

SMALL GAME HUNTER ACTIVITY SURVEY – 2008

STATEWIDE WILDLIFE RESEARCH AND SURVEYS PERFORMANCE REPORT for the period July 1, 2008 to June 30, 2009

**A Contribution of Pittman-Robertson Funds
Federal Aid in Wildlife Restoration**

Grant W-39-R-15

Kansas Department of Wildlife and Parks

**Mike Hayden
Secretary**

Prepared by

**Randy Rodgers
Wildlife Research Biologist**

**Joe Kramer, Director
Fisheries and Wildlife
Division**

**Mike Mitchener, Chief
Wildlife Section**

November 2009



PERMISSION TO QUOTE

This is an annual progress report that may contain information that is subject to future modification or revision. Persons wishing to quote from this report, for reproduction or reference, should first obtain permission from the Chief of the Wildlife Section, Kansas Department of Wildlife and Parks, 512 SE 25th Avenue, Pratt, KS 67124.

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**

TABLE OF CONTENTS

Abstract	4
Survey Procedures and Results	5
2008-2009 Small Game Seasons	6
Long-Term Statewide Harvest Indices	
<i>Dove</i>	8
<i>Quail</i>	10
<i>Pheasant.....</i>	12
<i>Greater Prairie Chicken</i>	14
<i>Lesser Prairie Chicken</i>	16
<i>Cottontail.....</i>	18
<i>Squirrel</i>	20
2008-2009 Regional Harvest Indices	
<i>Dove</i>	22
<i>Quail</i>	24
<i>Pheasant.....</i>	26
<i>Greater Prairie Chicken - Regular Season</i>	28
<i>- Early Season</i>	30
<i>Lesser Prairie Chicken</i>	31
<i>Cottontail.....</i>	32
<i>Jackrabbit.....</i>	34
<i>Squirrel</i>	36
Upland Hunting Days and Proportion on Public Land	38
Age of SGHS Respondents	39
County of Residence of Resident SGHS Respondents	41
Relative Resident and Non-Resident Small Game Hunting Activity	42
Aging of the Kansas Resident Small-Game Hunter Population	44
(Age Distribution of Respondents to the SGHS Since 1981)	

ABSTRACT

Random samples comprised of 12,720 Kansas resident and 6,460 non-resident 2008 hunting, combination, and lifetime license holders were selected through the electronic Kansas Outdoors Automated Licensing System (KOALS). Each individual was asked to complete an on-line questionnaire about their hunting activity in Kansas for the 2008–2009 seasons. From the 18,494 deliverable postcards, 4,548 (24.6%) usable responses (2,598 residents, 1,950 non-residents) were obtained and 2,930 indicated hunting in Kansas during the 2008-2009 small game seasons (1,815 residents, 1,115 non-residents).

About 136,000 active licensed hunters harvested an estimated 676,000 doves, 410,000 quail, 680,000 pheasants, 8,100 greater prairie chickens, 750 lesser prairie chickens, 92,000 cottontails, 45,000 jackrabbits, and 80,000 squirrels.

SMALL GAME HUNTER ACTIVITY SURVEY - 2008

Objective: Estimate statewide hunter activity and harvest parameters for Kansas' major small game species.

Procedure: A random sample of 12,720 Kansas resident and 6,460 non-resident 2008 hunting, combination, and lifetime license holders was selected from all Kansas counties using the electronic Kansas Outdoors Automated Licensing System (KOALS). Each individual was notified by postcard in early February 2009 of their selection for the survey and asked to complete an on-line questionnaire of their hunting activity about the 2008-2009 seasons. After approximately 6 weeks, non-respondents were mailed a second postcard notification requesting their participation in this survey.

For the first time in 2008, this survey relied entirely on electronic responses. Hunters without internet access were not offered an opportunity to complete a paper survey by request. Subsequent analysis of both 2006 and 2007 SGHS data (years when both electronic and paper response options were available) indicated that the lack of a paper option probably resulted in an undersampling of older hunters who either could not or did not wish to respond electronically. Averaging the 2006 and 2007 responses, showed that only 42% of the resident electronic respondents were age 50 or more, but 60% of the resident paper survey respondents were 50 or older. Since non-residents of all ages must purchase a Kansas license, these values are relatively greater than for residents, but the pattern is similar in that 52% of the electronic respondents were age 50 or more, but 80% of the paper survey respondents were 50 or older. When the 2006 and 2007 harvest estimates were recalculated using only electronic responses and those values were compared to the composite electronic + paper estimates, it was evident that the electronic-only format produced lower harvest estimates. Averaged over those two years, the electronic-only estimates were 6.2% lower for harvest, 5.6% lower for hunter days, and 2.5% lower for total hunters. Given this, the estimates provided in this report reflect the application of correction multiples of 1.07, 1.06, and 1.03 to the 2008 harvest, hunter-days, and total-hunter estimates, respectively. Particularly given the aging structure of Kansas's resident small game hunter population (see summary on page 44), optional paper questionnaires will be offered in the future.

Results: From the 18,484 deliverable notifications (12,267 residents and 6,227 non-residents), 4,548 usable responses were obtained. These included 2,598 electronic responses from resident hunters, and 1,950 electronic responses from non-resident hunters. Of these, 2,930 indicated hunting small game during the 2008-2009 seasons (1,815 residents and 1,115 non-residents). Based on these values, 69.9% and 57.2% of resident and non-resident hunters, respectively, hunted small game in Kansas. Female hunters accounted for 6.3% of the resident and 2.6% of the non-resident responses.

Hunting license sales totaled 169,226 in 2008, an increase of 0.84% compared to 2007 sales of 167,810. Resident license sales decreased 0.86% from 107,958 in 2007 to 107,034 in 2008. Non-resident license sales increased 3.91% from 59,852 in 2007 to 62,192 in 2008. Lifetime license holders (past 25 years, 1984-2008) numbered 36,569 during 2008.

Using the small game participation percentages previously noted (residents = 69.9%, non-residents = 57.2%), it was estimated that about 74,775 resident and 35,561 non-resident license buyers hunted small game in Kansas during the 2008-2009 seasons. The resident percentage was applied to lifetime license holders yielding an estimated 25,548 additional active hunters.

Long-term harvest estimates and hunter success indices are presented by species in tables 1 through 7. Tables 8 through 16 (a = all hunters, b = residents, c = non-residents) present regional harvest and hunter success indices for each species during the 2008-2009 seasons. Table 17 indicates the proportion of Kansas small game hunting that occurred on public land. Tables 18(a,b) and 19 present age and county-of-residence, respectively, for survey respondents. Relative small game hunting participation and harvest estimates by species are shown in tables 20a and 20b for residents and non-residents, respectively.

A summary of the 2008 small game hunting season regulations follows.

2008

SMALL GAME HUNTING SEASONS, BAG LIMITS, AND POSSESSION LIMITS

DOVE	<i>September 1 through October 14 and November 1 through 16 Daily bag = 15, Possession = 30</i>
QUAIL	<i>November 8 through January 31, 2009 Daily bag = 8, Possession = 32</i>
PHEASANT	<i>November 1 through January 31, 2009 Daily bag = 4 cocks, Possession = 16 cocks</i>
PRAIRIE CHICKEN	<i>September 15 through October 15 east of U.S. 281 (East Unit) and November 15 through January 31, 2009 east of U.S. 281 or north of I-70 (East and Northwest Units – greater prairie chicken) Daily bag = 2, Possession = 8</i>
	<i>November 15 through December 31 west of U.S. 281 and south of I-70 (Southwest Unit – primarily lesser prairie chicken) Daily bag = 1, Possession = 4</i>
COTTONTAIL & JACKRABBIT	<i>Season open all year Daily bag = 10, Possession = 30</i>
SQUIRREL	<i>June 1 through February 28, 2009 Daily bag = 5, Possession = 20</i>

LEGAL SHOOTING HOURS for all species: 30 minutes before sunrise to sunset

This page deliberately left blank

KANSAS DOVE HARVEST

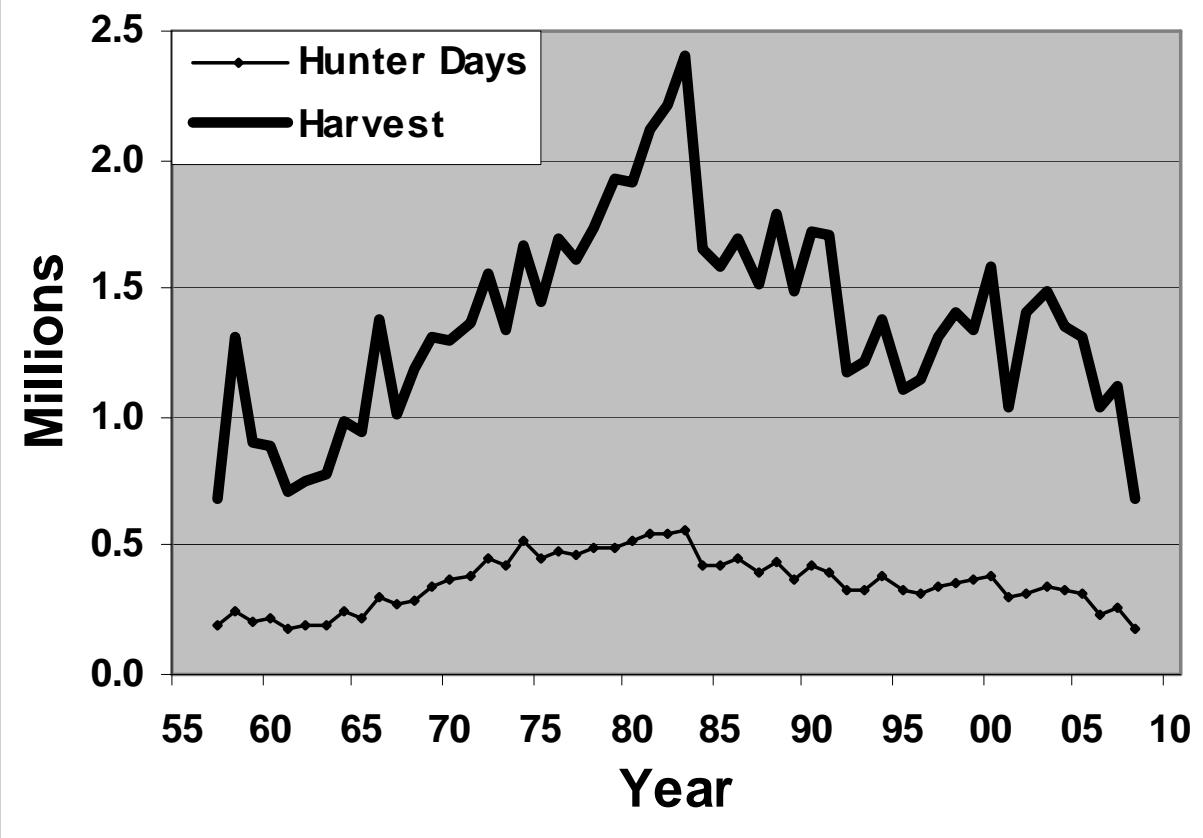


Table 1. Estimated annual DOVE hunting activity in Kansas.

