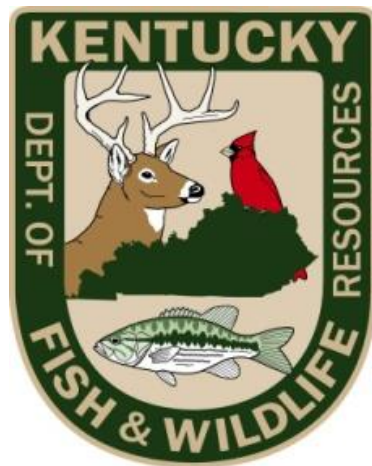


2018-2019 Kentucky Department of Fish and Wildlife Resources Elk Report



| Table of Contents | Page |
|---|-------------|
| Introduction | 1 |
| Elk in Kentucky | 1 |
| Elk Hunting Permits | 2-4 |
| General Quota Hunt Permits | 2 |
| Youth Permits | 2 |
| Commission Permits | 2 |
| Landowner Permits | 2 |
| Voucher Cooperator Permits..... | 3 |
| Elk Restoration Permits..... | 3 |
| Late Season Hunt Permits..... | 3 |
| Out of Zone Elk Permits | 3 |
| Quota Drawing Process and Statistics | 4-5 |
| How Permits Are Drawn..... | 4 |
| Odds | 5 |
| License and Permit Fees | 5 |
| General Information about the 2018-2019 Season | 5 |
| Season Dates | 5 |
| Bag Limits..... | 5 |
| Area Permit Allotment..... | 6 |
| 2018-2019 Harvest Results | 6 |
| Total Harvest by Year | 6 |
| Weapon Type Harvest Summary | 7 |
| Success Rates by Area | 7 |
| Success Rates by Weapon Type | 7 |
| Age at Harvest/Death Data..... | 8 |
| Kentucky Top 10 Trophy Bulls | 8 |
| Changes for the 2018-2019 Elk Season | 9 |
| Disease Surveillance | 9 |
| Brainworm | 9 |
| Chronic Wasting Disease | 9 |
| Current Research | 10 |
| Education | 10 |
| Contacts | 10 |

Introduction

The Elk Program is administered under the Wildlife Division of Kentucky Department of Fish and Wildlife Resources. The Department is an agency of the Kentucky Tourism, Arts & Heritage Cabinet. It is overseen by a nine-member commission who are nominated by Kentucky’s sportsmen and sportswomen. The nominees chosen by the sportsmen and sportswomen are sent to the Governor, who appoints the Commission members for each district. The department employs about 450 full-time staff, which includes conservation officers, wildlife and fisheries biologists, conservation educators, information and technology staff, public relations and administrative professionals.

Kentucky Fish and Wildlife receives no money from the state’s General Fund. Agency funding is provided through the sale of hunting and fishing licenses, boating registration fees, and federal grants based on the number of licenses sold in the state.

The Elk Program is tasked with managing the elk herd in the state to provide ample hunting opportunity while balancing the needs of consumptive and non-consumptive user groups. The Elk Program is made up of one program coordinator, Gabe Jenkins, and three biologists: Dan Crank Jonathan Fusaro, and Joe McDermott. Program staff are based out of headquarters in Frankfort as well as the elk zone in eastern Kentucky.

