

MIDWEST DEER STUDY GROUP

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KANSAS - 2012-2013 STATUS REPORT
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Abstract

Deer hunting continues to grow in popularity in Kansas. Deer hunters came to Kansas from every state in the nation. Deer populations continue to remain stable or increase at the current level of hunting and habitat management. Deer related vehicle accidents (DRVA) have remained relatively stable on a statewide basis since the late 1990's. There were 8,469 reported DRVA in 2012. The number of deer hunters is estimated to be 123,195. They purchased 193,116 permits for the 2012-13 deer seasons. That is the second highest number of permits sold in the history of deer hunting in Kansas. Improved analysis of our automated license system data revealed that 2,357 people (1.9% of deer hunters) obtained their first deer permit after December 30, 2012 and hunted only the white-tailed deer antlerless only season. Deer hunters spent an estimated 1.3 million days afield and reported harvesting 94,070 deer (91,357 white-tailed deer and 2,713 mule deer) during the 2012-13 seasons. Approximately 52.6% of the white-tailed deer taken by hunters were antlerless deer while only 15.9% of the mule deer were antlerless. The majority of deer were harvested by hunters using firearms (66.8%) while people using archery equipment (including crossbows) accounted for 28.2% and people using muzzleloaders took 5.0% for the harvest. The use of crossbows was liberalized for the 2012-13 season. Hunters with an archery youth permit and people over the age of 54 were allowed to use a crossbow during the archery season. In addition a pilot project required by state law allowed any person hunting in Deer Management Unit (DMU) 1, 12, 15 or 19 to use a crossbow. The harvest by people using crossbows increased from 487 during the 2011-12 seasons to 1,437 during the 2012-13 seasons. A survey of people allowed to use crossbows during the pilot project revealed that 88.0% would select to use a crossbow in future years. A survey of landowners revealed that the prevalence of complaints about damage caused by deer has continued to decline since the late 1990s. Less than 50% of landowners report damage caused by deer and only 7.2% of them considered that damage to be severe. The majority of landowners had no preference or did not want changes to occur with deer management practices designed to: increase or decrease the relative prevalence of mule deer in the state (69.2%), change the age structure of the deer herd (74.7%) or change the sex ratio of the herd (50.2%). Landowners were also non committal about the number of non-resident deer hunters relative to the number of resident deer hunts with 23.6% wanting more non-resident hunters and 29.0% wanting the portion of deer hunters from outside Kansas to decrease. Disease issues and drought were important topics of concern and discussion among deer hunters. Cases of hemorrhagic disease were common in the eastern third of the state with 1,274 cases of sick or dead deer reported from 46 counties. EHDV-2 was isolated from 16 of 24 samples of deer collected during 2012. While widespread and virulent, this HD event did not appear to cause excessive mortality. Deer related vehicle accidents and hunter harvest following the event showed only minor differences compared to prior years. A reduced sampling procedure was used to monitor for chronic wasting disease in 2012-13. The north central region of the state was the focus for sample collection, although suspect animals were tested from throughout the state. Samples were tested from 425 animals and 7 of them were positive for CWD.

Deer Population Trends

The Kansas Department of Wildlife Parks and Tourism (KDWP) manages deer at the level of Deer Management Units (DMU), see Figure 1. Population trends, harvest and human dimensions aspects to deer management are summarized by these units.

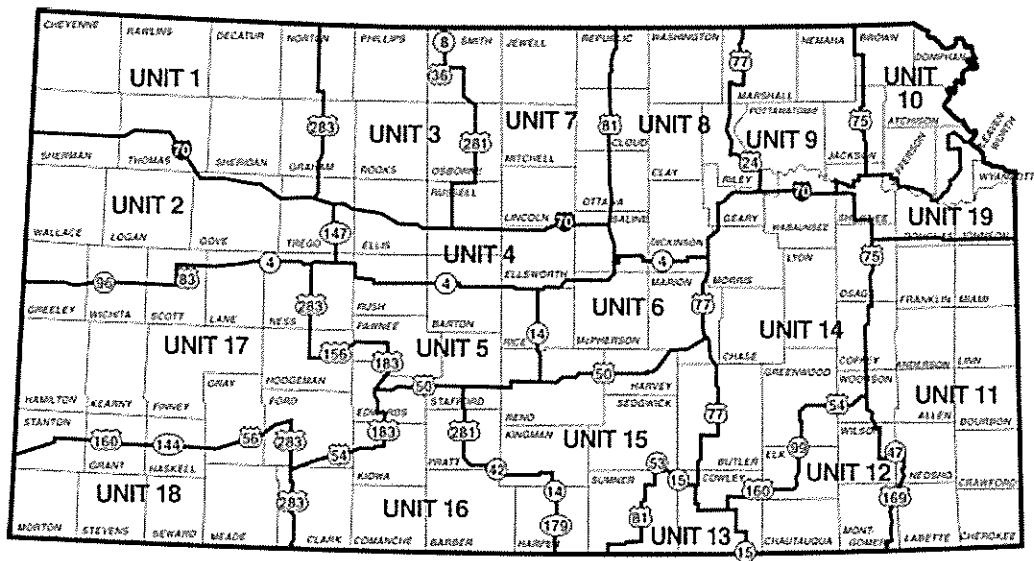


Figure 1. Deer management units in Kansas.

Population trend information from deer related vehicle accident data are collected on a county-by-county basis and converted to an approximate DMU based on the mean of all counties within a DMU. Population trends of deer in Kansas are currently monitored using deer related vehicle accidents adjusted for annual changes in vehicle mileage. County sheriff or state highway patrol officers collect vehicle accident data at the site of each accident. State laws require that an accident report be prepared for each accident that results in an injury or causes more than \$1,000 in property damage. Vehicle mileage estimates for each county are obtained from standard surveys compiled by the Kansas Department of Transportation (KDOT).

There were 8,469 accidents reported during 2012 compared to 9,200 in 2011, a decrease of 7.9%. The statewide trend in the number of deer related vehicle accidents (DRVA) and rate of accidents as expressed in DRVA per Billion miles of vehicular traffic is presented in Figure 2. Corresponding charts are maintained for each DMU.

Deer Related Accidents and Accidents per Billion Miles of Travel in Kansas.

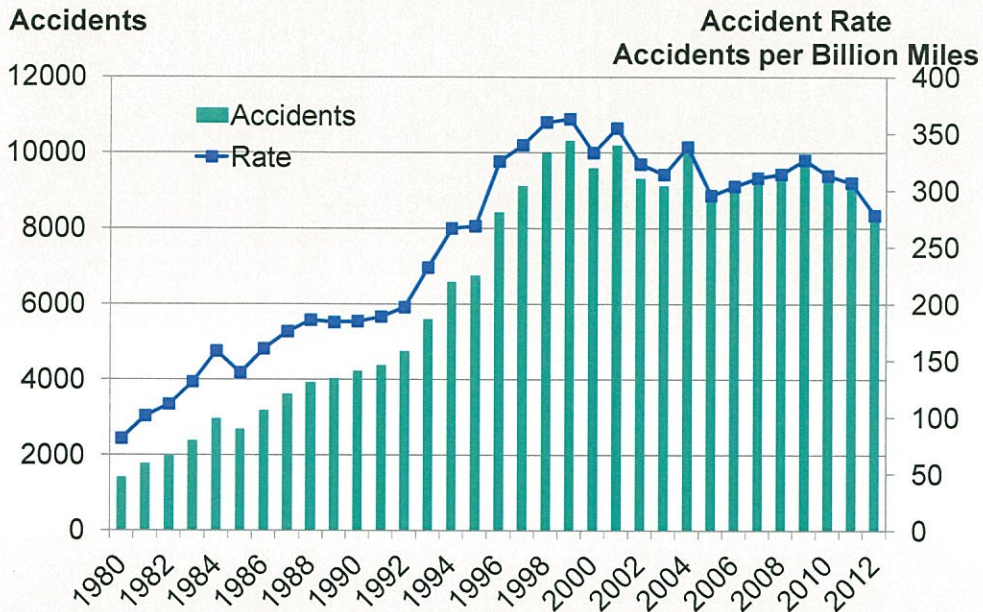


Figure 2. Number of reported vehicle accidents with deer and the rate of accident related to traffic volume in Kansas.

The distribution of the 2012 DRVA among the DMU in Kansas is shown in Figure 3. The number of accidents is influenced by volume of traffic, especially around urban areas whereas the rate of accidents may be high in rural area with low traffic volume, high traffic speeds, and relatively low number and densities of accidents. In most cases it is best to examine trends in DRVA on a unit by unit basis and not to compare these indices among units. Each area has unique traffic and deer population characteristics influencing DRVA.

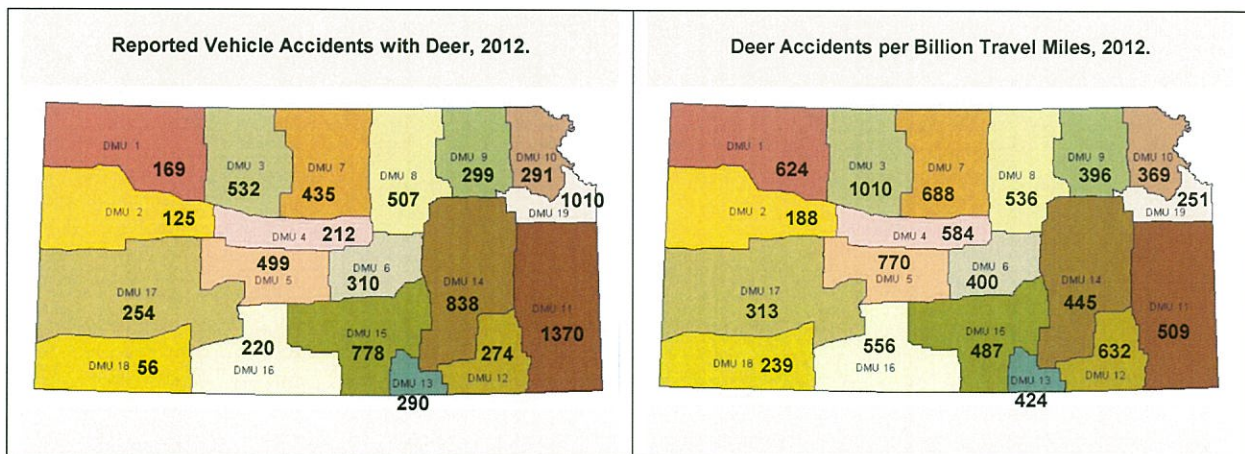


Figure 3. Distribution of 2012 deer related vehicle accident among Kansas deer management units and corresponding accident rates in the unit.

Bowhunter observations of deer have been collected using diaries and summary forms since 1998. An index has been developed based on the number of deer seen per 100 hours of observation (Figure 4). Unlike the vehicle accident index, the bowhunter diary data may be analyzed by species.