Year	Percent Hunting Species	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
1957	24.00	45,400	188,000	684,000	4.15	15.07	3.63
1958	25.26	58,000	250,000	1,308,000	4.31	22.56	5.24
1959	23.14	53,200	207,000	896,000	3.89	16.85	4.33
1960	27.45	61,400	217,000	893,000	3.54	14.55	4.11
1961	23.47	48,300	181,000	712,000	3.75	14.74	3.93
1962	25.37	48,800 ^a	194,000	755,000	3.98	15.48	2.87
1963	27.75	50,100	186,000	781,000	3.71	15.58	4.20
1964	33.22	58,000	247,000	978,000	4.26	16.87	3.96
1965	30.63	54,100	223,000	936,000	4.13	17.30	4.19
1966	33.90	67,000	302,000	1,378,000	4.50	20.57	4.57
1967	31.17	63,300	273,000	1,013,000	4.31	16.01	3.71
1968	33.36	66,100	283,000	1,183,000	4.27	17.89	4.17 ^b
1969	35.76	74,500	341,000	1,312,000	4.58	17.61	3.84
1970	35.07	74,200	371,000	1,304,000	5.00	17.57	3.51
1971	39.21	81,200	378,000	1,363,000	4.66	16.79	3.75
1972	40.54	85,900	454,000	1,556,000	5.29	18.11	3.78
1973	36.27	78,200	419,000	1,333,000	5.36	17.05	3.60
1974	44.45	94,300	517,000	1,668,000	5.48	17.69	3.50
1975	43.10	86,000	448,000	1,448,000	5.21	16.84	3.49
1976	44.21	89,700	483,000	1,694,000	5.39	18.89	3.75
1977	43.39	89,200	469,000	1,612,000	5.26	18.06	3.69
1978	41.58	89,300	497,000	1,739,000	5.56	19.45	4.14
1979	43.35 ^c	98,700	486,000	1,933,000	4.92	19.59	4.51
1980	45.30	104,100	519,000	1,916,000	4.99	18.41	3.93
1981	44.11	103,000	549,000	2,115,000	5.33	20.54	3.95
1982	43.19	107,300	543,000	2,208,000	5.06	20.58	4.23
1983	43.58	104,900	558,000	2,400,000	5.32	23.06	4.49
1984	45.33	85,900	420,000	1,647,000	4.89	19.17	4.27
1985	45.39	84,200	426,000	1,586,000	5.05	18.84	3.83
1986	47.15	91,300	445,000	1,697,000	4.88	18.58	3.95
1987	42.49	83,100	393,000	1,512,000	4.73	18.18	3.93
1988	47.93	92,000	434,000	1,795,000	4.67	19.32	4.21
1989	44.91	79,600	373,000	1,495,000	4.69	18.79	4.12
1990	44.26	79,100	421,000	1,724,000	5.32	21.79	4.27
1991	44.90	83,100	393,000	1,714,000	4.73	20.63	4.44
1992	42.56	73,100	333,000	1,170,000	4.55	16.00	3.62
1993	41.13	72,000	326,000	1,219,000	4.53	16.94	3.80
1994	40.54	77,400	389,000	1,373,000	5.02	17.74	3.78
1995	41.31	74,400	324,000	1,105,000	4.35	14.86	3.35
1996	43.94	70,100	318,000	1,152,000	4.54	16.44	3.64
1997	43.25	71,700	337,000	1,312,000	4.69	18.29	4.20
1998	42.62	73,800	362,000	1,408,000	4.91	19.08	4.05
1999	39.65	71,200	370,000	1,342,000	5.19	18.83	3.87
2000	43.13	80,300	386,000	1,584,000	4.81	19.72	4.31
2001	42.14	69,900	295,000	1,042,000	4.23	14.90	3.74
2002	44.38	70,600	309,800	1,404,600	4.39	19.89	4.54
2003	43.86	73,500	338,000	1,494,000	4.60	20.34	4.72
2004	41.59	72,300	331,000	1,352,000	4.58	18.71	4.45
2005	37.98	66,500	310,000	1,305,000	4.67	19.63	4.42
2006 ^d	32.42	52,200	238,000	1,038,000	4.55	19.86	4.69
2007	36.03	56,600	263,000	1,125,000	4.63	19.87	4.57
2008	29.07	39,500	171,000	676,000	4.19	16.46	4.08

^a Hunter estimates prior to 1962 were not adjusted for inactive license buyers.^b Average Bag Per Day through 1967 expresses overall mean season bag divided by overall mean season days.

ABPD after 1967 is the mean of individual hunter ratios of season bag to season days.

^c Percent of active hunters hunting species unobtainable due to 1979 questionnaire error. Value is 1974-1978 mean.^d Electronic licensing permitted random sampling of non-residents for the 1st time, improving how estimates were calculated.

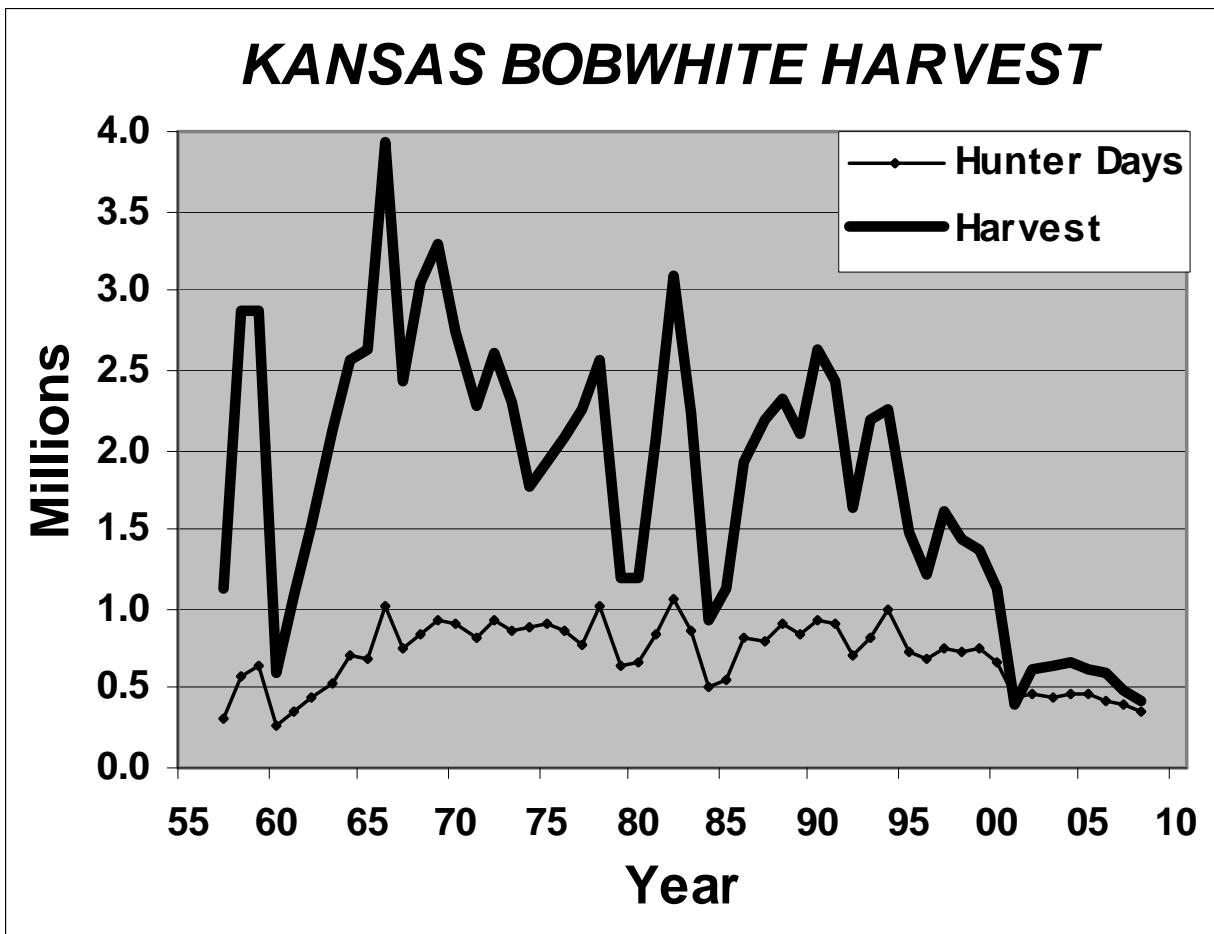


Table 2. Estimated annual BOBWHITE hunting activity in Kansas.

Year	Percent Hunting Species	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
1957	46.00	87,100	318,000	1,132,000	3.65	13.00	3.56
1958	60.86	139,800	583,000	2,863,000	4.17	20.48	4.91
1959	61.64	141,800	647,000	2,879,000	4.56	20.30	4.45
1960	43.18	96,500	261,000	594,000	2.70	6.16	2.28
1961	48.39	99,600	364,000	1,076,000	3.65	10.80	2.96
1962	55.28	106,300 ^a	437,000	1,520,000	4.11	14.30	3.48
1963	66.73	120,400	524,000	2,126,000	4.35	17.66	4.06
1964	74.91	130,800	717,000	2,573,000	5.48	19.67	3.59
1965	75.58	133,600	687,000	2,631,000	5.14	19.69	3.83
1966	79.36	156,800	1,016,000	3,931,000	6.48	25.07	3.87
1967	74.97	152,200	744,000	2,426,000	4.89	15.94	3.26
1968	76.62	151,800	838,000	3,050,000	5.52	20.09	3.50 ^b
1969	76.59	159,600	921,000	3,301,000	5.77	20.68	3.59
1970	75.69	160,200	897,000	2,733,000	5.60	17.06	3.04
1971	74.99	155,300	818,000	2,284,000	5.27	14.71	2.56
1972	74.71	158,200	924,000	2,618,000	5.84	16.55	2.73
1973	70.81	152,700	864,000	2,307,000	5.66	15.11	2.70
1974	71.63	152,000	879,000	1,772,000	5.78	11.66	2.06
1975	74.24	148,200	906,000	1,912,000	6.11	12.90	2.27
1976	73.23	148,700	864,000	2,068,000	5.81	13.91	2.43
1977	74.11	152,300	778,000	2,263,000	5.11	14.86	2.72
1978	74.97	161,000	1,027,000	2,569,000	6.38	15.96	2.70
1979	55.19 ^c	125,600	646,000	1,193,000	5.14	9.50	1.90
1980	55.19	126,800	668,000	1,186,000	5.27	9.35	1.84
1981	61.18	142,900	836,000	2,076,000	5.85	14.53	2.40
1982	67.08	166,600	1,068,000	3,094,000	6.41	18.57	2.88
1983	63.58	153,100	867,000	2,223,000	5.66	14.53	2.50
1984	52.24	99,000	500,000	920,000	5.04	9.29	1.90
1985	52.51	97,400	546,000	1,121,000	5.60	11.50	1.91
1986	63.14	122,200	815,000	1,925,000	6.67	15.75	2.31
1987	65.54	128,200	796,000	2,177,000	6.21	16.98	2.68
1988	68.43	132,700	901,000	2,324,000	6.79	17.52	2.51
1989	68.30	121,100	845,000	2,096,000	6.98	17.32	2.44
1990	73.05	130,500	920,000	2,620,000	7.05	20.07	2.82
1991	72.51	134,200	897,000	2,423,000	6.69	18.05	2.54
1992	70.39	120,900	713,000	1,635,000	5.90	13.52	2.23
1993	72.24	126,400	828,000	2,190,000	6.55	17.33	2.51
1994	74.23	141,700	987,000	2,256,000	6.96	15.92	2.18
1995	69.66	125,400	738,000	1,487,000	5.88	11.86	1.97
1996	68.95	110,000	679,000	1,225,000	6.17	11.13	1.74
1997	70.17	116,400	748,000	1,615,000	6.43	13.87	2.12
1998	66.71	115,500	721,000	1,432,000	6.24	12.40	1.96
1999	65.42	117,600	760,000	1,378,000	6.46	11.72	1.83
2000	61.29	114,100	673,000	1,129,000	5.90	9.89	1.64
2001	55.04	91,300	448,000	408,000	4.91	4.47	0.92
2002	53.32	84,900	473,000	621,000	5.57	7.32	1.36
2003	54.30	91,000	452,000	647,000	4.97	7.11	1.46
2004	51.80	90,000	456,000	674,000	5.07	7.49	1.50
2005	51.92	90,900	475,000	616,000	5.23	6.78	1.39
2006 ^d	50.20	80,900	428,000	600,000	5.29	7.41	1.39
2007	48.28	73,600	394,000	481,000	5.35	6.55	1.28
2008	51.37	69,800	358,000	410,000	4.98	5.66	1.16

^a Hunter estimates prior to 1962 were not adjusted for inactive license buyers.^b Average Bag Per Day through 1967 expresses overall mean season bag divided by overall mean season days.

ABPD after 1967 is the mean of individual hunter ratios of season bag to season days.

^c Percent of active hunters hunting species unobtainable due to 1979 questionnaire error. Value is 1974-1978 mean.^d Electronic licensing permitted random sampling of non-residents for the 1st time, improving how estimates were calculated.

