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ELK

Elk seasons on private lands ran concurrently with established deer seasons, except in the Special Southwest Zone. Hunters with modern guns harvested the most animals: 51 bulls and 40 cows. Archery hunters took 23 cows and 28 bulls. Muzzleloader hunters bagged three cows and five bulls. A total of 150 elk were taken on private lands in 2016-17. To see the breakdown of harvest by zone and method, check Table 4.

In addition to the private lands hunting opportunities, lim-

ited opportunities were offered through the Wildlife Department's Controlled Hunts program at Cookson WMA and at the Wichita Mountains Wildlife Refuge. The Cookson WMA hunt yielded one bull, and the Wichita Mountains hunters tagged 60 bulls and 61 cows.

An additional 43 elk (25 bulls and 18 cows) were taken by hunters with access to Fort Sill Army post.

The statewide elk limit was set at two for all elk zones combined. In total, 315 elk were taken statewide during the 2016-17 seasons, an increase of five elk from 2015-16.

Table 4: 2016 Elk Harvest by County, Sex, and Season

County	Archery		Gun		Muzzleloader		Total		Grand Total
	Bull	Cow	Bull	Cow	Bull	Cow	Bull	Cow	
Adair	1	1	0	0	0	0	1	1	2
Beckham	6	8	8	7	0	0	14	15	29
Caddo	0	1	5	3	0	0	5	4	9
Carter	1	0	0	0	0	0	1	0	1
Cherokee	1	3	1	5	1	0	3	8	11
Cimarron	2	2	8	3	0	0	10	5	15
Coal	0	1	1	0	0	0	1	1	2
Comanche	8	6	12	10	0	2	20	18	38
Dewey	2	0	0	0	0	0	2	0	2
Grady	0	0	1	0	0	0	1	0	1
Hughes	0	0	0	1	0	0	0	1	1
Kiowa	0	5	10	7	4	1	14	13	27
Muskogee	2	0	0	0	0	0	2	0	2
Oklahoma	0	0	1	0	0	0	1	0	1
Pushmataha	0	0	1	0	0	0	1	0	1
Texas	0	1	2	4	0	0	2	5	7
Washita	0	0	1	0	0	0	1	0	1
Private Lands Total	23	28	51	40	5	3	79	71	150
ODWC Controlled Hunt	0	0	1	0	0	0	1	0	1
Wichita Mnts Refuge	0	0	60	61	0	0	60	61	121
Fort Sill Military Base	0	0	25	18	0	0	25	18	43
GRAND TOTAL	23	28	137	119	5	3	165	150	315

Credit for “Young Buck” Success Given to Hunters as State’s Deer Strategy Draws Accolades

By Jerry Shaw, Program Supervisor

“If I were looking for my best opportunity to harvest a mature white-tailed buck, Oklahoma would be one of the first places I would look.”

That statement was made by Kip Adams, the Education and Outreach Director for the Quality Deer Management Association (QDMA) at the 2016 North American Deer Alliance meeting in Austin, Texas. The comment was part of Kip’s “State of the Whitetail” address to a roomful of state and federal conservation agency leaders, deer biologists and researchers, hunting industry professionals and nongovernmental organizations meeting for a two day “think tank” to strategically map where deer

level of success it has found, but also the speed and relative painless nature with which it was accomplished. As a state, we have managed to fundamentally alter the buck component of our deer resource. We have moved from the great majority of our harvested bucks being yearlings (1.5 years old) to seeing one of the smallest percentages of yearlings harvested nationwide.

And the most inspiring component is that we have done it without additional regulations. Our hunters have chosen to make this change! We did not have to enact restrictive rules or force hunters into a “one size fits all” management plan. Rather, we provided hunters with

are reaching mature age classes. The charts show this dramatic age shift across time.

While this shift in harvest pressure away from young bucks was undertaken to ensure better herd health, one of the benefits of an older age structure is the percentage of mature bucks on the landscape. As these bucks mature, more of their nutritional energy can be devoted to antler development, something highly attractive to doe deer and hunters alike!