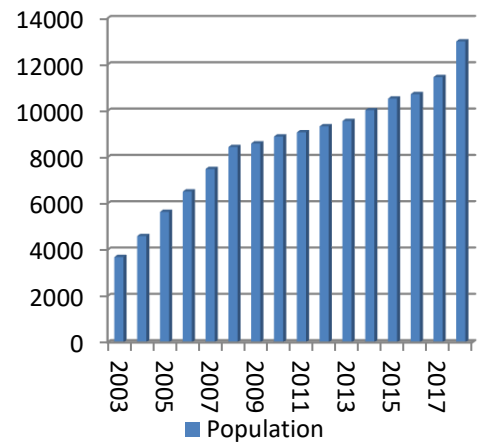
Elk In Kentucky

Elk are native to Kentucky and were present until the mid-1880’s, when the population was eliminated due to habitat degradation and overhunting. This is why the Kentucky elk program is considered a restoration, not an introduction. Kentucky’s present elk herd is a free ranging, wild herd established from 1,550 wild elk captured out-of-state and released into southeast Kentucky between December 1997 and March 2002. Contributing states included Utah, Kansas, Oregon, North Dakota, Arizona, New Mexico, with the majority of elk captured in Utah. Release sites were located in Harlan, Knott, Leslie, Letcher, Martin, Perry, and Pike counties. The elk restoration zone covers 16 counties in the southeast region of the state (approximately 4.1 million acres).

The current estimated population is 13,106 animals. Kentucky has the highest elk population of any state east of the Mississippi River.

The first elk hunt was conducted in 2001. Six bulls and six cows were harvested, with all hunters filling their permit. The same number of permits was issued in 2002 and 2003. In 2004, the number of permits was increased to 40. Beginning that year, legal deer hunters were also allowed to harvest elk outside the elk zone in order to control populations, keeping elk numbers low in agricultural areas or poor elk habitat. The number of elk permits have fluctuated nearly every year since 2004, with a total of 710 permits available in 2017.

Elk Population Estimate



Elk Hunting Permits

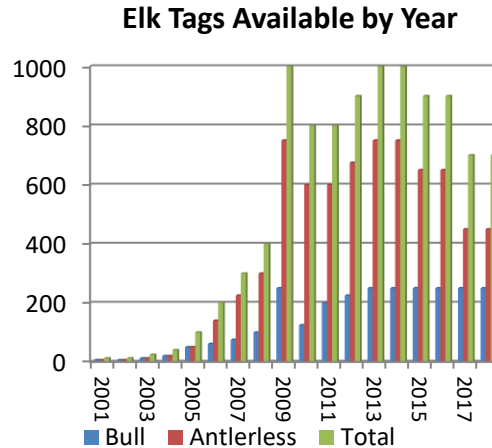
General Quota Hunt Permits

The majority of Kentucky elk permits are issued by way of a computer-randomized drawing. Applicants must apply online between January 1 and April 30 each year.

They may apply for four permits from the four permit types (bull archery/crossbow, bull firearm, antlerless archery/crossbow, and antlerless firearm), but no more than once for each type.

Both resident and non-resident hunters may apply for the elk permit drawing. A maximum of 10 percent of the available permits may go

to non-resident applicants. During the month of May, applicants' names are drawn at random by a separate Kentucky government agency (the Commonwealth Office of Technology [COT]) and then randomly assigned a permit type based on their application choices. Hunters that are drawn for either an antlered or an antlerless permit are not eligible to apply for another permit for three years.



Youth Permits

Hunters that are 15 years of age or younger may apply for the youth-only drawing. There are currently 10 youth-only either-sex permits. Youth may also apply for the general drawing four times like any other applicant, giving them five chances overall. However, they are only eligible to draw one permit.

Commission Permits

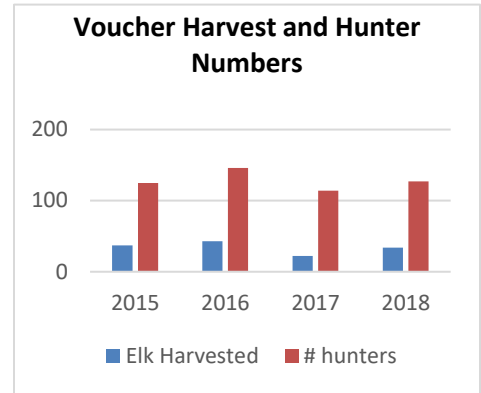
There are 10 either sex Commission permits that are available each year. These permits are assigned each year by the Kentucky Fish and Wildlife Commission members to conservation groups. Those groups then auction or raffle the permits in order to raise money for conservation projects.

Landowner Access Permits

Kentucky Fish and Wildlife has a program that allows large land holders in the elk zone to enter their land into management agreements in order to provide hunters additional public access to huntable land. Landowners are issued an either-sex elk permit for every 5,000 acres enrolled in the public access program. The landowner may transfer or sell the permit to whomever they choose. Land enrolled in this program is open for public hunting under all statewide regulations, unless denoted otherwise.