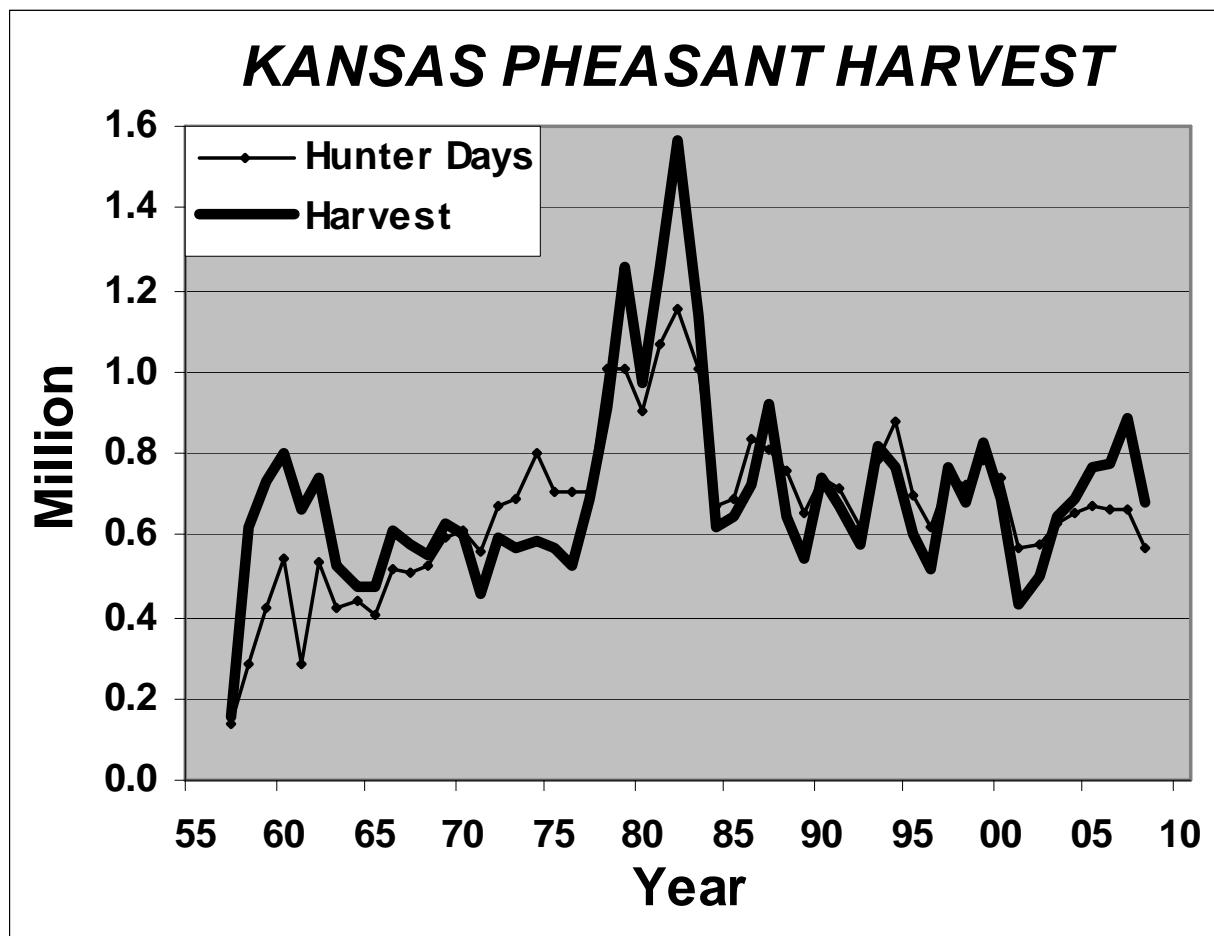


Table 3. Estimated annual PHEASANT hunting activity in Kansas.

Year	Percent Hunting Species	Est. Total Hunters	Est. Total Days	Est. ^a Total Harvest	Season Days Per Hunter	Season ^a Bag Per Hunter	Average ^a Bag Per Day
1957	40.00	75,700	136,000	154,000	1.80	2.03	1.13
1958	56.83	130,500	284,000	616,000	2.18	4.72	2.16
1959	63.56	146,300	420,000	727,000	2.87	4.97	1.73
1960	75.42	168,600	541,000	801,000	3.21	4.75	1.48
1961	69.99	144,000	288,000	660,000	2.00	4.59	2.29
1962	77.70	149,500 ^b	531,000	740,000	3.55	4.95	1.39
1963	72.38	130,600	422,000	524,000	3.23	4.01	1.24
1964	67.73	118,300	440,000	471,000	3.72	3.98	1.07
1965	69.02	122,000	401,000	473,000	3.29	3.88	1.18
1966	68.09	134,500	515,000	608,000	3.83	4.52	1.18
1967	68.44	139,000	509,000	580,000	3.66	4.17	1.14
1968	68.70	136,100	523,000	548,000	3.84	4.03	0.84 ^c
1969	69.69	145,200	590,000	627,000	4.06	4.32	1.06
1970	71.20	150,700	610,000	606,000	4.05	4.02	0.99
1971	68.40	141,700	555,000	455,000	3.92	3.21	0.96
1972	67.44	142,800	674,000	595,000	4.72	4.17	1.03
1973	64.97	139,700	692,000	566,000	4.95	4.05	0.96
1974	70.75	150,200	801,000	584,000	5.33	3.89	0.85
1975	70.69	141,100	707,000	564,000	5.01	3.97	0.92
1976	71.50	145,200	706,000	523,000	4.86	3.60	0.90
1977	72.21	148,400	709,000	690,000	4.78	4.65	1.09
1978	78.17	168,000	1,008,000	916,000	6.00	5.46	1.11
1979	78.17 ^d	177,900	1,009,000	1,253,000	5.67	7.05	1.41
1980	76.69	176,200	907,000	972,000	5.15	5.52	1.19
1981	78.45	183,200	1,070,000	1,260,000	5.84	6.88	1.36
1982	78.73	195,600	1,152,000	1,565,000	5.89	8.00	1.51
1983	76.27	183,600	1,006,000	1,138,000	5.48	6.20	1.28
1984	71.59	135,700	668,000	616,000	4.92	4.54	1.07
1985	73.64	136,600	688,000	645,000	5.03	4.72	1.02
1986	73.90	143,100	836,000	723,000	5.84	5.06	1.01
1987	76.44	149,600	812,000	921,000	5.43	6.16	1.21
1988	74.50	144,400	760,000	644,000	5.26	4.46	1.00
1989	70.49	124,900	653,000	546,000	5.23	4.37	0.96
1990	74.44	133,000	738,000	742,000	5.55	5.58	1.14
1991	74.80	138,400	710,000	669,000	5.13	4.83	1.08
1992	73.42	126,100	622,000	574,000	4.93	4.55	0.99
1993	76.81	134,400	785,000	820,000	5.84	6.10	1.18
1994	76.10	145,300	874,000	768,000	6.02	5.28	1.07
1995	74.14	133,500	694,000	603,000	5.20	4.52	0.96
1996	70.02	111,700	621,000	512,000	5.56	4.59	0.94
1997	75.26	124,800	742,000	766,000	5.94	6.13	1.15
1998	72.63	125,800	721,000	681,000	5.73	5.41	1.01
1999	74.43	133,700	780,000	824,000	5.83	6.16	1.18
2000	71.64	133,400	738,000	692,000	5.53	5.19	1.00
2001	70.27	116,600	572,000	426,000	4.91	3.66	0.82
2002	67.09	106,800	578,000	497,000	5.41	4.65	0.93
2003	69.87	117,000	625,000	646,000	5.34	5.52	1.13
2004	71.22	123,800	650,000	685,000	5.25	5.53	1.11
2005	71.26	124,700	673,000	764,000	5.40	6.12	1.20
2006 ^e	75.10	120,900	659,000	774,000	5.44	6.39	1.26
2007	77.81	117,100	660,000	887,000	5.64	7.58	1.41
2008	79.55	108,100	565,000	680,000	5.08	6.05	1.23

^a Values are for cocks only. Hen harvest estimates are based on check station data showing 28.6% (264,000) hens in 1961 and 19.4% (178,000) hens in 1962.

^b Hunter estimates prior to 1962 were not adjusted for inactive license buyers.

^c Average Bag Per Day through 1967 expresses overall mean season bag divided by overall mean season days.

ABPD after 1967 is the mean of individual hunter ratios of season bag to season days.

^d Percent of active hunters hunting species unobtainable due to 1979 questionnaire error. Value is 1974-1978 mean.

^e Electronic licensing permitted random sampling of non-residents for the 1st time, improving how estimates were calculated.

GREATER PRAIRIE CHICKEN

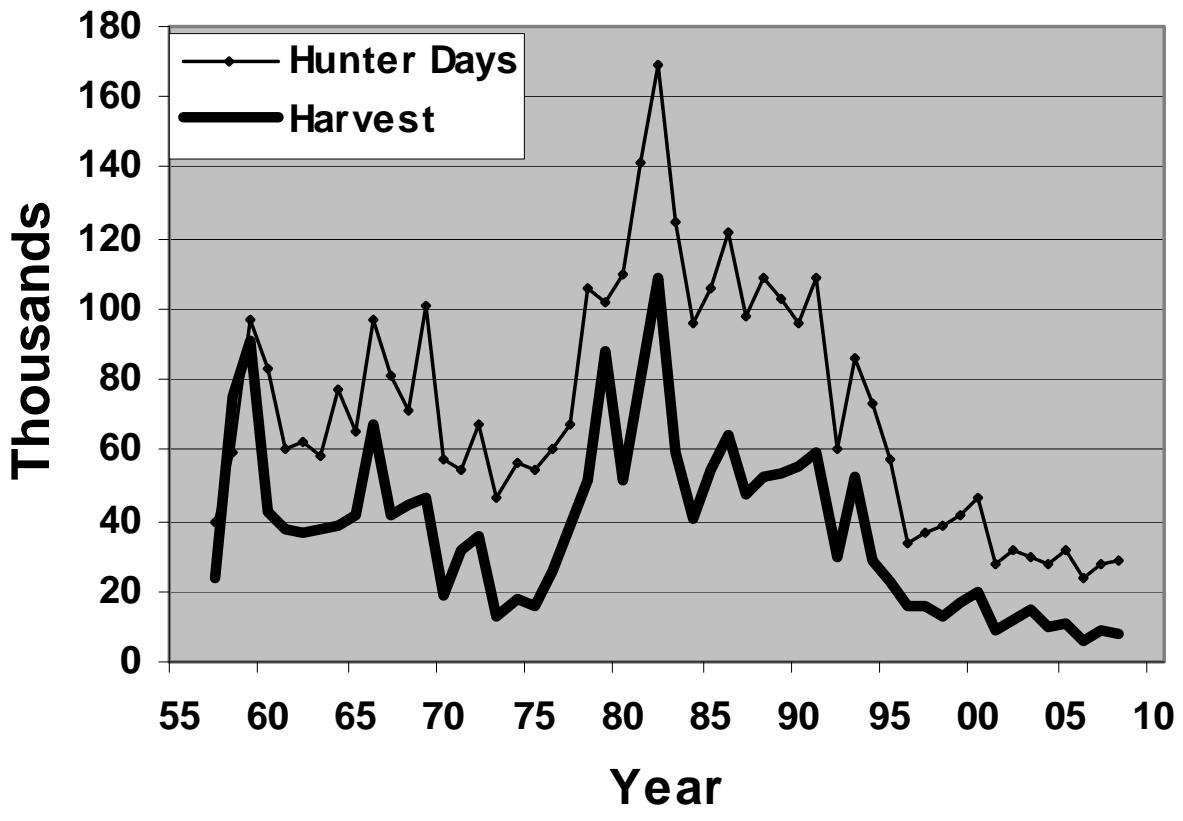


Table 4. Estimated annual GREATER PRAIRIE CHICKEN hunting activity in Kansas.