QDMA’s Adams further praised our agency and our hunters when he said “The Oklahoma Department of Wildlife Conservation has done a tremendous job promoting the benefits of protecting young bucks and engaging hunters in their deer management program. The result has been great buck age structure, supportive hunters, and exceptional hunting opportunities. This is a win-win for hunters and Oklahoma’s deer population.” The QDMA was so impressed with the success of this educational effort that it named the Oklahoma Department of Wildlife Conservation its Agency of the Year in 2014.

So where does this age data come from?

Each year, the Wildlife Department collects lower jaws from a sub-sample of the overall deer harvest. Using a technique that evaluates tooth wear and eruption patterns, the ODWC big game biologist and technician analyze the tooth pattern in the lower jaw of deer. Young deer lose teeth just like young people. Knowing the sequence of that loss and replacement, combined with the knowledge of the wear patterns in the enamel, an age can

**Hunters in the Know...
Let Young Bucks Grow!**

Deer Management is More Than Antlerless Harvest

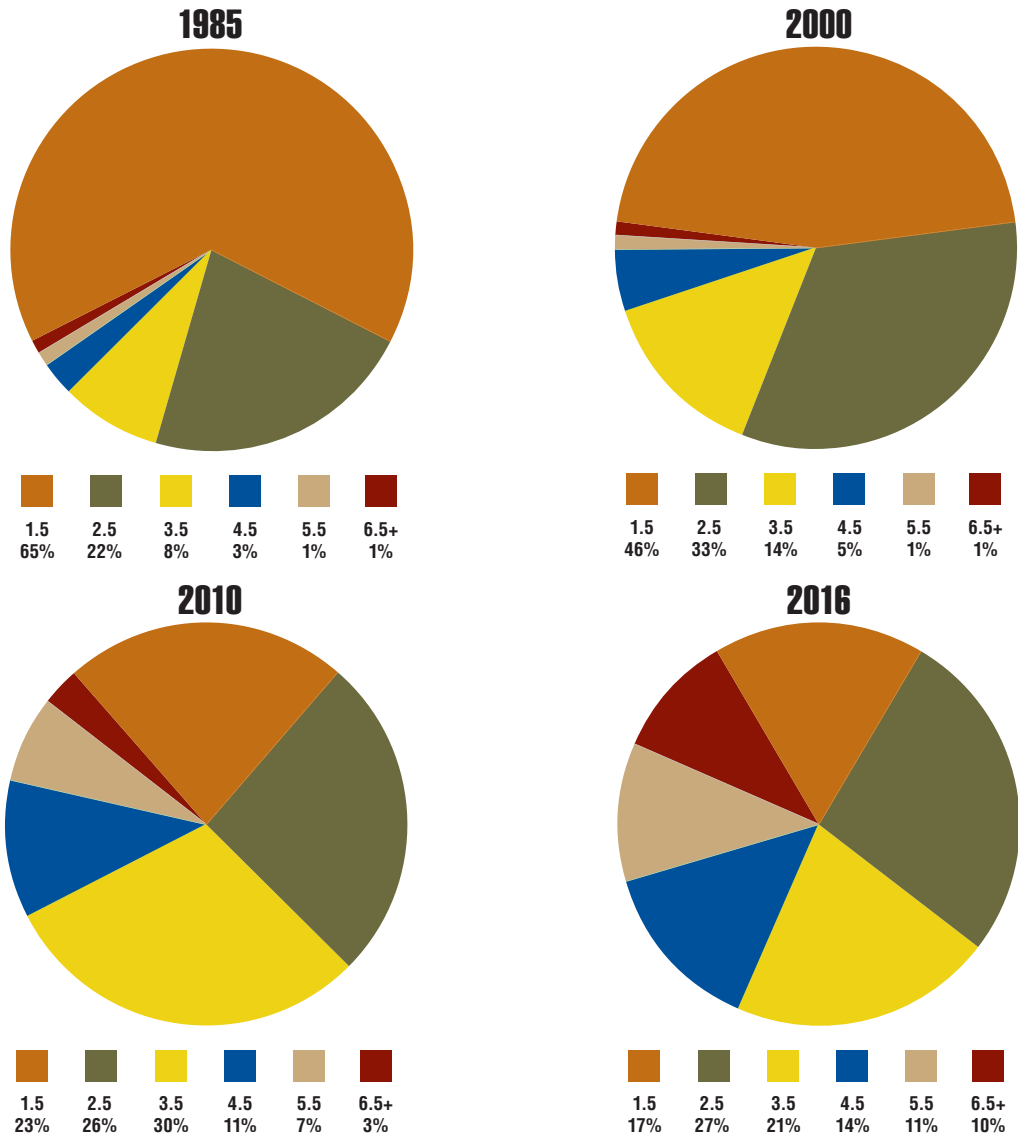
and deer hunting will move in the future. A Certified Wildlife Biologist who is involved daily with high-level deer management on a national scale, Adams’ opinion is not one to be taken lightly!