Voucher Cooperator Permits

Beginning in 2015, landowners with 100 acres or more could enter their property into a program with Kentucky Fish and Wildlife called the Voucher Cooperator Elk Permit Program. The program links people who own or lease elk hunting land with hunters who have drawn an elk permit. Hunter access is accomplished by offering landowners/lessees an either-sex, transferable elk permit when they accumulate 10 points (each harvested elk equals 1 point regardless of sex). Hunters sign up to hunt voucher properties on a first-come, first-served basis through an automated online system after the area draw is complete. A total of 18 properties encompassing 103,833 acres have been entered since 2015. For 2018, there were spots available for 127 hunters, resulting in 34 elk being harvested. The number of spots increased slightly this year. This program resulted in 2 permits being transferred to landowners for the 2018 – 2019 season.



Elk Restoration Permits

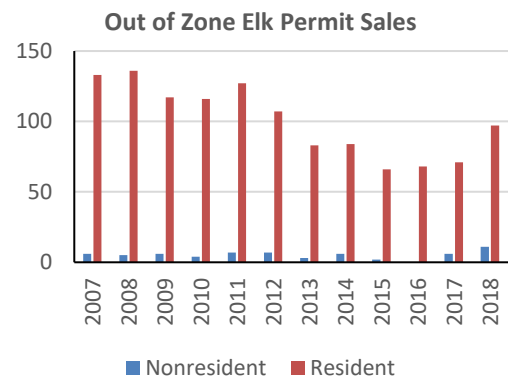
Beginning in 2017, landowners who allow trapping of elk for restoration purposes are eligible to gain points toward obtaining a transferrable either sex elk permit for use on their property or property they lease. They must accumulate 10 points to receive a permit (1 point for an elk regardless of sex). All trapping will be performed during the winter months. Nine permits were issued for the 2018-2019 season.

Late Season Hunt Permits

The late season hunt is designed to remove elk in areas that have had elk damage concerns over a number of years. The dates of the hunt correspond with the time of year when most damage occurs. This allows hunters to target elk that are likely causing damage, and to mitigate the burden to local landowners. Hunters are limited to the Knott County and Mayking EMU (Elk Management Unit). Only applicants that live inside the six counties within the two Elk Management Units are eligible to be drawn in the late season hunt. In 2018, four hunters were drawn for the late season hunt.

