

2011-2012 Kentucky Department of Fish and Wildlife Resources White-tailed Deer Report



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Deer Program

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Introduction

The Deer Program is administered under the Wildlife Division of Kentucky Department of Fish and Wildlife Resources (KDFWR). The KDFWR is an agency of the Kentucky Tourism, Arts & Heritage Cabinet. It is made up of a nine-member commission who are nominated by Kentucky’s sportsmen and sportswomen. Commission members are 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, and customer service and administrative professionals.

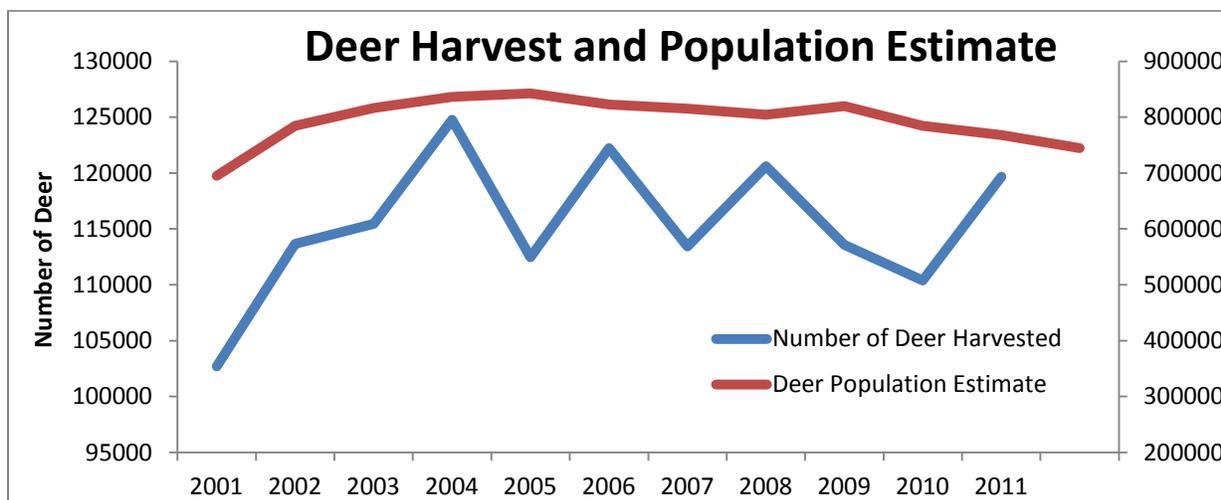
KDFWR receives no money from the state’s General Fund. Funding is provided by the sale of hunting and fishing licensees, boating registration fees and federal grants which are based on the number of licenses sold in the state.

The Deer Program is tasked with managing the white-tail deer herd in the state to provide ample hunting opportunity, yet strike a balance between consumptive and non-consumptive user groups. The Deer Program is made up of 1 program coordinator, Dr. Tina Brunjes, and two biologists, Gabe Jenkins and David Yancy. The Deer Program staff is based out of the headquarters office in Frankfort.

Population Status

Over the last decade deer management techniques have varied greatly across the state. Parts of the state such as the Bluegrass and Purchase regions have seen liberalization to the bag limit in an attempt to lower the deer population. Areas in the Southeast and Green River regions have seen a reduction in bag limits to accommodate for declining deer densities. In 2007, the state experienced the most wide spread Epizootic Hemorrhagic Disease (EHD) outbreak in recorded times. All regions of the state were impacted, with some seemingly affected worse than others. Post the 2007 outbreak, deer hunting zones were restricted to reduce harvest in order allow the herd to rebound.

The overall herd estimate is indicating a stable to slightly decreasing trend. Current statewide estimate is 744,408 deer statewide, post 2011 hunting season. The estimate is generated from harvest data and age structure data. Age structure data is collected by wildlife division staff at meat lockers and by taxidermist.



2011-2012 Harvest Results

The 2011-12 deer season was an excellent season and was the 4th highest on record. Deer hunters reported 119,653 deer for the season. It was 8.4% increase from 2010-11 season and was a -0.8 decrease from the 2008-09 season.