So just what has Oklahoma done to garner such high praise not only from the QDMA but also national hunting publications?

In short, Oklahoma’s hunters have been a major player in a management effort that is astonishing not only in the

a goal of reducing the harvest of young bucks, and we explained the benefits of increased numbers of mature bucks in the population. We resurrected our successful antlerless harvest campaign slogan of “Hunters in the Know Take a Doe!” and updated the message “Hunters in the Know Let Young Bucks Grow!” The hunters responded to the message in such a way that we now have better-balanced age structures, and greater numbers of bucks

Buck Age Percentage at Harvest



be assigned to the deer. Our own biologists and technicians collect jaws from deer taken from some of our WMAs. We also have individuals enrolled in our Deer Management Assistance Program (DMAP) submit jaws for aging. A third source of data is gathered by natural resources students hired each year from three universities across the state who collect jaws at deer processors opening weekend during firearms season. A smaller number of samples are obtained from the annual herd health survey conducted by the Department.

The final method of gaining data involves the hunters directly.

In the first-of-its-kind program, ODWC established a webpage where hunters

can submit photos of deer jaws. Submitted photos are examined, the submitter is notified of the deer's age, and the data included in this important management effort, all free of charge. You can participate in this effort in 2017-18 by going to www.wildlifedepartment.com/hunting/species/deer/age.

In total, ODWC's deer experts determine ages of between 2.5 percent and 5 percent of the harvested deer annually. That's from 2,000 to 5,000 jaws a year!

Concerned that the different sources of samples might skew the age data, we analyzed the jaws looking to see if the source made a difference (WMA vs. DMAP vs. processor). While we did find that DMAP properties were on average

taking slightly older bucks, the average difference in ages was between 0.2 and 0.7 years. In terms of this study, the similarity in ages was close enough to lump all the data together.

While hunters reading the annual Big Game Report might have seen these pie charts in the past, they have never been able to look at them side by side and see the success that they are helping to build. It is important to acknowledge and celebrate the success that has come from these efforts. This change in time shows that when hunters embrace their roles as deer managers with each deer they choose to harvest, as well as those they choose to pass over, great progress can be made. 🌿



The state's pronghorn harvest this past season was nearly double that of two years ago, indicating this species is recovering nicely from the drought of 2012-14.

PRONGHORN ANTELOPE

Pronghorn habitat is limited in Oklahoma, primarily in the far reaches of the Panhandle. However, Oklahoma does have pronghorn populations in huntable numbers through over-the-counter archery permits, landowner permits and once-in-a-lifetime Controlled Hunts drawn permits.

Cimarron County, with the largest number of pronghorns in

the state, led the harvest again in 2016 with 54 males and 49 females. Texas County saw a harvest of 18 males and 17 females. All told, 138 pronghorn were taken, including 31 with over-the-counter archery permits. This number is almost double the harvest from 2014 and 2015, evidence that the effects of the drought are beginning to lessen and reproduction is increasing. Table 5 shows the 2016 harvest data for these unique animals.