Out of Zone Elk Permits

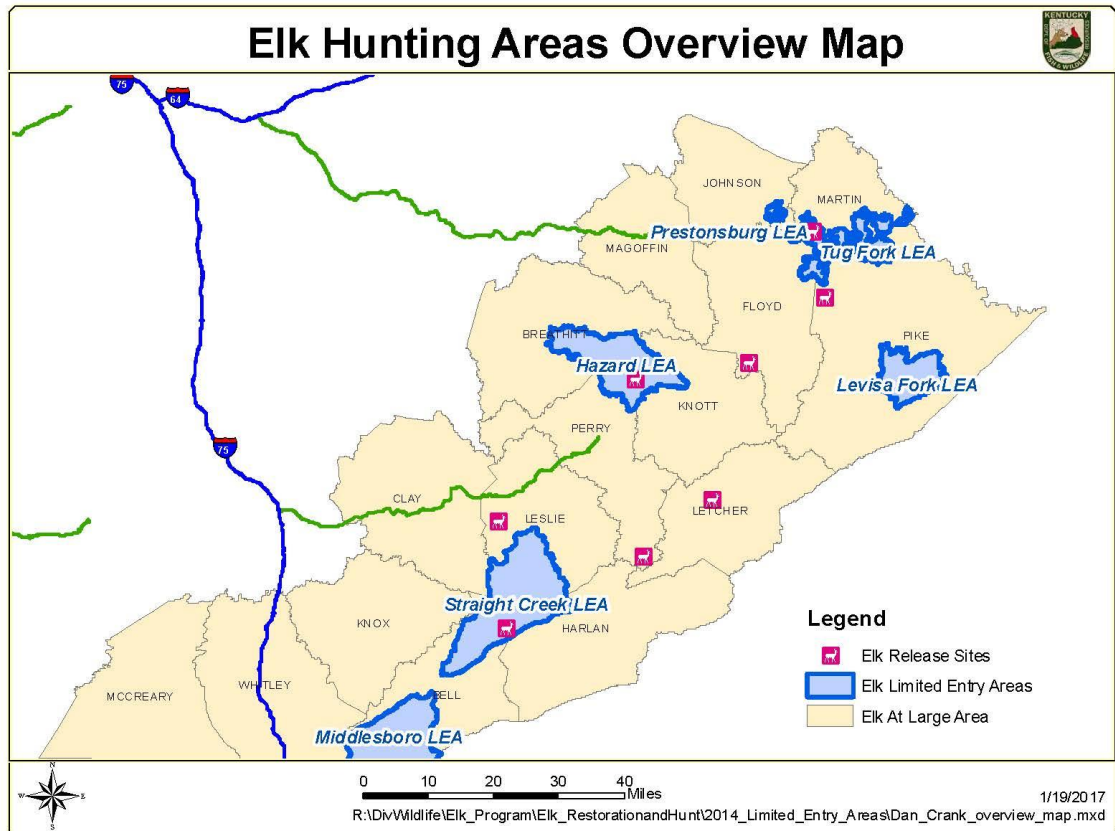
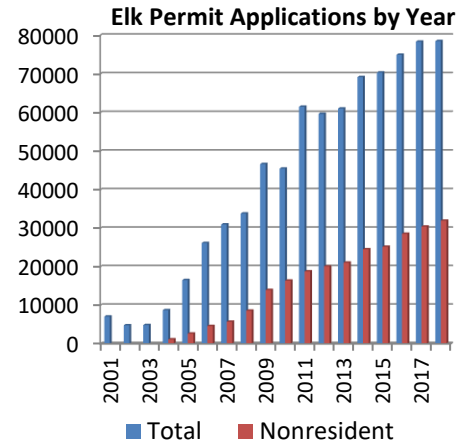
Elk may be taken from any county outside the 16 county Elk Restoration Zone by hunters who possess an annual Kentucky hunting license and an out-of-zone elk permit. Hunters must follow deer season and equipment regulations, but are not required to possess a deer permit. One cow was harvested in Wolfe County in 2017.



Quota Drawing Process and Statistics

How Permits Are Drawn

Elk applications go on sale January 1 of each year and can only be purchased online at fw.ky.gov. Hunters can apply for four different permit types. The application period ends at midnight on April 30. After the application period, a computer drawing conducted by the Commonwealth Office of Technology (COT) randomly selects the hunters from the pool of applicants. All hunters are drawn for the At-Large area. If hunters want, they can then apply for one of the Limited Entry Areas (LEA) (Hazard LEA, Middlesboro LEA, Prestonsburg LEA, or Straight Creek LEA). A second computer drawing is then held in July to fill the LEA openings. If a small group (up to 3) of drawn applicants would like to hunt the same area, they are able to apply as a group.



Odds

The odds of drawing a permit for the 2018-2019 season are shown in the table below. These numbers are based on how many applicants were in each permit type and how many permits were issued.

| Type | Resident Odds | Non-resident Odds |
|--------------------|---------------|-------------------|
| Bull Firearm | 1/143 | 1/833 |
| Cow Firearm | 1/54 | 1/241 |
| Bull Archery | 1/106 | 1/876 |
| Cow Archery | 1/34 | 1/218 |
| Either-sex – Youth | 1/103 | 1/355 |

License and Permit Fees

Residents

Elk Quota Hunt Application: \$10/application

Elk Permit: \$100 Bull, \$60 Antlerless

General Resident Hunting License: \$20

Non residents

Elk Quota Hunt Application: \$10/application

Elk Permit: \$550 Bull, \$400 Antlerless

General Non-resident Hunting License: \$140

General Information about the 2018-2019 Season

Season Dates

Archery Season Dates

Bull Only: September 15–September 28, 2018

Either-sex archery and crossbow: Sept 22-28, Oct 13–Dec 7, Dec 22–31, 2018.

