

# ***2024 Kansas Pronghorn Harvest Report***

## **PERFORMANCE REPORT STATEWIDE WILDLIFE RESEARCH AND SURVEYS**

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### **Kansas Department of Wildlife and Parks**

Chris Kennedy  
Secretary

Prepared by

Matt Peek  
Research Biologist

Jake George  
Wildlife Division Director

Jon Beckmann  
Wildlife Research Supervisor



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Prepared by Matt Peek, Research Biologist



**Background** – Pronghorn, often referred to by hunters as antelope, mostly exist in Kansas in the westernmost two to three tiers of counties, and mostly South of I-70. There's been a hunting season for pronghorn in western Kansas since 1974. The firearm pronghorn season has been four days long since 1990, starting on the first Friday in October. Since 1985, the archery pronghorn season has encompassed the two weekends prior to the firearm season (nine days). From 2005 to 2022, the archery season reopened on the Saturday following the firearms season and continued through the end of October. However, this season was discontinued to reduce archery harvest pressure resulting from increased permit sales and success rates in recent years. A muzzleloader only season was initiated in 2001. It has begun immediately after the archery season and ran for four days. Muzzleloader permit holders can also hunt with muzzleloader equipment during the four-day firearms season, giving them eight days total.

Archery permits have been unlimited due to traditionally low success rates. Firearm and muzzleloader permit demand and success rates require these permits to be limited draw. They are allocated by preference point system. (Applicants with the highest number of preference points are awarded permits.) Demand for these permits has been high. The number of applicant and preference point purchases for these limited permits has jumped significantly in recent seasons, surpassing 2600 this year (Figure 1). The result of this increase is that general residents are likely going to be impacted by some serious point creep in the coming years. At least part of this increase in applications is the result of the Department consolidating application deadlines for simplicity in 2018 and then providing preference point holders with better notification of upcoming deadlines.

By state law, half of the limited-draw permits are awarded to landowner/tenants and half are awarded to general residents. Draw statistics from 2024 are provided in Appendix 1. Applicants are allowed to buy a preference point without applying for the permit, so preference points higher than necessary to draw sometimes show up in the draw stats. For example, in unit 2 muzzleloader, one general resident had 16 preference points when only 6 were needed for a guaranteed draw.

**Harvest** – Pronghorn harvest and hunter activities are compiled annually through harvest reports sent to all pronghorn hunters. Paper report cards and postage paid tooth envelopes are initially sent to all hunters. After season, a direct link to an online harvest survey is e-mailed to nonrespondents for whom we have an active e-mail address. About a week later, a reminder email is sent. A week after that, all nonrespondents are sent a second mailing of the paper harvest survey. Two to three weeks later, a direct email is sent asking only one question about their overall harvest success (see Fig 6). Results are extrapolated to nonrespondents. Response rate by permit type in 2024 was: archery –69%; firearms – 85%; and muzzleloader – 83%.

An estimate of 175 pronghorn were harvested in 2024. Total pronghorn harvest since hunting seasons were initiated in 1974 is provided in Figure 2. The 2024 harvest was up 16 pronghorn (10%) from the 2023 harvest.

Since 1986, all permits have been valid for any antelope. In 2024, an estimated 166 bucks and 9 does or fawns were harvested. The sex and age composition of the harvest since 1995 is provided in Figure 3. In recent years, over 90% of the harvest has consisted of yearling or older bucks. Reported harvest dates are provided in Figure 4.

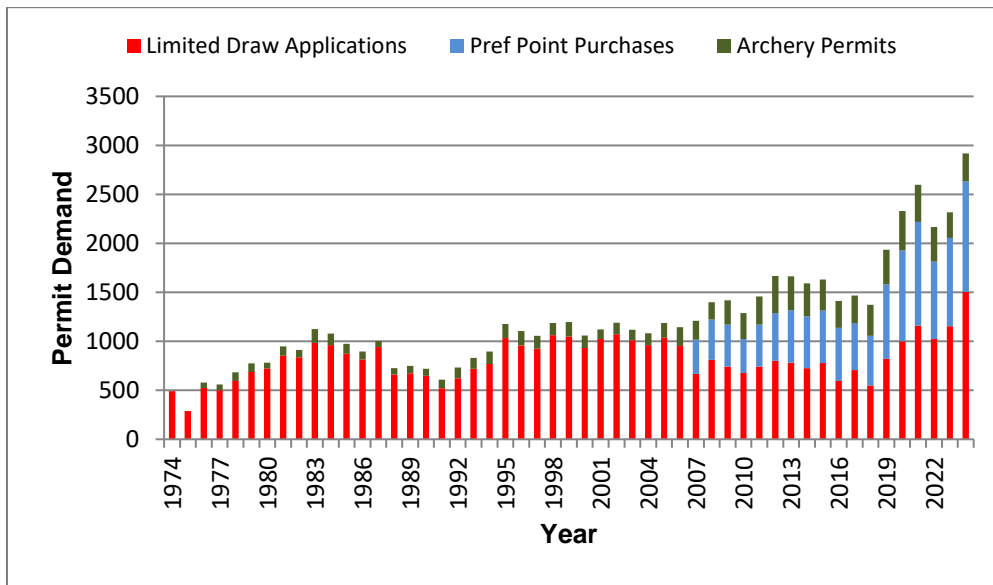


Figure 1. Pronghorn permit demand as indicated by limited draw (firearms and muzzleloader) permit applications and preference point purchases, as well as unlimited archery permit sales in Kansas since 1974.

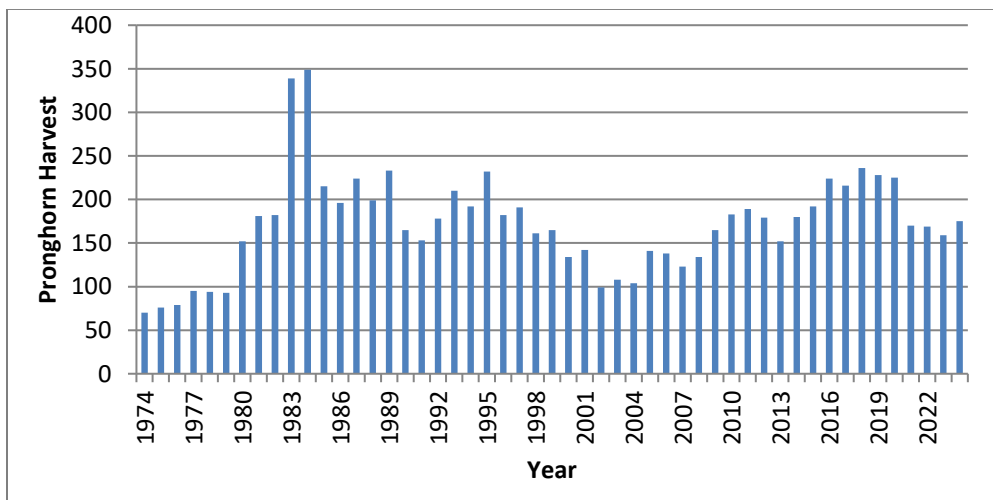


Figure 2. Total pronghorn harvest in Kansas since hunting seasons were initiated in 1974.