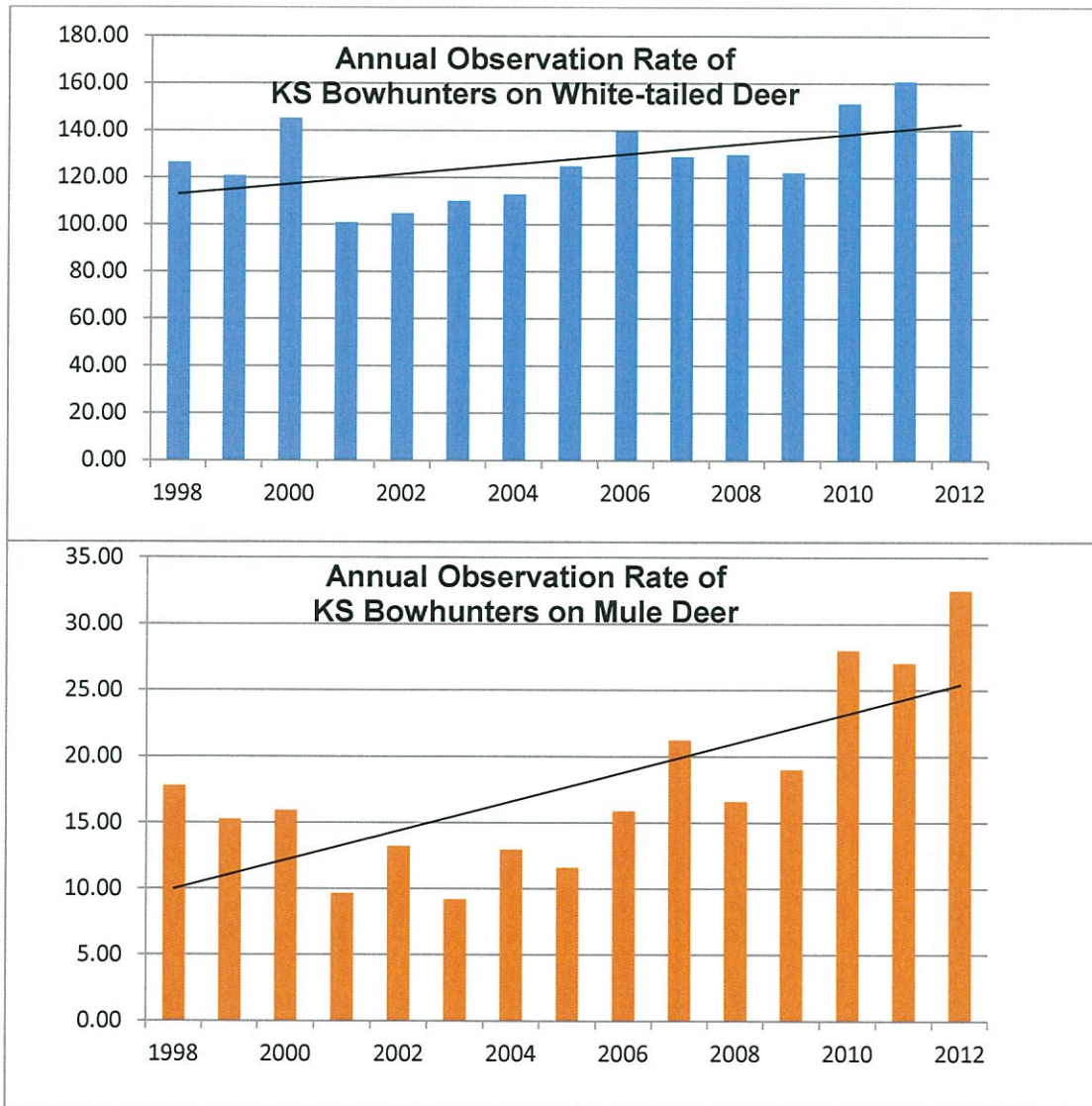


Figure 4. The average number of white-tailed deer and mule deer seen per 100 observational hours recorded in diaries by Kansas bowhunters during the seasons from 1998 to 2012.

Spotlight surveys have been conducted by agency personnel during October and November on selected department managed properties and on representative areas of private property in deer management units since 2002. Effort spent on this survey generally includes 3 routes of approximately 20 miles in length in representative habitat on private property for each DMU. That effort typically takes three nights and approximately 3 hours per night. In addition to the private lands survey, department personnel conduct a survey on one wildlife management area in each DMU. Those surveys typically involve three nights of spotlight observation generally along the same route each night. A sample size of at least 60 observations with distances and angles to single or groups of deer is desired for the analysis of each DMU or wildlife area. Data is collected

on each observation and includes the location, species, age and sex of deer as well as their behavior when first observed and the habitat characteristics where they were observed. Analysis of the 2012 data has not been completed at this time.

Deer Hunters and Permits

A deer hunter in Kansas may purchase only one deer permit that allows them to take an antlered deer each year. Our system encourages hunters to take antlerless white-tailed deer. Each permit that KDWPPT issues which allows the hunter to take an antlered deer is valid for either sex of deer. Furthermore, all permits issued in our system are valid throughout all seasons for the taking of an antlerless white-tailed deer. December 31st is the last day when antlered deer may be taken in Kansas. After that date all unfilled either sex permits convert to a white-tailed deer antlerless-only permit and are valid during the white-tailed deer antlerless-only seasons in January.

Antlerless-only deer permits are valid during any season with the equipment allowed during that season. Hunters may purchase up to five additional white-tailed deer antlerless-only permits (unlimited availability) and apply for one additional either species antlerless-only permit available on a limited basis in some western Kansas DMUs. Hunters may not purchase those permits until after they have obtained an either sex permit. A provision in our regulations allows hunters without an either sex permit to purchase an antlerless-only permit after December 30th of the year. Those hunters are restricted to the white-tailed deer antlerless-only season in January.

Most deer permits are available on an unlimited basis. Limited quotas are set on resident either species firearms permits and either species antlerless permits as well as non-resident firearm, muzzleloader or archery permits.

In recent years we have reported the number of deer hunters as being the number of people who purchased an either-sex permit, and we reported the total number of permits issued each year. That estimate of deer hunters has been an underestimate of the actual number of hunters. This year we analyzed all hunters for all the permits they bought to obtain a more accurate estimate of the number of people hunting deer. The analysis showed that 2,357 people initiated deer hunting after January 1st and purchased only antlerless permits and purchased 2,939 white-tailed deer antlerless-only permits. There are 26 different types of deer permits which allow a person to take either sex of deer. The number of people purchasing the various permit code types is shown in Table 1.

There were 120,838 people that purchased an either sex deer permit in Kansas during the 2012-13 seasons, an increase of 2.3% over the number of deer hunters in 2011. There were 123,195 total deer hunters who purchased 193,116 permits in 2012-13, an increase of 3.9% over the level in 2011.

Resident deer hunters may obtain a permit that allows them to pursue either sex of white-tailed deer in any DMU and to use their permit during any season with the equipment authorized for that season (i.e., a statewide any season permit). Resident deer hunters who choose to hunt mule deer in addition to white-tailed deer must purchase an either species, either sex permit instead of the any season permit. Either-species permits are restricted to a DMU and a specific equipment type (archery, muzzleloader or firearms). The archery and muzzleloader permits are unlimited and available over-the-counter. The firearms permits are limited and available by application and drawing.

Quotas for non-resident permits are established for each DMU. Non-residents must apply for a

permit. They are selected based on preference points within a random draw system. Hunters receive a preference point each year they apply but do not receive a permit. The total number of non-resident deer permits is established based on deer population trends, deer related vehicle accidents, crop damage complaints and social factors such as landowner desires for additional or fewer non-resident hunters. The number of non-residents is limited in each unit however, the non-residents drawn for a unit may pick the equipment type they desire (i.e., firearms, muzzleloader or archery). They may also designate one additional adjacent unit where they may hunt. During the 2012-13 drawing 18,175 non-residents applied for a deer permit and 17,501 received a permit. In only seven units were there more applications than available permits. After the drawing there were 4,533 non-resident deer permits still available. Those permits were issued on a first come basis and most were sold within a few days after the system was reopened.

Successful non-residents with an archery or muzzleloader permit for western units are allowed to draw for a mule deer stamp. This allows them to pursue either-species of deer. Table 1 shows the 132 non-resident muzzleloader hunters and 134 non-resident archers obtained a mule deer stamp.

Resident and non-resident landowners are allowed to purchase a deer permit restricted to lands they own or lease for agricultural purposes. Those types of permits allow the hunter to pursue either-species and either-sex of deer. There is no quota on that type of permit and those permits may be purchased over-the-counter and used during any season with the equipment that is legal during that season.

People with a lifetime hunting license in Kansas may obtain a resident deer permit regardless of their current address. The distribution by state of residency for the deer hunters with an either-sex permit in Kansas is shown in Figure 5 while the state of residency for the hunters with only antlerless permits is shown in Figure 6.

Table 1. Permits bought by deer hunters in Kansas during the 2012-13 deer seasons in Kansas.

Either Sex Deer Hunters

Permit Type	Season and Species	Residency	Permit Code Type	Total Permits Issued	Either-Sex Hunters With 0 WT		Either-Sex Hunters With 1 WT		Either-Sex Hunters With 2 WT		Either-Sex Hunters With 3 WT		Either-Sex Hunters With 4 WT		Either-Sex Hunters With 5 WT		Either-Sex Hunters With 1 Either Spp. Antlerless-Only	
					Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits
Any Deer, Gen Res	Firearms ESES (Any Deer)	KS	471	1,728	1039	451	148	48	22	21	21	118						
Any Deer, LO/Ten	Firearms ESES (Any Deer)	KS	470	394	269	76	31	7	7	2	2	16						
Any Deer, Youth	Firearms ESES (Any Deer)	KS	955	169	110	44	7	3	1	1	4	7						
W-T Either Sex, Gen Res	Any Season WTES	KS	417	53,516	25,683	20,897	4,853	1,245	499	342	113							
W-T Either Sex, LO/Ten	Any Season WTES	KS	418	17,853	9,671	6,053	1,491	317	169	152	25							
W-T Either Sex, Youth	Any Season WTES	KS	983	8,231	5,453	2,332	347	66	18	16	36							
Muzzleloader, Gen Res	MZ & Firearms ESES	KS	891	862	450	272	95	30	7	9	57							
Muzzleloader, LO/Ten	MZ & Firearms ESES	KS	892	144	88	32	9	3	3	0	10							
Muzzleloader, Youth	MZ & Firearms ESES	KS	893	81	64	14	3	0	0	0	2							
HOL	Any Season ESES	KS	424	5,660	3,923	1,213	338	88	40	58	24							
STWD Archery, Gen Res	Archery ESES	KS	415	5,456	2,509	2,188	514	146	47	51	82							
STWD Archery, LO/Ten	Archery ESES	KS	416	1,195	601	415	124	29	11	15	15							
STWD Archery, Youth	Archery ESES	KS	981	282	179	81	15	6	0	1	7							
WTAO, General Resident	Any Season WTAO	KS*	421	61,164														
WTAO, Youth	Any Season WTAO	KS*	985	4,035														
ESAO	Either Species AO unit 12/31	KS	942	464														
ESAO, Youth	Either Species AO unit 12/31	KS	895	55														
W-T Either Sex, Draw	Firearms WTES	NR	481	6,350	5,129	989	174	32	13	10	33							
W-T Either Sex, Leftover	Firearms WTES	NR	915	1,396	1,153	190	49	5	2	3	4							
Muzzleloader, Draw	MZ & Firearms WTES	NR	483	1,952	1,722	1,800	48	5	1	1	12							
Muzzleloader, Leftover	MZ & Firearms WTES	NR	896	469	413	44	13	2	0	0	0							
Muzzleloader, ESES	MZ & Firearms ESES	NR	898	132	121	9	1	1	0	0	5							
HOL	Any Season ESES	NR	425	1,188	799	299	64	9	11	6	9							
HOL Special	Any Season ESES	NR	426	1,535	1,224	255	45	8	2	1	16							
HOL NR Tenant	Any Season ESES	NR	890	507	409	90	6	2	0	0	1							
Archery, Draw	Archery WTES	NR	485	8,933	7,078	1,553	234	32	16	10	22							
Archery, Leftover	Archery WTES	NR	897	2,662	2,229	383	44	5	2	2	5							
Archery, ESES	Archery ESES	NR	899	134	106	24	3	1	0	0	2							
WTAO	Any Season WTAO	NR*	423	6,458														
ESAO	Either Species AO unit 12/31	NR	944	102														
Commissioner	Any Season ESES	NR	919	6	5	1	0	0	0	0	0							
YOUTH HUNT-OF-LIFE	Any Season ESES	NR	465	3	1	2												
KS Sub-Total Permits		KS		161,289	50,039	34,068	7,975	1,988	824	680	512							
NR Sub-Total Permits		NR		31,827	20,389	4,019	681	102	47	31	109							
Grand Total Permits				193,116	70,428	38,087	8,656	2,090	871	711	621							