Weapon Type	2011	1 Year % Change	3 Year % Change
Archery	18,167	9.1%	29.3%
Crossbow	1,969	29.5%	35.5%
Modern firearm	83,356	5.5%	-6.1%
Muzzle-loader	16,161	22.6%	-1.3%
Overall	119,653	8.4%	-0.8%

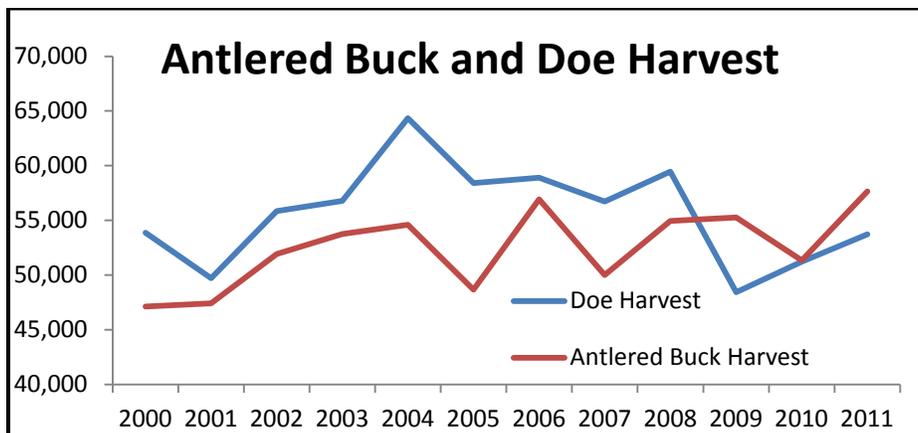
Weapon Type Harvest Summary

Archery, crossbow, and muzzleloader hunters harvest a greater proportion of antlerless deer than do modern firearms hunters. This trend in antlerless harvest is consistent with reporting numbers over the last 10 years.

Weapon Type	Female	Male	Total
Archery	11,139	7,028	18,167
Crossbow	1,232	737	1,969
Modern firearm	31,569	51,787	83,356
Muzzle-loader	9,789	6,372	16,161
Overall	53,729	65,924	119,653

Hunters appear to have a limit on the number of deer they are willing or able to harvest. The majority of successful deer hunters (77%) only harvest one deer. Of the total successful hunters in the 2011-12 season (90,247 hunters) the average deer harvested per hunter was 1.3 deer. The 1.3 deer harvested per hunter has not fluctuated regardless of deer zone and season year.

Even though the average hunter only harvests 1.3 deer, the successful hunters do an excellent job balancing the buck to doe numbers in the harvest. Doe harvest number fluctuate greatly due to changes in deer zones. Not the change from 2007 to 2009. During that time many zones were reduced due to the severe Epizootic Hemorrhagic Disease (EHD) outbreak that year. Doe harvest numbers are finally returning to numbers similar to 2007.