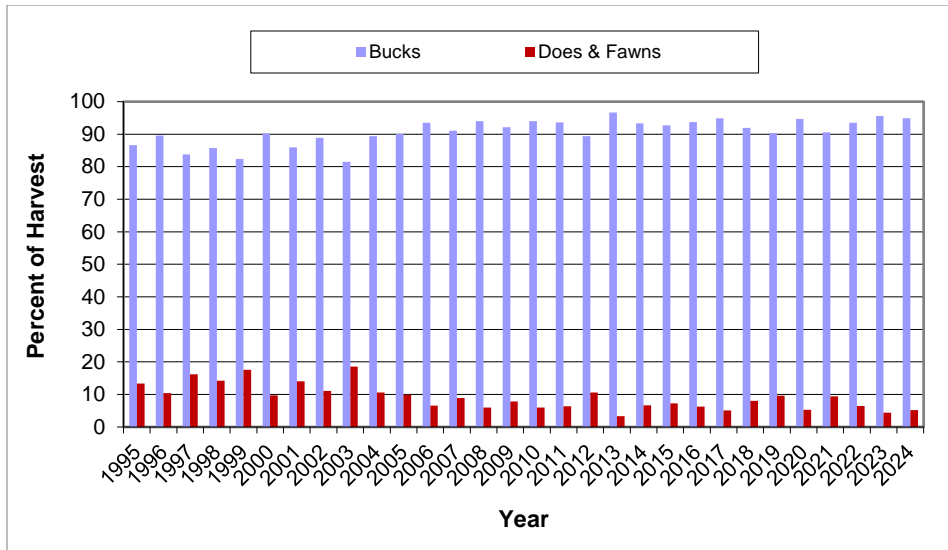


Figure 3. Sex and age composition of annual pronghorn harvest in Kansas since 1995.

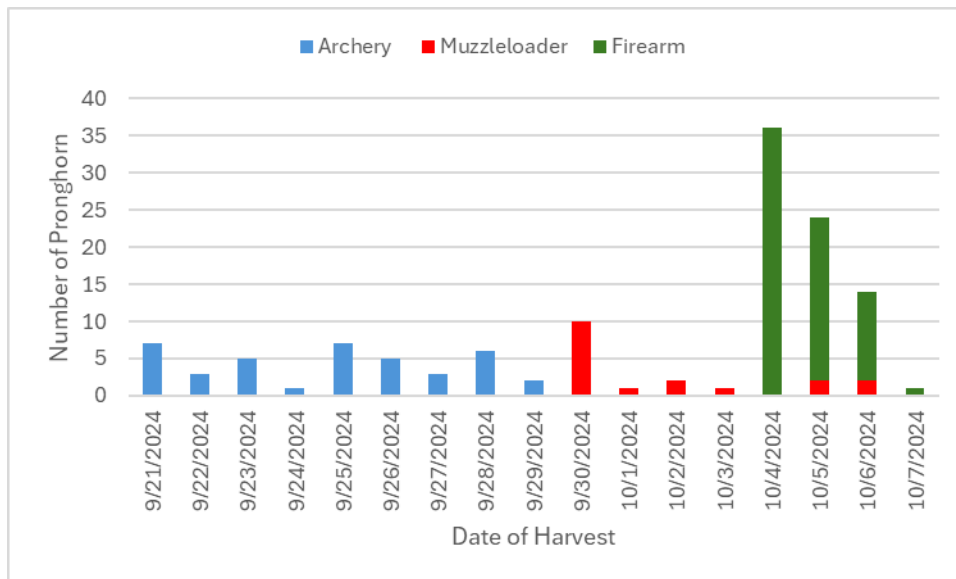


Figure 4. Reported date of harvest and permit type by which pronghorn were taken in Kansas during the 2024 season (n=128).

**Harvest by Weapon Type** – The number of pronghorn permits sold by weapon type since 1995 is provided in Figure 5. Limited draw permit allocations were reduced by about 20% in 2021 due to decreasing pronghorn numbers and have been kept similar since. 2024 allocations were 122 firearms permits and 35 muzzleloader permits. Archery permit sales increased from 2023 by 26 permits (10%). Harvest classification by permit type is presented in Figure 6. Harvest by permit type since 1995 is provided in Figure 7, and success rate by permit type is found in Figure 8.

Pronghorn hunters are asked to rank their hunt satisfaction on a 7-point scale ranging from extremely dissatisfied to extremely satisfied. This serves as a general indicator of hunt quality likely reflecting harvest success, pronghorn numbers, buck quality, access, crowding and various other factors of the hunt. Mean satisfaction by permit type since 2013 is found in Figure 9, and hunter satisfaction by permit type is found in Figure 10.

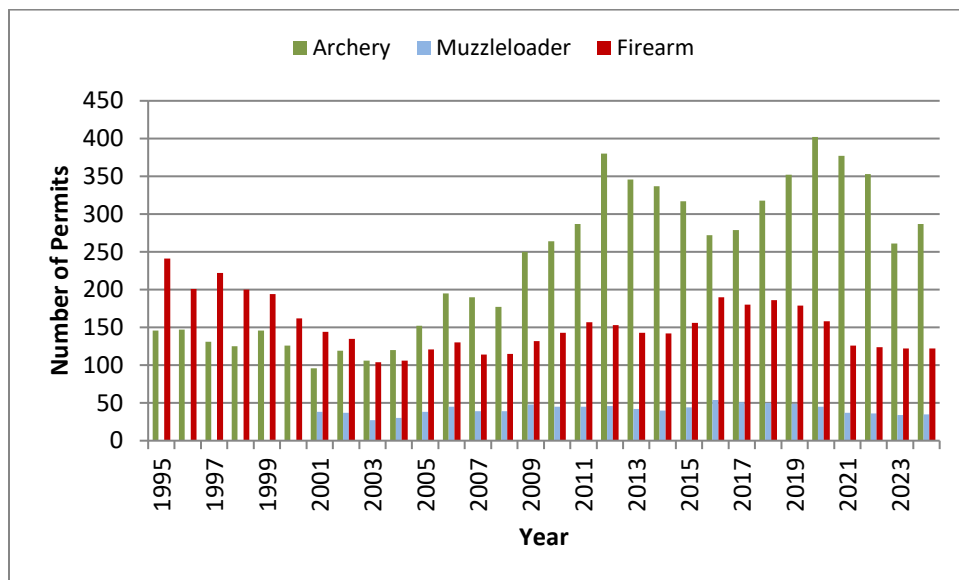


Figure 5. Permits sold by weapon type for pronghorn in Kansas since 1995.

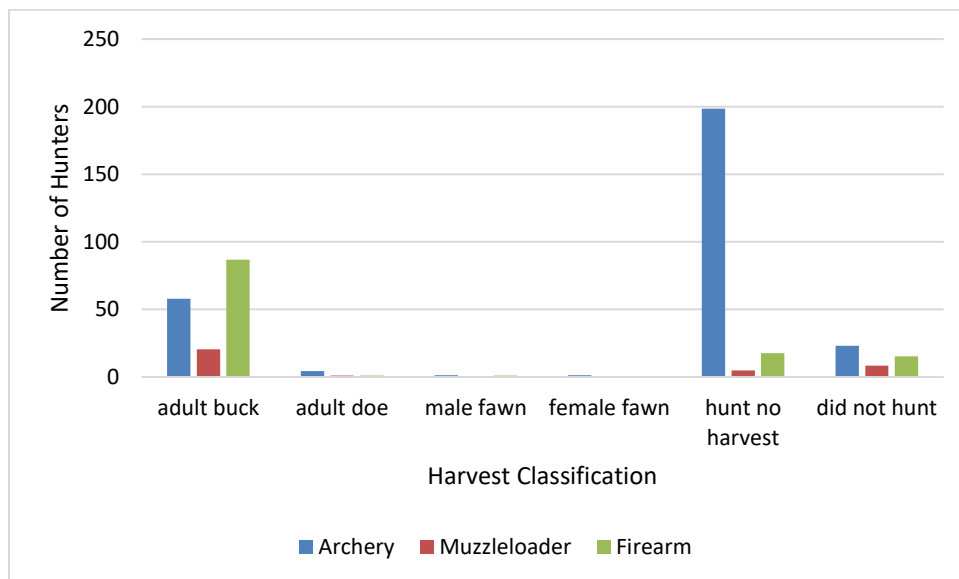


Figure 6. Harvest classification by permit type for 2024 Kansas pronghorn hunters.