Antlerless-Only Deer Hunters

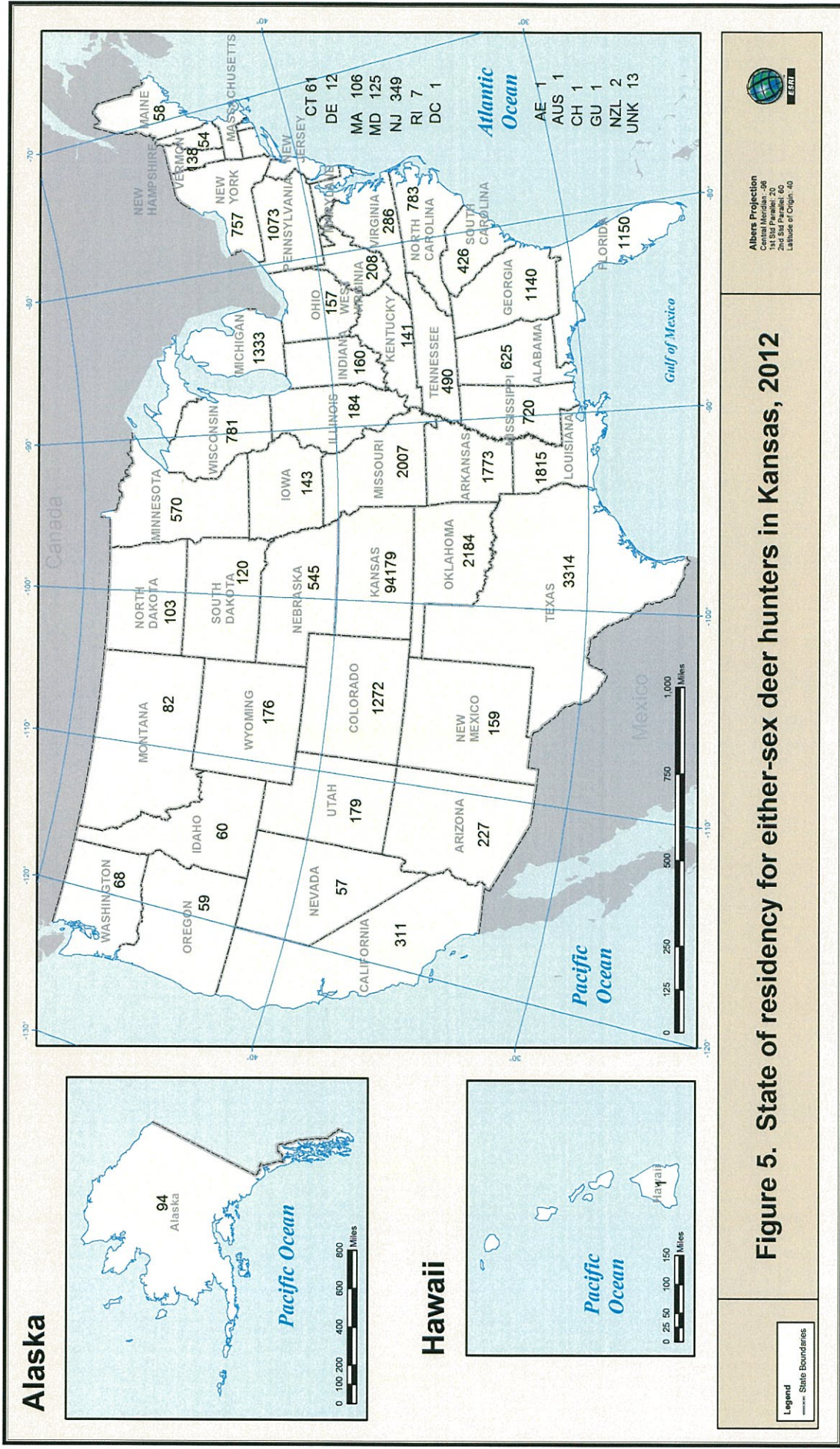
Permit Type	Season and Species	Residency	Permit Code Type	Total Permits Issued	Antlerless-Only Hunters With 0 WT		Antlerless-Only Hunters With 1 WT		Antlerless-Only Hunters With 2 WT		Antlerless-Only Hunters With 3 WT		Antlerless-Only Hunters With 4 WT		Antlerless-Only Hunters With 5 WT		Antlerless-Only Hunters With 1 ES	
					Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits	Antlerless-Only Permits	Permits
WTAO, General Resident		KS	421	2,128	1,713	1,396	256	37	11	13								
WTAO, Youth		KS	985	214	200	186	14	0	0	0								
WTAO		NR	423	597	444	331	88	14	7	4								
KS Sub-Total WAO Permits to AO Only Hunters				2,342														
NR Sub-Total WAO Permits to AO Only Hunters				597														
Grand Total WAO Permits to AO Only Hunters				2,939														
KS Sub-Total Antlerless-Only Hunters				1,913														
NR Sub-Total Antlerless-Only Hunters				444														
Total Antlerless-Only Hunters				2,357														

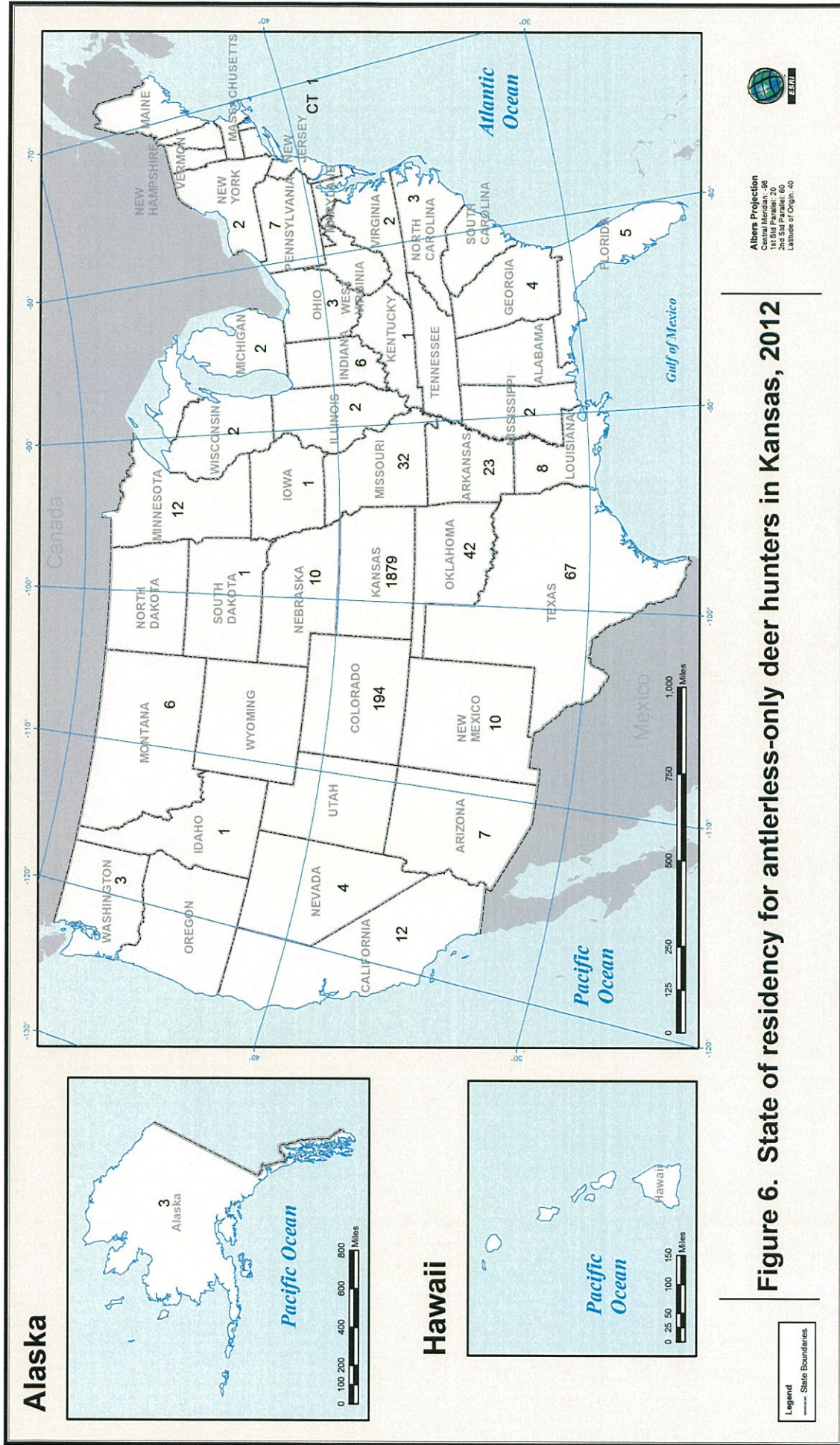
* Total includes hunters without and Either Sex Permit

Table 2. History of deer hunting season dates in Kansas.

