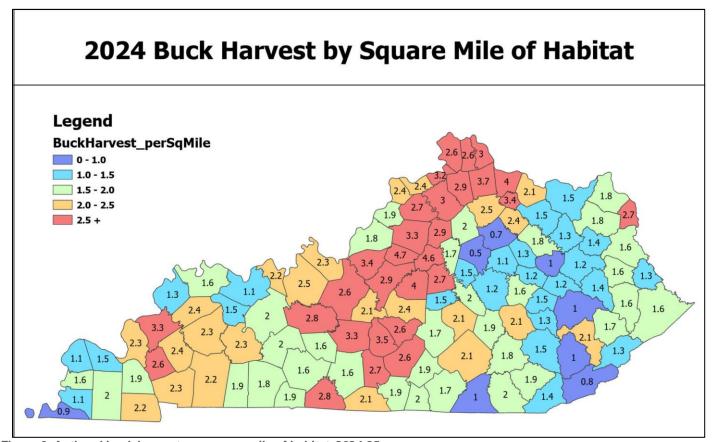


Figure 6. Antlered buck harvest per square mile of habitat, 2024-25.

### **Female Harvest**

The total number of female deer harvested (**Figure 7**) during the 2024-25 season was 63,797 deer. This is 0.4% below the ten-year average but saw a 4% increase since the 2023-24 season. Although the total number of females harvested has remained steady year-over-year, the proportion of the harvest that is female has steadily declined in the last decade (**Figure 7**). When comparing female deer harvested per square mile of habitat, Spencer County (4.7 female deer/sq. mi.) harvested the most female deer followed by Pendleton County (4.55 female deer/sq. mi.) and Anderson and Washington Counties (4.00 deer/sq. mi, respectively). Menifee County (0.1 female deer/sq. mi.) harvested the fewest female deer per square mile during the 2024-25 season (**Figure 8**).

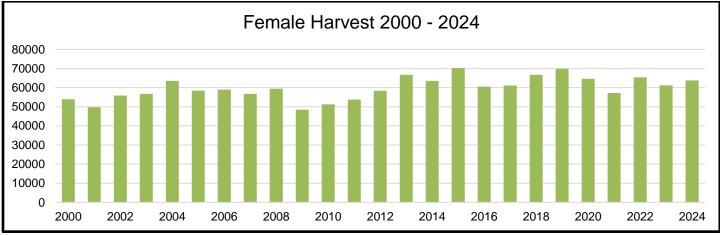


Figure 7. Female harvest, 2000-2024.

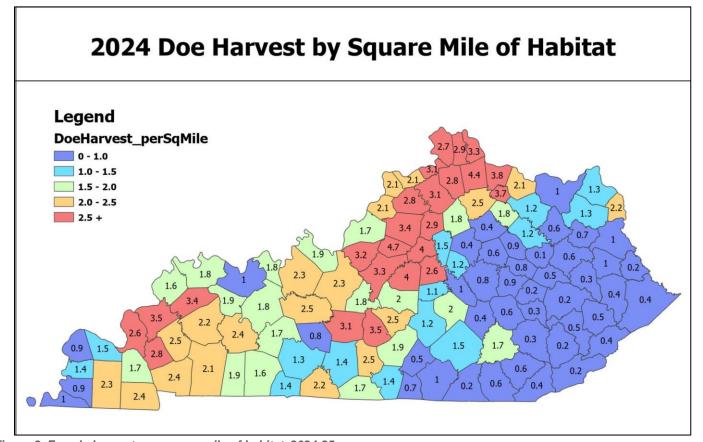


Figure 8. Female harvest per square mile of habitat, 2024-25.

### **Male Fawn Harvest**

The total male fawn harvest (**Figure 9**) was 7,503 during the 2024-25 season which is 6.7% below the ten-year average (8,044). The harvest in 2024-25 saw a 6% increase from the 2023-24 season (7,074), but the percentage of the harvest that male fawns make up has remained relatively stable (around 5%) for the last decade.

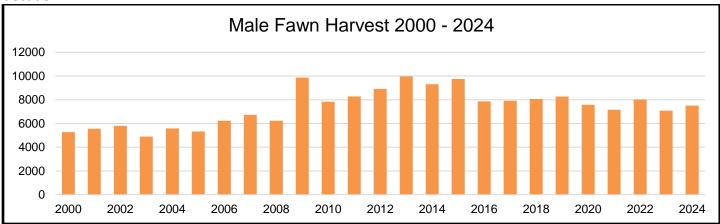


Figure 9. Male fawn harvest, 2000-2025.

## **Male Age Class Comparison**

Deer hunters have been asked to include whether the outside spread of their antlered deer is greater or less than 11 inches when checking their deer since 2016. Male fawn information was already being collected, but yearling and adult male information was needed to better understand the distribution of the varying age classes of males within the total harvest (**Figure 10**). In addition to providing this information to hunters, these data strengthen our population model and improve trend data used to manage deer populations. Hunters do a great job of letting younger age class males walk in hopes of seeing them reach their antler potential in older age classes.

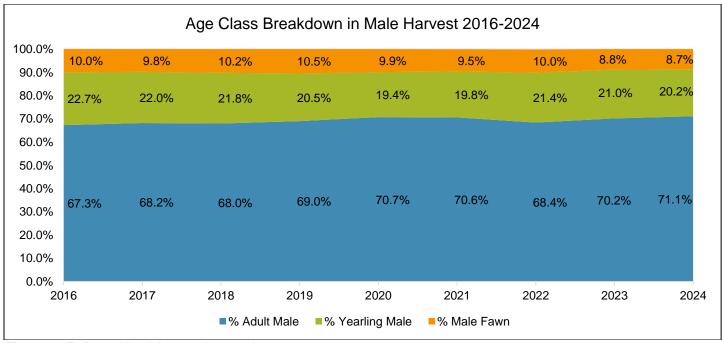


Figure 10. Estimated buck harvest by age class, 2016-2024.