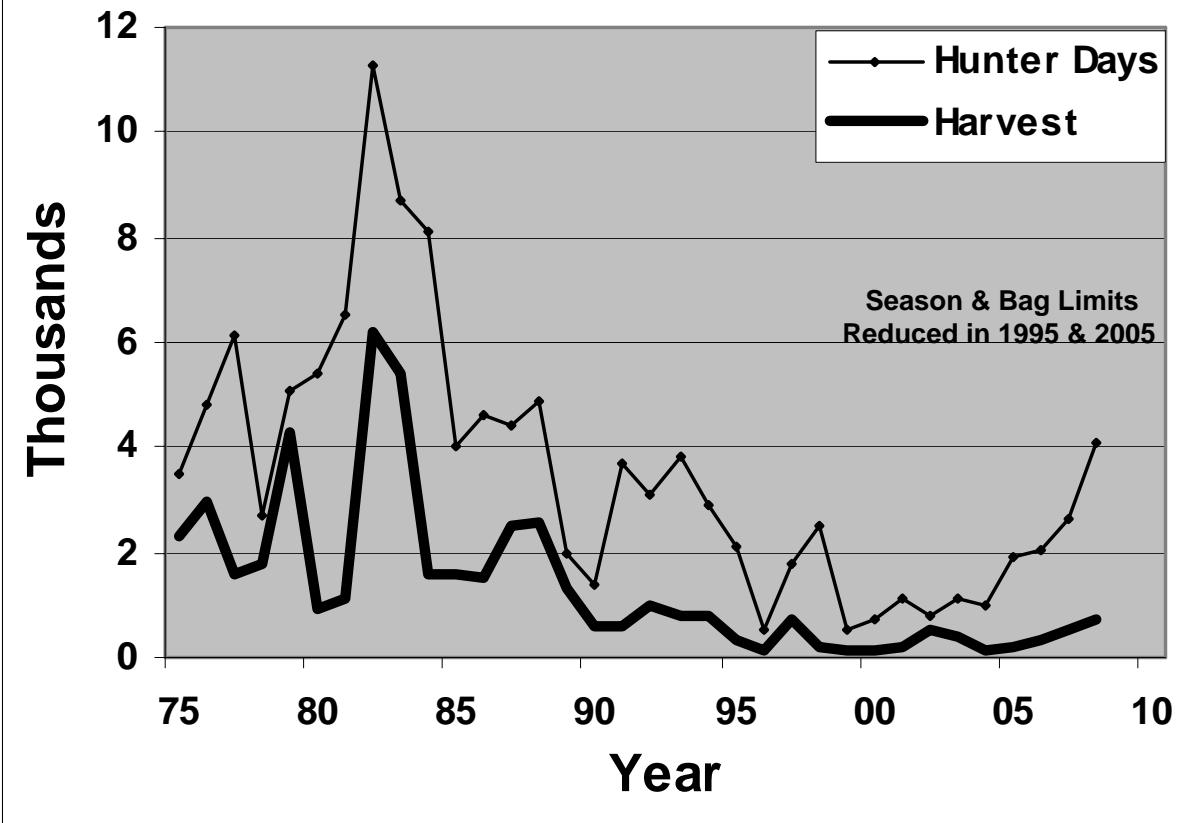
Year	Percent Hunting Species	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
1957	16.00	30,300	40,000	24,000	1.32	0.78	0.59
1958	22.59	51,900	59,000	75,000	1.13	1.45	1.28
1959	27.86	64,100	97,000	91,000	1.52	1.42	0.94
1960	25.71	57,500	83,000	43,000	1.45	0.74	0.51
1961	19.46	40,000	60,000	38,000	1.50	0.96	0.64
1962	20.37	39,200 ^a	62,000	37,000	1.59	0.95	0.60
1963	20.58	37,100	58,000	38,000	1.57	1.02	0.65
1964	25.49	44,500	77,000	39,000	1.73	0.87	0.50
1965	23.49	41,500	65,000	42,000	1.56	1.01	0.65
1966	26.67	52,700	97,000	67,000	1.84	1.27	0.69
1967	22.20	45,100	81,000	42,000	1.79	0.94	0.53
1968	19.94	39,500	71,000	45,000	1.80	1.13	0.63
1969	23.34	48,600	101,000	46,000	2.08	0.95	0.46
1970	16.68	35,300	57,000	19,000	1.62	0.53	0.33
1971	15.81	32,700	54,000	32,000	1.65	0.98	0.60
1972	16.07	34,000	67,000	36,000	1.96	1.06	0.54
1973	8.69	18,700	46,000	13,000	2.45	0.71	0.29
1974	9.54	20,200	56,000	18,000	2.75	0.91	0.33
1975	8.57	17,100	54,000	16,000	3.16	0.92	0.29
1976	10.76	21,800	60,000	26,000	2.75	1.19	0.44
1977	11.11	22,800	67,000	39,000	2.92	1.71	0.59
1978	15.88	34,100	106,000	51,000	3.12	1.49	0.50
1979	15.88 ^c	36,100	102,000	88,000	2.83	2.45	0.87 ^b
1980	16.12	37,000	110,000	51,000	2.98	1.37	0.49 ^b
1981	19.46	45,400	141,000	80,000	3.11	1.76	0.57
1982	21.36	53,100	169,000	109,000	3.18	2.05	0.70
1983	17.07	41,100	125,000	59,000	3.04	1.44	0.50
1984	15.85	30,000	96,000	41,000	3.20	1.38	0.45
1985	16.22	30,100	106,000	54,000	3.52	1.78	0.52
1986	17.49	33,900	122,000	64,000	3.61	1.90	0.54
1987	15.32	30,000	98,000	47,000	3.26	1.58	0.52
1988	16.88	32,700	109,000	52,000	3.35	1.59	0.46
1989 ^d	14.42	25,600	103,000	53,000	4.11	2.15	0.53
1990	14.54	26,000	96,000	55,000	3.67	2.09	0.55
1991	13.58	24,800	109,000	59,000	4.49	2.50	0.56
1992	10.89	18,700	60,000	30,000	3.28	1.65	0.52
1993	12.29	21,400	86,000	52,000	3.92	2.40	0.57
1994	9.99	19,100	73,000	29,000	3.87	1.52	0.47
1995	8.57	15,400	57,000	23,000	3.70	1.50	0.43
1996	7.15	11,400	34,000	16,000	3.01	1.36	0.44
1997	6.69	11,100	37,000	16,000	3.32	1.41	0.51
1998	6.38	11,000	39,000	13,000	3.49	1.21	0.46
1999	5.63	10,100	41,800	16,900	4.14	1.67	0.48
2000	6.12	11,400	46,000	19,300	4.42	1.36	0.43
2001	4.86	8,100	27,700	9,300	3.44	1.15	0.37
2002	5.43	8,600	31,700	11,400	3.68	1.31	0.42
2003	4.62	7,740	29,200	14,800	3.78	1.91	0.54
2004	5.48	9,530	27,500	9,700	2.86	1.02	0.45
2005	3.56	6,230	31,300	11,100	5.02	1.79	0.40
2006 ^e	4.16	5,640	23,500	6,300	4.17	1.11	0.34
2007	5.03	7,630	27,890	8,500	3.66	1.22	0.31
2008	5.41	7,350	28,250	8,100	3.46	0.88	0.32

^a Hunter estimates prior to 1962 were not adjusted for inactive license buyers.^b Average Bag Per Day through 1979 expresses overall mean season bag divided by overall mean season days.

ABPD after 1979 is the mean of individual hunter ratios of season bag to season days.

^c Percent of active hunters hunting species unobtainable due to 1979 questionnaire error. Value is 1974-1978 mean.^d Values from 1989 forward include both regular (November opening to Jan. 31) and special early (9/15-10/15) season.^e Electronic licensing permitted random sampling of non-residents for the 1st time, improving how estimates were calculated.

LESSER PRAIRIE CHICKEN



Annual variation results, in part, from small sample sizes.

Table 5. Estimated annual LESSER PRAIRIE CHICKEN hunting activity in Kansas^a.

Year	Percent Hunting Species	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
1975	0.70	1,400	3,500	2,300	2.48	1.67	0.67
1976	0.90	1,800	4,800	3,000	2.67	1.64	0.61
1977	0.90	1,900	6,100	1,600	3.19	0.89	0.28
1978	0.51	1,100	2,700	1,800	2.46	1.63	0.66
1979	0.75 ^b	1,700	5,100	4,300	3.00	2.55	0.85
1980	0.98	2,200	5,400	900	2.44	0.41	0.30 ^c
1981	0.82	1,900	6,500	1,100	3.42	0.58	0.19
1982	1.38	3,400	11,300	6,200	3.31	1.81	0.58
1983	1.17	2,800	8,700	5,400	3.10	1.91	0.61
1984	0.70	1,300	8,100	1,600	6.12	1.24	0.51
1985	0.59	1,100	4,000	1,600	3.71	1.50	0.34
1986	0.73	1,400	4,600	1,500	3.24	1.06	0.32
1987	0.68	1,300	4,400	2,500	3.30	1.90	0.38
1988	0.87	1,700	4,900	2,600	2.90	1.55	0.73
1989	0.45	800	2,000	1,300	2.50	1.60	0.54
1990	0.25	400	1,400	600	3.17	1.33	0.49
1991	0.45	800	3,700	600	4.36	0.73	0.32
1992 ^d	0.66	1,100	3,100	1,000	2.80	0.80	0.51
1993	0.70	1,200	3,800	800	3.07	0.64	0.14
1994	0.40	800	2,900	800	5.00	1.00	0.27
1995 ^e	0.30	500	2,100	300	3.83	0.50	0.06
1996	0.15	200	500	100	2.00	0.00	0.00
1997	0.38	600	1,800	700	2.80	1.10	0.42
1998	0.18	300	2,500	200	7.83	0.67	0.31
1999	0.12	200	500	100	2.25	0.50	0.38
2000	0.17	300	700	100	2.20	0.40	0.30
2001	0.23	330	1,100	170	3.55	0.55	0.18
2002	0.22	300	790	520	2.25	1.50	0.68
2003	0.31	530	1,130	380	2.14	0.71	0.33
2004	0.14	250	990	120	4.00	0.50	0.50
2005 ^e	0.29	500	1,910	200	3.80	0.40	0.40
2006 ^f	0.41	650	2,020	340	3.09	0.52	0.23
2007	0.58	830	2,640	500	3.18	0.59	0.22
2008	0.53	720	4,060	750	5.51	1.00	0.20

^a Wide annual variation is caused by low sample size for this species.

^b Percent of active hunters hunting species unobtainable due to 1979 questionnaire error. Value is 1974-1978 mean.

^c Average Bag Per Day through 1979 expresses overall mean season bag divided by overall mean season days.

ABPD after 1979 is the mean of individual hunter ratios of season bag to season days.

^d Values from 1992-1994 include both regular (November opening to Jan. 31) and special early (9/15-10/15) season.

^e Season length reduced and daily bag set at 1.

^f Electronic licensing permitted random sampling of non-residents for the 1st time, improving how estimates were calculated.

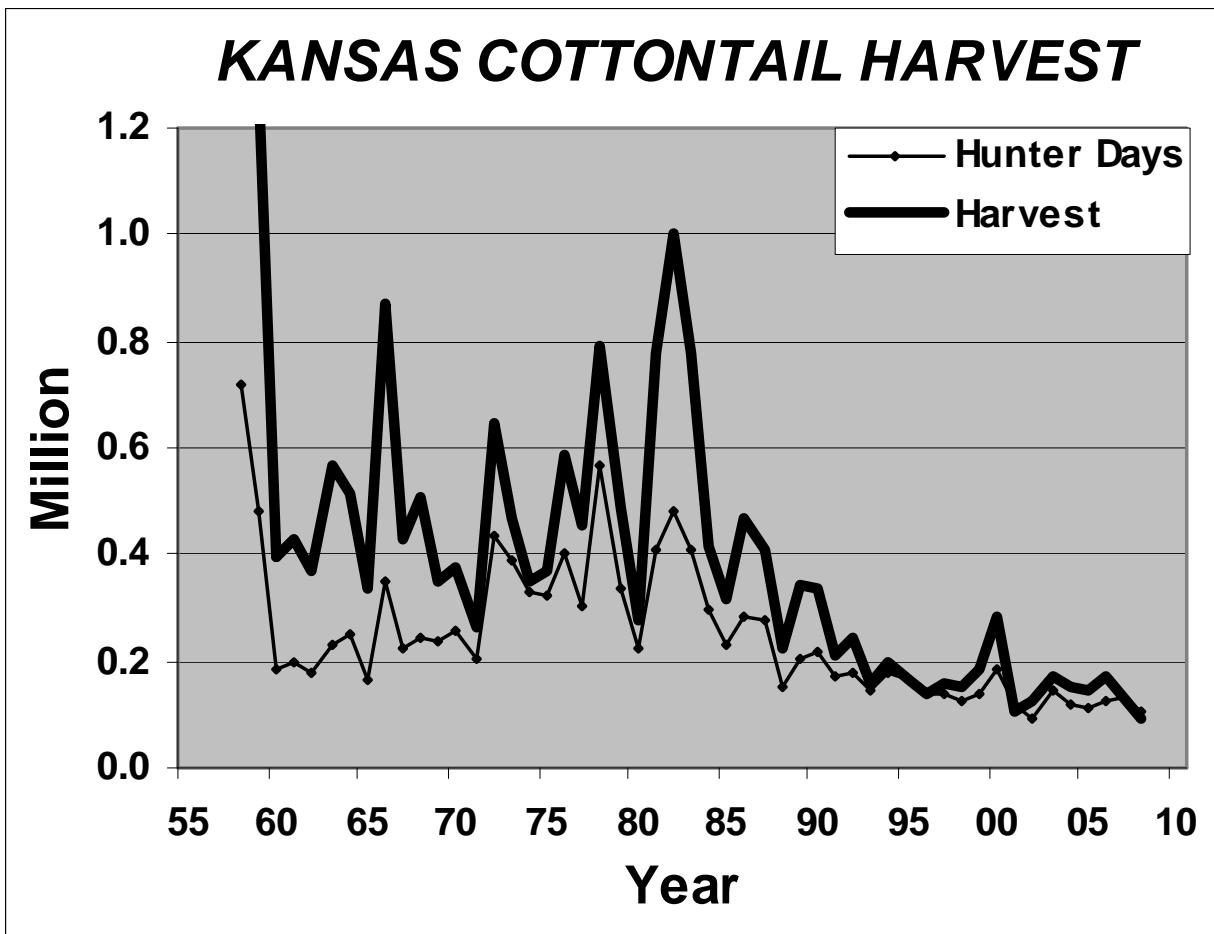


Table 6. Estimated annual COTTONTAIL hunting activity in Kansas.