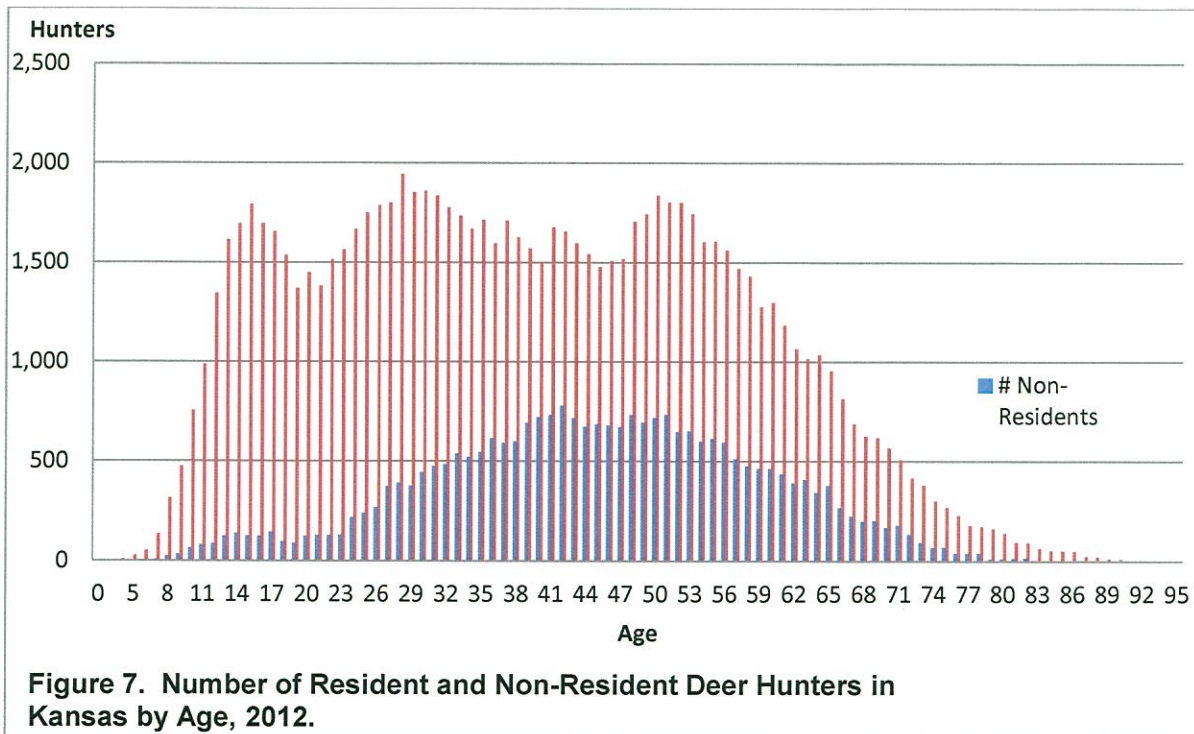
YEAR	FIREARMS OPEN DATES	NO. DAYS	ARCHERY OPEN DATES	NO. DAYS	MUZZLELOADER OPEN DATES	NO. DAYS	YOUTH AND DISABILITY OPEN DATES	NO. DAYS	EXTENDED OPEN DATES	NO. DAYS	YEAR
1965	Dec. 11 - 15	5	Oct. 1 - Nov. 15	46	0	0	0	0	0	0	1965
1966	Dec. 10 - 14	5	Oct. 1 - Dec. 9	70	0	0	0	0	0	0	1966
1967	Dec. 8 - 12	5	Oct. 1 - Nov. 26	57	0	0	0	0	0	0	1967
1968	Dec. 13 - 17	5	Oct. 1 - Dec. 1	62	0	0	0	0	0	0	1968
1969	Dec. 6 - 10	5	Oct. 1 - Nov. 30	61	0	0	0	0	0	0	1969
1970	Dec. 5 - 9	5 - WEST	Oct. 1 - Nov. 30	61	0	0	0	0	0	0	1970
	Dec. 5 - 13	9 - EAST	Oct. 1 - Nov. 30	61	0	0	0	0	0	0	1970
1971	Dec. 4 - 8	5 - WEST	Oct. 16 - Nov. 25, Dec. 11 - Dec. 31	62	0	0	0	0	0	0	1971
	Nov. 27 - Dec. 5	9 - EAST	Oct. 16 - Nov. 25, Dec. 11 - Dec. 31	62	0	0	0	0	0	0	1971
1972	Dec. 2 - 6	5 - WEST	Oct. 1 - Nov. 30	61	0	0	0	0	0	0	1972
	Dec. 2 - 10	9 - EAST	Oct. 1 - Nov. 30	61	0	0	0	0	0	0	1972
1973	Dec. 1 - 9	9	Oct. 1 - Nov. 25, Dec. 15 - Dec. 31	73	0	0	0	0	0	0	1973
1974	Dec. 7 - 15	9	Oct. 1 - Nov. 30, Dec. 21 - Dec. 31	72	0	0	0	0	0	0	1974
1975	Dec. 6 - 14	9	Oct. 1 - Nov. 30, Dec. 20 - Dec. 31	73	0	0	0	0	0	0	1975
1976	Dec. 4 - 12	9	Oct. 1 - Nov. 30, Dec. 18 - Dec. 31	75	0	0	0	0	0	0	1976
1977	Dec. 3 - 11	9	Oct. 1 - Nov. 30, Dec. 17 - Dec. 31	76	0	0	0	0	0	0	1977
1978	Dec. 2 - 10	9	Oct. 1 - Nov. 30, Dec. 16 - Dec. 31	77	0	0	0	0	0	0	1978
1978	Dec. 1 - 9	8	Oct. 1 - Nov. 28, Dec. 12 - Dec. 31	79	0	0	0	0	0	0	1979
1980	Dec. 6 - 14	8	Oct. 1 - Dec. 3, Dec. 17 - Dec. 31	79	0	0	0	0	0	0	1980
1981	Dec. 5 - 13	9	Oct. 1 - Dec. 2, Dec. 16 - Dec. 31	79	0	0	0	0	0	0	1981
1982	Dec. 4 - 12	9	Oct. 1 - Dec. 1, Dec. 15 - Dec. 31	79	0	0	0	0	0	0	1982
1983	Dec. 3 - 11	9	Oct. 1 - Nov. 30, Dec. 12 - Dec. 31	79	0	0	0	0	0	0	1983
1984	Dec. 1 - 9	9	Oct. 1 - Nov. 30, Dec. 10 - Dec. 31	79	0	0	0	0	0	0	1984
1985	Dec. 7 - 15	9	Oct. 1 - Dec. 6, Dec. 16 - Dec. 31	79	0	0	0	0	0	0	1985
1986	Dec. 6 - 14	9	Oct. 1 - Dec. 5, Dec. 15 - Dec. 31	79	Dec. 6 - 14	9	0	0	0	0	1986
1987	Dec. 5 - 13	9	Oct. 1 - Dec. 4, Dec. 14 - Dec. 31	79	Dec. 5 - 13	9	0	0	0	0	1987
1988	Nov. 30 - Dec. 11	12	Oct. 1 - Nov. 28, Dec. 12 - Dec. 31	79	Nov. 30 - Dec. 11	12	0	0	Jan. 2 - 10, 1988	9	1987
1989	Nov. 29 - Dec. 10	12	Oct. 1 - Nov. 27, Dec. 11 - Dec. 31	79	Sept. 22 - 30	9	0	0	Jan. 2 - 10, 1989	9	1988
1990	Nov. 28 - Dec. 9	12	Oct. 1 - Nov. 27, Dec. 10 - Dec. 31	79	Sept. 22 - 30	9	0	0	Jan. 2 - 10, 1989	9	1988
1991	Dec. 4 - 15	12	Oct. 1 - Dec. 3, Dec. 16 - Dec. 31	79	Sept. 21 - 29	9	0	0	1st seg. Jan. 1 - 14, 2nd seg. Jan. 21 - Feb. 3	28	1990
1992	Dec. 2 - 13	12	Oct. 1 - Dec. 1, Dec. 14 - Dec. 31	79	Sept. 19 - 27	9	0	0	1st seg. Jan. 1 - 14, 2nd seg. Jan. 21 - Feb. 3	28	1991
1993	Dec. 1 - 12	12	Oct. 1 - Nov. 30, Dec. 13 - Dec. 31	79	Sept. 18 - 26	9	0	0	Jan. 13 - 26	14	1992
1994	Nov. 30 - Dec. 11	12	Oct. 1 - Nov. 29, Dec. 12 - Dec. 31	79	Sept. 17 - 25	9	0	0	Jan. 11 - 24	14	1993
1995	Dec. 1 - 10	12	Oct. 1 - Nov. 28, Dec. 11 - Dec. 31	79	Sept. 16 - 24	9	0	0	Jan. 11 - 24	14	1994
1996	Dec. 4 - 15	12	Oct. 1 - Dec. 3, Dec. 15 - Dec. 31	79	Sept. 21 - 29	9	0	0	0	0	1995
1997	Dec. 3 - 14	12	Oct. 1 - Dec. 2, Dec. 15 - Dec. 31	79	Sept. 20 - 28	9	0	0	0	0	1996
1998	Dec. 2 - 13	12	Oct. 1 - Dec. 1, Dec. 14 - Dec. 31	79	Sept. 19 - 27	9	0	0	0	0	1997
1999	Dec. 1 - 12	12	Oct. 1 - Nov. 30, Dec. 13 - Dec. 30	78	Sept. 18 - 30	13	0	0	Jan. 9 - 10, 1999	2	1998
2000	Nov. 23 - Dec. 10	12	Oct. 1 - Nov. 28, Dec. 11 - 31	79	Sept. 16 - 29	14	0	0	Dec. 31 - Jan. 9, 2000	10	1999
2001	Nov. 28 - Dec. 9	12	Oct. 1 - Nov. 27, Dec. 10 - 31	79	Sept. 15 - 28	14	Sept. 30 - Oct. 1	2	Jan. 1 - 14, 2001	14	2000
2002	Dec. 4 - 15	12	Oct. 1 - Dec. 3, Dec. 15 - 31	79	Sept. 14 - 27	14	Sept. 29 - 30	2	Jan. 1 - 13, 2002	13	2001
2003	Dec. 3 - 14	12	Oct. 1 - Dec. 2, Dec. 15 - 31	79	Sept. 13 - 26	14	Sept. 27 - 28	2	Jan. 1 - 12, 2003	12	2002
DMU 19 *	Oct. 18 - 26	9	Oct. 1 - Dec. 2, Dec. 15 - 31	26	Sept. 13 - 26	14	Sept. 27 - 28	2	Jan. 1 - 4, 2004	4	2003
2004	Dec. 1 - 12	12	Oct. 1 - Nov. 30, Dec. 13 - 31	79	Sept. 11 - 24	14	Sept. 25 - 26	2	Jan. 1 - 2, 2005	2	2004
DMU 19 *	Oct. 16 - 24	9	Oct. 1 - Nov. 30, Dec. 13 - 31	28	Sept. 10 - 23	14	Sept. 24 - 25	2	Jan. 1 - 8, 2006	8	2005
2005	Nov. 30 - Dec. 11	12	Oct. 1 - Dec. 31	91	Sept. 9 - 22	14	Sept. 23 - 24	2	Jan. 1 - 7, 2007	7	2006
DMU 19 *	Oct. 15 - 23	9	Oct. 1 - Dec. 31	23	Sept. 9 - 22	14	Sept. 23 - 24	2	Jan. 1 - 7, 2007	7	2006
2006	Nov. 29 - Dec. 10	12	Oct. 1 - Dec. 31	91	Sept. 9 - 22	14	Sept. 23 - 24	2	Jan. 1 - 7, 2007	7	2006
DMU 19 *	Oct. 14 - 22	9	Oct. 1 - Dec. 31	23	Sept. 9 - 22	14	Sept. 23 - 24	2	Jan. 1 - 7, 2007	7	2006
2007	Nov. 28 - Dec. 9	12	Oct. 1 - Dec. 31	91	Sept. 15 - 28	14	Sept. 29 - 30	2	Jan. 1 - 6, 2008	6	2007
DMU 19	Oct. 13 - 21	9	Oct. 1 - Dec. 31	24	Sept. 15 - 28	14	Sept. 29 - 30	2	Jan. 1 - 6, 2008	6	2007
2008	Dec. 3 - 14	12	Sept. 22 - Dec. 31	100	Sept. 22 - Oct. 5	14	Sept. 13 - 21	9	Jan. 1 - 4, 2009	4	2008
DMU 19	Oct. 11 - 19	9	Jan. 5 - 31	26	Sept. 22 - Oct. 5	14	Sept. 13 - 21	9	Jan. 1 - 4, 2009	4	2008
2009	Dec. 2 - 13	12	Sept. 21 - Dec. 31	101	Sept. 21 - Oct. 4	14	Sept. 12 - 20	9	Jan. 1 - 10, 2010	10	2009
DMU 19	Oct. 10 - 18	9	Jan. 11 - 31	21	Sept. 21 - Oct. 4	14	Sept. 12 - 20	9	Jan. 1 - 17, 2010 (DMU 7, 8, & 15)	17	2009
2010	Dec. 1 - 12	12	Sept. 20 - Dec. 31	100	Sept. 20 - Oct. 3	14	Sept. 11 - 19	9	Jan. 1 - 9, 2011	9	2010
DMU 19	Oct. 9 - 17	9	Jan. 10 - 31	22	Sept. 20 - Oct. 3	14	Sept. 11 - 19	9	Jan. 1 - 9, 2011	9	2010
2011	Nov. 30 - Dec. 11	12	Sept. 19 - Dec. 31	101	Sept. 19 - Oct. 2	14	Sept. 10 - 18	9	Jan. 1 - 8, 2012	8	2011
DMU 19	Oct. 8 - 16	9	Jan. 9 - 31	23	Sept. 19 - Oct. 2	14	Sept. 10 - 18	9	Jan. 1 - 8, 2012	8	2011
2012	Nov. 28 - Dec. 9	12	Sept. 17 - Dec. 31	103	Sept. 17 - 30	14	Sept. 8 - 16	9	Jan. 1 - 15, 2011 (DMU 7, 8, & 15)	15	2012
DMU 19	Oct. 13 - 21	9	Jan. 14 - 31	18	Sept. 17 - 30	14	Sept. 8 - 16	9	Jan. 1 - 13, 2013	13	2012
									Jan. 1 - 20, 2011 (DMU 7, 8, & 15)	20	2012

* Additional days of hunting opportunity in DMU 19





There are no age restrictions on hunting deer in Kansas. The age structure of deer hunters in Kansas is shown in Figure 7.



The history of season dates is presented in Table 2. Shooting hours have traditionally been from ½ hour before sunrise to ½ hour after sunset.

Hunter Harvest of Deer

The trend in hunting pressure and estimated harvest since 1994 is shown in Table 3. That table shows the changes in number of limited quota permits issued through drawings and the number of unlimited availability permits.

The basic deer hunter harvest survey in Kansas is an on-line survey that covers all permits a hunter might purchase. A sample of hunters is selected for this survey. People are contacted by the email address from our KOALS database. The survey is written in SurveyMonkey®. The 2012 sample consisted of four groups of approximately 9,100 deer hunter (n = 36,410). Each group was contacted four times by email. Only 34,080 people were contacted as a result of the data set containing non-deliverable addresses and duplication of email addresses (when two or more people listed the same address). Within the sample 685 people opted out of a survey through SurveyMonkey® and 1,005 bounced. Usable responses were obtained from 19,866 hunters for a response rate of 58.3%.

In addition to the basic email survey, we send paper surveys to 3,479 resident bowhunters. They were contacted before the season and asked to gather wildlife observations using a diary as well as being given a deer hunter report card. Unlike most years, no second mailing was made to non-respondents after the season. Usable responses were received from 734 of the resident bowhunters (21.1% response rate).

The estimate of the number of deer killed by hunters in Kansas during the 2012-13 seasons was 94,070. That was 3.8% lower than the corresponding estimate made of the harvest in 2011-12.