### **2024 Management Goals**

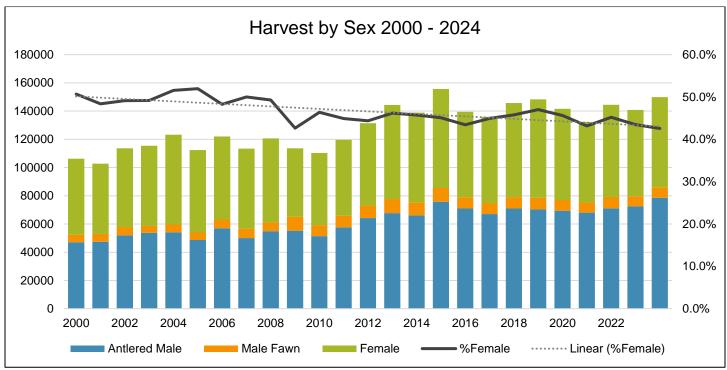


Figure 11. Harvest by sex, 2000-2024.

Kentucky's deer zones are controlled by manipulating the antlerless deer harvest limits within a county. Hunters in Zone 4 counties harvest an average of 1.1 deer per year while our most liberal Zone 1 counties only harvest 1.46 deer per year. That is a difference of < 1 deer per hunter per year despite an unlimited antlerless bag limit in Zone 1 counties. Couple this with the fact that 74.6% (80,842) of hunters only harvested one deer, and it's clear that there is a limit on the number of deer that hunters are willing or able to harvest. It is particularly discouraging when we consider that the national average is 1.8 deer per hunter per year. Lower harvest rates aren't always bad, however; they are actually desired in the more mountainous regions of Kentucky where the Department seeks to grow the herd (Zone 3 - 4). However, these lower-than-average harvest rates in the central and western 2/3s of the state are cause for concern as these counties (Zone 1 - 2) are slated for population reduction or maintenance.

A minimum of 30% of the standing crop of females must be taken each year to begin to see population level reductions. Higher harvest rates (40 - 50%) are more ideal, but are oftentimes unreasonable to achieve. Kentucky hunters killed 18% of the standing crop of females in 2024, which is insufficient in curbing population growth where needed in Zone 1 and 2 counties. However, prior to the writing of this report, the Department has never publicized deer harvest goals for individual counties so hunters had nothing to "shoot for." Beginning with the 2025 season, the Department will publish antlerless deer harvest goals for each of its Zone 1 and 2 counties to give local hunters a reasonable goal to achieve. Using 30% of the standing crop of females as a harvest goal, it is important to note that zero of our 92 Zone 1 and 2 counties obtained this goal in the 2024-25 deer season (Figure 12; Table 1).

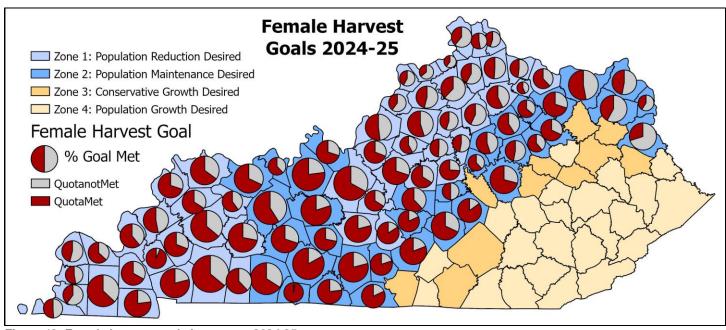


Figure 12. Female harvest goals by county, 2024-25.