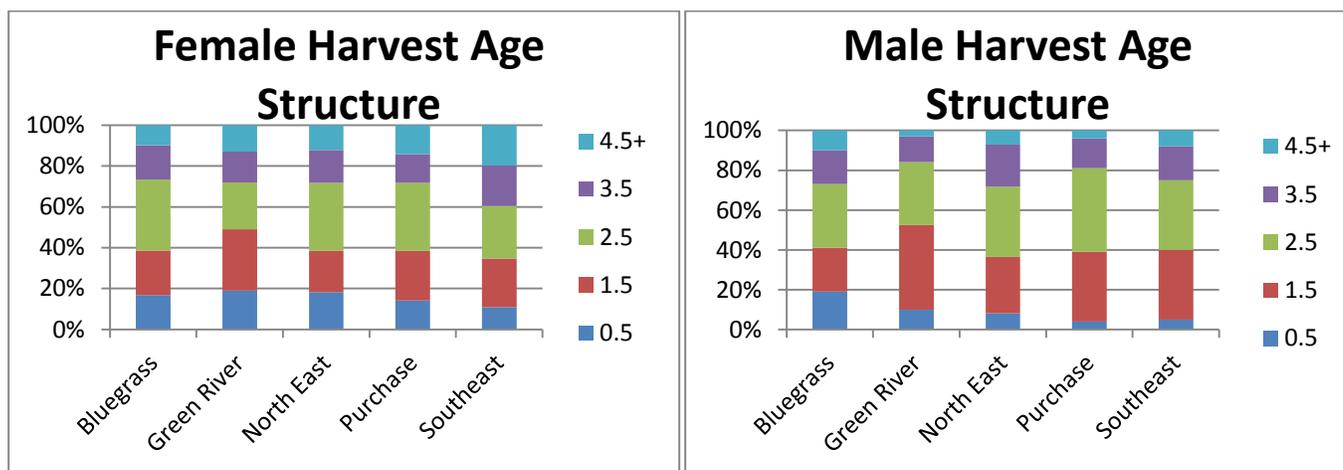


Monthly Harvest Rates

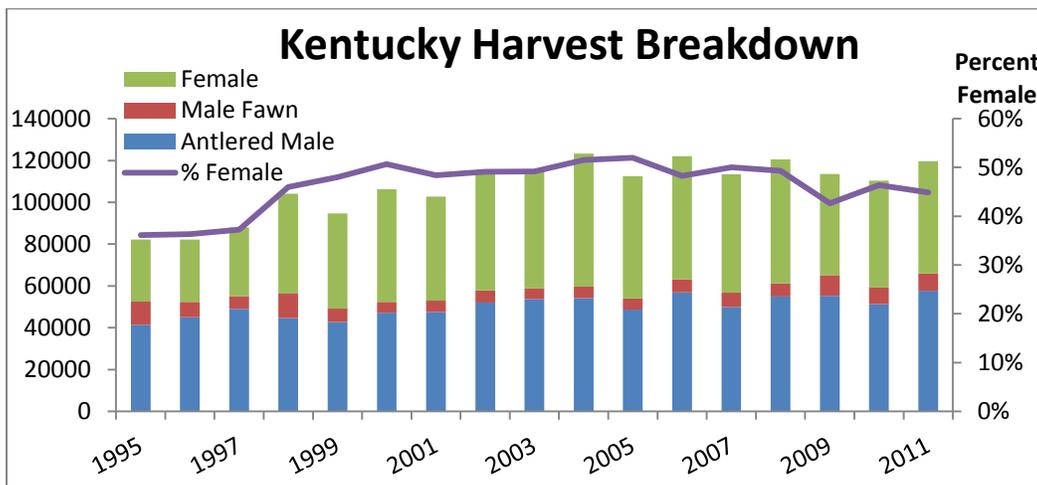
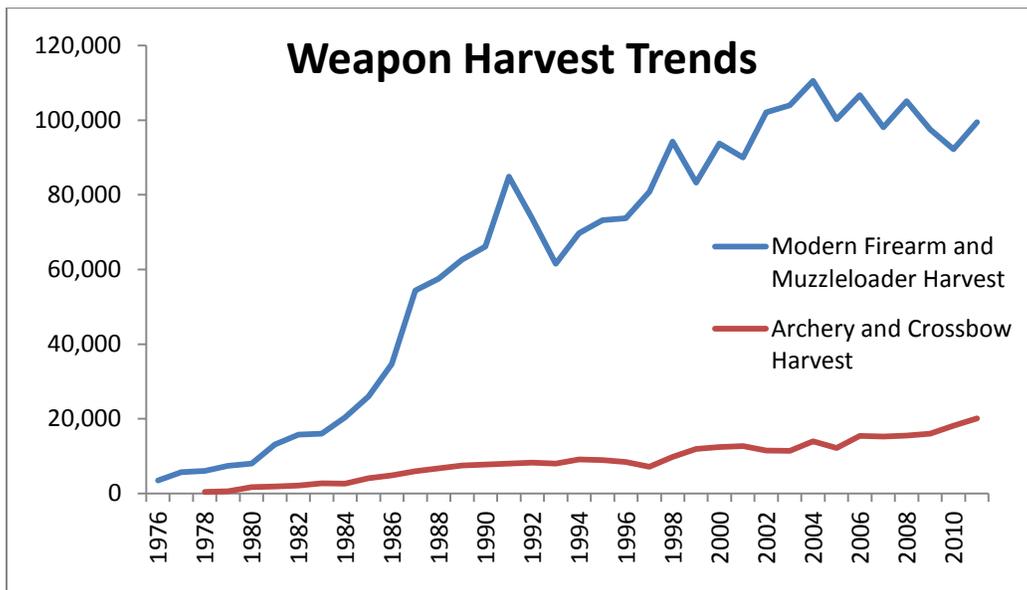
Monthly harvests varied greatly due to extreme weather conditions. September and December saw a record harvest of 4,945 and 12,989 respectively. Cooler conditions in September and warmer conditions in December help to drive the record harvest. October’s harvest was the 4th lowest (14,912) over the last 10 years. January’s conditions were also warm and harvest numbers were the second highest (2,628) in the last 10 years.