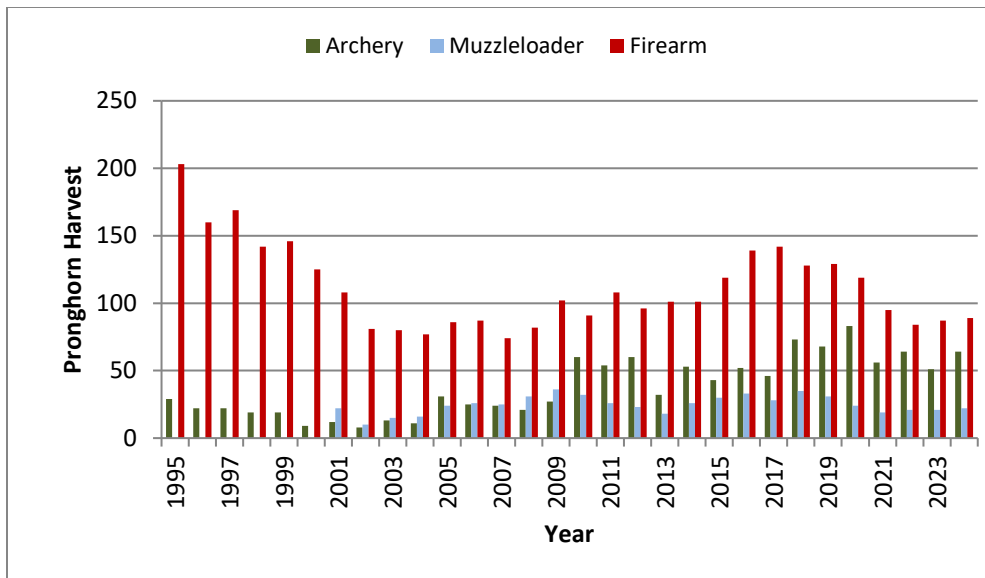


Figure 7. Pronghorn harvest in Kansas by permit type since 1995.

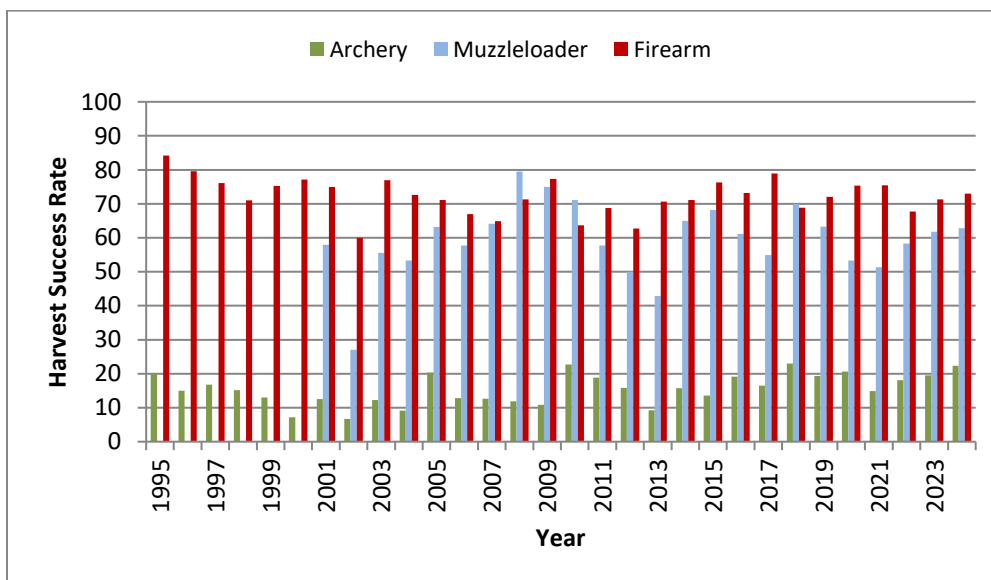


Figure 8. Harvest success rate by permit type for pronghorn in Kansas since 1995.

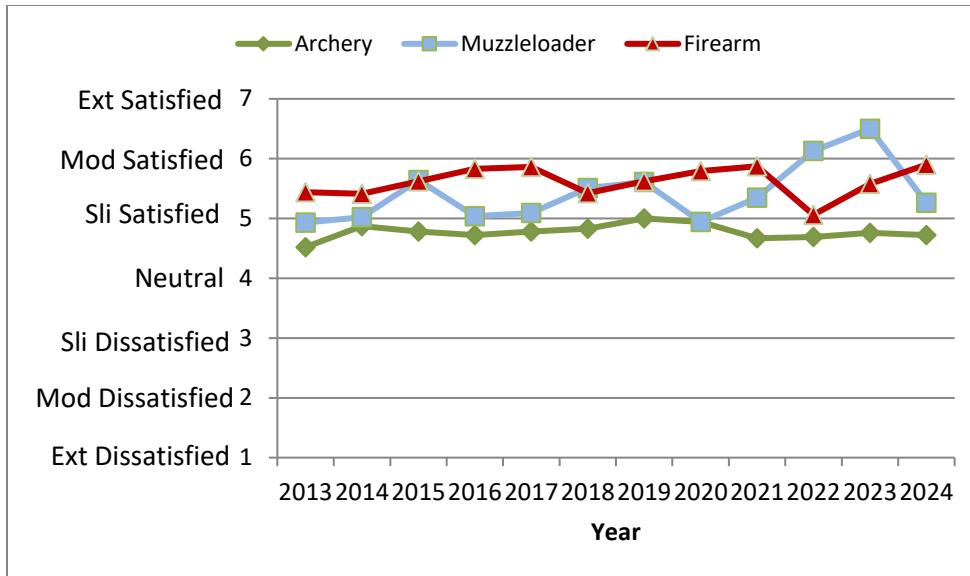


Figure 9. Mean pronghorn hunter satisfaction by permit type in Kansas since 2013.

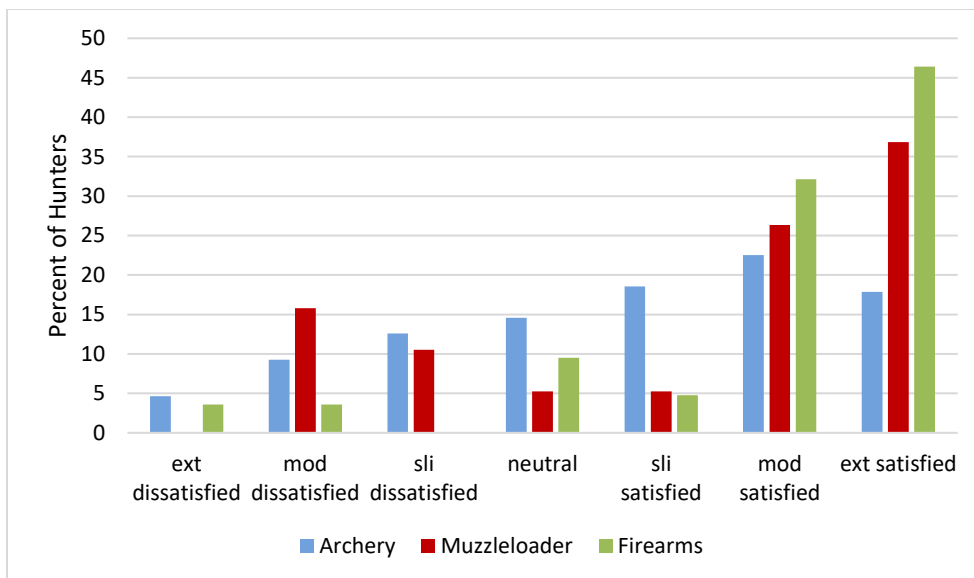


Figure 10. Hunter satisfaction by permit type during the 2024 Kansas pronghorn season.