Either-sex archery only: Oct 13–Dec 7, Dec 22–Dec 31, 2018.

Firearms Bull week 1: September 29-October 5

Firearms Bull week 2: October 6-12

Firearms Cow week 1: December 8-14

Firearms Cow week 2: December 15-21

Bag Limits

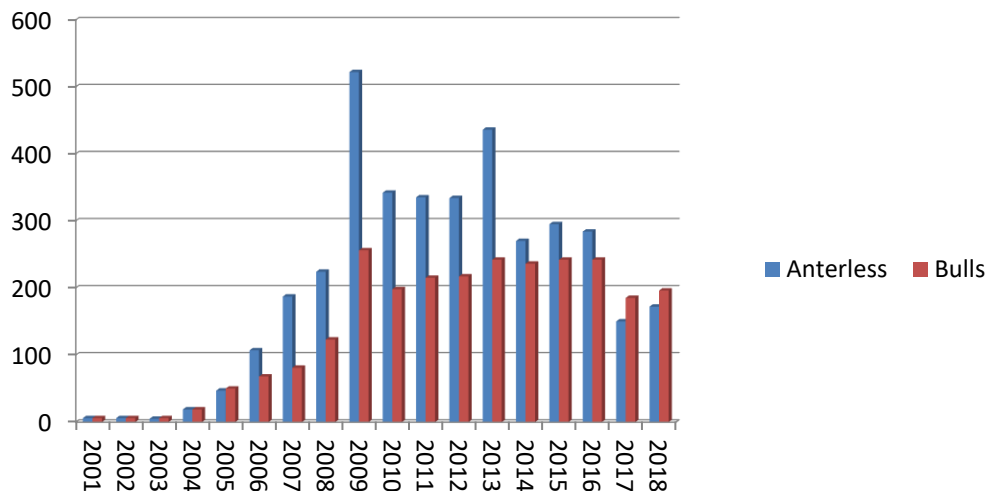
Elk hunters may take only one elk per year.

Area Permit Allotment

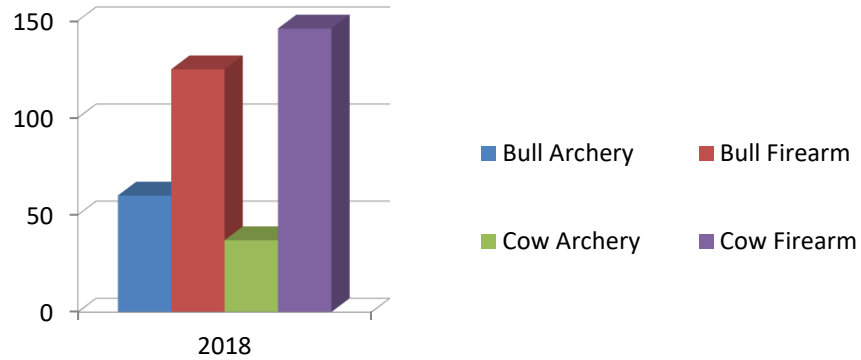
| | Hazard LEA | Straight Creek LEA | At Large | Prestonsburg LEA | Middlesboro LEA | Tug Fork | Total |
|---------------------|------------|--------------------|------------|------------------|-----------------|-----------|------------|
| Bull Archery | 8 | 8 | 79 | 1 | 1 | 3 | 100 |
| Cow Archery | 20 | 14 | 118 | 2 | 3 | 3 | 160 |
| Bull Firearm Week 1 | 6 | 6 | 59 | 1 | 1 | 2 | 75 |
| Bull Firearm Week 2 | 6 | 6 | 59 | 1 | 1 | 2 | 75 |
| Cow Firearm Week 1 | 15 | 12 | 110 | 3 | 2 | 3 | 145 |
| Cow Firearm Week 2 | 15 | 12 | 110 | 3 | 2 | 3 | 145 |
| Youth | 2 | 1 | 5 | 1 | 0 | 1 | 10 |
| Total | 72 | 59 | 540 | 12 | 10 | 17 | 710 |