Age Structure in the Harvest

Overall age structure of the harvest is indicating that the majority of hunters are passing or recognizing male fawns. The majority of antlered bucks taken in the 2011-12 season were 3.5 years old. Female age class distribution in the harvest is nearly identical between 2.5 and 3.5 year old females. The majority of the female harvest is 1.5 years or old, this indicated that the majority of the hunters are also selecting adult does to harvest.



Historical Harvest Results



Disease Surveillance

Hemorrhagic Disease (HD)

Hemorrhagic disease (HD), a vector-borne disease of white-tailed deer is caused by two related orbiviruses, epizootic hemorrhagic disease virus (EHDV) and bluetongue virus (BTV). Hemorrhagic disease viruses are considered the most important viral agents affecting deer populations in the United States. HD is caused by one of two different viruses: EHDV or BTV. The virus is transmitted from animal to animal through the bite of an infected midge. These insects occur in the late summer and early fall. HD outbreaks

are often associated with drought. Once there has been a hard freeze the midges die off for the winter, eliminating new cases of HD. It is not contagious between animals.

HD is reported in deer from a few counties nearly every year in Kentucky, although outbreaks can be considerably large and widespread. The 2007 outbreak of HD in wild deer was the most widespread outbreak reported in the past 30 years. Over 4,000 suspected cases were reported in Kentucky. When possible, KDFWR will test animals that have died of apparent EHD.

Only a few HD suspected deer deaths were reported in 2011. Most were reported in the Bluegrass and Green River Regions of the state and one local area in the Southeast Region. Only 1 deer was clinically diagnosed as EHDV positive.

CWD

CWD is a fatal, neurological disease in white-tailed deer, mule deer, elk and moose. It causes a characteristic spongy degeneration of the brains of infected animals resulting in emaciation, abnormal behavior, loss of bodily functions and death. CWD is categorized as a transmissible spongiform encephalopathy (TSE), a group that includes "mad cow" disease in cattle, Creutzfeldt-Jakob disease in humans and scrapie in sheep and goats. CWD has been detected in 19 states and 2 Canadian provinces. Four states (West Virginia, Virginia, Missouri and Illinois) have CWD and border Kentucky. CWD has not been detected in Kentucky. Due to this fact, KDFWR has adopted test procedures and regulations to detect and or stop the spread of CWD.

To detect CWD should it arrive in Kentucky, KDFWR adopted a CWD monitoring plan in 2002. That plan is a 4 part monitoring program to test: 1) a random sampling of hunter harvested deer, 2) target or suspect animals, 3) a random sample or roadkill deer, and 4) all captive deer mortalities. In 2006, KDFWR adopted a contingency plan on how to deal with CWD if was found in Kentucky. Since 2002, approximately 22,000 hunter harvested and roadkill deer samples have been tested. In 2011-12, 1641 hunter harvested and roadkill samples were submitted for CWD testing. All samples have tested negative for CWD.