County	Archery		Gun		Total		Grand Total
	Male	Female	Male	Female	Male	Female	
Cimarron	20	2	34	47	54	49	103
Texas	8	1	10	16	18	17	35
GRAND TOTAL	28	3	44	63	72	66	138

DATA COLLECTION AND ANALYSIS

The Wildlife Department collects a variety of biological data for management of the state's deer resources. A host of factors are evaluated to better assess the health of the deer population including harvest rates, sex ratios, deer age at harvest, and even antler characteristics.

The data needed for this type of analysis does not come solely from our E-check system. It requires special efforts by people across the state. Every year for the past several decades, students from three universities enrolled in natural resources programs are hired to collect deer jaws from hunter-killed deer brought to selected deer processors. This data is coupled with jaw data collected on WMAs, deer harvested by cooperators in the Department's Deer Management Assistance Program, and from online jaw submission photos. The outcome of this age analysis for 2016-17 is shown in Figures 11 and 12.

Yearling bucks (those that are 1.5 years old) are an especially good barometer of a herd's physical condition. Their high vulnerability to harvest usually ensures a large sample size, and, more importantly, these young bucks have the

burden of growing their first set of antlers when body growth is not complete. This makes them especially sensitive to prevailing range conditions. When yearlings have well-developed antlers with many points and large beam diameters, the herd can be considered healthy. In 2016-17, a sample of 212 yearling bucks was identified in the dataset using tooth wear and eruption analysis techniques. Of this yearling sample, 89 percent had four or more points (Figure 13). With the excellent habitat conditions across most of the state, this antler development was expected.

The age structure for adult does is shown in Figure 12. The doe harvest is a telling sign of the herd structure. Since does do not have antlers, the harvest pressure on does is fairly level across the age range. Interestingly, the yearling doe portion of harvest is only 1 percent less than the yearling buck harvest. Hunters should take pride in the fact that their efforts to reduce the harvest of young bucks are paying off in the overall harvest rates, as seen in Figures 12 and 13. Further discussion of the Wildlife Department's success in altering buck age structure can be found in the article on pages 20-21.

Oklahoma's Black Bear Harvest Totals 57 for 2016 Seasons

Oklahoma hunters took 57 black bears during the 2016 hunting seasons, an increase of five bears from the previous year.

"The overall status of the bear population is healthy," said Jeff Ford, a wildlife biologist for the Oklahoma Department of Wildlife Conservation. "We are seeing bear in new places every year, and the bear being captured in the Southeast Bear Study currently being conducted by OSU are extremely healthy."

Bear hunting has been permitted since 2009 in only four counties in southeastern Oklahoma: Le Flore, Latimer, Pushmataha and McCurtain. Seasons are held for archery or muzzleloader, and hunters are limited to one bear each year regardless of method of take. A quota of 20 bears is set for the muzzleloader season, but the actual harvest the past few years has not come close to that number.

Le Flore County yielded 36 bears to hunters, only four of which were taken by muzzleloader hunters. In the other three counties, all bears were taken

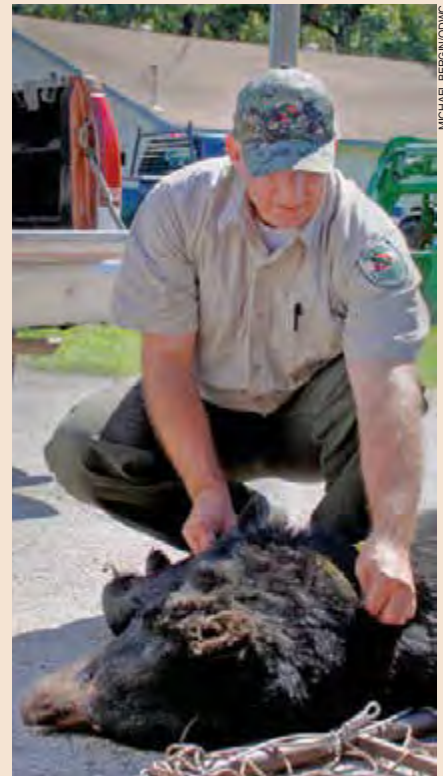
during archery season. Latimer County yielded seven bears for the year; Pushmataha County, nine bears; and McCurtain County, five bears. Usually about three-fourths of the total bear harvest each year occurs on private land.