**Harvest by Unit** – Three management units are open to pronghorn hunting in Kansas (Figure 11). These units, which are also deer management units, were adopted in 2001 to reduce confusion over big game unit boundaries. Pronghorn are generally uncommon in the easternmost parts of all three units. Firearm and muzzleloader permits are restricted to use in one unit whereas archery permits are valid in all three, so unit analyses below are limited to firearms and muzzleloader permits.

Total firearm and muzzleloader permits allocated in each unit is provided in Figure 12. Total harvest by unit is found in Figure 13. Harvest success by unit is found in Figure 14. Mean Hunt satisfaction by unit is provided in Figure 15.

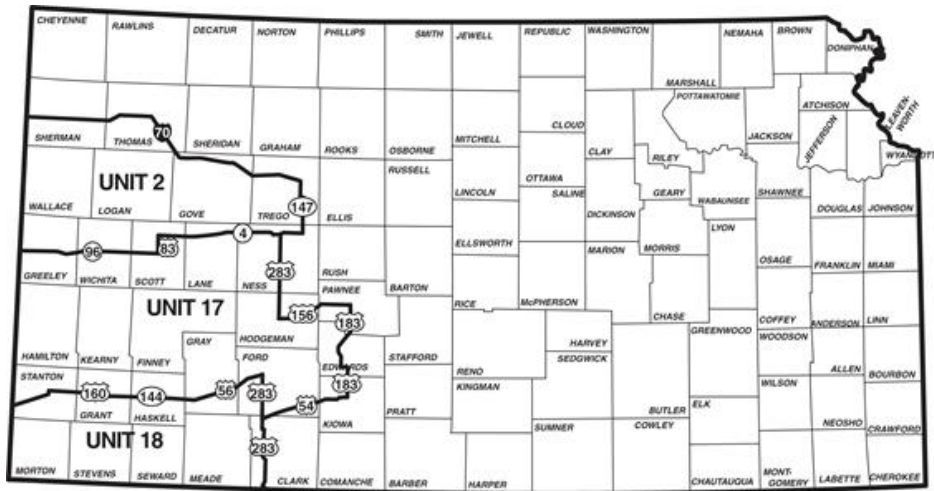


Figure 11. Kansas pronghorn management units.

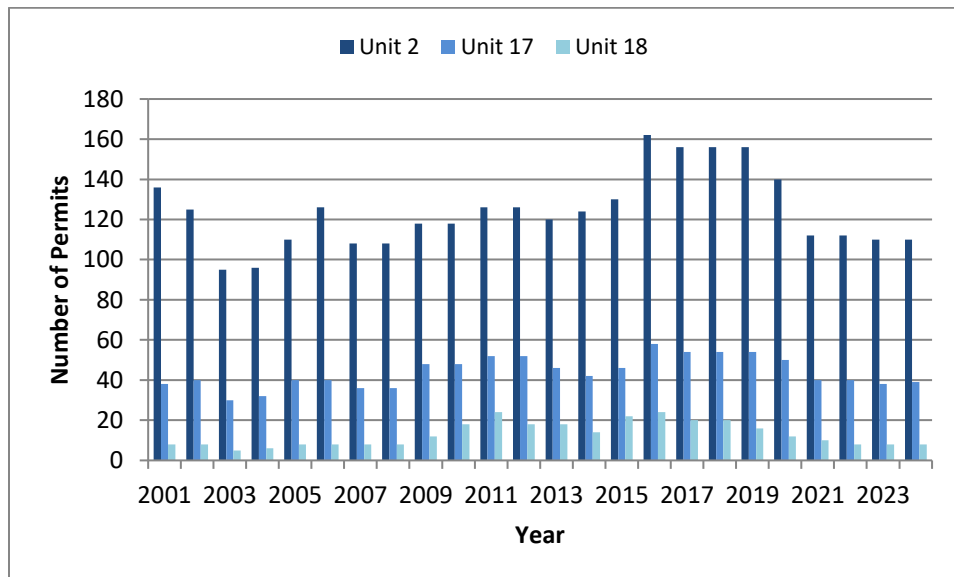


Figure 12. Number of firearm and muzzleloader permits issued in each of the three Kansas pronghorn management units since 2001.



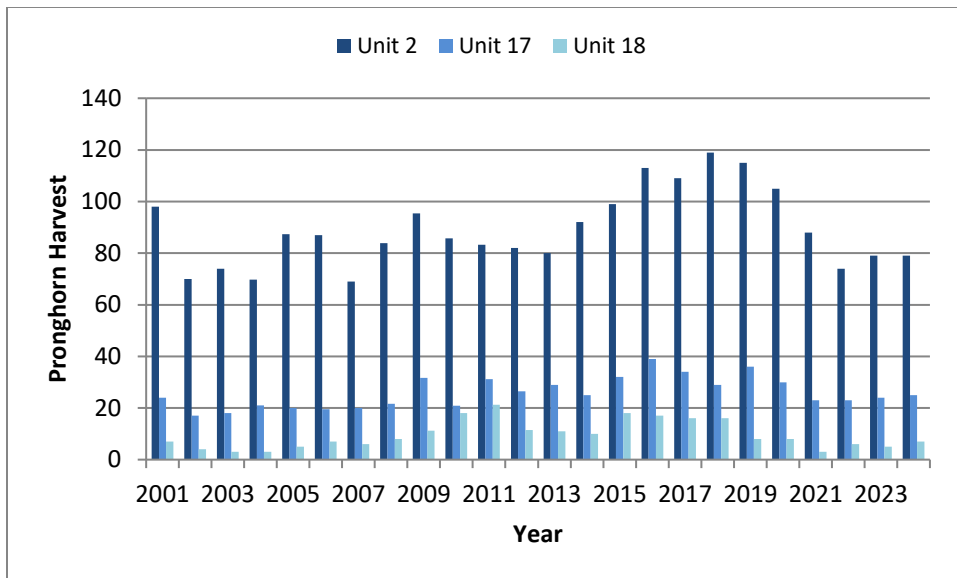


Figure 13. Pronghorn harvest in Kansas by management unit for firearm and muzzleloader permit holders since 2001.

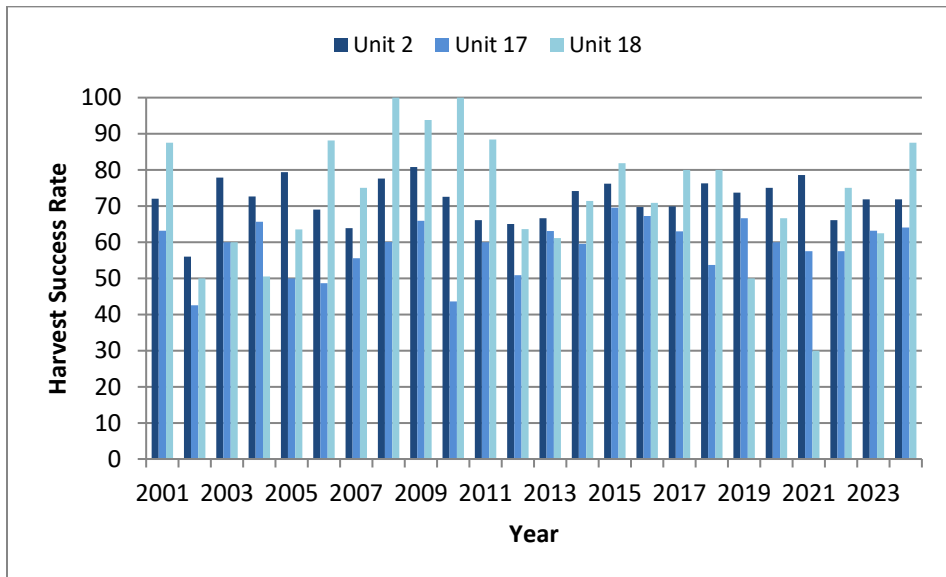


Figure 14. Harvest success rate by pronghorn management unit for firearm and muzzleloader permit holders in Kansas since 2001.