Table 4 shows the success rates of the various permit hunt types and the breakdown of the harvest by species and age sex category. Table 5 shows the number of deer taken statewide by permit type.

The hunting regulations in 2012-13 once again allowed deer hunters flexibility to use a variety of equipment and conduct activities during a variety of seasons. We cannot use the permit type to classify hunters to an equipment category. A white-tailed either sex permit which before 2008 was considered a firearms permit will now allow a hunter to use muzzleloader or archery equipment and hunt during those additional seasons. As in previous years, all unfilled permits converted to a firearm permit during the extended season for antlerless white-tailed deer. Therefore permits named "archery" may be used at some times with a firearm. Table 6 shows the harvest by equipment by hunters with the various permit types. Estimates of the days afield during the various seasons by hunters with the different either-sex types of permits are presented in Table 7. This estimate is based on all the permits a hunter purchased, thus a hunter with an either-sex permit that prohibited them from hunting during the firearm season may have purchased an additional white-tailed deer antlerless-only permit that allowed them to hunt for that class of deer during that season.

Hunter satisfaction has been monitored using our post season harvest survey and a five-point Likert scale to a simple question; "Describe your satisfaction with your 2012-13 deer hunt in Kansas." The five choices are: Extremely Satisfied, Satisfied, Neutral, Dissatisfied and Extremely Dissatisfied. This is an annual gauge for deer hunters. Typically non-resident deer hunters indicate higher satisfaction than resident deer hunters, youth have a higher satisfaction than general residents and they have higher satisfaction than landowners. That was observed again this year with 69.6% of the non-residents indicating that they were extremely satisfied or satisfied and 14.3% indicated they were dissatisfied or extremely dissatisfied, whereas 59.2% of the residents selected the satisfied levels and 20.9% picked the levels expressing dissatisfaction. A breakdown of hunter's responses to this question by their permit types is shown in Table 8.

The majority (>95%) of Kansas is privately owned and managed. Approximately 78% of Kansas landowners indicate that deer hunting occurs on their land. Deer hunting also occurs on public land including wildlife areas managed by KDWPT and on more than a million acres of private lands leased by the department in the Walk In Hunting Area (WIHA) program. The deer harvest survey has been collecting information on the type of land used by hunters and the portion of the harvest that occurs on those different land types. During the 2012-13 seasons 91.2% of the active deer hunters hunted on private land, 12.7% hunted public hunting areas, and 18.2% hunted deer on lands within the WIHA program. The breakdown of the deer harvest showed that 90.5% of the deer harvest by hunters during the 2012-13 seasons occurred on private land, 5.8% occurred on public lands and 3.7% occurred on the WIHA lands.

Table 3. History of deer permit availability and harvest in Kansas, 1994 to 2011.

Permit Type	1994*	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
RESIDENT																			
Limited Quota																			
Any Deer	25,380	26,995	27,850	31,150	37,200	40,000	45,175	4,373	3,270	2,855	2,439	2,440	2,453	2,477	2,585	2,490	2,290	2,300	2,291
Buck Only	5,880	5,000	4,675	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W-T Either Sex	3,900	5,480	7,800	8,605	11,030	14,420	0	0	0	0	0	0	0	0	0	0	0	0	0
W-T Buck Only	1,220	670	320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Muzzleloader	3,000	3,350	3,645	3,945	4,765	5,140	5,985	1,185	14,172	1,024	1,049	841	778	766	0	0	0	0	0
Antlerless Only	2,960	4,765	8,335	13,835	9,660	8,760	12,405	1,385	1,223	503	174	0	0	102	100	100	498	519	519
W-T Antlerless Only	300	600	1,750	2,920	5,055	4,330	6,611												
Sub-total	42,600	46,860	53,830	64,325	85,275	69,260	84,596	6,944	5,665	4,782	3,662	3,281	3,231	3,335	2,685	2,650	2,768	2,819	2,810
Unlimited Availability																			
Permit Sales																			
Hunt-Your-Own-Land	13,881	14,654	15,507	16,407	16,521	16,119	16,161	12,658	11,983	8,962	8,719	9,120	8,440	8,312	5,851	5,623	5,989	5,890	5,660
W-T Either Sex								45,395	41,662	49,293	49,371	53,127	53,161	53,412	72,074	74,713	76,189	78,166	79,660
Muzzleloader								94,116	79,870	62,275	52,354	45,362	47,642	46,939	962	968	962	1,045	1,087
Game Tags Residents)	3,119	4,734	4,872	4,634	29,707	49,200	58,764	1,874	1,959	1,074	2,867	3,615	4,407	4,346	51,558	56,232	57,706	61,622	65,199
W-T Antlerless Only	16,156	16,106	16,429	16,299	17,330	19,180	19,831	17,315	17,340	17,134	17,822	18,458	19,497	20,175	7,493	7,093	6,563	6,565	6,933
STWD Archery	4,658	4,742	5,106	5,434	3,093	1,756	1,837												
Unit Archery	37,812	40,236	41,914	42,774	66,651	86,255	96,583	171,368	152,814	138,738	130,833	129,662	133,147	133,184	138,038	144,629	147,409	153,268	158,539
Sub-total	80,412	87,116	95,744	107,099	131,926	155,515	181,179	170,302	158,479	145,520	134,495	132,963	136,378	136,519	140,723	147,219	150,197	156,107	161,349
NON RESIDENT																			
Antlered (Firearms)	415	385	451	645	986	1,587	3,678	3,865	4,347	4,086	6,432	7,304	8,694	9,725	7,653	8,166	7,866	7,657	7,746
Either Species ES (MZ)	18	0	43	141	154	237	461	240	244	159	194	197	221	241	164	132	133	133	132
White-tailed ES (MZ)																			
Antlered (HOL)	207	245	268	520	700	1,026	1,190	1,166	1,372	1,570	1,706	2,026	2,258	2,531	2,583	2,283	3,094	3,288	3,230
Antlerless (Firearms)	115	45	241	775	646	632	906	900	728	840	1,101	350	411	421	3,556	3,968	4,273	5,706	6,560
Game Tags Nonresidents)																			
W-T ES (Archery)	415	385	451	645	814	866	2,877	2,977	2,600	2,601	3,258	3,745	4,248	4,884	7,666	10,331	10,948	10,919	11,595
ES ES (Archery)																			
Antlerless (Archery)	115	45	241	775	271	154	207	0	0	0	0	0	0	0	122	154	133	133	134
Sub-total	1,285	1,105	1,695	3,501	3,571	5,440	14,062	15,225	15,220	13,672	21,244	17,663	20,822	23,491	23,251	27,096	28,738	29,833	31,818
Percent of Permits to NR																			
	1.6	1.3	1.7	3.2	2.6	3.4	7.2	7.9	8.8	8.7	13.6	11.7	13.2	14.7	14.2	15.5	16.1	16.0	16.5
GRAND TOTAL	81,697	88,221	97,439	110,600	135,497	160,955	195,241	193,527	173,699	157,192	156,739	150,646	157,200	160,010	163,974	174,315	178,935	185,940	193,167
History of deer harvest in Kansas, 1994 to 2008.																			
Permit Type																			
Regular Firearms (Res)	194	195	196	197	198	199	200	201	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Hunt-Own-Land (Res + NR)	26,500	27,700	31,200	39,600	40,700	44,700	38,548	27,493	22,561	24,313	28,655	31,885	33,912	31,172	41,845	41,835	44,479	44,428	41,930
Antlerless Tags (Res + NR)	8,400	8,900	8,600	10,400	10,900	12,000	11,732	7,114	5,370	4,754	5,650	5,344	5,571	5,002	4,739	4,207	4,945	5,091	4,391
Regular Firearms (NR)	1,800	2,500	3,100	2,800	20,300	31,000	44,216	56,164	43,002	30,372	29,328	22,354	22,427	20,422	21,134	27,598	26,632	35,017	34,456
Archery (Res + NR)	340	290	450	640	1,200	1,600	4,776	2,768	2,832	2,672	3,867	4,170	5,596	5,501	4,872	5,711	5,327	5,955	5,483
Sub-total	7,800	7,200	8,500	9,700	8,000	12,000	11,887	8,045	9,147	9,172	9,435	11,157	11,685	11,584	7,900	7,696	7,655	7,447	7,810
Grand Total	43,840	46,590	52,050	63,140	81,100	101,300	111,159	101,584	82,912	71,283	76,935	74,910	79,191	73,681	80,490	87,047	89,038	97,938	94,070

Table 4. Success rate of hunters using various permit hunt types during the 2012 - 2013 deer season in Kansas.

RES	STWD Total Permit Type	Permit Success Rate	Percent of the Harvest in Species and Sex Category											
			White-tailed Deer						Mule Deer					
			Antlered Buck	Male Fawn	Adult doe	Female Fawn	Buck With Sheds	Antlered Buck	Male Fawn	Adult doe	Female Fawn	Buck With Sheds		
KS	Any Deer, Gen Res	65.5%	34.48%	0.64%	6.64%	0.00%	0.43%	54.39%	0.21%	3.00%	0.00%	0.21%		
KS	Any Deer, LO/Ten	63.9%	27.06%	1.18%	12.94%	0.00%	0.00%	51.76%	0.00%	7.06%	0.00%	0.00%		
KS	Any Deer, Youth	72.2%	53.85%	0.00%	7.69%	0.00%	0.00%	30.77%	0.00%	0.00%	0.00%	7.69%		
KS	Any Season W-T Either Sex, Gen Res	49.4%	70.03%	2.46%	24.40%	1.71%	1.32%	0.07%	0.00%	0.00%	0.00%	0.00%		
KS	Any Season W-T Either Sex, LO/Ten	49.5%	71.95%	1.76%	24.53%	0.81%	0.81%	0.14%	0.00%	0.00%	0.00%	0.00%		
KS	Any Season W-T Either Sex, Youth	52.4%	74.42%	4.65%	18.60%	0.78%	1.55%	0.00%	0.00%	0.00%	0.00%	0.00%		
KS	Muzzleloader, Gen Res	56.8%	36.89%	0.00%	10.68%	0.00%	0.00%	49.51%	0.00%	0.97%	0.00%	1.94%		
KS	Muzzleloader, LO/Ten	56.3%	33.33%	5.56%	16.67%	0.00%	0.00%	38.89%	0.00%	5.56%	0.00%	0.00%		
KS	Muzzleloader, Youth	0.0%	None	None	None	None	None	None	None	None	None	None		
KS	HOL	47.9%	61.81%	1.65%	14.01%	1.37%	0.82%	18.41%	0.00%	1.65%	0.27%	0.00%		
KS	STWD Archery, Gen Res	44.8%	69.09%	1.08%	15.86%	1.34%	1.08%	11.02%	0.00%	0.54%	0.00%	0.00%		
KS	STWD Archery, LO/Ten	46.3%	67.82%	0.00%	10.34%	3.45%	0.00%	16.09%	0.00%	2.30%	0.00%	0.00%		
KS	STWD Archery, Youth	41.7%	66.67%	0.00%	16.67%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%		
KS	WTAO, General Resident	41.0%	0.00%	6.10%	86.16%	6.25%	1.49%	0.00%	0.00%	0.00%	0.00%	0.00%		
KS	WTAO, Youth	36.0%	0.00%	10.17%	77.97%	8.47%	3.39%	0.00%	0.00%	0.00%	0.00%	0.00%		
KS	ESAO Adult	51.7%	0.00%	2.33%	34.88%	2.33%	1.16%	0.00%	3.49%	55.81%	0.00%	0.00%		
KS	ESAO Youth	66.7%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	75.00%	0.00%	0.00%		
NR	Firearms W-T Either Sex, Draw	56.3%	93.83%	0.87%	4.65%	0.00%	0.44%	0.22%	0.00%	0.00%	0.00%	0.00%		
NR	Firearms W-T Either Sex, Leftover	46.4%	91.89%	0.45%	7.21%	0.00%	0.45%	0.00%	0.00%	0.00%	0.00%	0.00%		
NR	Muzzleloader, Draw	47.0%	93.46%	0.27%	5.18%	0.54%	0.27%	0.00%	0.00%	0.00%	0.27%	0.00%		
NR	Muzzleloader, Leftover	37.3%	93.10%	0.00%	5.17%	0.00%	1.72%	0.00%	0.00%	0.00%	0.00%	0.00%		
NR	Muzzleloader, ESES	65.2%	30.23%	0.00%	0.00%	0.00%	0.00%	67.44%	0.00%	2.33%	0.00%	0.00%		
NR	HOL	50.9%	81.66%	0.59%	10.06%	0.59%	0.00%	6.51%	0.00%	0.59%	0.00%	0.00%		
NR	HOL Special	51.9%	65.13%	1.54%	12.82%	1.03%	0.51%	16.92%	0.51%	1.54%	0.00%	0.00%		
NR	HOL NR Tenant	46.7%	72.58%	0.00%	16.13%	0.00%	1.61%	9.68%	0.00%	0.00%	0.00%	0.00%		
NR	Archery, Draw	40.0%	90.74%	0.38%	7.55%	0.44%	0.63%	0.25%	0.00%	0.00%	0.00%	0.00%		
NR	Archery, Leftover	36.3%	89.53%	0.00%	8.82%	0.28%	1.10%	0.28%	0.00%	0.00%	0.00%	0.00%		
NR	Archery, ESES	50.0%	60.61%	0.00%	3.03%	3.03%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%		
NR	WTAO	38.9%	0.00%	3.34%	91.69%	3.67%	1.29%	0.00%	0.00%	0.00%	0.00%	0.00%		
NR	ESAO	34.1%	0.00%	0.00%	46.67%	0.00%	0.00%	0.00%	0.00%	53.33%	0.00%	0.00%		
KS	KS Sub-Total		42.82%	3.99%	48.39%	3.43%	1.36%	2.58%	0.02%	0.43%	0.03%	0.03%		
NR	NR Sub-Total		71.52%	1.17%	25.53%	1.04%	0.73%	2.05%	0.03%	0.30%	0.02%	0.00%		

Table 5. Harvest of deer by permit hunt type in Kansas, 2012 - 2013.