| County       |      | Female<br>Harvest | County     | Harvest<br>Goal | Female<br>Harvest | County    | Harvest<br>Goal | Female<br>Harvest | County     | Harvest<br>Goal | Female<br>Harvest | County     | Harvest<br>Goal | Female<br>Harvest | County     | Harvest<br>Goal | Female<br>Harvest |
|--------------|------|-------------------|------------|-----------------|-------------------|-----------|-----------------|-------------------|------------|-----------------|-------------------|------------|-----------------|-------------------|------------|-----------------|-------------------|
| Adair        | 965  | 779               | Calloway   | 1202            | 920               | Gallatin  | 750             | 303               | Jessamine  | 321             | 200               | Meade      | 842             | 586               | Simpson    | 324             | 319               |
| Allen        | 964  | 745               | Campbell   | 1032            | 468               | Grant     | 1709            | 721               | Kenton     | 825             | 437               | Mercer     | 882             | 652               | Spencer    | 1517            | 884               |
| Anderson     | 1647 | 811               | Carlisle   | 497             | 263               | Graves    | 2019            | 1263              | Larue      | 723             | 477               | Metcalfe   | 907             | 730               | Taylor     | 796             | 655               |
| Ballard      | 496  | 228               | Carroll    | 740             | 266               | Grayson   | 1575            | 1260              | Lawrence   | 1343            | 404               | Monroe     | 677             | 552               | Todd       | 1148            | 710               |
| Barren       | 860  | 681               | Carter     | 1257            | 530               | Green     | 1210            | 1013              | Lewis      | 902             | 480               | Montgomery | 289             | 177               | Trigg      | 1325            | 1050              |
| Bath         | 505  | 342               | Casey      | 758             | 515               | Greenup   | 949             | 444               | Lincoln    | 803             | 684               | Muhlenberg | 1517            | 1095              | Trimble    | 733             | 306               |
| Boone        | 1602 | 629               | Christian  | 2224            | 1424              | Hancock   | 531             | 329               | Livingston | 1321            | 806               | Nelson     | 2002            | 1403              | Union      | 801             | 564               |
| Bourbon      | 183  | 107               | Clark      | 313             | 148               | Hardin    | 2090            | 1395              | Logan      | 1328            | 883               | Nicholas   | 550             | 352               | Warren     | 853             | 704               |
| Boyd         | 806  | 331               | Crittenden | 2410            | 1280              | Harrison  | 1353            | 771               | Lyon       | 642             | 604               | Ohio       | 1815            | 1078              | Washington | 1836            | 1204              |
| Boyle        | 385  | 194               | Daviess    | 696             | 475               | Hart      | 1617            | 1274              | Madison    | 513             | 362               | Oldham     | 961             | 386               | Webster    | 1725            | 1145              |
| Bracken      | 1574 | 761               | Edmonson   | 350             | 251               | Henderson | 1165            | 758               | Marion     | 1083            | 672               | Owen       | 2894            | 1088              | Woodford   | 598             | 284               |
| Breckinridge | 1711 | 1325              | Fayette    | 170             | 94                | Henry     | 1734            | 806               | Marshall   | 758             | 508               | Pendleton  | 2500            | 1223              |            |                 |                   |
| Bullitt      | 1363 | 938               | Fleming    | 606             | 423               | Hickman   | 568             | 226               | Mason      | 803             | 499               | Robertson  | 647             | 371               |            |                 |                   |
| Butler       | 1060 | 747               | Franklin   | 1344            | 598               | Hopkins   | 1863            | 1189              | McCracken  | 574             | 362               | Scott      | 1196            | 516               |            |                 |                   |
| Caldwell     | 1264 | 873               | Fulton     | 381             | 195               | Jefferson | 1015            | 530               | McLean     | 788             | 470               | Shelby     | 2399            | 1308              |            |                 |                   |

Table 1. Female harvest goals, total, and percent of goal met, 2024-25. Counties not mentioned are those with growth desired.

The deer population will likely continue to grow in much of Kentucky without proper management by hunters, much like herds north of Kentucky experiencing the effects of overpopulation. Overpopulation of deer herds may lead to adverse effects including but not limited to hindered antler development, smaller body size, increased disease spread, higher deer-vehicle collisions, crop destruction, skewed sex ratios, and lower quality buck hunting.



## **Harvest Summary by Weapon Type**

| Weapon        | Female | Male Fawn | Male   | Total   |
|---------------|--------|-----------|--------|---------|
| Archery       | 9,225  | 498       | 6,811  | 16,662  |
| Crossbow      | 7,277  | 546       | 5,947  | 14,020  |
| Firearm       | 40,373 | 5,165     | 61,674 | 107,392 |
| Muzzle-loader | 6,922  | 732       | 4,136  | 11,794  |
| Total         | 63,797 | 7,503     | 78,568 | 149,868 |

Table 2. Harvest by weapon type and sex, 2024-25.

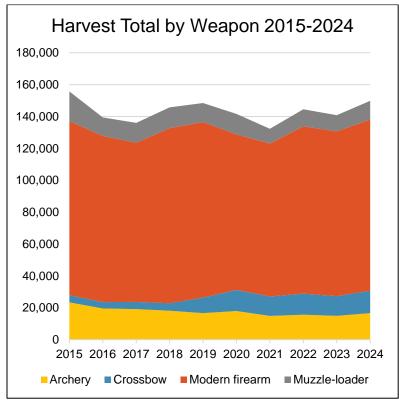




Figure 13. Total harvest by weapon, 2015-2024.

There were no significant changes in the percentage of the 2024-25 harvest by weapon type (**Table 2**; **Figures 13 - 14**) compared to the 2023-4 season. The archery harvest (16,662) was 11% of the total harvest, identical when compared to the last four seasons and the highest total harvest since 2020. The muzzleloader harvest (11,794) comprised 8% of the total harvest and the total was 6.2% higher than the five-year average (11,105). Crossbows represented 9% of the 2024-25 total deer harvest (12,467), a proportion that has not changed five years. However, the total number of deer harvested by crossbow has increased 33% in the last decade. This season saw the highest recorded harvest by crossbow by over 700 deer. Crossbow harvest has steadily increased in the last decade, particularly after crossbow season was liberalized in 2018. Interestingly, more antierless deer were taken with crossbows, muzzle-loaders, and archery equipment than antiered males, respectively. The modern gun harvest (107,392) saw a 4% increase from the 2023-24 season (103,315) and was also 4% higher than the five-year average (103,635). Seventy percent of the overall harvest occurred during the modern gun season (**Figure 14**) when most Kentucky deer hunters go afield. On average, 15% of the total harvest occurs on the opening day of modern gun season (**Table 3**).