Year	Percent Hunting Species	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
1957							
1958	56.24	129,200	716,000	2,075,000	5.54	16.06	2.90
1959	38.07	87,600	483,000	1,282,000	5.51	14.63	2.66
1960	18.71	41,800	185,000	398,000	4.43	9.53	2.15
1961	25.19	51,800	198,000	427,000	3.83	8.24	2.15
1962	22.13	42,600 ^a	177,000	372,000	4.16	8.74	2.10
1963	33.54	60,500	230,000	566,000	3.80	9.35	2.46
1964	32.94	57,500	248,000	516,000	4.31	8.97	2.08
1965	23.61	41,700	168,000	334,000	4.04	8.00	1.98
1966	40.02	79,100	352,000	872,000	4.45	11.02	2.48
1967	28.44	57,700	225,000	430,000	3.90	7.45	1.92
1968	32.64	64,700	243,000	506,000	3.76	7.82	2.08 ^b
1969	27.31	56,900	237,000	347,000	4.17	6.09	1.46
1970	28.52	60,300	254,000	374,000	4.21	6.21	1.48
1971	23.69	49,100	206,000	261,000	4.20	5.31	1.69
1972	40.97	86,700	436,000	648,000	5.03	7.47	1.93
1973	32.15	69,300	386,000	469,000	5.57	6.77	1.68
1974	31.63	67,100	331,000	348,000	4.94	5.36	1.45
1975	32.02	63,900	320,000	371,000	5.01	5.81	1.65
1976	37.70	76,500	399,000	587,000	5.21	7.67	1.89
1977	33.05	67,900	303,000	456,000	4.46	6.71	1.94
1978	40.69	87,400	568,000	792,000	6.50	9.07	2.21
1979	35.02 ^c	79,700	336,000	489,000	4.22	6.13	1.96
1980	21.72	49,900	227,000	277,000	4.55	5.56	1.50
1981	36.00	84,100	410,000	778,000	4.88	9.26	2.26
1982	37.22	92,500	481,000	1,001,000	5.20	10.83	2.67
1983	32.18	77,500	410,000	781,000	5.29	10.09	2.32
1984	29.39	55,700	299,000	415,000	5.37	7.46	1.70
1985	24.27	45,000	234,000	317,000	5.20	7.04	1.71
1986	32.45	62,800	281,000	469,000	4.47	7.46	2.10
1987	28.40	55,600	274,000	410,000	4.92	7.38	2.01
1988	16.52	32,000	153,000	221,000	4.79	6.90	1.77
1989	23.66	41,900	204,000	346,000	4.86	8.25	1.87
1990	26.58	47,500	220,000	335,000	4.63	7.05	1.96
1991	17.91	33,100	174,000	211,000	5.26	6.36	1.73
1992	23.81	40,900	178,000	245,000	4.35	5.99	1.66
1993	16.86	29,500	142,000	160,000	4.81	5.42	1.53
1994	18.81	35,900	177,000	195,000	4.92	5.44	1.52
1995	18.88	34,000	168,000	165,000	4.95	4.85	1.25
1996	18.01	28,700	141,000	136,000	4.90	4.72	1.32
1997	16.41	27,200	136,000	158,000	5.01	5.82	1.58
1998	14.03	24,300	127,000	150,000	5.22	6.17	1.67
1999	15.45	27,800	141,000	187,000	5.07	6.75	1.61
2000	19.37	36,100	187,000	282,000	5.18	7.81	1.95
2001	12.78	21,200	118,000	106,000	5.56	4.98	1.21
2002	13.11	20,900	92,000	124,000	4.43	5.95	1.49
2003	15.07	25,200	147,000	174,000	5.83	6.90	1.55
2004	13.42	23,300	120,000	149,000	5.14	6.40	1.68
2005	12.39	21,700	111,000	142,000	5.13	6.56	1.57
2006 ^d	13.32	21,400	125,000	169,000	5.85	7.87	1.56
2007	14.23	22,200	132,000	132,000	5.96	5.95	1.23
2008	12.73	17,300	102,000	92,000	5.72	5.11	1.10

^a Hunter estimates prior to 1962 were not adjusted for inactive license buyers.^b Average Bag Per Day through 1967 expresses overall mean season bag divided by overall mean season days.

ABPD after 1967 is the mean of individual hunter ratios of season bag to season days.

^c Percent of active hunters hunting species unobtainable due to 1979 questionnaire error. Value is 1974-1978 mean.^d Electronic licensing permitted random sampling of non-residents for the 1st time, improving how estimates were calculated.

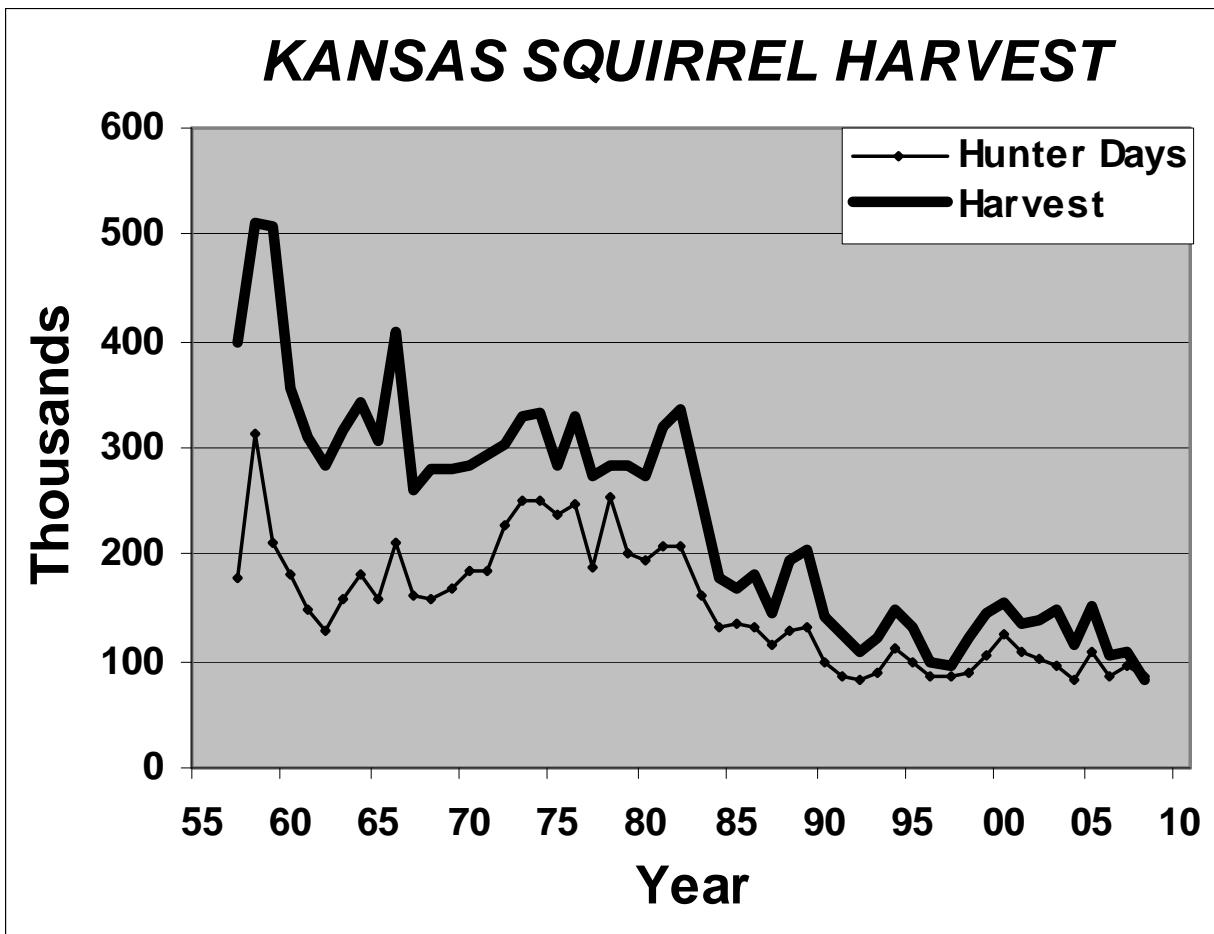


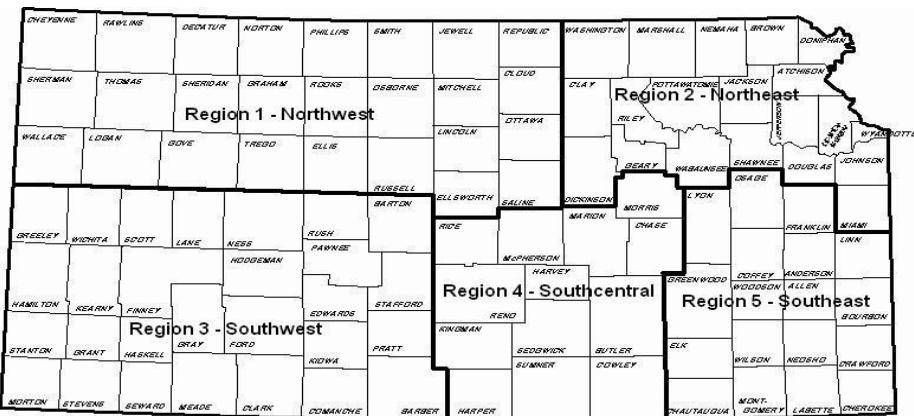
Table 7. Estimated annual SQUIRREL hunting activity in Kansas.

Year	Percent Hunting Species	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
1957	21.00	39,800	177,000	400,000	4.44	10.06	2.27
1958	27.80	63,900	314,000	512,000	4.91	8.01	1.63
1959	21.51	49,500	210,000	509,000	4.24	10.29	2.43
1960	20.38	45,600	180,000	357,000	3.95	7.82	1.98
1961	18.74	38,600	148,000	311,000	3.73	8.06	2.16
1962	17.95	34,500 ^a	129,000	284,000	3.74	8.23	2.20
1963	22.74	41,000	158,000	317,000	3.86	7.72	2.00
1964	25.27	44,100	181,000	342,000	4.10	7.75	1.89
1965	21.73	38,400	159,000	305,000	4.14	7.95	1.92
1966	23.49	46,400	212,000	409,000	4.57	8.82	1.93
1967	20.87	42,400	160,000	262,000	3.77	6.19	1.64
1968	20.76	41,100	157,000	279,000	3.81	6.78	1.52 ^b
1969	21.12	44,000	169,000	281,000	3.85	6.39	1.66
1970	21.52	45,500	183,000	285,000	4.03	6.27	1.55
1971	21.46	44,400	184,000	293,000	4.14	6.60	1.74
1972	23.34	49,400	227,000	304,000	4.59	6.16	1.60
1973	22.90	49,400	252,000	331,000	5.10	6.70	1.64
1974	24.64	52,300	250,000	333,000	4.78	6.56	1.58
1975	23.82	47,600	239,000	282,000	5.03	5.93	1.55
1976	24.23	49,200	247,000	330,000	5.02	6.70	1.62
1977	21.13	43,400	187,000	272,000	4.32	6.27	1.63
1978	19.69	42,000	253,000	285,000	6.02	6.74	1.65
1979	22.70 ^c	51,700	201,000	283,000	3.88	5.48	1.72
1980	16.98	39,000	195,000	273,000	4.99	6.99	1.54
1981	18.35	42,800	207,000	321,000	4.84	7.50	1.64
1982	16.14	40,100	209,000	337,000	5.21	8.40	1.81
1983	13.64	32,800	163,000	252,000	4.97	7.68	1.68
1984	14.86	28,200	133,000	179,000	4.73	6.34	1.51
1985	15.55	28,800	135,000	167,000	4.67	5.79	1.41
1986	13.42	26,000	133,000	181,000	5.10	6.98	1.40
1987	12.56	24,600	117,000	146,000	4.76	5.92	1.55
1988	13.36	26,300	130,000	195,000	4.93	7.39	1.71
1989	16.34	29,000	131,000	205,000	4.52	7.09	1.64
1990	13.35	23,900	98,000	141,000	4.10	5.90	1.57
1991	10.95	20,300	85,000	126,000	4.20	6.21	1.57
1992	9.84	16,900	81,000	109,000	4.81	6.45	1.48
1993	10.18	17,800	89,000	123,000	5.01	6.90	1.42
1994	10.64	20,300	113,000	150,000	5.55	7.38	1.48
1995	10.51	18,900	98,000	131,000	5.16	6.91	1.52
1996	9.99	15,900	85,000	100,000	5.36	6.28	1.48
1997 ^d	10.59	17,600	85,000	97,000	4.87	5.53	1.31
1998	9.84	17,000	88,000	121,000	5.15	7.12	1.45
1999	11.02	19,800	106,000	146,000	5.36	7.39	1.61
2000	11.66	21,700	125,000	155,000	5.78	7.13	1.47
2001	10.74	17,800	108,000	135,000	6.09	7.58	1.54
2002	13.00	20,700	103,000	138,000	5.00	6.67	1.53
2003	10.18	17,000	96,000	149,000	5.63	8.72	1.60
2004	9.55	16,600	84,000	115,000	5.08	6.92	1.41
2005	11.02	19,300	109,000	151,000	5.65	7.82	1.46
2006 ^e	8.42	13,600	86,000	105,000	6.28	7.72	1.45
2007	10.41	16,500	95,000	110,000	5.75	6.65	1.37
2008	11.04	15,000	85,000	80,000	5.51	5.11	1.19

^a Hunter estimates prior to 1962 were not adjusted for inactive license buyers.^b Average Bag Per Day through 1967 expresses overall mean season bag divided by overall mean season days.

ABPD after 1967 is the mean of individual hunter ratios of season bag to season days.

^c Percent of active hunters hunting species unobtainable due to 1979 questionnaire error. Value is 1974-1978 mean.^d Season was extended 2 months to run from June 1 through the end of February.^e Electronic licensing permitted random sampling of non-residents for the 1st time, improving how estimates were calculated.