STWD Total

RES	Permit Type	White-tailed Deer						Mule Deer			Buck With Sheds	Total Antlerless MD	Total WT Deer Harvested	Total Mule Deer Harvested	Percent Of WT Harvest That Was Antlerless	Percent Of MD Harvest That Was Antlerless	Grand Total For Permit Type	
		Antlered Buck	Male Fawn	Adult doe	Female Fawn	Buck With Sheds	Total Antlerless WTD	Antlered Buck	Male Fawn	Adult doe								Female Fawn
KS	Any Deer	392	7	75	0	5	88	618	2	34	0	2	39	480	657	18.27%	5.93%	1,137
KS	Any Deer	68	3	33	0	0	36	130	0	18	0	0	18	104	148	34.29%	12.00%	252
KS	Any Deer	66	0	9	0	0	9	38	0	0	0	9	9	75	47	12.50%	20.00%	122
KS	W-T Either Sex	18,629	655	6,491	456	351	7,953	19	0	0	0	0	0	26,582	19	29.92%	0.00%	26,601
KS	W-T Either Sex	6,381	156	2,175	72	72	2,476	12	0	0	0	0	0	8,857	12	27.95%	0.00%	8,869
KS	W-T Either Sex	3,253	203	813	34	68	1,118	0	0	0	0	0	0	4,371	0	25.58%	0.00%	4,371
KS	Muzzleloader	184	0	53	0	0	53	246	0	5	0	10	14	237	261	22.45%	5.56%	498
KS	Muzzleloader	27	5	14	0	0	18	32	0	5	0	0	5	45	36	40.00%	12.50%	81
KS	Muzzleloader	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	0
KS	HOL	1,695	45	384	38	23	490	505	0	45	8	0	53	2,185	558	22.41%	9.46%	2,742
KS	STWD Archery	1,707	27	392	33	27	478	272	0	13	0	0	13	2,185	286	21.88%	4.65%	2,471
KS	STWD Archery	375	0	57	19	0	76	89	0	13	0	0	13	452	102	16.90%	12.50%	553
KS	STWD Archery	78	0	20	0	0	20	20	0	0	0	0	0	98	20	20.00%	0.00%	118
KS	WTAO General	0	1,780	25,162	1,826	436	29,204	0	0	0	0	0	0	29,204	0	100.00%	0.00%	29,204
KS	WTAO Youth	0	177	1,356	147	59	1,739	0	0	0	0	0	0	1,739	0	100.00%	0.00%	1,739
KS	ESAO Adult	0	6	96	6	3	112	0	10	153	0	0	163	112	163	100.00%	100.00%	274
KS	ESAO Youth	0	0	0	0	0	0	0	0	41	14	0	55	0	55	5.97%	0.00%	55
NR	W-T Either Sex	3,396	32	168	0	16	216	8	0	0	0	0	0	3,611	8	8.11%	0.00%	3,619
NR	W-T Either Sex	608	3	48	0	3	54	0	0	0	0	0	0	661	0	8.11%	0.00%	661
NR	Muzzleloader	873	3	48	5	3	59	0	0	0	3	0	3	932	3	6.28%	100.00%	934
NR	Muzzleloader	168	0	9	0	3	12	0	0	0	0	0	0	180	0	6.90%	0.00%	180
NR	Muzzleloader ESES	27	0	0	0	0	0	60	0	2	0	2	2	27	62	0.00%	3.33%	89
NR	HOL	497	4	61	4	0	68	40	0	4	0	0	4	565	43	12.10%	8.33%	609
NR	HOL Special	522	12	103	8	4	127	136	4	12	0	0	16	650	152	19.62%	10.81%	802
NR	HOL NR Tenant	173	0	38	0	4	42	23	0	0	0	0	0	215	23	19.64%	0.00%	238
NR	Archery	3,276	14	272	16	23	325	9	0	0	0	0	0	3,601	9	9.03%	0.00%	3,610
NR	Archery	887	0	87	3	11	101	3	0	0	0	0	0	988	3	10.22%	0.00%	991
NR	Archery ESES	41	0	2	2	0	4	22	0	0	0	0	0	45	22	9.09%	0.00%	67
NR	WTAO	0	105	2,876	115	41	3,136	0	0	0	0	0	0	3,136	0	100.00%	100.00%	3,136
NR	ESAO	0	0	23	0	0	23	0	0	26	0	0	26	23	26	100.00%	100.00%	48
KS	KS Sub-Total	32,855	3,064	37,130	2,632	1,043	43,868	1,981	12	327	21	21	381	76,723	2,362	57.18%	16.15%	79,086
NR	NR Sub-Total	10,466	172	3,736	153	107	4,167	300	4	44	3	0	50	14,633	351	28.48%	14.37%	14,984
	STWD Total	43,321	3,236	40,866	2,784	1,150	48,036	2,281	16	370	24	21	432	91,357	2,713	52.58%	15.92%	94,070

Table 6. Number of Deer Taken by Equipment Type by Hunters with Various Permit Type n Kansas, 2012.

RES	STWD Permit Type	Compound Bow				In-Line		MZ		MZ		MZ		Shotgun & Slug		Pistol		Cross Bow		Firearms Unspecified	Total
		5	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0		
KS	Any Deer, Gen Res	5	0	0	0	10	0	0	0	1,113	2	2	2	0	0	0	0	0	5	1,137	
KS	Any Deer, LO/Ten	0	0	0	0	0	0	0	0	249	0	0	0	0	0	0	0	0	0	252	
KS	Any Deer, Youth	0	0	0	0	9	0	0	0	113	0	0	0	0	0	0	0	0	0	122	
KS	Any Season W-T Either Sex, Gen Res	5,162	66	864	750	152	152	66	18,296	218	218	399	598	26,600							
KS	Any Season W-T Either Sex, LO/Ten	1,382	36	276	252	24	24	24	6,441	12	12	168	168	8,869							
KS	Any Season W-T Either Sex, Youth	949	0	0	34	0	0	0	3,321	0	0	68	68	4,371							
KS	Muzzleloader, Gen Res	0	0	0	392	68	68	10	29	0	0	0	0	498							
KS	Muzzleloader, LO/Ten	0	0	0	63	5	5	5	9	0	0	0	0	81							
KS	Muzzleloader, Youth	0	0	0	0	0	0	0	0	0	0	0	0	0							
KS	HOL	226	0	30	45	23	23	0	2,335	8	8	53	8	2,742							
KS	STWD Archery, Gen Res	1,362	66	684	0	0	0	0	199	7	7	73	80	2,471							
KS	STWD Archery, LO/Ten	286	19	172	0	0	0	0	51	0	0	19	6	553							
KS	STWD Archery, Youth	39	0	20	0	0	0	0	59	0	0	0	0	118							
KS	WTAO, General Resident	4,728	167	1,947	1,020	185	185	19	19,284	185	185	389	1,168	29,204							
KS	WTAO, Youth	324	0	0	29	0	0	0	1,356	0	0	0	29	1,739							
KS	ESAO Adult	13	3	16	16	0	0	0	220	0	0	0	6	274							
KS	ESAO Youth	0	0	0	0	0	0	0	55	0	0	0	0	55							
NR	Firearms W-T Either Sex, Draw	11	0	0	11	0	0	0	3,580	8	8	5	0	3,619							
NR	Firearms W-T Either Sex, Leftover	0	0	0	3	0	0	0	655	3	3	0	0	661							
NR	Muzzleloader, Draw	0	0	0	853	69	69	0	10	3	3	0	0	934							
NR	Muzzleloader, Leftover	3	0	0	158	16	16	0	3	0	0	0	0	180							
NR	Muzzleloader, ESES	0	0	0	77	12	12	0	0	0	0	0	0	89							
NR	HOL	166	4	0	18	4	4	0	400	0	18	0	0	609							
NR	HOL Special	132	0	0	25	4	4	0	633	0	8	0	0	802							
NR	HOL NR Tenant	54	0	0	4	0	0	0	177	0	4	0	0	238							
NR	Archery, Draw	3,351	103	0	2	2	2	0	30	0	124	0	0	3,610							
NR	Archery, Leftover	945	8	0	0	0	0	0	5	0	33	0	0	991							
NR	Archery, ESES	61	2	0	0	0	0	0	2	0	2	0	0	67							
NR	WTAO	1,384	44	0	230	17	17	7	1,370	3	71	0	0	3,136							
NR	ESAO	6	0	0	6	0	0	0	35	0	0	0	0	48							
KS	KS Sub-Total	14,476	358	4,008	2,620	456	456	123	53,130	432	1,172	241	2,069	79,086							
NR	NR Sub-Total	6,112	161	0	1,384	124	124	7	6,900	17	265	15	0	14,984							
	Total	20,588	519	4,008	4,004	580	580	130	60,030	449	1,437	257	2,069	94,070							

Table 7. Estimated Days Spent by Deer Hunters with Various Permit Types in Each Season in Kansas, 2012.