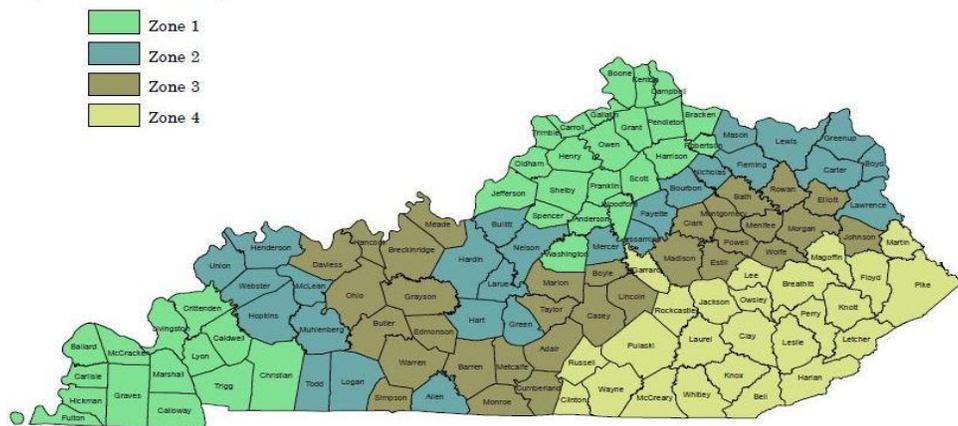
General Information about the 2011-12 Season

Season Dates and Bag Limits for 2011-12

	Statewide	Zone 1	Zone 2	Zone 3	Zone 4
Modern Firearm		Nov 10-25	Nov 10-25	Nov 10-19	Nov 10-19
Archery		Sept 1- Jan 21	Sept 1- Jan 21	Sept 1- Jan 21	Sept 1- Jan 21
Early Crossbow		Oct 1-21	Oct 1-21	Oct 1-21	Oct 1-21
Late Crossbow		Nov 10-Dec 31	Nov 10-Dec 31	Nov 10-Dec 31	Nov 10-Dec 31
Early Muzzleloader		Oct 20-21	Oct 20-21	Oct 20-21	Oct 20-21
Late Muzzleloader		Dec 8-16	Dec 8-16	Dec 8-16	Dec 8-16
Youth-Only Firearms	Oct 13-14				
Free Youth Weekend	Dec 29-30				
Antlered Bag Limit	1				
Antlerless Bag Limit	Based upon zone	Unlimited	Up to 4	Up to 4, only 2 with a firearm	Up to 4. Only 2 with a firearm, which can only be filled during the last 3 days of the late muzzleloader