In all, 53 bears (32 males and 21 females) were harvested during the archery season, and four bears (two males and two females) were taken with muzzleloaders.

"The best tip I can give hunters is find trees where acorns are dropping, with bear sign around, and stay put," Ford said. "Bears tend to feed at all times of the day during the fall. And if there is water close by, that's a plus but not a bear necessity."

Hunters wanting to pursue a black bear in 2017 must buy either an archery or muzzleloader bear license before the opening dates of each season. Archery bear season will be Oct. 1-15. Muzzleloader bear season will be Oct. 28-Nov. 5, but the season closes as soon as the quota of 20 bears has been reached. Muzzleloader hunters must call the bear

quota update line on the day of their hunt at (888) 901-3256. For more information, consult the Oklahoma Hunting & Fishing Regulations Guide. 🐾



CONCLUSIONS

“Habitat is the key.” This is the mantra of deer managers the world over for good reason. Without quality habitat, even the best management efforts will fail to provide optimum results. Oklahoma was an excellent example of the vital role habitat plays when, after several years of limited rainfall, we found our herds impacted both in quantity as well as quality. Fortunately, in 2016 the rain returned, and the state’s deer population and habitats are rebounding. Much of the state’s habitat was in great condition during the 2016 growing season. As a result, the deer herds are healthy and producing well.

We have ample reasons to be excited about our deer hunting future:

- We continue to offer ample deer hunting opportunities compared with other states in the region, as well as some of the best chances to take a mature buck.
- Oklahoma hunters took home just under 100,000 deer, an increase of 12 percent from 2015-16 levels.
- Archers continue to show increasing harvest with a record take of 26,151 deer!
- Age at harvest data show herds that are much better balanced than possibly at any time since deer were first hunted in our state, with buck and doe age structures being very similar.
- Gun season license sales are holding steady, despite surveys showing fewer hunters nationwide.



RIP PECK/COURTESY

White-tailed deer are by far the most popular game species targeted by hunters in Oklahoma. For all of the 2016-17 seasons combined, 99,023 deer were checked in to the Wildlife Department’s online E-Check reporting system.

- Oklahoma’s deer herd is in great shape as the 2017-18 seasons approach, as most of the state has had a wet spring and limited areas are lacking for rain. Reproduction and antler growth should be elevated over the past few years.
- The Wildlife Department’s WMAs continue to produce great opportunities in terms of quality and quantity of deer taken.

Figure 11: 2016 Adult Buck Age Distribution

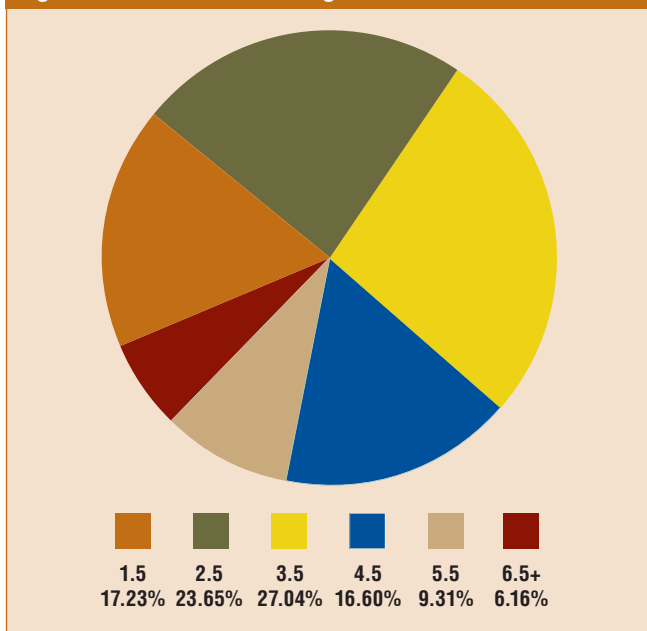
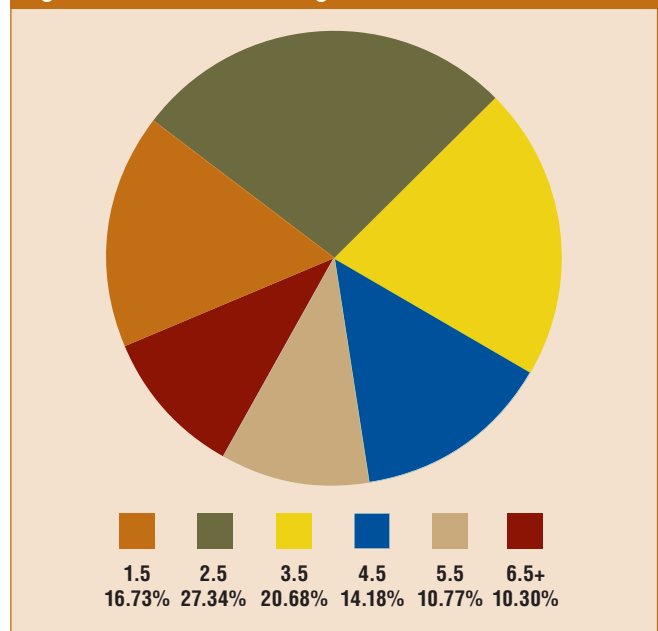