RES	STWD Permit Type	ESTIMATED DEER HUNTER DAYS AFIELD												Total Days
		Early MZ	Early Disabled	Youth	Archery	Firearms U19	Regular Firearms	Extended WT Antlerless	Special Extended U 7, 8, 15	Archery U19				
KS	Any Deer, Gen Res	184	107	1,374	97	6,983	949	99	46	9,839				
KS	Any Deer, LO/Ten	41	9	127	6	1,636	247	15	3	2,084				
KS	Any Deer, Youth	93	272	112	0	328	103	9	0	917				
KS	Any Season W-T Either Sex, Gen Res	26,406	3,511	391,543	5,723	179,961	50,908	5,531	2,712	666,295				
KS	Any Season W-T Either Sex, LO/Ten	5,462	682	115,125	1,316	68,097	17,542	2,371	235	210,830				
KS	Any Season W-T Either Sex, Youth	1,928	11,055	55,412	1,343	22,626	7,404	1,033	344	101,145				
KS	Muzzleloader, Gen Res	2,527	67	358	14	2,770	450	48	0	6,234				
KS	Muzzleloader, LO/Ten	454	0	36	0	630	130	22	0	1,272				
KS	Muzzleloader, Youth	27	81	0	0	162	0	0	0	270				
KS	HOL	1,130	251	14,389	204	19,397	3,202	321	133	39,027				
KS	STWD Archery, Gen Res	639	537	87,452	136	2,517	2,653	190	306	94,430				
KS	STWD Archery, LO/Ten	380	66	22,157	33	874	721	86	66	24,383				
KS	STWD Archery, Youth	0	258	5,123	0	399	611	70	0	6,461				
KS	WTAO, General Resident													
KS	WTAO, Youth													
KS	ESAO													
KS	ESAO, Youth													
NR	Firearms W-T Either Sex, Draw	59	366	290	157	29,746	252	18	0	30,888				
NR	Firearms W-T Either Sex, Leftover	26	80	194	32	6,689	83	17	0	7,121				
NR	Muzzleloader, Draw	8,888	57	52	31	2,795	67	0	0	11,890				
NR	Muzzleloader, Leftover	2,135	0	15	12	633	38	0	0	2,833				
NR	Muzzleloader, ESES	434	0	2	0	227	6	0	0	669				
NR	HOL	680	52	6,252	0	3,654	165	22	33	10,858				
NR	HOL Special	475	96	3,734	16	4,550	340	42	0	9,253				
NR	HOL NR Tenant	267	27	2,074	38	1,528	96	34	0	4,064				
NR	Archery, Draw	222	91	76,594	42	423	257	32	0	77,661				
NR	Archery, Leftover	5	13	21,806	21	92	40	13	32	22,022				
NR	Archery, ESES	0	0	1,032	0	4	12	0	0	1,048				
NR	WTAO													
NR	ESAO													
KS	KS Sub-Total	39,271	16,896	693,208	8,872	306,380	84,920	9,795	3,845	1,163,187				
NR	NR Sub-Total	13,191	782	112,045	349	50,341	1,356	178	65	178,307				
	STWD Total	52,462	17,678	805,253	9,221	356,721	86,276	9,973	3,910	1,341,494				

Table 8. Percent of Kansas Deer Hunters with Various Levels of Satisfaction by Hunt Types in, 2012.

Satisfaction

RES	STWD Permit Type	Satisfaction				
		Extremely Satisfied	Satisfied	Neutral	Dissatisfied	Extremely Dissatisfied
KS	Any Deer, Gen Res	32.10%	40.68%	16.12%	7.40%	3.70%
KS	Any Deer, LO/Ten	26.98%	41.27%	19.05%	8.73%	3.97%
KS	Any Deer, Youth	41.18%	47.06%	0.00%	11.76%	0.00%
KS	Any Season W-T Either Sex, Gen Res	18.70%	40.55%	19.72%	14.20%	6.83%
KS	Any Season W-T Either Sex, LO/Ten	14.41%	39.63%	22.49%	14.76%	8.71%
KS	Any Season W-T Either Sex, Youth	27.90%	36.05%	15.88%	12.88%	7.30%
KS	Muzzleloader, Gen Res	22.94%	44.12%	21.76%	8.24%	2.94%
KS	Muzzleloader, LO/Ten	9.38%	59.38%	9.38%	12.50%	9.38%
KS	Muzzleloader, Youth	0.00%	0.00%	50.00%	50.00%	0.00%
KS	HOL	17.31%	43.41%	24.31%	10.30%	4.67%
KS	STWD Archery, Gen Res	18.33%	40.71%	18.46%	15.68%	6.83%
KS	STWD Archery, LO/Ten	10.73%	49.72%	20.90%	11.30%	7.34%
KS	STWD Archery, Youth	45.45%	36.36%	0.00%	18.18%	0.00%
KS	WTAO, General Resident*					
KS	WTAO, Youth*					
KS	ESAO*					
KS	ESAO, Youth*					
NR	Firearms W-T Either Sex, Draw	33.81%	36.60%	15.29%	9.92%	4.38%
NR	Firearms W-T Either Sex, Leftover	25.38%	37.42%	17.94%	11.82%	7.44%
NR	Muzzleloader, Draw	32.57%	37.94%	16.49%	9.65%	3.35%
NR	Muzzleloader, Leftover	14.29%	42.14%	15.00%	15.71%	12.86%
NR	Muzzleloader, ESES	51.72%	32.76%	10.34%	5.17%	0.00%
NR	HOL	25.16%	42.45%	17.30%	8.49%	6.60%
NR	HOL Special	35.38%	37.88%	15.04%	8.91%	2.79%
NR	HOL NR Tenant	30.65%	39.52%	19.35%	8.06%	2.42%
NR	Archery, Draw	32.49%	38.31%	15.63%	9.57%	4.01%
NR	Archery, Leftover	27.99%	38.40%	18.21%	11.97%	3.43%
NR	Archery, ESES	43.75%	32.81%	15.63%	4.69%	3.13%
NR	WTAO*					
NR	ESAO*					
KS	KS Sub-Total	18.89%	40.32%	19.99%	13.85%	6.96%
NR	NR Sub-Total	31.58%	38.02%	16.09%	9.98%	4.33%
	Total	21.54%	39.84%	19.17%	13.04%	6.41%

2012 Crossbow Pilot Study

Crossbow use during an archery season was debated in the state legislature in the spring of 2012. The department attempted to compromise on some aspects of issue. KDWPT change equipment regulations to allow any person with a youth permit and any person over the age of 54 to use a crossbow during an archery season. That approach was not considered adequate by a majority of legislators so they passed Senate bill 314 required the department to initiate a two year study of crossbow use. The bill specifically stated that the department had to allow crossbows in four deer management units during the archery season for people of any age and physical condition.

The department selected DMUs 1, 12, 15 and 19 for this study. DMU 1 and 12 are predominately rural area, with DMU 1 traditionally having the highest harvest of mule deer in the state. DMU 15 and 19 are predominately suburban areas. The department required all crossbow users between 16 and 54 years old to obtain a free Crossbow Survey ID number. That created a list of people to sample about their use of crossbows.

Five hundred and thirty one people obtained a Crossbow Survey ID number, however, only 481 of them obtained a deer permit. We created a SurveyMonkey® instrument to gather information from these people. Three waves of email request were sent to the 481 people. Everybody on the list was contacted by email on 12/28/12. Non respondents were contacted of 1/2/13 (n= 277) and 1/7/13 9 (n= 164). The survey was closed on 1/9/2013 with results from 346 respondents for a response rate of 71.9%.

The survey results showed that these people had extensive deer hunting experience before the 2013 season. The overall average deer hunting experience for this group was 19 years. The largest majority of these hunters (71.9%) had used centerfire rifles during the previous hunting season and 90.1% owned a centerfire rifle. Compound bows had been used by 60.3% by the 79.7% that owned that type of equipment while only 26.4% of the people had hunted with a crossbow the year before the current season.

Recent purchases of crossbow were common among the survey participants. More than half (58.8%) indicated the bought a crossbow with 12 month of the current season. When asked to check factors important to them for using a crossbow the topic that received the greatest response was, "To try new equipment" with 71.4% checking that factor 26.1% indicating that reason was the single most important factor in their decision.

Legislative and Social Issues

Numerous modifications in the regulations dealing with big game and deer were made during 2012 and 2013. One of the more controversial items addressed by the department was regulations on the equipment that could be used while deer hunting.

Senate bill 314 was passed in the 2012 legislative session. The bill included a provision to extend the license buying age of hunters and fisherman from 65 to 75, something the department had requested. The bill also contained specific deer management issues under consideration by the department but which some legislators felt were not being addressed as fast as they wanted. The bill included:

- A combo deer permit (2 tags, 1 for an antlerless deer)
- A pre-rut antlerless only season
- Legalization of crossbows during the archery deer season

The department created a two-tag deer permit. It was limited to non-residents. Their typical permit prior to this time had allowed them to take one white-tailed deer of either sex. The total number of non-residents was limited by a quota per deer management unit. The hunters could specify which class of equipment they would use, which determined which season(s) they could hunt. Non-residents tend to buy fewer antlerless-only permits compared to residents. Non-residents also tend to lease land at a higher rate than residents. The leased lands are generally not open to residents to hunt for antlerless deer. These characteristics are believed to cause local deer population problems. Adjacent landowners to an area leased by non-residents complain that the local deer herd was not being controlled because nobody was taking female deer. Non-residents complained that they would not pay \$52.50 for an antlerless deer permit.

The new permit retained features of the former permit plus it included a second tag restricted to an antlerless white-tailed deer. The price of the non-resident two-tag deer permit was increased by \$15. That increase is the price of an antlerless permit for a resident. This new permit ensures that all non-resident deer hunters will have an antlerless tag.

The 2012 legislature directed the department to initiate a pre-rut antlerless only season for the 2013 hunting seasons. The department selected October 12 and 13, 2013 for the pre-rut season dates and established it as a statewide firearms season. Hunters must wear blaze orange during this firearms season. No special permit will be needed for this season as all permits issued in Kansas allow the hunter to take an antlerless white-tailed deer. It is assumed that few hunters will use their either sex permit at this time of year to take an antlerless deer.

Some people believe that the timing of the removal of female deer from the herd during a pre-rut season may produce benefits that a post-rut removal would not. They suggest that by removing females before the peak of the vehicle accidents in a year there will be fewer conflicts between people and deer caused by deer related vehicle accidents. Proponents of the pre-rut season also suggest that adjusting the sex ratio before breeding may result in a shorter period of breeding activity and a stronger peak of fawning, which may reduce predator losses. Removing antlerless deer before the peak of the rut rather than in January may also result in fewer adult male deer without antlers being killed as antlerless deer.

The pre-rut season will run concurrent with the archery season, thus not reducing the number of days a bowhunter might pursue deer.

Equipment has a major topic of discussion during the last two years. The 2011 legislature had authorized hunters with a concealed carry license to carry a concealed handgun while lawfully hunting, fishing, or furharvesting (SB 152). In addition, a person with a legally acquired sound suppression device could use it while lawfully hunting, fishing, or furharvesting. The change in that state law made some provisions in KDWPT regulations difficult to enforce. For example, deer hunting regulations had prohibited people to possess firearms, including handguns, while they were bowhunting. Deer hunting regulations also had specific caliber and cartridge case length requirements, state law allowed people to carry any caliber handgun.

The question of using crossbows during the archery season had come up in the 2012 legislature. People attending Commission Meetings had requested changes in regulations on handguns, center fire rifles and other equipment. As a result the department undertook an extensive review of the regulation on big game equipment.

The department proposed regulations for the 2013 seasons to allow any center fire rifle or handgun during a firearms season. The regulation also allowed crossbows as legal archery equipment for anybody during an archery season.

Coyote Hunting and Vehicles

Coyote hunting in Kansas has a long and colorful history. Coyotes have been hunted for decades in the Great Plains using vehicles and coursing hounds. Coyotes are not classified as a game animal and provisions have been placed in Kansas law which allows people to shoot coyotes from a vehicle. In some cases the hunter will drive along rural roads or through pastures and shoot from their vehicle in order to get coyotes out of cover where the dogs can pursue them. Because that activity is legal it creates a law enforcement loophole for some people to abuse deer hunting regulations. Road hunting deer hunters, even when caught shooting from a vehicle may claim to be hunting coyotes.

A proposal was made in 2013 to prohibit coyote hunting from a vehicle during the firearms deer season. The proposal was not approved. Additional review of this situation will be made during the 2013 season. Law enforcement officers have been requested to document the times that they encounter hunters in vehicles during the firearms deer season. The officers will attempt to document the times they encounter hunters or receive complaints about road hunting during the firearms deer season and then attempt to determine if the hunters had deer hunting permits, blaze orange clothing and other factors that would suggest they were deer hunters or if the hunters had coursing hounds and other factors that suggest they were hunting coyotes with no intent to hunt deer.

Chronic Wasting Disease Management

Monitoring deer population for chronic wasting disease has taken a new turn. Funding previously available through USDA is no longer available. Currently the monitoring program in Kansas is funded through Pittman/Robertson Act (W39 R019 Subproject 8115). The level of funding is less than we had used since 2003 and as a result we currently attempt to sample hunter harvested deer from only one of five regions of the state each year. Sampling will rotate to a different region each year. In 2012 we focused on the north central portion of the state. In addition to the hunter harvested deer we collected samples from vehicle killed deer, and all elk killed in the state. The sampling protocol included testing of all suspect deer. We also collected information on deer by hunters who paid for private testing.