2018-2019 Harvest Results

Total Harvest by Year



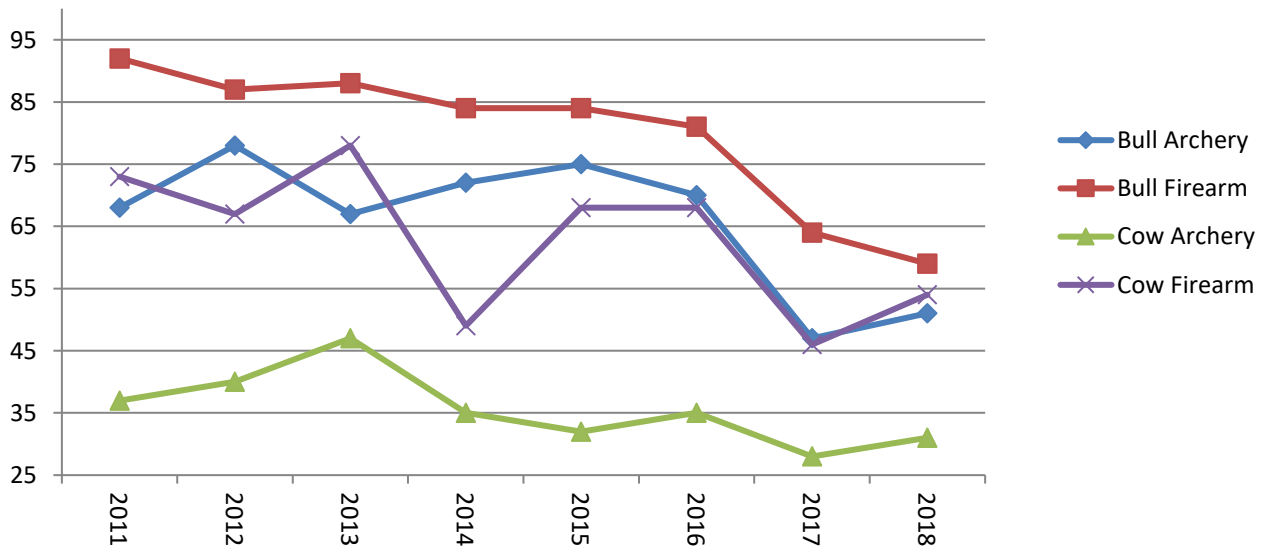
Weapon Type Harvest Summary



Success Rates by Area

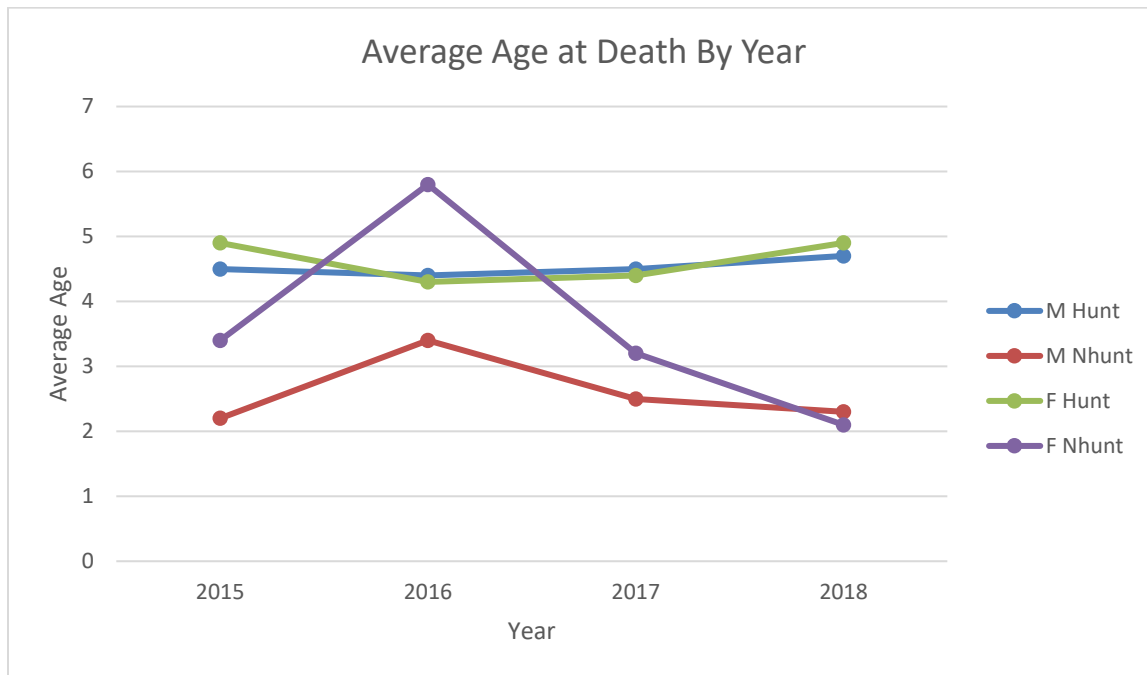
| | Hazard LEA | Middlesboro LEA | Prestonsburg LEA | Straight Creek LEA | Tug Fork | At Large |
|---------------------|------------|-----------------|------------------|--------------------|----------|----------|
| Bull Archery | 62% | 100% | 100% | 25% | 33% | 48% |
| Bull Week 1 | 100% | 100% | 100% | 50% | 50% | 44% |
| Bull Week 2 | 100% | 100% | 100% | 50% | 100% | 54% |
| Cow Archery | 20% | 67% | 100% | 25% | 0% | 22% |
| Cow Week 1 | 80% | 100% | 100% | 58% | 67% | 49% |
| Cow Week 2 | 20% | 50% | 100% | 25% | 67% | 42% |
| Youth | 100% | n/a | 100% | 100% | 100% | 80% |

Overall Success Rates by Weapon Type



Age at Harvest/Death Data

Starting in 2015, all hunters were asked to remove a tooth from their elk and return it in a postage-paid envelope for the purpose of determining the age of their elk. Program staff also collected teeth opportunistically. The chart below shows the average age at death for both hunted and non-hunted categories. Hunted elk samples were collected from hunters during the general elk hunting season. Non-hunted samples were collected from live captured elk or any elk that dies outside the hunting season (roadkills, euthanized, poached, etc.).