| Moder | n Gun Seas  | on Harvest by I  | Day   |
|-------|---|--|---|
| Day   | Harvest   | % of Modern<br>Gun Harvest   | % of Deer<br>Season Harvest   |
| Sat   | 19667   | 19%  | 13%   |
| Sun   | 7870  | 8%   | 5%  |
| Mon   | 8112  | 8%   | 5%  |
| Tue   | 6962  | 7%   | 5%  |
| Wed   | 4868  | 5%   | 3%  |
| Thu   | 4371  | 4%   | 3%  |
| Fri   | 6027  | 6%   | 4%  |
| Sat   | 9886  | 9%   | 7%  |
| Sun   | 7269  | 7%   | 5%  |
| Mon   | 2457  | 2%   | 2%  |
| Tue   | 1725  | 2%   | 1%  |
| Wed   | 2277  | 2%   | 2%  |
| Thu   | 2911  | 3%   | 2%  |
| Fri   | 4428  | 4%   | 3%  |
| Sat   | 8171  | 8%   | 5%  |
| Sun   | 7531  | 7%   | 5%  |
|       | 102,323   | 100%   | 70%   |
|       | Day Sat Sun Mon Tue Wed Thu Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun Sat Sun | Day         Harvest           Sat         19667           Sun         7870           Mon         8112           Tue         6962           Wed         4868           Thu         4371           Fri         6027           Sat         9886           Sun         7269           Mon         2457           Tue         1725           Wed         2277           Thu         2911           Fri         4428           Sat         8171           Sun         7531 | Day         Harvest         Gun Harvest           Sat         19667         19%           Sun         7870         8%           Mon         8112         8%           Tue         6962         7%           Wed         4868         5%           Thu         4371         4%           Fri         6027         6%           Sat         9886         9%           Sun         7269         7%           Mon         2457         2%           Tue         1725         2%           Wed         2277         2%           Thu         2911         3%           Fri         4428         4%           Sat         8171         8%           Sun         7531         7% |

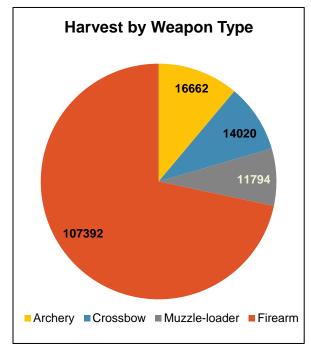


Table 3. Harvest by day, Modern Gun 2024-25

Figure 14. Harvest by weapon type, 2024-25.

### **Monthly Harvest Results**

The 7,476 deer harvested in September is the second-highest harvest for September since 2014. Fifty-three percent (3,514) of the deer harvested in September were female, and this year's September harvest was over 1000 animals higher than the 10-year average. October saw a harvest of 14,749 deer with 2,981 taken during Kentucky's Youth Firearms season and 3,881 during the following weekend's Early Muzzle-loader season. Hunters harvested 111,245 deer during November, most of which occurred during the statewide modern gun season (102,323). December's take remained strong for the third year in a row with 12,522 deer reported harvested. Similarly, the month of January saw a record 3,876 deer reported harvested.

### 2024-25 Harvest Results by Permit Type

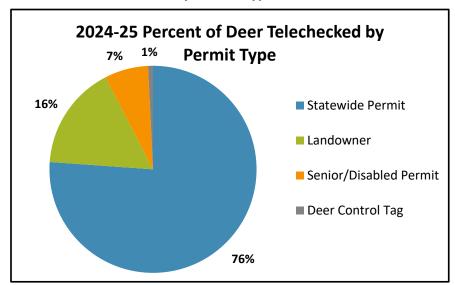


Figure 15. Percent of deer telechecked by permit type, 2024-25

The percentage of deer telechecked by permit type (Figure 15) has remained stable over the years. However, with the increasing number of senior/disabled licenses sold, we would expect to see the senior/disabled harvest increase and the statewide permit harvest to decrease over time. Resident landowners are not required to purchase a hunting license or deer permit if they are hunting deer on their own property but are still required to telecheck any harvested deer. Deer control tags are used to mitigate deer damage and issuance has remained stable over the past six years.

### **Public Land Deer Harvest**

KDFWR owns, leases, or manages more than 120 Wildlife Management Area's (WMA), Hunting Access Areas (HAA), and Outdoor Recreation Areas (ORA) across the state for public use (**Table 4**). Exceptions exist on some properties, but most of Kentucky's public areas are open to public hunting through quota hunts or under statewide regulations. The public areas are separated between five wildlife regions and are managed by regional staff in the Wildlife Division. The number of deer harvested on public land in Kentucky has been stable to increasing over the last decade in every wildlife region (**Figure 16**). Kentucky public areas saw the highest reported harvest on record with 7,767 deer in the 2024-25 season (**Figure 17**), and 4,139 antlered bucks taken on 129 different areas across the Commonwealth.

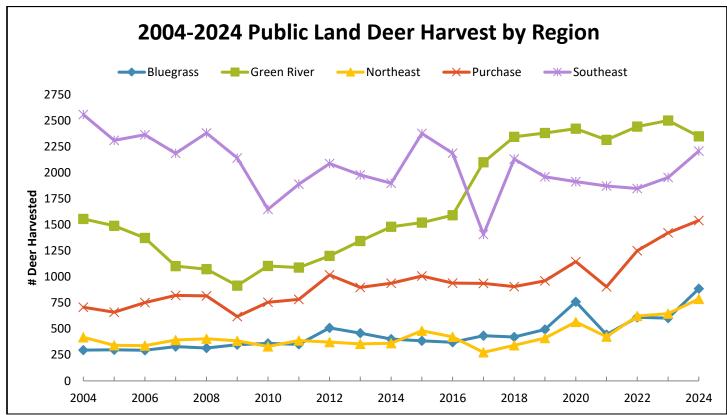


Figure 16. Public land harvest by Wildlife Region, 2004-2024.

| Acres of Public Hunting Areas by Wildlife Region |                           |  |  |  |  |  |
|--|---------------------------|--|--|--|--|--|
| Wildlife Region                                  | Public Land Hunting Acres |  |  |  |  |  |
| Bluegrass  | 83,483                    |  |  |  |  |  |
| Green River                                      | 171,223                   |  |  |  |  |  |
| Northeast  | 327,687                   |  |  |  |  |  |
| Purchase   | 222,486                   |  |  |  |  |  |
| Southeast  | 906,294                   |  |  |  |  |  |

**Table 4.** Acres of Kentucky public land by wildlife region.

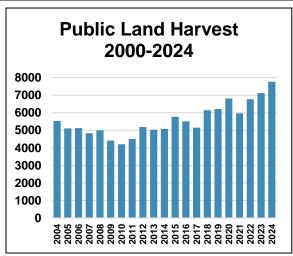


Figure 17. Kentucky public land harvest, 2004-2024.