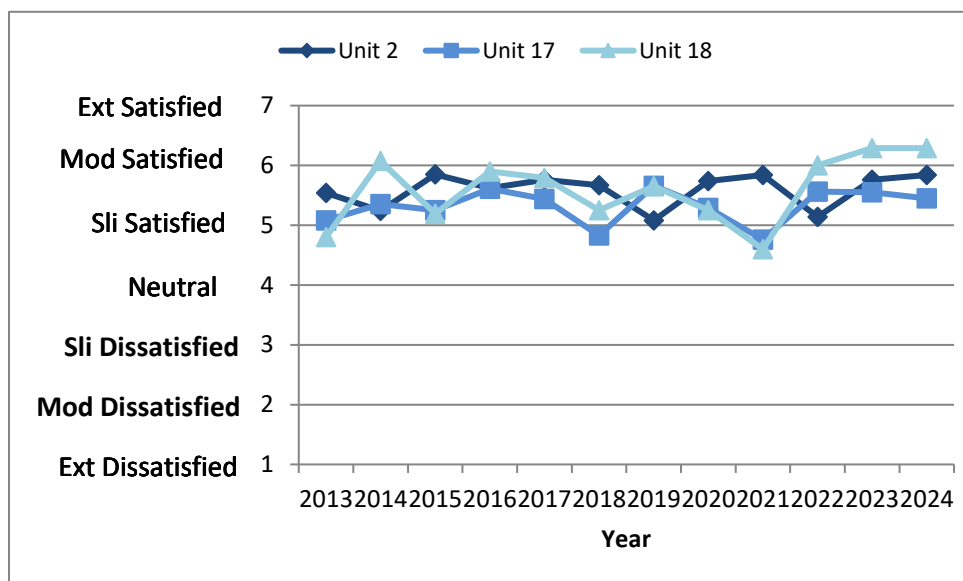


Figure 15. Mean pronghorn hunter satisfaction by unit for firearm and muzzleloader permit holders in Kansas since 2013.

**Horn size** – The Department has been asking hunters to provide horn length and circumference measurements since 2009. Hunters are asked to take the measurements themselves, and given the frequency of whole numbers (8, 9...) and even halves (8.5, 9.5...), this data should be considered an estimate. However, it still provides for a meaningful comparison with age data.

Frequency of adult buck horn lengths and circumferences can be found in Figures 16 and 17, respectively. A scatterplot of this data can be found in Figure 18.

Mean horn lengths and circumferences of adult buck pronghorn harvested in Kansas can be found in Figure 19. This year the mean horn length was 12.2 inches, about the same as the average from the previous three years (12.3). The mean circumference was 5.8 inches, identical to the average of the previous three years. Mean horn length and circumference by management unit and weapon can be found in Figures 20 and 21, respectively. The means for both measurements have been pretty consistent over time. There has generally been minimal difference in mean horn size by unit. By weapon type, mean horn length of pronghorn taken by archery hunters has been slightly lower than that of pronghorn taken by firearm and muzzleloader, and that was the case again this year.

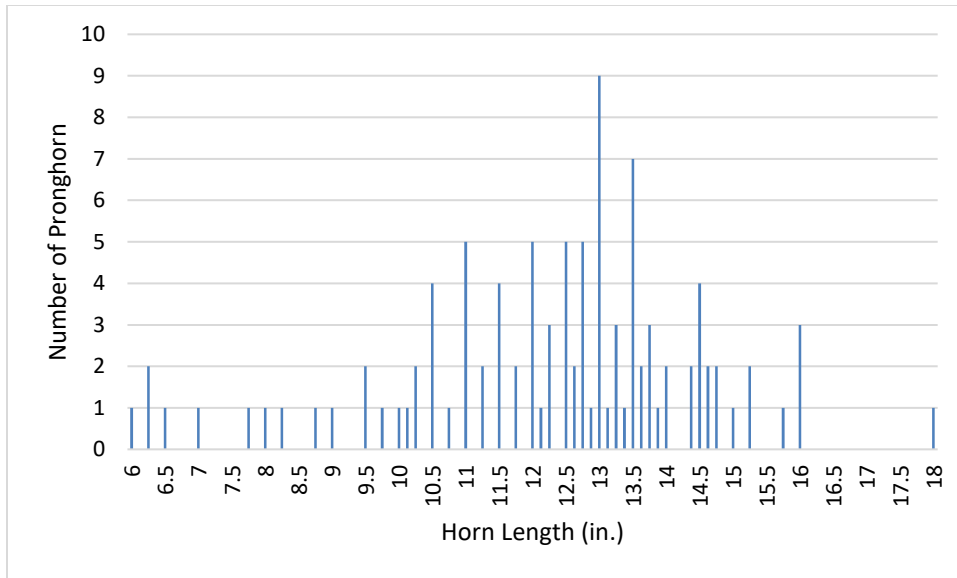


Figure 16. Horn length of adult buck pronghorn harvested in Kansas during the 2024 season (n=105).

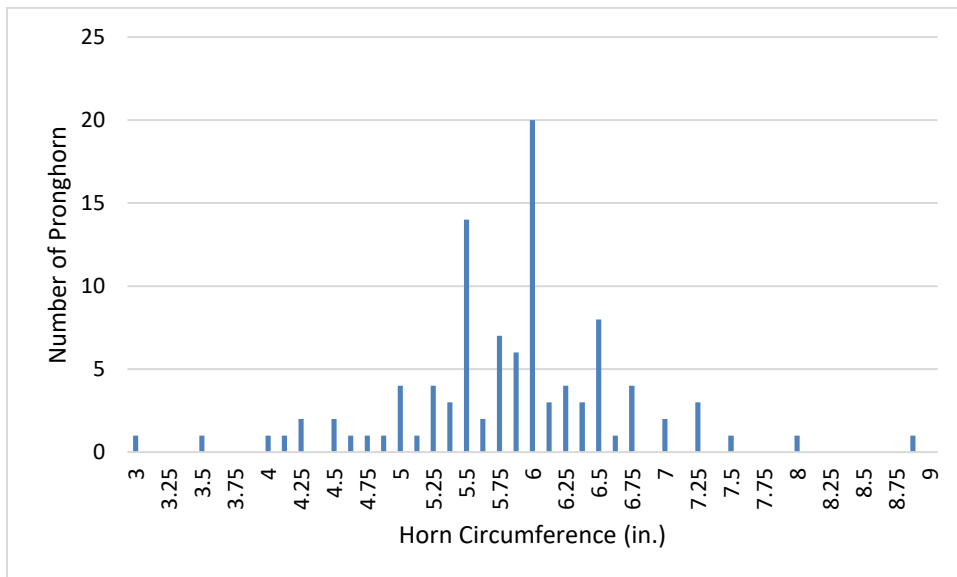


Figure 17. Horn circumference of adult buck pronghorn harvested in Kansas during the 2023 season (n=103).