Kentucky’s Top 10 Trophy Bulls

| SCORE | Hunter | County | Method | Year |
|----------|-----------------|---------|------------|------|
| *416 5/8 | Lisa Parsley | Martin | Found | 2016 |
| *392 0/8 | Sam Billiter | Pike | Modern Gun | 2016 |
| *377 5/8 | David Giles | Knott | Modern Gun | 2015 |
| *373 4/8 | Anthony Brown | Letcher | Archery | 2015 |
| *372 6/8 | Terrell Royalty | Knott | Modern Gun | 2009 |
| 371 0/8 | Greg Neff | Bell | Modern Gun | 2007 |

| | | | | |
|----------|----------------|--------|------------|------|
| *369 5/8 | Bryan Barton | Bell | Modern Gun | 2016 |
| *368 4/8 | Bill Krider | Knott | Modern Gun | 2015 |
| *367 7/8 | Kelvin Jackson | Harlan | Modern Gun | 2008 |
| 367 0/8 | Bill Auxier | Knott | Modern Gun | 2007 |

*** Indicates Non-typical**

This list includes the 10 largest bull elk scored and reported to Kentucky Fish and Wildlife. The department is compiling a list of the top 100 elk taken in Kentucky. Please send copies of official (signed) score sheets to: Kentucky Trophy Elk List, KDFWR, 1 Sportsman’s Lane, Frankfort, KY 40601. Emailed submissions to info.center@ky.gov also will be accepted.

Changes for the 2018-2019 Elk Season

All hunters must complete the annual elk hunter survey after elk season is over. Hunters that do not complete the post-season survey will not be allowed to enter into any quota hunt drawing, regardless of species, for one year.