The sample size during 2012-13 was 425 animals. That included 49 suspect animals (18 suspect deer were sent to SCWDS primarily for HD testing). Twenty elk were culled from the herd at Maxwell Game Preserve. Seven CWD positive deer were detected in Kansas during 2012-13. They were detected in Decatur, Ellis, Gove, Norton, Rawlins, Sherman, and Trego Counties. The history of testing and number of CWD positive animals is shown in Figure 8. The distribution of the positive animals by county is shown in Figure 9.

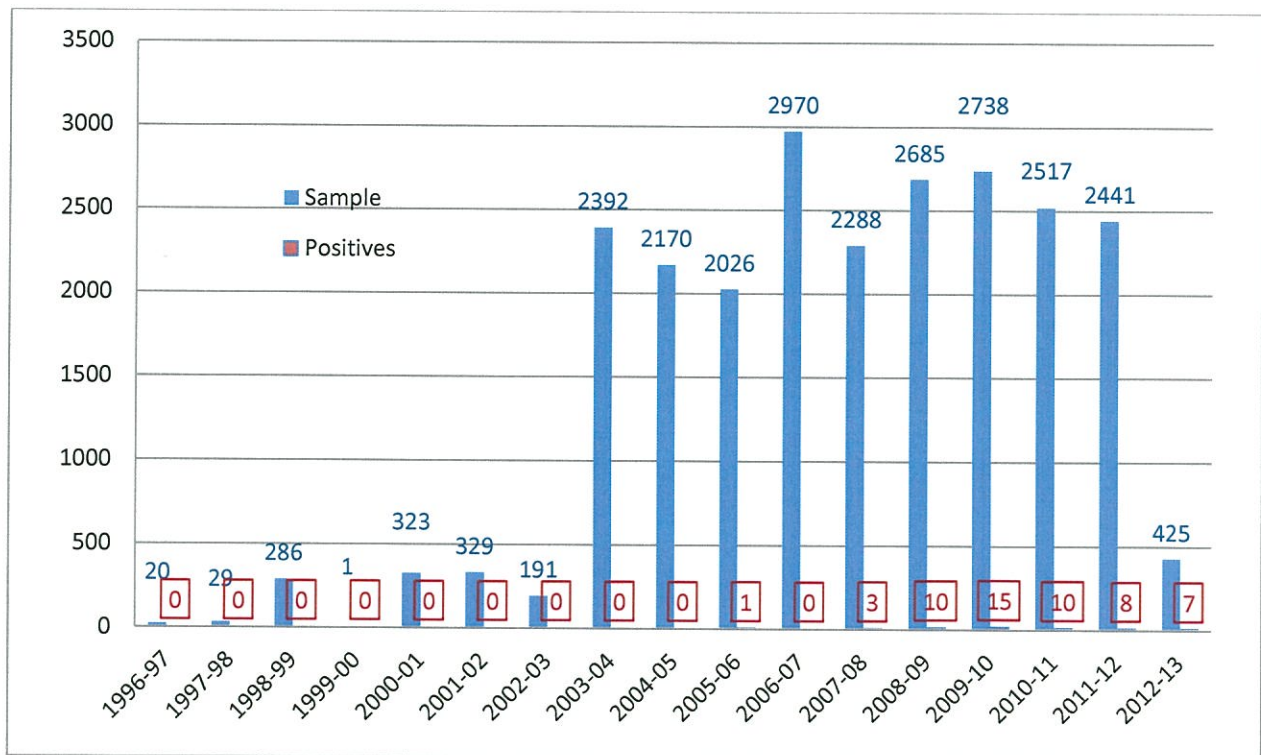


Figure 8. Number of deer and elk sampled and CWD positive animals detected by year in Kansas.

2012 Hemorrhagic Disease Distribution KDWPT Staff and Public Input_Final N = 1274

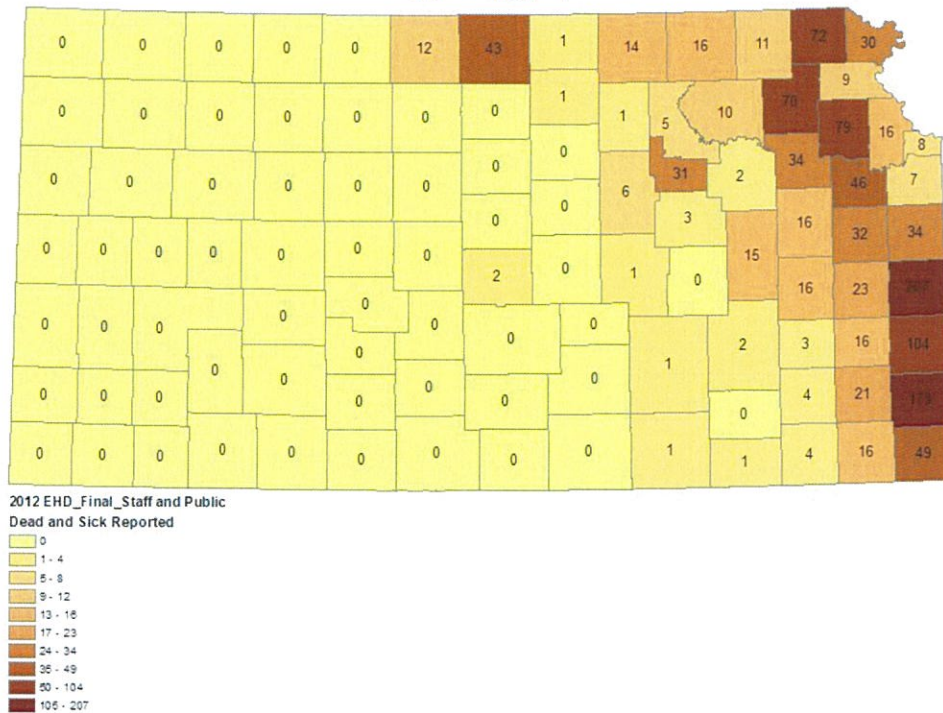


Figure 10. Distribution of reports of hemorrhagic disease during 2012 in Kansas.

Landowner Survey on Deer Issues

Approximately every five years since 1964 the department conducts a survey of Kansas landowners. The objective of this survey is to obtain estimates of the opinions of Kansas landowners on deer populations and deer management issues. The survey is used to determine trends in issues such as the portion of Kansas farms and ranches that have damage caused by deer and landowner's subjective opinions on the severity of that damage.

A stratified random sample of 4,264 Kansas landowners was selected from a list of Kansas Landowners who had enrolled in Conservation Reserve Programs during the 39-41 sign up periods (2008 to 2011)(n=13,687). The procedures randomized all landowners. Each county was assigned to one of the 19 Deer Management Unit (DMU) in the state. If more than one DMU occurred in a county the DMU that made up the largest segment of the county was used. Up to 250 landowners were selected from each DMU. Whenever possible the selection was made from landowners designated as

individuals as opposed to businesses and from landowners with a Kansas mailing address as opposed to out-of-state. Insufficient individuals were present in the database for the 250 object size for DMUs 10, 12, 13, and 19.

The initial contact procedure involved a letter to each landowner with a request for them to go online at a website and complete the survey. That mailing was initiated on February 8, 2013. A paper survey was sent to all non respondents on March 28, 2013. In the second contact to non-respondents they were encouraged again to enter their information on-line but they could complete and return the paper copy in a postage paid envelope if they preferred. The website was left open until June 24, 2103.

Result from SurveyMonkey® were downloaded to an MS excel file, exported to MS ACCESS and analyzed in PC SAS version 9.2.

The sample of 4,264 names included 34 duplicate records as a result of people owning land in two or more counties. It also contained 20 undeliverable address and the addresses of 8 deceased individuals. There were 52 people who returned the survey instrument and either refused to respond or provided only a written comment with their opinions about deer, information that they sold the land, information that they did not feel capable to respond because of their age or health, or provided some other explanation why they did not complete the survey. Usable responses were obtained from 1,690 people from an affective sample of 4,152 names for a response rate of 40.7.

Fewer landowners reported deer damage on their property in 2013 than during any year since the survey conducted in 1985 (Fig. 10). A landowner's response to the question about damage caused by deer influenced many of their other responses in the survey. For example, when asked if they wanted more deer, fewer deer, etc., there has been a consistent pattern in this survey of landowners who reported damage also reporting that they wanted fewer deer or no deer on their property (Fig. 11).

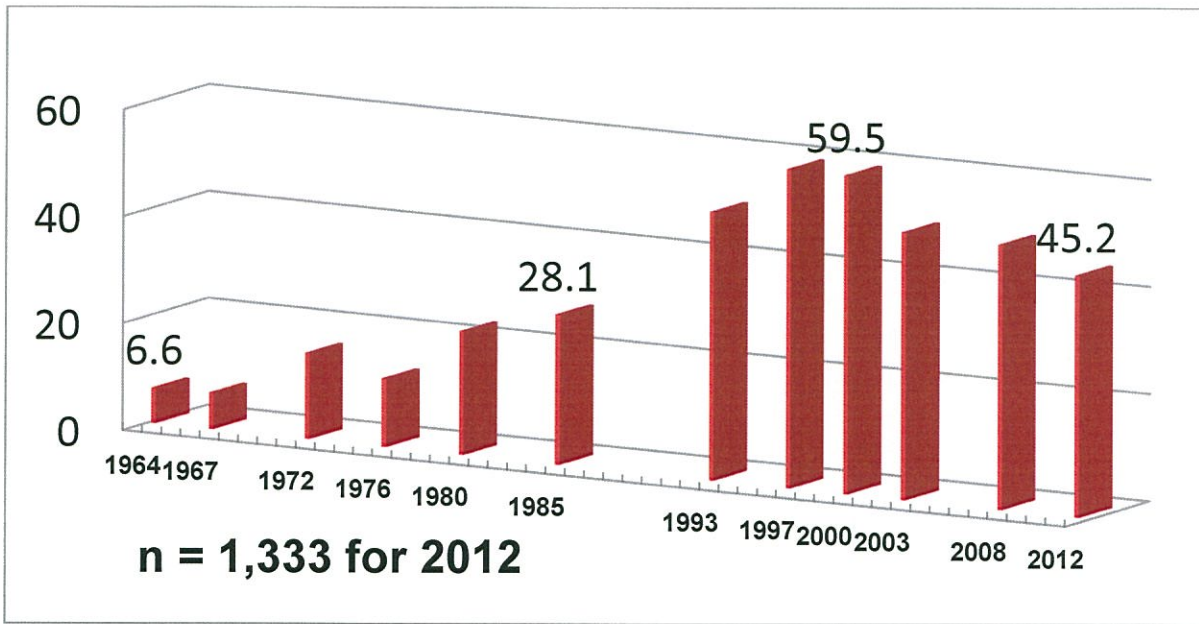


Figure 10. Percent of Kansas landowners reporting that deer caused damage on their property in from 1964 to 2012.

**Percent of Landowners with Various Opinions About Deer:
Compared by those Experiencing Damage Vs No Damage.**

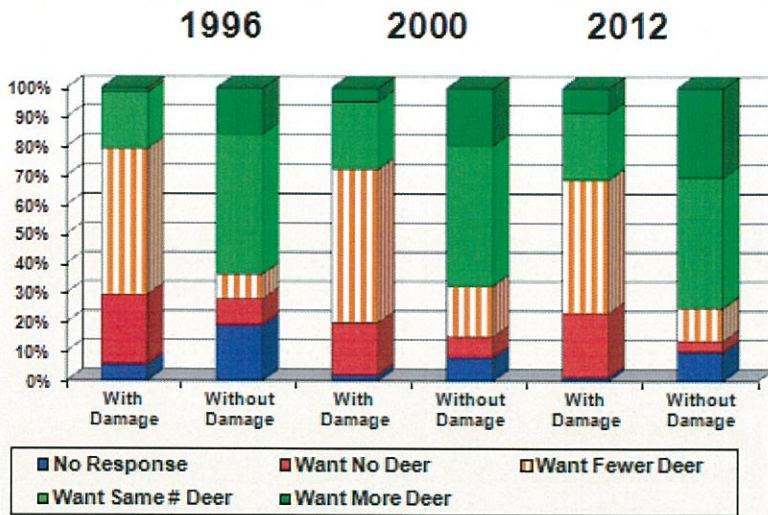


Figure 11. Opinions of Kansas landowners about the level of deer on their land in the future in comparison to their response about damage currently caused by deer in 1996, 2000 and 2012.