### **Deer Quota Hunts**

KDFWR offers over 30 deer quota hunts on Kentucky WMAs. Any resident or nonresident hunter may apply for a deer quota hunt in Kentucky, but only the persons successfully drawn for a quota hunt may participate. The application period for KDFWR deer quota hunts is the month of September when applicants can apply online at <a href="https://fw.ky.gov/Hunt/Pages/Quota-Hunts.aspx">https://fw.ky.gov/Hunt/Pages/Quota-Hunts.aspx</a>. Applicants will be given the option to pick a first and second hunt choice but may be drawn to participate in only one quota hunt. The non-refundable fee is \$3 per hunter to apply. Each hunter who applies correctly, but is not selected, will receive a preference point that increases the odds of being drawn the next year. Unselected hunters who do not apply the following year will lose all previously credited preference points. Applicants are selected based on individual preference points. Up to five people can apply together, but individuals within the group will have their preference points averaged (total number of points divided by total number of applicants). However, there is a 10% maximum allowance on non-residents to be drawn for each quota hunt. If any one of the group's Social Security numbers is drawn, the others in the group are automatically selected. The exception applies to hunt parties that have one or more non-resident applicants and where the quota hunt may have already reached the 10% maximum limit of non-resident hunters. If this is the case, then no member of that party will be drawn.

8,882 hunters applied for the 3,724 available spots at the 37 KDFWR deer quota hunts held in the 2024-25 season. Fifty percent of applicants were drawn for a Kentucky quota deer hunt but drawing success varied from 9% to 93% depending on the property. There are quota hunts for general hunters (i.e., residents or non-residents with a statewide license), mobility impaired hunters, archery/crossbow hunters, and youth hunters. There are at least two deer quota hunts in each of the five wildlife regions across the state.

|                                      | Hom    | ·oct |                        | Observed Antlered Deer  |
|--------------------------------------|--------|------|------------------------|-------------------------|
|                                      | Harv   |      |                        | Observed Antlered Deer: |
| 2024 Quota Deer Hunts                | Female | Male | Deer Seen/ Hour Hunted | Antlerless Deer Ratio   |
| Ballard WMA                          | 15     | 17   | 0.54                   | 1: 1.59                 |
| Beaver Creek WMA                     | 0      | 10   | 0.15                   | 1: 3.67                 |
| Big Rivers WMA and State Forest #1   | 5      | 3    | *                      | *                       |
| Big Rivers WMA and State Forest #2   | 9      | 17   | 0.49                   | 1: 1.94                 |
| Clay WMA                             | 34     | 25   | 0.33                   | 1: 1.82                 |
| Dale Hollow Lake State Resort Park   | 8      | 5    | *                      | *                       |
| Dewey Lake WMA                       | 12     | 21   | 0.34                   | 1: 2.16                 |
| Fishtrap Lake WMA                    | 11     | 14   | 0.30                   | 1: 1.50                 |
| Greenbo Lake State Resort Park       | 0      | 3    | *                      | *                       |
| Green River Lake and Dennis-Gray WMA | 29     | 30   | 0.43                   | 1: 2.57                 |
| Green River Lake and Dennis-Gray WMA |        |      |                        |                         |
| Mobility-impaired                    | 0      | 0    | 0.18                   | 1: 1.4                  |
| Green River Lake State Park          | 15     | 5    | *                      | *                       |
| Higginson-Henry WMA #1               | 1      | 0    | *                      | *                       |
| Higginson-Henry WMA #2               | 4      | 11   | 0.49                   | 1: 2.45                 |
| Kenlake State Resort Park            | 3      | 0    | *                      | *                       |
| Kentucky River WMA                   | 4      | 4    | 0.35                   | 1: 3.14                 |
| Kincaid Lake State Park              | 3      | 2    | *                      | *                       |
| Kleber and Rich WMA #1               | 16     | 19   | 0.28                   | 1: 2.13                 |
| Kleber and Rich WMA #2               | 12     | 11   | 0.16                   | 1: 5.26                 |
| Otter Creek Outdoor Recreation Area  | 4      | 0    | 0.38                   | 1: 4.3                  |

| Paintsville Lake WMA                  | 7  | 7  | 0.17 | 1: 3.16 |
|---------------------------------------|----|----|------|---------|
| Pennyrile State Forest and Tradewater |    |    |      |         |
| WMA                                   | 16 | 25 | 0.36 | 1: 1.86 |
| Taylorsville Lake WMA #1              | 50 | 55 | 0.37 | 1: 1.85 |
| Taylorsville Lake WMA #1 Mobility-    |    |    |      |         |
| impaired                              | 0  | 0  | 0.12 | 1:4     |
| Taylorsville Lake WMA #2              | 22 | 15 | 0.15 | 1: 3.91 |
| Taylorsville Lake WMA #2 Mobility-    |    |    |      |         |
| impaired                              | 0  | 0  | 0    | 0       |
| Zilpo Mobility-impaired               | 0  | 0  | 0    | 0       |
| Veterans Memorial WMA                 | 0  | 2  | 0.26 | 1: 1.57 |
| West Kentucky WMA                     | 0  | 2  | 0.26 | 1: 3.05 |
| ,                                     |    |    |      |         |

Table 5. Public land quota hunt data, 2024-25.