Disease Surveillance

Brainworm (*Parelaphostrongylus tenuis*)

Brainworm, or meningeal worm, is the common name for a parasite that affects elk and other deer species. White-tailed deer are carriers of the parasite, but have evolved resistance to the disease. The parasites are limited only to deer species; therefore there is no disease risk to most livestock. Brainworms are small parasitic worms that travel through the body and end up in the spinal cord or brain, where they cause damage to nervous tissue. Elk infected with the parasite may become emaciated, disoriented, and show abnormal behavior such as a loss of fear for humans. Most affected individuals ultimately die from complications caused by the disease. Approximately 4-6% of elk in Kentucky contract the parasite. Brainworm symptoms are similar to those caused by Chronic Wasting Disease (CWD), but the two are in no way related. Kentucky Fish and Wildlife biologists actively seek out animals showing brainworm symptoms and collect biological samples for testing. If you see an elk that fits the description, please contact your local biologist. More information can also be found on our website: <https://fw.ky.gov/Wildlife/Pages/Meningeal-Worm.aspx>

Chronic Wasting Disease

Chronic Wasting Disease (CWD) is a disease of high concern to deer and elk across North America. It is caused by a certain type of protein (prion) and causes damage to brain tissue. Kentucky Fish and Wildlife has tested thousands of deer and elk statewide and have not detected the disease. More information can be found on our website: <https://fw.ky.gov/Wildlife/Pages/Chronic-Wasting-Disease.aspx>

Current Research

The elk program has contracted with Dr. Joshua Millspaugh, a Boone and Crockett Fellow at the University of Montana, to create a first generation elk Statistical Population Reconstruction (SPR) model. The information gained from this study is a necessary first step to apply SPR to assess demographics of elk in Kentucky. The use of SPR models would result in a rigorous and defensible monitoring strategy for elk. Application of SPR will help establish appropriate harvest regulations and manage elk in a sustainable and defensible manner. Long-term vital rate estimation envisioned from this project will allow the program to better understand the relationship between harvest rates, harvest regulations, and elk demographics and management. Results from this project should reveal future research needs associated with elk demographics and management in Kentucky.

The resulting SPR model will estimate abundance, survival rates, harvest rates, and recruitment. All estimates can be age and sex-specific and include corresponding confidence intervals (We do not have any confidence intervals with our current model). The final report is expected in the late winter of 2018.

Education

KY Elk University Training Module

An on-line elk hunt training is available through our website that covers topics ranging from pre-hunt preparation to the actual hunt and what to do after an elk is harvested (<http://app.fw.ky.gov/elk101/default.aspx>).

2015-2030 Elk Management Plan

The transition from elk restoration to sustainable elk management has resulted in creating a comprehensive Kentucky Elk Management Plan. KDFWR had two goals in writing this Plan: we wished to provide an overview of past and current management of the Kentucky elk herd, and to provide a vision for future management of the herd. The result is the 2015-2030 Kentucky Elk Management Plan, which is available on our website (<http://fw.ky.gov/Hunt/Documents/20152030ElkManagementPlan.pdf>)

Elk Info Page

Other information regarding Kentucky elk restoration and management can be found on our Elk Info Page at <http://fw.ky.gov/Hunt/Pages/Elk-Info.aspx>

Contacts

If you have questions about the elk herd or elk hunting opportunities, please visit the elk webpage at fw.ky.gov/Hunt/Pages/Elk-Hunting.aspx or call the Kentucky Fish and Wildlife Info Center at 1-800-858-1549 or contact one of the Elk Program Biologists listed below.

Dan Crank
606-435-6225

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Jonathan Fusaro
606-303-1167

jonathan.fusaro@ky.gov

Joe McDermott
502-892-4432

joe.mcdermott@ky.gov

Gabe Jenkins
502-892-4490

Gabriel.jenkins@ky.gov

Approximately 95 percent of Kentucky land is privately owned. To successfully manage our wildlife resources, the Kentucky Fish and Wildlife 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 with wildlife management on your property see the map.