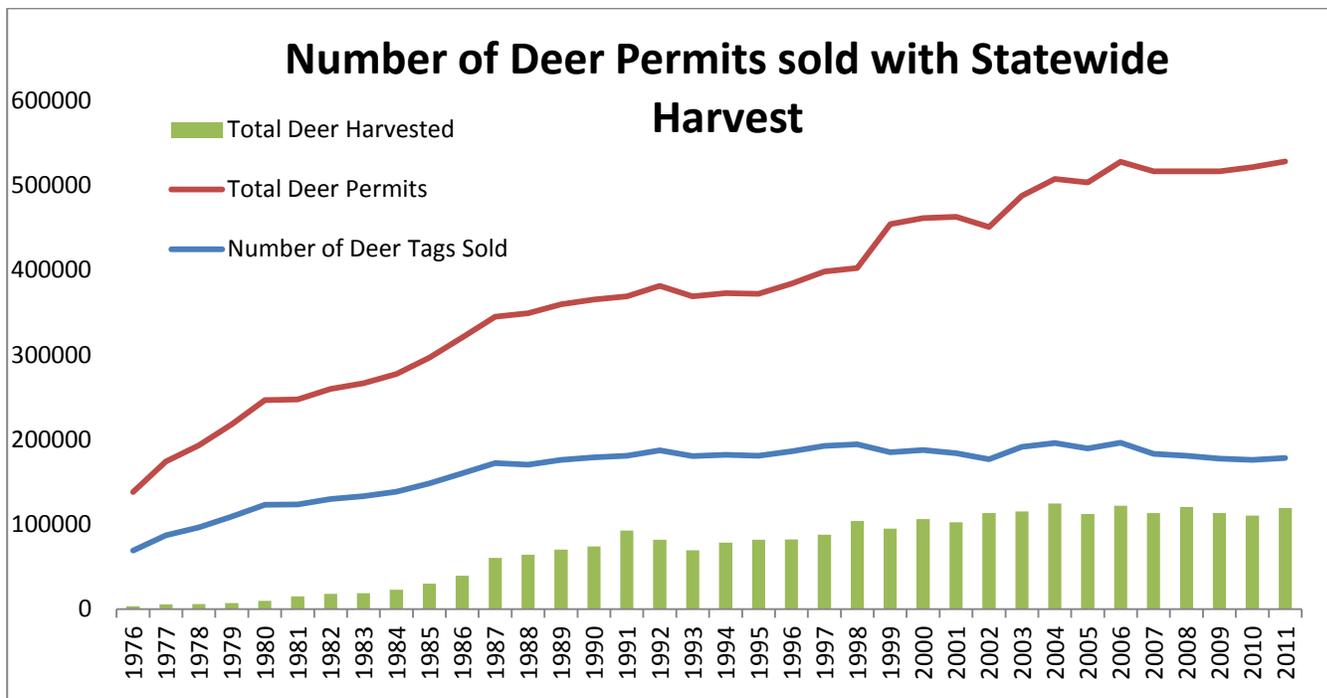
Deer Hunting Zones for 2011-2012

Proposed Deer Hunting Zones

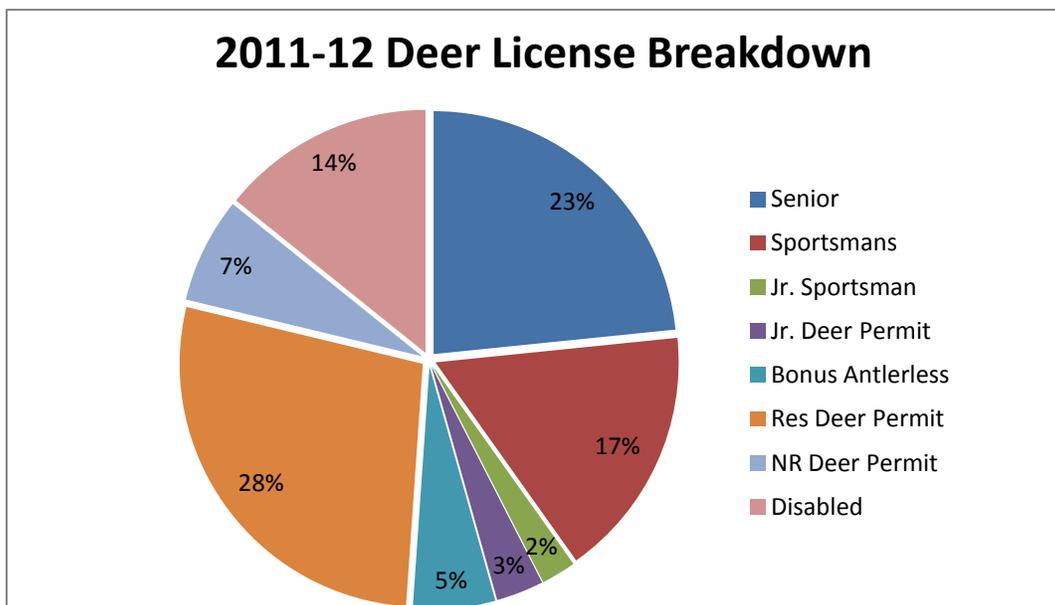


License Sales

In recent years the number of deer tags sold has been slightly declining. When including the license bundles in the total deer permit numbers a positive license sales growth is reported. Interestingly, even though deer permit sales are up, overall statewide harvest is remaining constant. Given that the number of hunters is slightly increasing, and the number of deer taken per hunter is 2 or fewer per season, harvests are expected to continue to be approximately 110,000 to 120,000 each season.