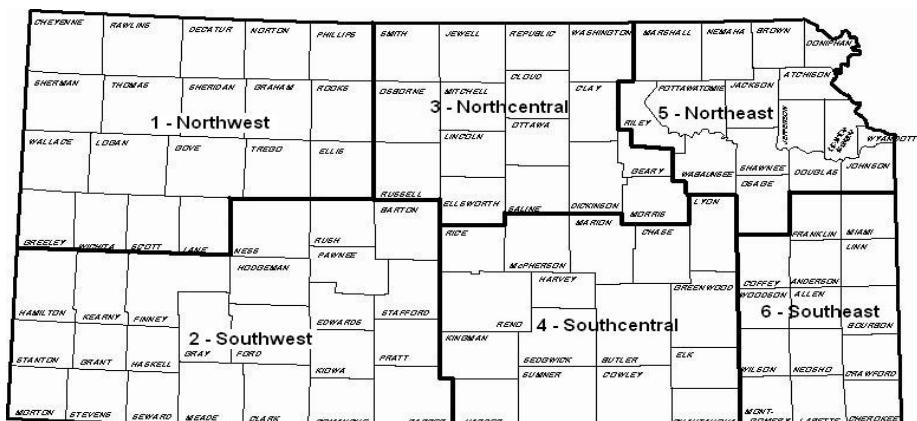
Kansas Department of Wildlife and Parks **ADMINISTRATIVE** regions.

Table 8a. **All** hunter activity for DOVES, 2008 season ^a.

Region	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	727	39,500	171,000	676,000	4.19	16.46	4.08
A1-NW	173	8,900	40,500	199,800	4.45	21.77	5.14
A2-NE	166	9,200	40,100	126,100	4.22	13.15	3.00
A3-SW	124	6,700	28,800	138,500	4.15	19.78	5.26
A4-SC	163	9,200	42,200	142,500	4.47	14.95	3.60
A5-SE	101	5,500	18,900	69,100	3.33	12.02	3.57
A0-NS ^b							
M1-NW	94	4,700	23,100	122,000	4.76	24.97	5.60
M2-SW	113	6,200	25,800	125,300	4.06	19.54	5.22
M3-NC	140	7,500	31,700	124,900	4.12	16.11	4.06
M4-SC	169	9,400	43,000	148,000	4.43	15.08	3.61
M5-NE	118	6,600	29,900	92,800	4.42	13.59	3.10
M6-SE	93	5,200	16,900	63,000	3.21	11.78	3.53

^a The sum of regional values may not precisely equal state total due to computation method.

^b County hunted not specified. Non-specified management region equals non-specified administrative region.



Kansas DOVE management / survey regions.

Table 8b. **Resident** hunter activity for DOVES, 2008 season ^a.

Region	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	650	37,000	162,000	623,000	4.26	16.22	3.93
A1-NW	131	7,500	35,700	163,400	4.66	21.08	4.65
A2-NE	157	8,900	39,000	121,600	4.24	13.10	3.02
A3-SW	111	6,300	27,700	131,800	4.25	20.08	5.21
A4-SC	159	9,100	41,700	140,900	4.48	14.98	3.58
A5-SE	92	5,200	17,900	65,700	3.33	12.08	3.56
A0-NS ^b							
M1-NW	67	3,800	20,000	98,000	5.09	24.73	5.07
M2-SW	102	5,800	24,800	119,200	4.16	19.75	5.12
M3-NC	120	6,800	29,200	107,800	4.16	15.19	3.78
M4-SC	162	9,200	42,200	144,700	4.45	15.11	3.58
M5-NE	112	6,400	29,500	92,300	4.49	13.94	3.16
M6-SE	87	5,000	16,300	61,300	3.21	11.92	3.55

^a The sum of regional values may not precisely equal state total due to computation method.

^b County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 8c. **Non-Resident** hunter activity for DOVES, 2008 season ^a.

Region	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	77	2,500	9,000	53,000	3.27	20.03	6.24
A1-NW	42	1,400	4,800	36,400	3.36	25.43	7.75
A2-NE	9	300	1,100	4,500	3.67	14.78	2.51
A3-SW	13	400	1,100	6,700	2.62	15.00	6.07
A4-SC	4	100	500	1,600	3.50	11.75	4.93
A5-SE	9	300	1,000	3,400	3.33	11.00	3.72
A0-NS ^b							
M1-NW	27	900	3,100	24,000	3.37	26.00	7.86
M2-SW	11	400	1,000	6,100	2.64	16.36	6.63
M3-NC	20	700	2,500	17,100	3.75	25.00	6.81
M4-SC	7	200	800	3,300	3.57	13.86	5.00
M5-NE	6	200	400	500	2.17	2.33	1.00
M6-SE	6	200	600	1,700	3.17	8.17	3.03

^a The sum of regional values may not precisely equal state total due to computation method.

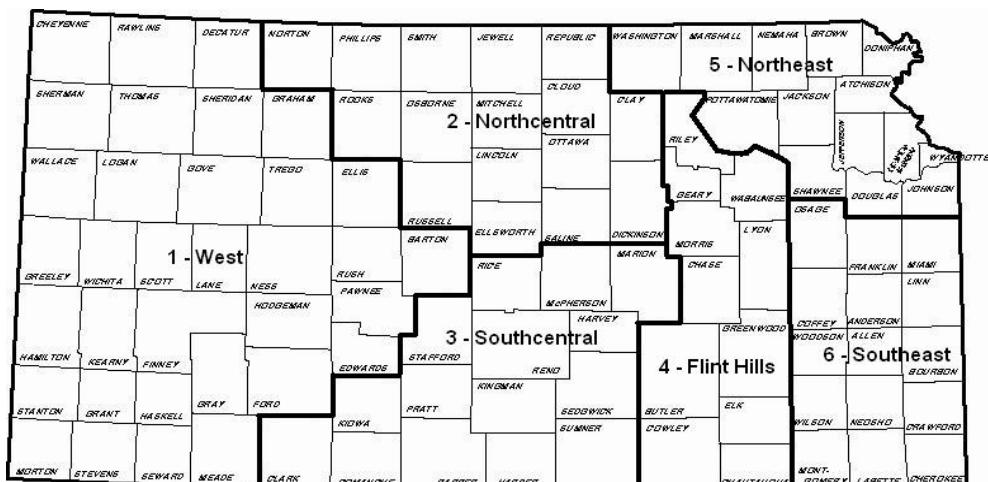
^b County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 9a. All hunter activity for BOBWHITE, 2008-2009 season ^a.

Region	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	1,437	69,800	358,000	410,000	4.98	5.66	1.16
A1-NW	462	21,000	99,200	101,200	4.59	4.64	1.02
A2-NE	255	13,400	68,700	68,200	5.00	4.92	0.97
A3-SW	337	15,400	75,700	93,500	4.80	5.87	1.32
A4-SC	255	13,500	74,600	88,100	5.40	6.32	1.26
A5-SE	128	6,700	39,600	58,700	5.79	8.52	1.44
A0-NS ^b							
M1-W	346	15,800	70,100	73,400	4.33	4.49	1.12
M2-NC	403	18,900	91,100	94,300	4.71	4.83	1.00
M3-SC	313	15,400	85,600	115,600	5.38	7.20	1.39
M4-FH	107	5,700	34,200	40,000	5.80	6.73	1.31
M5-NE	168	8,800	45,800	40,700	5.06	4.47	0.93
M6-SE	100	5,300	30,900	45,700	5.72	8.37	1.41

^a The sum of regional values may not precisely equal state total due to computation method.

^b County hunted not specified. Non-specified management region equals non-specified administrative region.



Kansas QUAIL management / survey regions.

Table 9b. **Resident** hunter activity for BOBWHITE, 2008-2009 season ^a.

Region	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	938	53,400	281,000	300,000	5.12	5.40	1.07
A1-NW	242	13,800	65,100	60,700	4.59	4.24	0.91
A2-NE	207	11,800	62,300	57,300	5.14	4.68	0.86
A3-SW	177	10,100	51,200	57,900	4.94	5.53	1.21
A4-SC	210	12,000	68,600	76,100	5.58	6.13	1.25
A5-SE	102	5,800	34,100	47,400	5.71	7.86	1.30
A0-NS ^b							
M1-W	182	10,400	46,600	44,900	4.37	4.17	1.06
M2-NC	231	13,200	64,700	61,500	4.78	4.50	0.89
M3-SC	215	12,200	69,700	86,100	5.54	6.77	1.29
M4-FH	92	5,200	32,100	35,200	5.96	6.47	1.22
M5-NE	136	7,700	41,500	33,300	5.21	4.14	0.79
M6-SE	82	4,700	26,700	38,500	5.56	7.94	1.35

^a The sum of regional values may not precisely equal state total due to computation method.

^b County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 9c. **Non-Resident** hunter activity for BOBWHITE, 2008-2009 season ^a.

Region	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	499	16,400	77,000	110,000	4.54	6.48	1.45
A1-NW	220	7,200	34,100	40,500	4.59	5.40	1.23
A2-NE	48	1,600	6,400	10,900	3.94	6.65	1.77
A3-SW	160	5,300	24,500	35,600	4.53	6.51	1.54
A4-SC	45	1,500	6,000	12,000	3.93	7.82	1.34
A5-SE	26	900	5,500	11,300	6.31	12.77	2.36
A0-NS ^b							
M1-W	164	5,400	23,500	28,500	4.25	5.09	1.25
M2-NC	172	5,700	26,400	32,800	4.55	5.59	1.27
M3-SC	98	3,200	15,900	29,500	4.79	8.84	1.76
M4-FH	15	500	2,100	4,800	4.13	9.47	2.31
M5-NE	32	1,100	4,300	7,400	4.00	6.75	1.88
M6-SE	18	600	4,200	7,200	6.94	11.78	1.82

^a The sum of regional values may not precisely equal state total due to computation method.

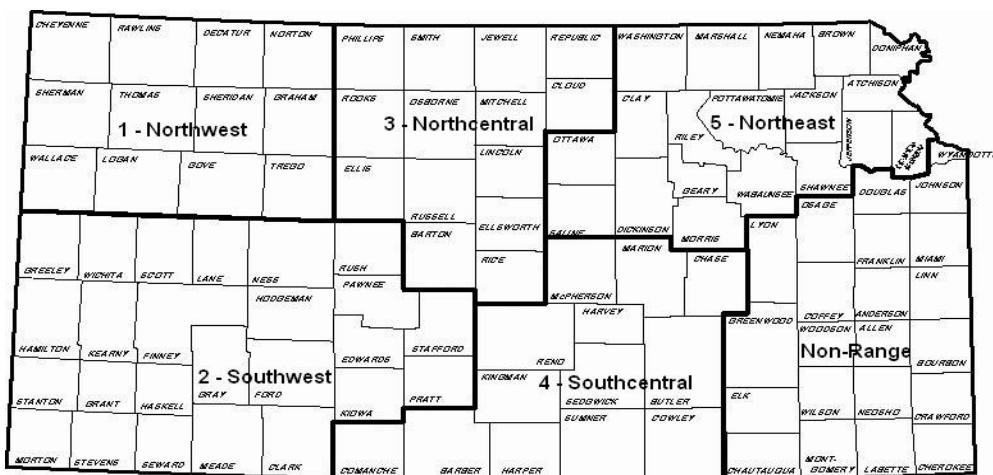
^b County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 10a. **All** hunter activity for **PHEASANTS**, 2008-2009 season ^a.

Region	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	2,318	108,100	565,000	680,000	5.08	6.05	1.23
A1-NW	986	44,600	235,700	295,100	5.13	6.37	1.27
A2-NE	241	12,500	60,700	42,900	4.72	3.31	0.67
A3-SW	776	35,100	191,600	284,300	5.31	7.81	1.54
A4-SC	287	14,500	74,300	53,200	4.97	3.53	0.84
A5-SE	28	1,500	3,200	4,900	2.20	3.22	1.66
A0-NS ^b							
M1-NW	370	16,000	93,100	138,700	5.66	8.36	1.42
M2-SW	689	30,800	173,000	259,200	5.46	8.10	1.57
M3-NC	643	29,900	147,300	167,200	4.79	5.39	1.22
M4-SC	283	14,100	71,600	54,600	4.92	3.71	0.88
M5-NE	300	15,500	76,700	55,200	4.78	3.41	0.68
M6-SE	33	1,700	3,900	5,700	2.24	3.14	1.72

^a The sum of regional values may not precisely equal state total due to computation method.

^b County hunted not specified. Non-specified management region equals non-specified administrative region.



Kansas **PHEASANT** management / survey regions.

Table 10b. **Resident** hunter activity for **PHEASANTS**, 2008-2009 season ^a.