### **Deer Permit Sales**

The number of deer permits sold has been declining since its peak in 2015 but has seen a recent resurgence (**Figures 18, 19**). The 2024-25 season saw a dramatic increase from the 2023-24 dip, with total deer permit sales (308,209) reaching 300,000 for the first time since 2017 and was 6% above the 10-year average (290,747). Sportsman's and Youth Sportsman's bundle licenses in 2024-25 were 27% and 26% higher than the 10-year average, respectively. No information is available regarding how many resident landowners hunted deer, as they are not required to purchase a permit if hunting on their property. However, deer harvested by private landowners on their property make up 15-20% of the total harvest annually.

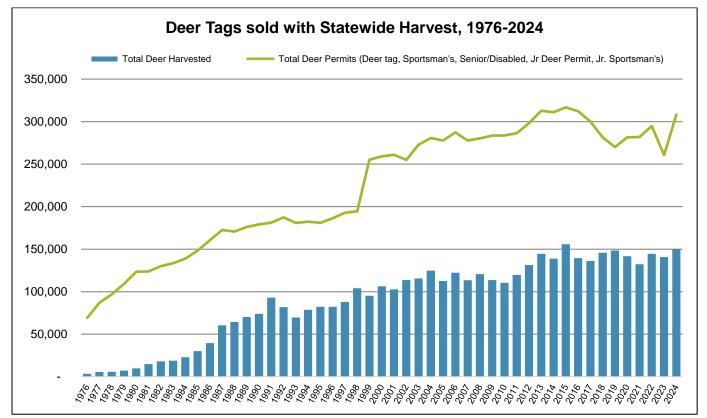


Figure 18. Deer tags sold vs statewide total deer harvest, 1976-2024.

<sup>\*</sup> Hunters not required to submit a check card during these hunts.



Figure 19. Deer permit sales, 2000-2024.

Upon further examination of license sales (Figure 19, 20), most deer permits are purchased by senior/disabled hunters (39%) followed by Sportsman License (28%) and resident deer permit buyers (16%). Although senior/disabled permit holders make up the majority of deer permits purchased, only 7% of the total deer harvest is made by senior/disabled hunters. This is likely because most senior/disabled permit holders are primarily purchasing this license type to fish and choose not to hunt deer or are not deer hunters.

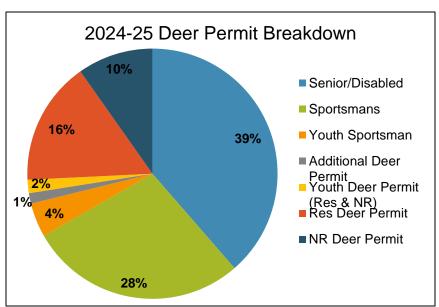


Figure 20. Proportion of total deer permit by type, 2024-25.

# **Habitat Management**

The Department's East Kentucky Habitat Initiative (EKHI) entered its fourth year during the fall of 2024. This initiative utilizes prescribed fire, aerial herbicide, and other practices to help reduce exotic and invasive species from overtaking the open areas of reclaimed mine land. Specifically, KDFWR focused efforts on large blocks of reclaimed mine areas on public and private lands where autumn olive has begun to completely overtake the grassland community. In addition, prescribed fire was utilized in the adjacent woodlands to reduce non-desirable species and stimulate oak regeneration. These habitat practices benefit many species, including deer and elk, by allowing a more diverse grassland and forb community to flourish, increasing nutrition along with creating more productive bedding and fawning cover for deer in these areas.

In the late summer of 2024, KDFWR conducted herd health examinations on the deer of reclaimed mines with and without habitat management practices. This comparison may show early indications that habitat management is impacting the productivity of the deer population in the area. Analyses will be published when complete.

### **Current Research**

Kentucky's CWD Response and Management Plan utilizes two buffers of 10- and 30-mile radiuses to help focus CWD management and surveillance efforts. Beyond delineating the boundaries of our CWD Surveillance Zone, these buffers were designed to "capture"/ contain deer that disperse away from the core area and ensure sampling strategies and goals are adequate. However, deer dispersal rates and distances are largely tied to forest composition; deer disperse further and at higher rates in fragmented landscapes, and shorter distances where forests are more contiguous/ abundant. Kentucky's CWD Management Zone is located in a highly fragmented area that is dominated by row crop agriculture production. As such, it is possible that our CWD containment buffers may not be adequate in detecting the disease as deer disperse beyond the boundaries of our Surveillance Zone. KDFWR, in collaboration with University of Kentucky researchers, aim to capture and radio-collar up to 80 juvenile deer (i.e., 6 – 7 months old) inside the CWD Management Zone to monitor spring and fall dispersal events of yearling deer, which is the age at which most deer emigrate. Other anticipated benefits include auxiliary data collection including but not limited to cause-specific mortality rates, travel/ disease corridors, and habitat selection to support population modeling efforts.

The winter capture season of 2024-25 resulted in the capture of 53 total deer and deployment of 35 radio collars prior to spring and fall dispersal windows.