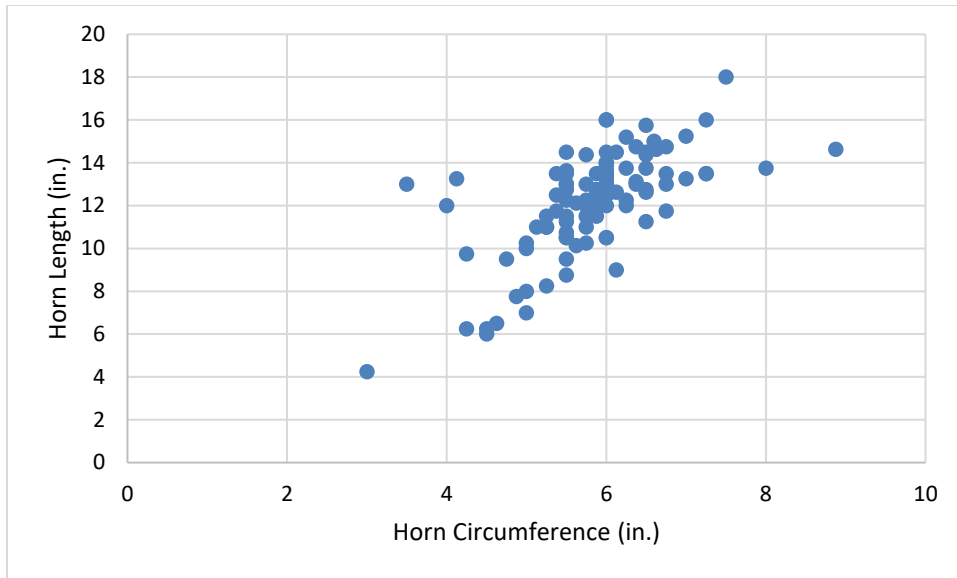


Figure 18. Scatterplot of horn length and circumference of pronghorn harvested in Kansas during the 2024 season (n=103).

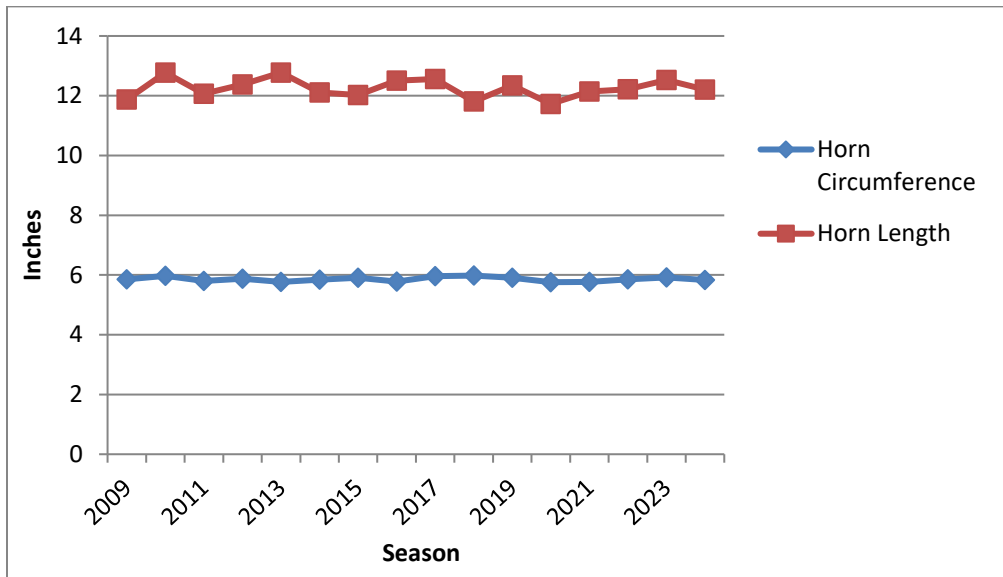


Figure 19. Mean horn length and circumference of pronghorn harvested in Kansas since 2009.

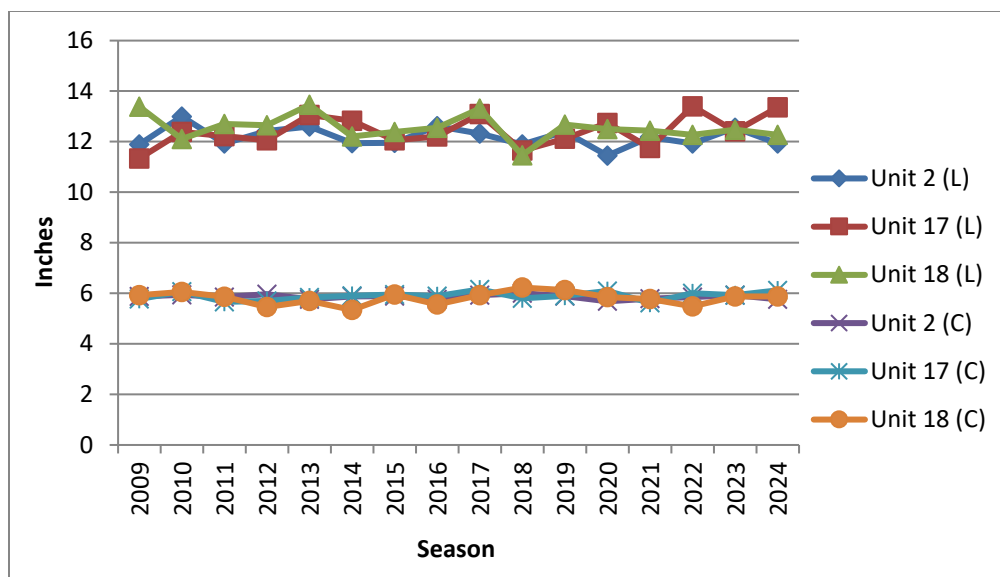


Figure 20. Mean horn length (L) and circumference (C) of pronghorn harvested in Kansas since 2009 by management unit.

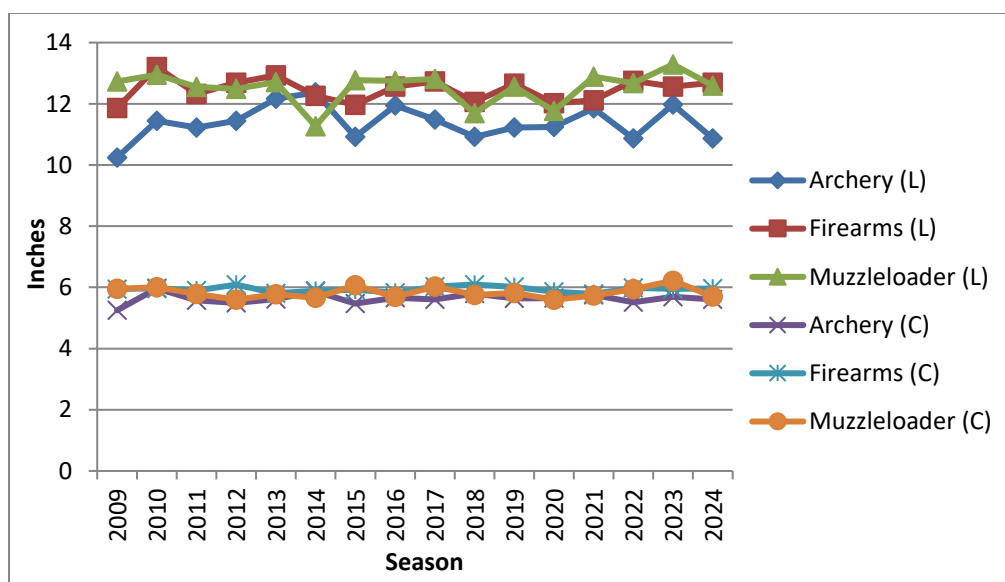


Figure 21. Mean horn length (L) and circumference (C) of pronghorn harvested in Kansas since 2009 by weapon of harvest.