Region	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	1,328	75,600	415,000	451,000	5.34	5.74	1.12
A1-NW	507	28,900	156,900	179,000	5.28	5.97	1.16
A2-NE	191	10,900	53,800	37,400	4.81	3.31	0.66
A3-SW	397	22,600	135,700	186,900	5.83	7.96	1.46
A4-SC	211	12,000	66,100	44,200	5.35	3.54	0.76
A5-SE	22	1,300	2,600	3,600	2.05	2.76	1.64
A0-NS ^b							
M1-NW	159	9,100	53,100	77,100	5.71	8.20	1.35
M2-SW	339	19,300	120,900	166,600	6.09	8.31	1.47
M3-NC	364	20,700	107,100	111,000	5.02	5.15	1.13
M4-SC	201	11,400	62,200	44,400	5.28	3.73	0.82
M5-NE	238	13,500	68,600	47,900	4.92	3.40	0.65
M6-SE	27	1,500	3,300	4,400	2.12	2.73	1.71

^a The sum of regional values may not precisely equal state total due to computation method.

^b County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 10c. **Non-Resident** hunter activity for **PHEASANTS**, 2008-2009 season ^a.

Region	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	990	32,500	150,000	229,000	4.49	6.79	1.50
A1-NW	479	15,700	78,800	116,100	4.87	7.10	1.47
A2-NE	50	1,600	6,900	5,500	4.08	3.24	0.75
A3-SW	379	12,500	55,900	97,400	4.36	7.53	1.69
A4-SC	76	2,500	8,200	9,000	3.19	3.48	1.24
A5-SE	6	200	600	1,300	3.17	6.17	1.80
A0-NS ^b							
M1-NW	211	6,900	40,000	61,600	5.60	8.56	1.52
M2-SW	350	11,500	52,100	92,600	4.40	7.75	1.73
M3-NC	279	9,200	40,200	56,200	4.26	5.91	1.42
M4-SC	82	2,700	9,400	10,200	3.41	3.63	1.14
M5-NE	62	2,000	8,100	7,300	3.85	3.47	0.90
M6-SE	6	200	600	1,300	3.17	6.17	1.80

^a The sum of regional values may not precisely equal state total due to computation method.

^b County hunted not specified. Non-specified management region equals non-specified administrative region.

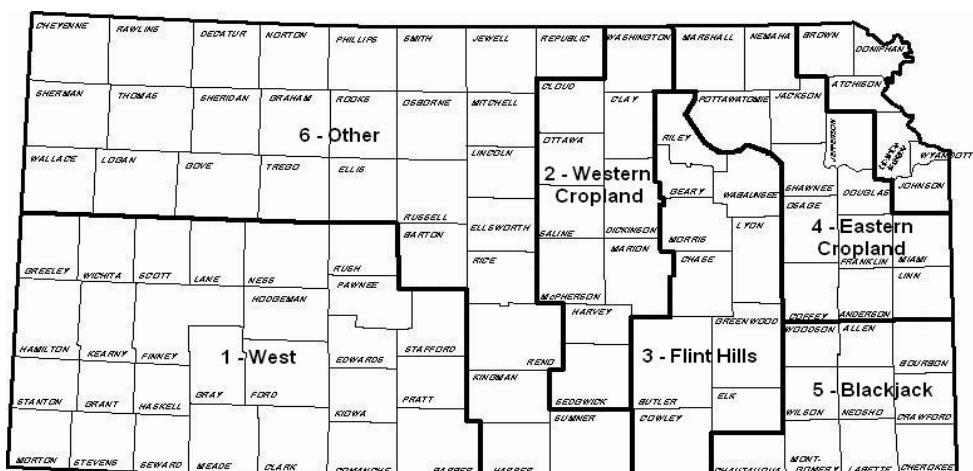
Table 11a. All hunter activity for GREATER PRAIRIE CHICKENS, 2008-2009 REGULAR season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	150	7,200	25,800	6,600	3.46	0.88	0.32
A1-NW	91	4,140	17,000	4,310	3.98	1.00	0.33
A2-NE	29	1,550	5,160	1,060	3.23	0.66	0.24
A3-SW	2	110	350	0	3.00	0.00	0.00
A4-SC	20	1,010	2,090	690	1.99	0.66	0.41
A5-SE	8	380	1,140	540	2.86	1.35	0.53
A0-NS ^c	-	-	-	-	-	-	-
M1-W	-	-	-	-	-	-	-
M2-WC	25	1,280	4,040	1,320	3.07	1.00	0.25
M3-FH	32	1,650	4,540	2,120	2.66	1.24	0.51
M4-EC	12	660	2,660	60	3.92	0.09	0.04
M5-BJ	0	0	0	0	-	-	-
M6-OT	81	3,630	14,490	3,100	3.89	0.82	0.32

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management Region 1 and Administrative Region 3 constitute lesser prairie chicken range.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.



Kansas PRAIRIE-CHICKEN management / survey regions.

Table 11b. **Resident** hunter activity for **GREATER PRAIRIE CHICKENS**, 2008-2009 **REGULAR** season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	95	5,400	16,500	5,400	2.96	0.96	0.36
A1-NW	48	2,730	8,850	3,250	3.15	1.15	0.39
A2-NE	25	1,420	4,690	1,060	3.20	0.72	0.26
A3-SW	2	110	350	0	3.00	0.00	0.00
A4-SC	15	850	1,580	590	1.80	0.67	0.47
A5-SE	5	280	1,000	470	3.40	1.60	0.48
A0-NS ^c	-	-	-	-	-	-	-
M1-W	0	0	0	0	-	-	-
M2-WC	19	1,080	3,400	1,120	3.05	1.00	0.23
M3-FH	25	1,420	3,930	1,950	2.68	1.32	0.54
M4-EC	11	630	2,460	60	3.82	0.09	0.05
M5-BJ	0	0	0	0	-	-	-
M6-OT	40	2,280	6,680	2,250	2.85	0.95	0.41

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management Region 1 and Administrative Region 3 constitute lesser prairie chicken range.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 11c. **Non-Resident** hunter activity for **GREATER PRAIRIE CHICKENS**, 2008-2009 **REGULAR** season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	55	1,800	9,300	1,200	4.98	0.65	0.21
A1-NW	43	1,410	8,150	1,060	5.60	0.72	0.20
A2-NE	4	130	470	0	3.50	0.00	0.00
A3-SW	0	0	0	0	-	-	-
A4-SC	5	160	510	100	3.00	0.60	0.12
A5-SE	3	100	140	70	1.33	0.67	0.67
A0-NS ^c	-	-	-	-	-	-	-
M1-W	0	0	0	0	-	-	-
M2-WC	6	200	640	200	3.17	1.00	0.33
M3-FH	7	230	610	170	2.57	0.71	0.37
M4-EC	1	30	200	0	6.00	0.00	0.00
M5-BJ	0	0	0	0	-	-	-
M6-OT	41	1,350	7,810	850	5.63	0.61	0.17

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management Region 1 and Administrative Region 3 constitute lesser prairie chicken range.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 12a. **All** hunter activity for **GREATER PRAIRIE CHICKENS**, 2008 **EARLY** season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	19	1,000	2,500	1,500	2.44	1.45	0.34
A1-NW	6	300	780	590	2.58	1.92	0.38
A2-NE	8	430	1,290	750	2.90	1.67	0.36
A3-SW	0	0	0	0	-	-	-
A4-SC	2	110	120	0	1.00	0.00	0.00
A5-SE	3	170	350	180	2.00	1.00	0.40
A0-NS ^c	-	-	-	-	-	-	-
M1-W	-	-	-	-	-	-	-
M2-WC	0	0	0	0	-	-	-
M3-FH	8	430	1,280	750	2.87	1.67	0.36
M4-EC	5	280	470	180	1.60	0.60	0.24
M5-BJ	0	0	0	0	-	-	-
M6-OT	6	300	780	590	2.58	1.92	3.83

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management Region 1 and Administrative Region 3 constitute lesser prairie chicken range.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 12b. **Resident** hunter activity for **GREATER PRAIRIE CHICKENS**, 2008 **EARLY** season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	16	900	2,200	1,400	2.38	1.50	0.35

Table 12c. **Non-Resident** hunter activity for **GREATER PRAIRIE CHICKENS**, 2008 **EARLY** season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	3	100	300	100	3.00	1.00	0.20

Table 13a. **All** hunter activity for **LESSER PRAIRIE CHICKENS**, 2008 season.

Region ^a	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	16	720	4,060	750	5.51	1.00	0.20

^a Statewide values equal those of Administrative Region 3 and Management Region 1.

Table 13b. **Resident** hunter activity for **LESSER PRAIRIE CHICKENS**, 2008 season.

Region ^a	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	8	460	3,150	610	6.71	1.29	0.17

^a Statewide values equal those of Administrative Region 3 and Management Region 1.

Table 13c. **Non-Resident** hunter activity for **LESSER PRAIRIE CHICKENS**, 2008 season.

Region ^a	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	8	260	910	140	3.38	0.50	0.26

^a Statewide values equal those of Administrative Region 3 and Management Region 1.

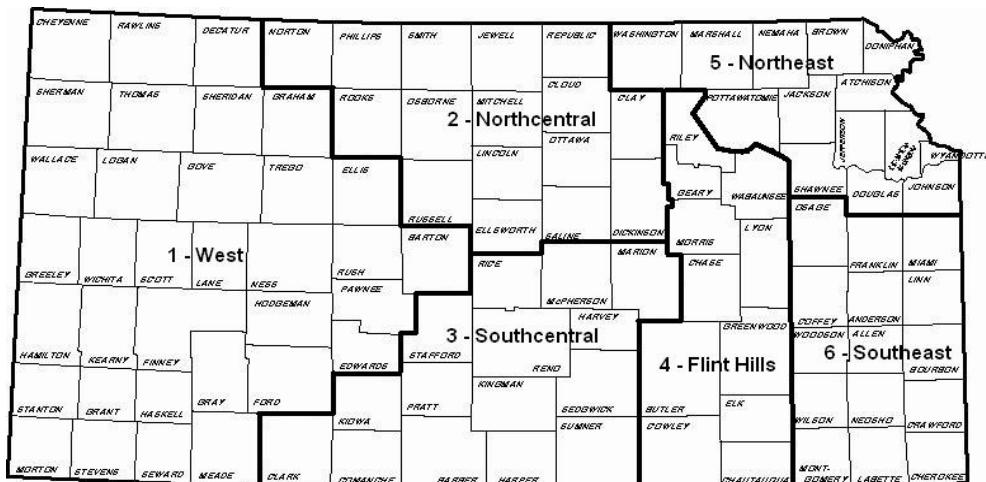
Table 14a. **All** hunter activity for **COTTONTAILS**, 2008-2009 season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	330	17,300	102,000	92,000	5.72	5.11	1.10
A1-NW	77	3,600	21,500	24,200	5.76	6.39	1.31
A2-NE	87	4,900	27,500	15,700	5.45	3.06	0.75
A3-SW	54	2,600	20,000	24,900	7.52	9.28	1.40
A4-SC	62	3,400	16,500	11,900	4.71	3.34	1.03
A5-SE	50	2,700	16,100	15,100	5.75	5.33	1.25
A0-NS ^c	-	-	-	-	-	-	-
M1-W	69	3,300	26,700	31,200	7.91	9.16	1.33
M2-NC	65	3,100	17,000	18,400	5.29	5.68	1.23
M3-SC	53	2,900	11,100	9,000	3.78	3.02	1.06
M4-FH	34	1,900	10,300	7,100	5.32	3.61	0.96
M5-NE	64	3,600	22,500	12,200	6.05	3.24	0.73
M6-SE	45	2,500	14,000	13,700	5.47	5.31	1.30

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management regions are the same as for bobwhite.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.



Kansas COTTONTAIL management / survey regions.

Table 14b. **Resident** hunter activity for COTTONTAILS, 2008-2009 season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	267	15,200	92,900	81,700	5.94	5.18	1.04
A1-NW	46	2,620	15,900	18,400	5.91	6.76	1.22
A2-NE	85	4,840	27,400	15,600	5.51	3.09	0.75
A3-SW	34	1,940	17,700	21,600	8.91	10.76	1.27
A4-SC	57	3,250	16,200	11,300	4.86	3.34	0.99
A5-SE	45	2,560	15,700	14,800	5.96	5.56	1.29
A0-NS ^c	-	-	-	-	-	-	-
M1-W	42	2,390	22,400	26,700	9.10	10.76	1.25
M2-NC	41	2,330	13,400	13,800	5.56	5.71	1.07
M3-SC	47	2,680	10,800	8,300	3.93	3.00	0.99
M4-FH	32	1,820	10,100	6,900	5.41	3.66	0.98
M5-NE	63	3,590	22,400	12,200	6.08	3.27	0.74
M6-SE	42	2,390	13,800	13,600	5.62	5.48	1.33

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management regions are the same as for bobwhite.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 14c. **Non-Resident** hunter activity for COTTONTAILS, 2008-2009 season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	63	2,100	8,700	10,000	4.10	4.66	1.55
A1-NW	31	1,020	5,620	5,750	5.37	5.43	1.54
A2-NE	2	70	100	70	1.50	1.00	1.00
A3-SW	20	660	2,330	3,340	3.45	4.90	1.81
A4-SC	5	160	300	580	1.80	3.40	1.80
A5-SE	5	160	410	310	2.40	1.80	0.60
A0-NS ^c	-	-	-	-	-	-	-
M1-W	27	890	4,290	4,470	4.70	4.85	1.55
M2-NC	24	790	3,630	4,590	4.48	5.61	1.72
M3-SC	6	200	340	680	1.67	3.33	2.00
M4-FH	2	70	200	170	3.00	2.50	0.50
M5-NE	1	30	70	0	2.00	0.00	0.00
M6-SE	3	100	200	140	2.00	1.33	0.67

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management regions are the same as for bobwhite.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.