# **Damage Mitigation**

An overpopulation of deer can have a negative impact on the environment and humans alike. Overabundant deer populations may result in agricultural and landscape damage, be detrimental to forest health and regeneration, pose safety risks due to deer-vehicle collisions, and serve as vectors for the transmission of diseases. State, local, and private groups all have a role in helping to manage the state's deer population. The primary tool for deer management in Kentucky is hunting, but sometimes this framework alone may not be enough to curtail the issues that some stakeholders experience. Deer populations can outgrow what their habitat can reasonably sustain, known as exceeding ecological carrying capacity. However, a much less understood issue in modern deer management is social carrying capacity, which is essentially the number or density of deer that is socially acceptable in a given area. KDFWR staff can offer their assistance once this threshold has been reached in an area (see Contacts map on page 22). A local Regional Biologist or Game Warden will schedule an on-site visit to document damage and provide technical guidance on potential solutions. Technical guidance can be offered in many ways, but the best damage mitigation strategy is a dedicated, long-term hunting regimen. In addition to hunting, assistance from KDFWR may come in the form of Deer Control Tags (DCTs), Deer Destruction Permits, and the use of KRS 150.170 (**Table 6**).

| D            | eer Control Ta  | gs Used in 20 | 24     | Dest   | ruction Per | mit Use from 2 | 024    |  |  |  |
|--------------|---|---------------|--------|--------|-------------|----------------|--------|--|--|--|
| Region       | DCT's Issued DCT's Used                                   |               | % Used | Region | DDPs        | DDPs Used      | % Used |  |  |  |
| BG           | 986   | 136           | 14%    | BG     | 992         | 326*           | 33%    |  |  |  |
| GR           | 2627  | 460           | 18%    | GR     | 1825        | 296*           | 16%    |  |  |  |
| NE           | 199   | 64            | 32%    | NE     | 8           | 2*             | 25%    |  |  |  |
| PR           | 602   | 99            | 16%    | PR     | 36          | 0*             | 0%     |  |  |  |
| SE           | 1382  | 391           | 28%    | SE     | 210         | 60*            | 29%    |  |  |  |
| Total        | 5796  | 1150          | 20%    | Total  | 3071        | 684*           | 22%    |  |  |  |
| *DDP use dat | DDP use data were not complete at the time of publication |               |        |        |             |                |        |  |  |  |

Table 6. Deer damage permit use, 2024.

### **Disease Surveillance**

# **Hemorrhagic Disease (HD)**

Hemorrhagic disease (HD), which is a vector-borne disease of white-tailed deer, is caused by two related orbiviruses: epizootic hemorrhagic disease virus (EHDV) and bluetongue virus (BTV). HD viruses are considered the most important viral agents affecting deer populations in the United States. The virus is transmitted from animal to animal through the bite of an infected midge which is active in the late summer and early fall. Severe outbreaks are often associated with drought conditions because drought creates an increased amount of breeding habitat for the midges. The midges die off for the year after a hard freeze, eliminating new cases of HD.

HD is reported in localized areas from at least a few counties nearly every year in Kentucky, although outbreaks can be considerably large and widespread. In 2017, a large HD outbreak occurred in the eastern portion of Kentucky and had significant impacts on that deer population. Many of those areas continue to experience lower deer numbers primarily due to the habitat type in east Kentucky being predominately forested, where deer populations exhibit a much slower growth rate. In 2024, KDFWR biologists received 198 HD deer reports throughout the state. When possible, KDFWR will test animals that have died of apparent HD. Widespread testing for HD is difficult due to the tissue collection process being extremely time-sensitive, but Kentucky's <u>Sick or Dead Deer Reporting Form</u> allows KDFWR to estimate the impact of HD each year. In 2024, eleven counties had positive tests for HD and it is estimated that between 101-500 deer died of the disease (**Figure 21**).

While HD does cause mortality among white-tailed deer, there are also animals that survive and produce protective antibodies, which can be passed to offspring. This is an important distinction when discussing this disease compared to chronic wasting disease, which is always fatal and was detected for the first time in Kentucky in 2023.

# Hemorrhagic Disease in KY White-Tailed Deer: Jun. - Dec. 2024

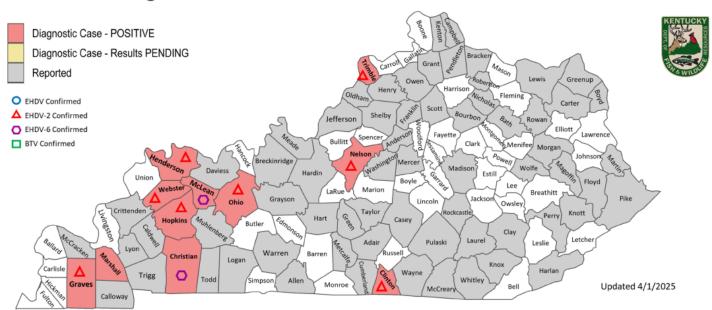


Figure 21. Hemorrhagic disease in Kentucky deer, 2024.

### 2024 CWD Response

Prior to the start of the 2021-2022 deer hunting season, the Tennessee Wildlife Resources Agency (TWRA) reported the discovery of a CWD positive deer eight miles from the southern border of Calloway County, KY. Tennessee has since reported positive deer in two counties that lie within 30 miles of Kentucky's border. Due to the proximity to the Kentucky border, the Department initiated the beginning steps of its CWD Response Plan, including the establishment of a CWD Surveillance Zone. Marshall, Calloway, Graves, Hickman, and Fulton counties were included in the original CWD Surveillance Zone. In December 2023, statewide surveillance efforts adjacent to the 5-county CWD Surveillance Zone detected Kentucky's first CWD-positive wild deer, a 2.5-year-old buck harvested in Ballard County. This detection resulted in KDFWR's Commission extending the CWD Surveillance Zone to include Ballard, Carlisle, and McCracken counties.

In October 2024, the Kentucky Department of Agriculture notified KDFWR that a farmed white-tailed deer had tested positive for CWD in Breckinridge County. This detection triggered the CWD Response Plan, adding Breckinridge, Meade, and Hardin counties to the CWD Surveillance Zone for the remainder of the 2024-25 season.

The 2024-25 CWD sampling season resulted in the collection and testing of 9,204 deer across the Commonwealth (**Figure 23**), 3,471 of which were from the expanded 8-county Surveillance Zone in western Kentucky. 1,012 deer were sampled in the Breckinridge 3-county zone, while 4,721 deer were sampled in our remaining 109 counties.