**Archery Equipment** – In 2013, the opportunity to use crossbows during big game archery seasons was expanded to all archery hunters. The percent of archery hunters using each type of archery equipment is found in Figure 22, and the actual number of crossbow and non-crossbow archery hunters is presented in Figure 23. Since legalized, crossbow hunters have comprised an increasing number and percent of total archery hunters in the state. It is uncertain whether crossbow hunters are additive to other archery hunters based on this

data (i.e. whether these hunters would be hunting in the archery season with traditional equipment if they weren't allowed to use a crossbow).

A comparison of crossbow and other archery hunter success rates is found in Figure 24. Crossbow hunter success rates have averaged 9% above non-crossbow archery success over the past 5 seasons. This year, non-crossbow and crossbow success rates were 20% and 33%, respectively.

In 2006, unlimited nonresident archery permits were established. In 2024, 12 of these permits were sold. The 5-year average sales is 11.2 per year. Representing <4% of total archery permit sales, these permits are considered an insignificant factor in archery harvest pressure.\*\*\*

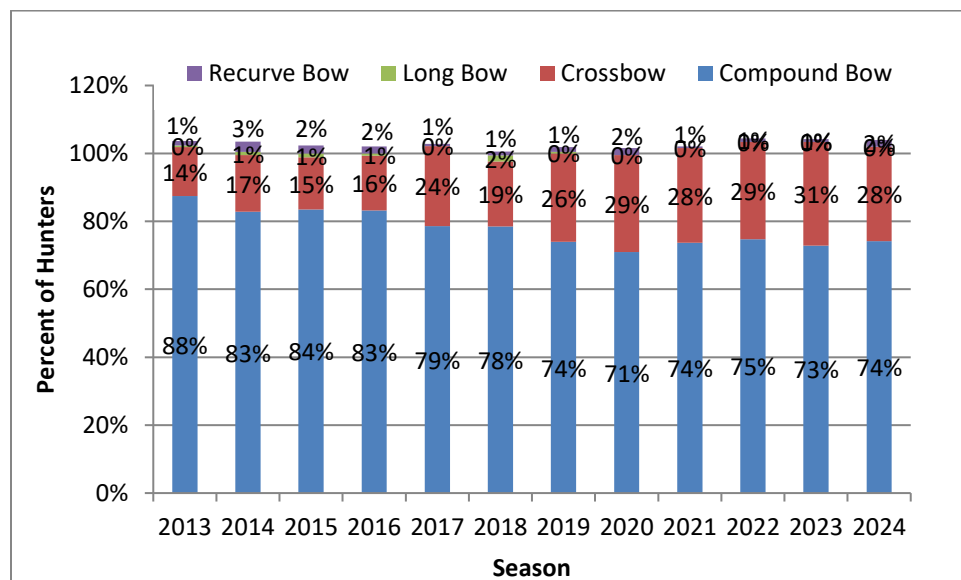


Figure 22. Percent of archery pronghorn hunters using different types of archery hunting equipment since 2013. (Totals exceed 100% some years because some hunters used more than one bow type.)

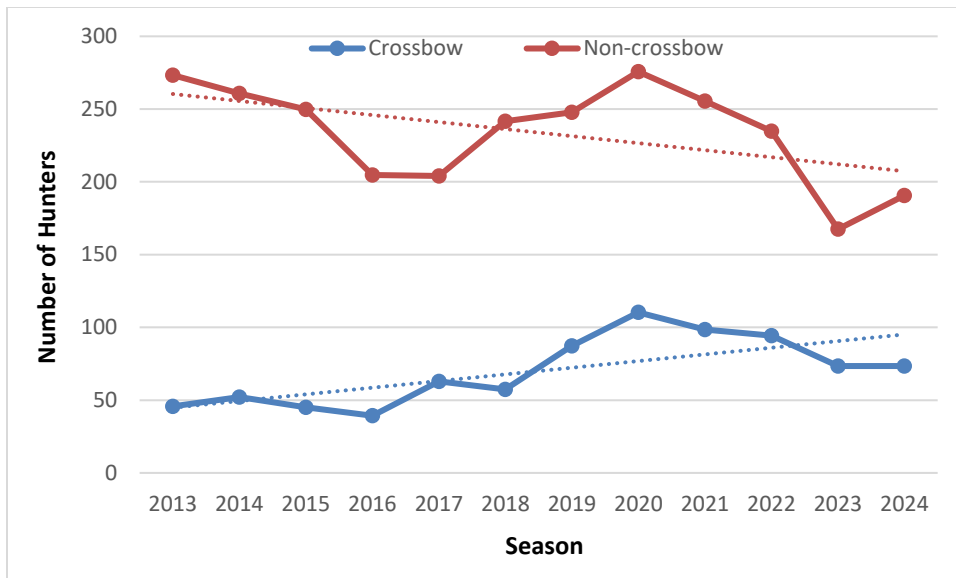


Figure 23. Number of active archery hunters using crossbows and not using crossbows (Non-crossbow archery) since 2013, and linear trendlines for each user type.

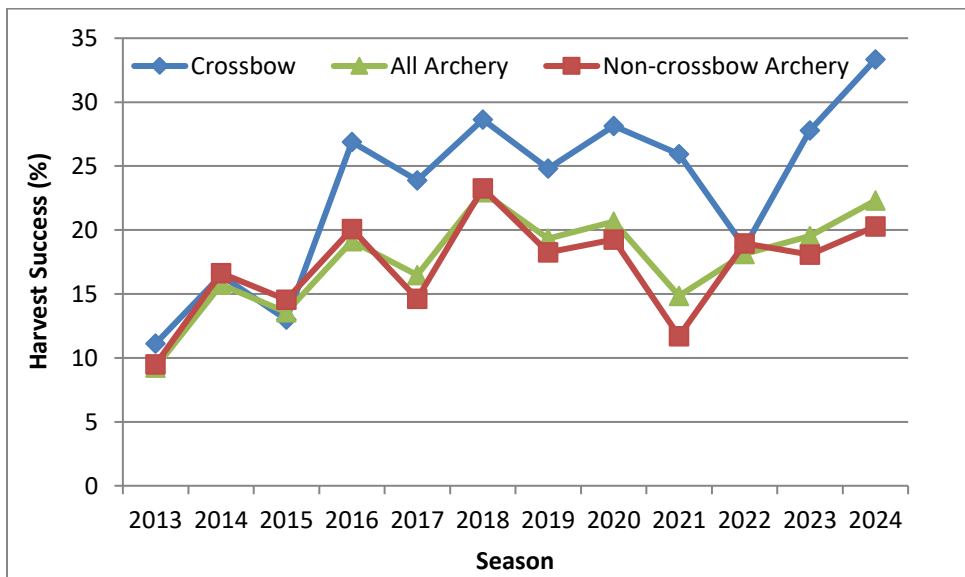


Figure 24. Harvest success rates by Kansas pronghorn hunters who used crossbows, did not use crossbows, and all archery hunters combined.