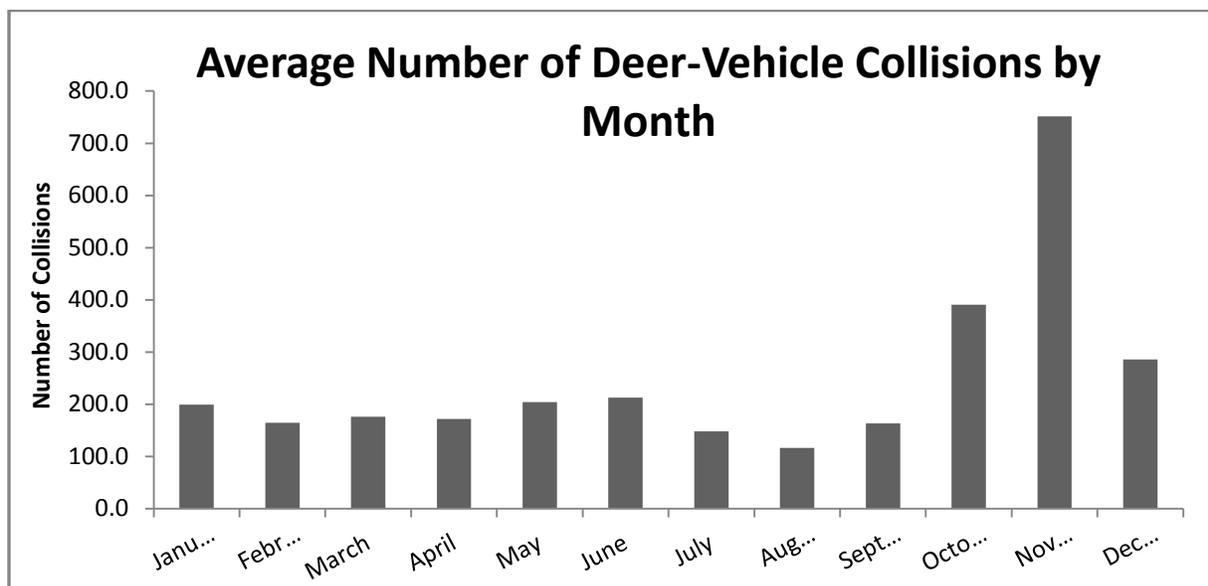


Upon further examining the license sale breakdown, the majority of the deer permits are purchased by resident deer hunters (28%), followed closely by Senior Licenses (23%) and Sportsman Licenses (17%) buyers. Over the last few years there is a steady increase in the number of senior and sportsman licenses sold.



Deer and Vehicle Collisions (DVC)

Over the last 8 years, Kentucky State Police documented an average of 2,985 DVC each year; and on average, 180 (6%) of those caused human injury. During each year, 1-4 people lost their lives in DVCs. The frequency of DVCs in Kentucky is strongly correlated with the density of deer in the area and the number of miles of highway. In those counties where DVC rates are highest, KDFWR has liberal doe harvest. DVC incidents increase sharply in November due to the peak of the deer breeding period or “rut”, which occurs during mid-November. Although Kentucky is not among the top ten states for number of claims due to DVCs annually, 4 neighboring states are: Illinois, Ohio, Virginia, and Indiana.



Changes for the 2012-2013 Deer Season

New for the 2012-13 season, a hunter will now be allowed to tag their antlered deer either under their statewide deer tag or their bonus tag (now called an “additional deer permit”). The one buck rule still applies, however hunters can now harvest a buck even if they killed 2 does on their statewide permit before buying the additional deer permit.