Soon after the 2024-25 season concluded, a positive deer was detected in Indiana, less than 2 miles north of the border with Henderson County, Kentucky. This caused the KDFWR Commission to add Henderson, Union, and Webster counties to the CWD Surveillance Zone for the upcoming 2025-26 season.

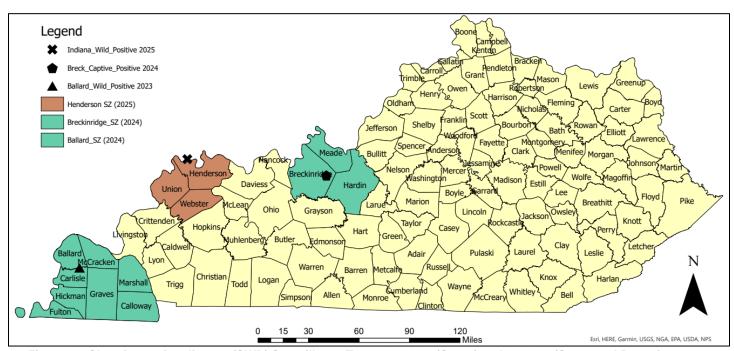


Figure 22. Chronic wasting disease (CWD) Surveillance Zones, 2024-25 (Green) and 2025-26 (Green and Brown)

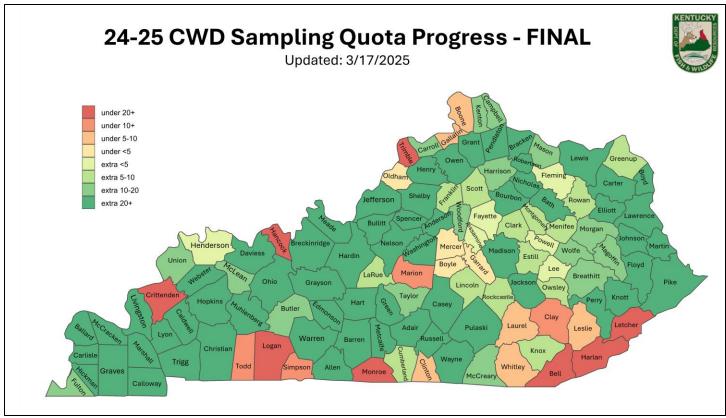


Figure 23. Final progress of CWD sampling quotas per county, 2024-25.

### 2024-25 CWD Regulations

Due to the discovery of CWD in wild and captive deer in Kentucky, the following regulations were in place for the 2024-25 season (**Figure 22**; Calloway, Fulton, Graves, Hickman, Marshall, Carlisle, McCracken, Ballard, Breckinridge, Meade, and Hardin counties). The purpose of these regulations is to provide the Department the ability to conservatively manage and prevent CWD from spreading throughout the herd as much as possible.

- No baiting or wildlife feeding
  - Feeders holding or distributing wildlife food and placing grain, salt, or mineral is prohibited
  - Normal agricultural practices (including mineral blocks in active cattle pastures), food plots for wildlife, hanging bird feeders used within the curtilage of the home, and scents and deer urinebased products are allowed
- Mandatory deer check stations
  - During the 2024-25 mandatory check there were 13 check stations in 8 western counties for 7 days.
- Carcass transportation restrictions
  - <u>Prohibited</u>: Entire carcasses, uncleaned skulls, spines, or bone-in quarters of deer harvested within the 5-county surveillance zone may <u>not</u> be taken outside of the zone, unless in transit to a Kentucky Fish and Wildlife-authorized CWD check station.
  - Allowed: De-boned meat, antlers, antlers attached to a clean skull plate, a clean skull, clean teeth, hides, and finished taxidermy products may be taken out of the surveillance zone.

Carcasses of deer or elk harvested elsewhere in Kentucky may be transported into the surveillance zone.

### New for 2025-26

Kentucky learned of a hunter-harvested buck harvested just across the Ohio River from Kentucky in Posey County, Indiana that tested positive for CWD shortly after the conclusion of the 2024-25 deer season. The case was less than two miles from Kentucky and, in response, the Kentucky Fish and Wildlife Commission voted to declare Henderson, Union and Webster counties a new CWD Surveillance Zone. In addition, under commissioner authority, two key changes will be in effect for the 2025-26 season.

- 1. Baiting and feeding will now be allowed in all CWD Surveillance Zone counties, as long as it is not distributed by a contact feeder (e.g., troughs, funnels, gravity feeders without spreading abilities), giving hunters more tools to increase harvest in these areas.
- 2. A special two-day Antlerless Firearms Season will be held on September 27-28, 2025 in all CWD Surveillance Zone counties. Hunters will be required to submit heads through CWD Sample Drop-Off Sites located throughout CWD Surveillance Zones.

## **Carcass Importation Law**

In reference to 301 KAR 2:095: a person shall not import a cervid carcass or carcass parts that include any part of the spinal column or head. A person importing a legally taken cervid carcass or carcass parts may possess the items listed below:

- **Antlers**
- Antlers attached to a clean skull plate
- A clean skull
- Clean upper canine teeth
- Finished taxidermy products
- The hide
- Quartered or deboned meat



### **Contacts**

Approximately 95% of Kentucky is privately owned. To successfully manage our wildlife resources, the KDFWR works cooperatively with Kentucky's private landowners. One of the essential ingredients in conserving Kentucky's wildlife resources is habitat improvement. Wildlife biologists are available to work with interested individuals or groups on properties that they own or have management authority on. KDFWR's Private Lands Program performed technical guidance visits on over 500 private properties in 2024.

Contact the local private lands biologist for assistance with wildlife management on your property.