#### EQUAL OPPORTUNITY STATEMENT

This program receives Federal financial assistance from the U.S. Fish and Wildlife Service. Under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972, the U.S. Department of the Interior and its bureaus prohibit discrimination on the basis of race, color, national origin, age, disability or sex (in educational programs). If you believe that you have been discriminated against in any program, activity or facility, or if you desire further information, please write to:

The U.S. Fish and Wildlife Service, Office of Diversity and Civil Rights Programs- External Programs, 4040 North Fairfax Drive, Suite 130, Arlington, VA 22203

## Appendix 1.

### 2024 Antelope Draw Stats



2024 Antelope Draw Stats

Management Unit	Permit Type	Permits Authorized	Total # of Applicants (1st) Choice	Preference Points (PP)	Number of Permits issued by Pref Pt LO/T	Number of Permits issued by Pref Pt GEN	Total Number of Permits Drawn
Unit 2	Muzzleloader	11 LO/T 11 GEN	10 LO/T 95 GEN 1 YOUTH 0 NR TENANT	0	4		11 LO/T 11 GEN
				1	7		
				2			
				5		9	
				12		1	
				16		1	
Unit 2	Firearms	44 LO/T 44 GEN	123 LO/T 669 GEN 53 YOUTH 2 NR TENANT	0			44 LO/T 44 GEN
				1	34		
				2	9		
				4	1		
				5		1	
				6		25	
				7		12	
				8		1	
				9		3	
				10		2	
Unit 17	Muzzleloader	4 LO/T 4 GEN	0 LO/T 30 GEN 2 YOUTH	0	3		4 LO/T 4 GEN
				1	1		
				2			
				3			
				4			
				5		4	
Unit 17	Firearms	15 LO/T 15 GEN	34 LO/T 314 GEN 18 YOUTH 1 NR TENANT	0			15 LO/T 15 GEN
				1	10		
				2	3		
				3			
				4	2		
				5		8	
				6		7	
				7			
				16			
Unit 18	Muzzleloader	2 LO/T 2 GEN	0 LO/T 16 GEN 0 YOUTH	0	1		2 LO/T 2 GEN
				1	1		
				2			
				3			
				4			
				5		2	
Unit 18	Firearms	2 LO/T 2 GEN	15 LO/T 111 GEN 6 YOUTH 2 NR TENANT	0			2 LO/T 2 GEN
				1			
				2			
				3	1		
				4	1		
				5		1	
				6		1	
				7			
TOTAL		156	182 LO/T 1,235 GEN 5 NR TENANT 80 YOUTH				156
			1,502				
.Preference points purchased 1130							

Appendix 2.

2024 Pronghorn Hunter Comments

Comments
After waiting 6 years for a permit it's (b.s.) that you only have 4 days to fill it! The short season is the reason for all of the road hunters and the trespassers running all over the country in a hurry to fill a tag, which ruins things for people like me who try to do it right.
Antelope numbers are very low in Scott County. Saw very few during summer, none during my hunt.
Archery hunted 2022 season. 2024 season maybe seen a quarter of what was seen in 2022 at best
Archery hunters should be able to hunt all antelope seasons
Bring back the late archery season. Archery antelope hunting is very difficult with low success rates.
By far the worst year to date for me number wise
Can you email me and tell me the age of my antelope?
Challenging hunt with no harvest.
Covered 250 miles checking properties in Logan, Wallace, and Sherman counties and only saw 2 pronghorn which were on private.
Crossbow is not archery equipment!
Different hunting opportunity right here in the great state of Kansas!
Do not have antelope head - cannot provide measurement or teeth sample
Forgot to measure horns
Found plenty of pronghorn on private, struggled to find them on public/WIHA
Had a great time, hunted close to 20 hours over a 3-day period. Saw 40+ different pronghorn over this period, 5 mature bucks that I considered harvesting. Did take a shot Sunday afternoon, a clean miss. Had a great time. Did notice that by Sunday it seemed like all animals (including whitetail and mule deer) were pretty stirred up in Gove County.
Hit one and followed for a day. He was back with the herd the next morning and running fine. Super cool experience and am looking forward to next year!
Hunted antelope in Western KS over several yrs, #'s are still fairly solid but the overall quality was way down!! And did not see much fawn recruitment. Thank you
I accidentally threw the teeth in the trash when I was cleaning my truck and they were lost. I am sorry for not returning them!
I believe WIHA properties should be able to hold game on them to be in the program.
I didn't get the teeth. The envelope was destroyed by bad dog in my truck. He was very old. Sorry
I feel like the archery antelope season needs to extend the number of days allowed to hunt.
I had seen 2 bucks and one doe. I missed the buck I shot and did not wound it.
I had to go to the Judge's conference in Wichita and could not hunt this year
I wish the time to hunt antelope with a bow was one week longer.
I would like to see the second week of archery season again
I'm glad tags are finally being limited and your making hunters choose between archery and applying for points. Our antelope numbers have plummeted over the past couple years. Now you need to pay attention to the deer numbers which are far worse.
It would be nice if the season was longer so farmers could actually have a chance at hunting or not have it during harvest.
It would be super helpful if the aerial production survey went further east or just a larger area overall. It's very helpful in locating some antelope herds but it would help that area not be so congested with hunters if we were all not targeting the same dozen herds. Also, maybe some better marketing of the WIHA program? I met a dozen farmers that wanted their property hunted to control antelope numbers, but their land was not an active WIHA area.
Kansas antelope seem to be healthy.
Less mature bucks around the area.
Look forward to it every year
Lots of Goats this year! Landowners wanting them hunted when asking. Lots of landowners told us they avoiding roads and back in winter wheat or harvest corn hiding from roads. Lots of boots ground scouting since Sunday and

found a dandy. Looked over 250 goats most away from roads. The buck to doe ratio was almost 1:1 it was unreal in unit 2! Would recommend more permits future but many switch to antlered only to drive numbers up in Unit 2! Lots of Goats this year and half were bucks from yearling to 15inchers just 95% couldn't be seen from roads! Get out the trucks and boots ground and find goats and you will!
Low numbers
Need more antelope, draw less rifle tags
Not many bucks
Numbers seem to be way down compared to the population survey. Like to no opportunities present themselves. Public or private.
Numbers seemed to be down.
Only saw one herd of 6 does, one buck. Fun hunt!
Please work to secure more WIHA in Morton County. All antelope were observed in that area, but there were limited opportunities.
Protecting the wrong game animal, needs to be more antelope tags given out and way less deer tags out. Shorten deer season and lengthen antelope season. Also need to be doing something about the pheasant population before we don't have any left
Satisfied and saw ok numbers.
Saw 1 buck and a few does in my 3 days of hunting in both Unit 2 and 17
Saw a lot of antelope.
Saw a total of 17 pronghorn across three counties
Saw better quality of animals this year. The numbers are still down.
Saw between 300-400 antelope. Not sure why it takes 4-6 years to draw a tag
Saw many antelope. Cutting antelope archery season does not seem necessary. Numbers across 3 counties were quite good.
Saw very few pronghorn south of Russell Springs this year. Used to be many herds. In addition to eliminating the late archery season, may need to cut rifle/muzzle tags?
Starting the season on a Monday is not very convenient. Would be much better starting on a Saturday.
The number of pronghorn this year seemed rather low as we didn't see as many as in year's past. Personal opinion-I think archery season should not include crossbows.
The season is incredibly short now for pronghorn. With how challenging it is to kill one with a bow, the season should be a lot more than 10 days. Numbers were good in the area I hunt, but only being able to hunt 2 days in the 10-day season I will likely not purchase a tag again. With the old season, I'd have closer to 6-8 days to hunt (weekends) making it more justifiable!
Tough hunt with so few antelope
We should be able to bow hunt for antelope and buy a preference point in the same year.
We spent a lot of time driving around trying to find herds of antelope in places where we could hunt them.
Would be nice to see more WIHA acres where the antelope frequently live during antelope season.
Would like to see crossbows limited to rifle seasons and removed from Archery. Would also like to see rifle tags reduced.
Would like to see more CRP to build the population. Also (county withheld) county has virtually zero game warden presence. People poach antelope and deer all the time, nothing ever comes of it. My family has had deer shot on their ground and fences cut to recover poached animals and people aren't afraid to do it because they never see a game warden.