Figure 12: 2016 Adult Doe Age Distribution



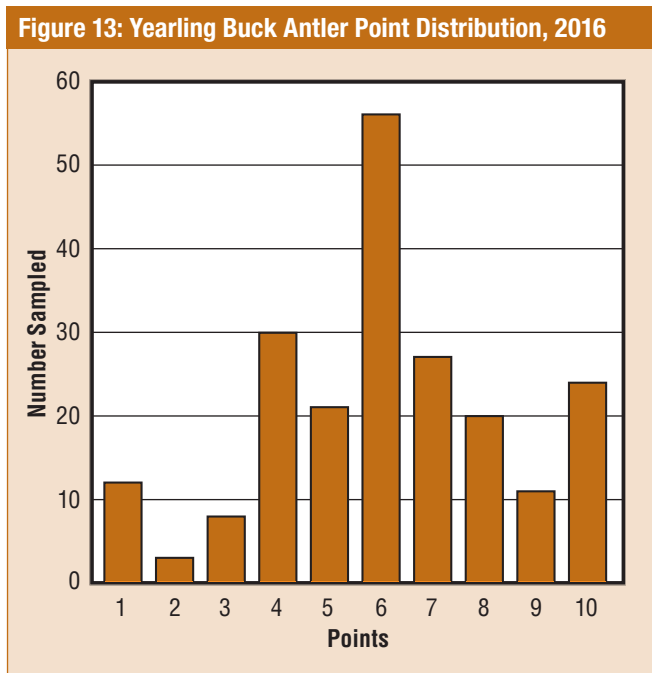


The mule deer harvest in western Oklahoma totaled 189 in 2016-17. Among those was a new Cy Curtis state record muley rack that scored 226 4/8.

- The Wildlife Department is continuing to buy additional land for public hunting areas for those who do not have private-land access.
- Oklahoma hunters have shown that they are willing to

voluntarily alter their buck harvest practices to positively impact the deer population.

- Current regulations allow for a tremendous amount of flexibility for hunters to choose the deer that fits their management and harvest goals.



- It is easier than ever for young hunters to enter the sport with the youth-only season, and apprentice and youth licenses.

Oklahoma’s deer hunters are currently living in “the good old days.” It is up to hunters to continue down this road of management success. Hunters need to stay vigilant in attempts to harvest a sufficient number of does to balance herd numbers with habitat availability. Hunters should remember that they are making a management decision each and every time they pull the trigger — or more importantly, every time their gun’s safety remains on as they watch younger bucks walk away. We all need to keep protecting and enhancing habitat. And perhaps most importantly, we all need to make sure we are introducing the next generation to deer hunting in Oklahoma.

Congratulations on a fantastic 2016-17 deer season and best of luck in 2017! 🌿