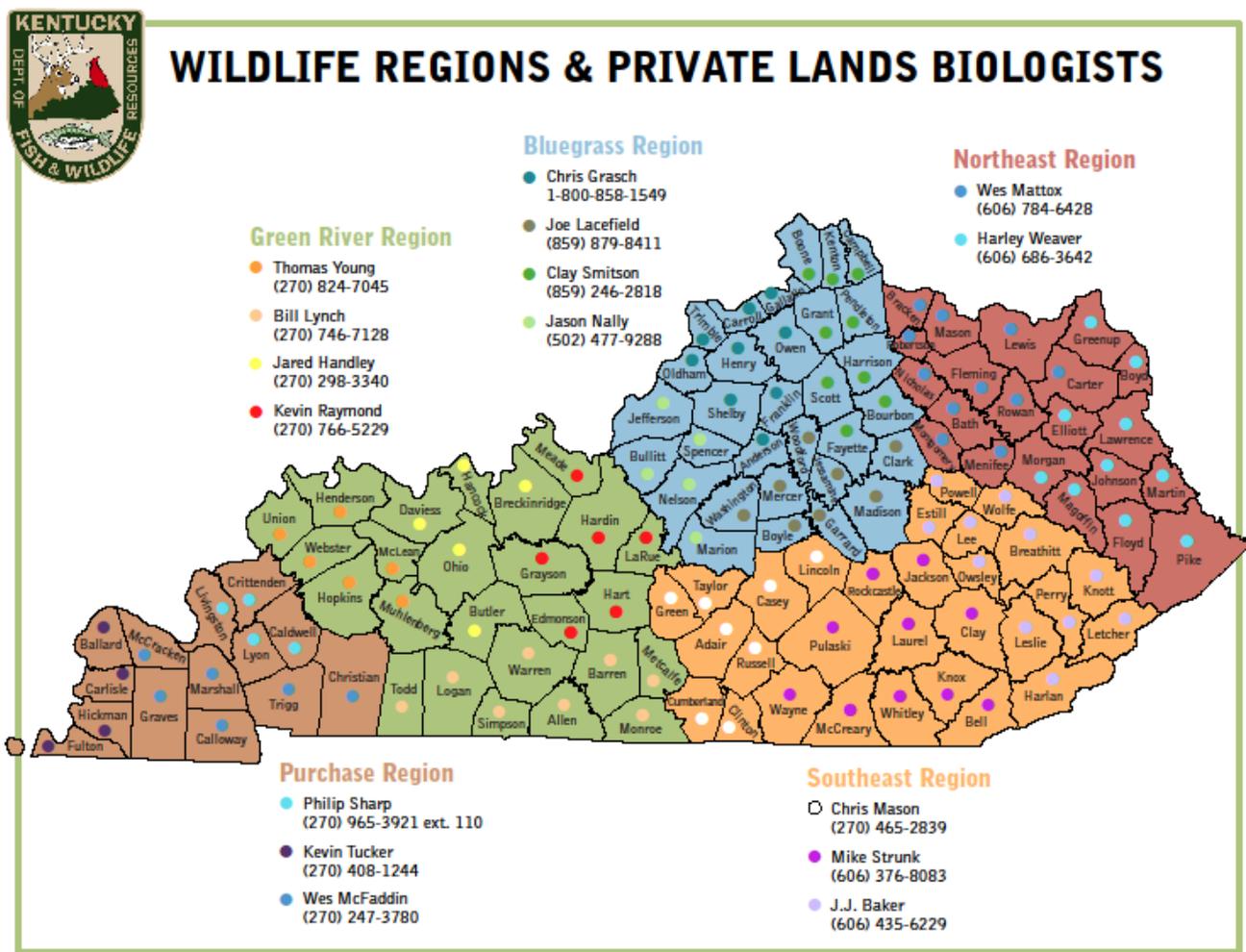
Deer quota hunters will now have the option to purchase a “no hunt” option for the quota hunts. This option was implemented to prevent the loss of accumulated preference points if you were not able to hunt during that year. This new option helps hunters keep the preference points earned over a number of years.

Deer hunters on wildlife management areas (WMA’s) in Zone 1 counties are now allowed to harvest more than one deer a day. Hunters must abide by the deer zone restriction that the WMA is located in. In order to shoot more than 2 deer, hunters must still purchase the additional deer permit.

Contacts

About 95% of the land in 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 rights on.

To contact your local wildlife biologist for assistance on wildlife management on your property see the map below.





Kentucky Sportsmen and Women Pay for Conservation

The Department of Fish and Wildlife Resources is funded through the sale of hunting and fishing licenses. It receives no general fund tax dollars.