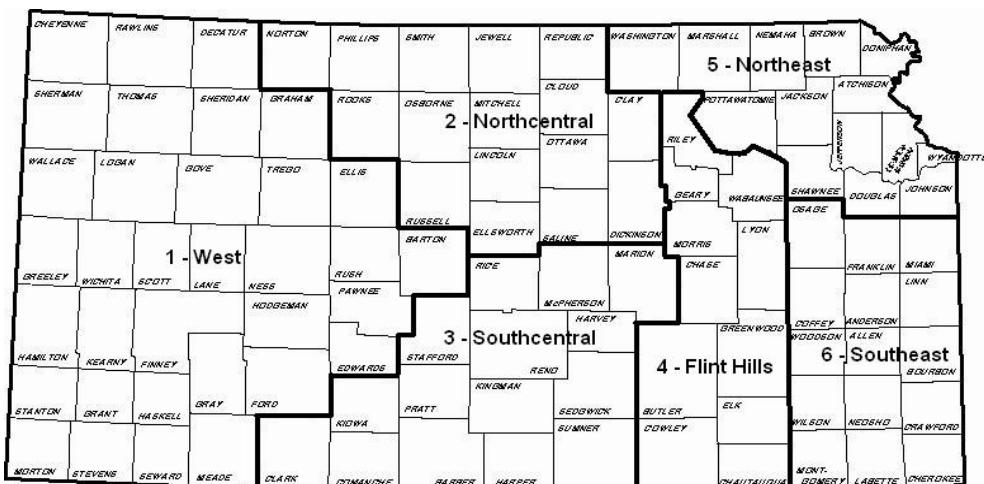
Table 15a. **All** hunter activity for JACKRABBITS, 2008-2009 season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	72	3,600	25,100	45,100	6.77	12.07	1.35
A1-NW	24	1,100	6,010	3,870	5.30	3.39	0.79
A2-NE	2	110	590	410	5.00	3.50	0.70
A3-SW	38	1,950	14,800	40,190	7.38	19.84	1.94
A4-SC	6	310	3,430	410	10.57	1.26	0.51
A5-SE	2	110	290	180	2.50	1.50	0.60
A0-NS ^c	-	-	-	-	-	-	-
M1-W	53	2,640	18,400	39,460	6.79	14.42	1.42
M2-NC	9	410	2,300	1,770	5.38	4.08	0.65
M3-SC	5	260	2,430	3,190	9.18	11.94	2.50
M4-FH	2	110	1,290	180	11.00	1.50	0.75
M5-NE	1	60	290	300	5.00	5.00	1.00
M6-SE	2	110	290	180	2.50	1.50	0.60

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management regions are the same as for bobwhite.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.



Kansas JACKRABBIT management / survey regions.

Table 15b. **Resident** hunter activity for **JACKRABBITS**, 2008-2009 season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	51	2,900	21,800	43,100	7.29	14.27	1.53
A1-NW	13	740	4,450	3,190	5.85	4.15	0.94
A2-NE	2	110	590	410	5.00	3.50	0.70
A3-SW	29	1,650	13,140	38,860	7.73	22.66	2.15
A4-SC	5	280	3,400	410	11.60	1.40	0.56
A5-SE	2	110	290	180	2.50	1.50	0.60
A0-NS ^c	-	-	-	-	-	-	-
M1-W	37	2,110	15,560	37,620	7.18	17.19	1.61
M2-NC	5	280	1,930	1,600	6.60	5.40	0.78
M3-SC	4	230	2,400	3,190	10.25	13.50	2.83
M4-FH	2	110	1,290	180	11.00	1.50	0.75
M5-NE	1	60	290	300	5.00	5.00	1.00
M6-SE	2	110	290	180	2.50	1.50	0.60

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management regions are the same as for bobwhite.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 15c. **Non-Resident** hunter activity for **JACKRABBITS**, 2008-2009 season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	21	690	3,250	2,010	4.57	2.81	0.58
A1-NW	11	360	1,560	680	4.18	1.82	0.49
A2-NE	0	0	0	0	-	-	-
A3-SW	9	300	1,660	1,330	5.44	4.33	0.76
A4-SC	1	30	30	0	1.00	0.00	0.00
A5-SE	0	0	0	0	-	-	-
A0-NS ^c	-	-	-	-	-	-	-
M1-W	16	530	2,840	1,840	5.25	3.38	0.67
M2-NC	4	130	370	170	2.75	1.25	0.38
M3-SC	1	30	30	0	1.00	0.00	0.00
M4-FH	0	0	0	0	-	-	-
M5-NE	0	0	0	0	-	-	-
M6-SE	0	0	0	0	-	-	-

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management regions are the same as for bobwhite.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.

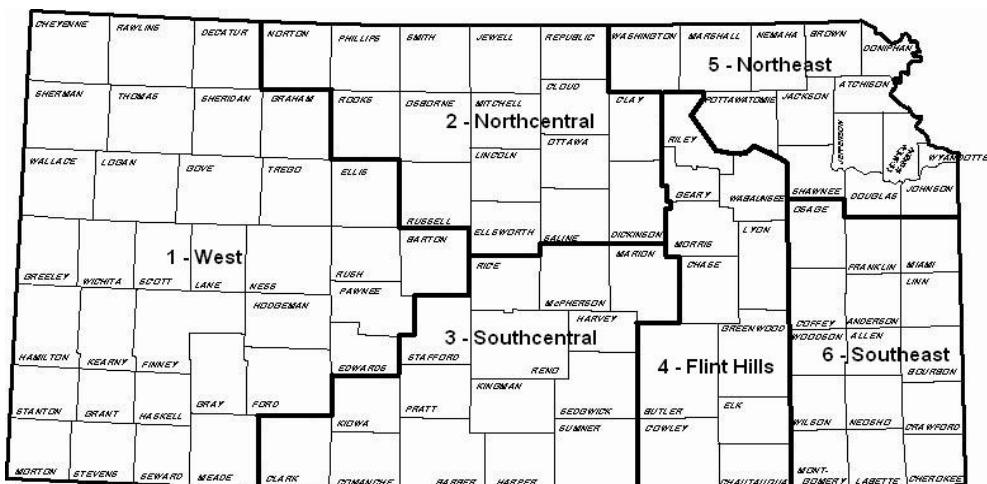
Table 16a. **All** hunter activity for **SQUIRRELS**, 2008-2009 season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	268	15,000	85,000	80,000	5.51	5.11	1.19
A1-NW	25	1,300	7,400	4,700	5.54	3.42	0.78
A2-NE	112	6,300	34,100	36,800	5.26	5.61	1.42
A3-SW	9	500	2,800	2,300	5.33	4.33	0.71
A4-SC	49	2,800	13,400	7,900	4.69	2.77	0.83
A5-SE	73	4,100	27,300	27,700	6.48	6.50	1.24
A0-NS ^c	-	-	-	-	-	-	-
M1-W	7	400	1,500	800	4.00	1.96	0.61
M2-NC	30	1,600	9,900	8,500	5.88	5.02	0.99
M3-SC	39	2,200	9,500	7,600	4.19	3.35	0.81
M4-FH	38	2,100	11,800	8,200	5.36	3.67	1.07
M5-NE	84	4,700	25,300	26,400	5.21	5.39	1.46
M6-SE	70	4,000	27,200	27,900	6.66	6.78	1.25

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management regions are the same as for bobwhite.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.



Kansas **SQUIRREL** management / survey regions.

Table 16b. **Resident** hunter activity for **SQUIRRELS**, 2008-2009 season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	257	14,600	83,300	77,200	5.53	5.08	1.19
A1-NW	20	1,140	6,700	3,800	5.70	3.20	0.78
A2-NE	109	6,210	33,600	36,300	5.27	5.62	1.42
A3-SW	9	510	2,800	2,300	5.33	4.33	0.71
A4-SC	48	2,730	13,300	7,900	4.72	2.79	0.84
A5-SE	71	4,040	26,800	26,800	6.45	6.38	1.24
A0-NS ^c	-	-	-	-	-	-	-
M1-W	5	280	1,200	700	4.00	2.20	0.70
M2-NC	27	1,540	9,400	7,700	5.96	4.85	0.98
M3-SC	38	2,160	9,400	7,600	4.22	3.38	0.82
M4-FH	37	2,110	11,500	7,700	5.30	3.51	1.06
M5-NE	81	4,610	24,800	25,900	5.22	5.41	1.46
M6-SE	69	3,930	27,000	27,500	6.67	6.74	1.25

^a The sum of regional values may not precisely equal state total due to computation method.

^b Management regions are the same as for bobwhite.

^c County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 16c. **Non-Resident** hunter activity for **SQUIRRELS**, 2008-2009 season ^a.

Region ^b	Sample Size	Est. Total Hunters	Est. Total Days	Est. Total Harvest	Season Days Per Hunter	Season Bag Per Hunter	Avg. Bag Per Day
STATE	11	400	1,800	2,300	4.91	6.09	1.16

Table 17. Mean number of Small Game hunting days and the proportion that occurred on Public Land.

Year	Sample ^a Active Hunters	Mean No. Small Game Days	Mean No. Public Small Game Days	Percent on Public Land
1980	3,269	9.58	1.75	18.22
1981	3,058	11.13	1.74	15.63
1982	3,047	11.44	1.71	14.95
1983	2,735	10.16	1.69	16.64
1984	2,429	8.87	1.34	15.07
1985	2,386	9.79	1.52	15.49
1986	2,333	10.96	1.49	13.58
1987	2,937	10.16	1.38	13.55
1988	2,518	10.31	1.50	14.60
1989	2,240	10.58	1.44	13.63
1990	2,449	11.49	1.59	13.85
1991	2,401	10.94	1.41	12.93
1992	2,200	9.89	1.43	14.43
1993	1,945	9.58	1.24	12.99
1994	1,983	10.71	1.29	12.04
1995	2,007	9.04	1.34 ^b	14.83 ^b
1996	1,971	9.24	1.58	17.10
1997	2,615	9.62	1.61	16.77
1998	3,292	9.49	1.51	15.91
1999	3,430	9.46	1.99	21.04
2000	2,891	9.23	2.29	24.81
2001	2,449	7.46	1.76	23.59
2002	1,823	8.48	2.21	26.06
2003	2,230	8.23	1.84	22.36
2004	2,116	8.15	1.97	24.17
2005	1,743	7.21	1.94	26.92
2006 ^c	2,383	7.49	1.73	23.10
2007	3,322	8.23	1.85	22.53
2008	2,701	6.95	1.53	22.01

^a Hunters reporting some small game activity. Values from 1980-2005 are for Resident hunters only.

^b From the 1995 start of the statewide Walk-In-Hunting Area (WIHA) program, the question indicated hunters should not include WIHA as public land. However, inclusion of WIHA does occur to an unknown degree.

^c Electronic licensing permitted random sampling of Non-Residents for the 1st time. Values after 2005 are weighted means from both Resident and Non-Resident hunters.

Table 18a. **AGE** of **RESIDENT** respondents to 2008 Small Game Harvest Survey ^a.

Age ^b	Number	Percent of Total	Age ^b	Number	Percent of Total
17	27	1.07	42	50	1.97
18	44	1.74	43	49	1.93
19	35	1.38	44	51	2.01
20	23	0.91	45	59	2.33
21	21	0.83	46	62	2.45
22	16	0.63	47	64	2.52
23	22	0.87	48	72	2.84
24	26	1.03	49	104	4.10
25	21	0.83	50	80	3.16
26	26	1.03	51	88	3.47
27	26	1.03	52	91	3.59
28	22	0.87	53	86	3.39
29	39	1.54	54	87	3.43
30	39	1.54	55	82	3.23
31	20	0.79	56	71	2.80
32	31	1.22	57	80	3.16
33	35	1.38	58	72	2.84
34	41	1.62	59	69	2.72
35	17	0.67	60	76	3.00
36	46	1.81	61	70	2.76
37	47	1.85	62	74	2.92
38	50	1.97	63	69	2.72
39	43	1.70	64	66	2.60
40	49	1.93	65	48	1.89
41	49	1.93			

^a Only 69.9% of the resident survey respondents actively hunted small game in the 2008-2009 seasons.

^b Hunters under 16 or over 64 are not required to purchase hunting licenses, so are generally not sampled.

Table 18b. AGE of **NON-RESIDENT** respondents to 2008 Small Game Harvest Survey ^a.

Age ^b	Number	Percent of Total	Age ^b	Number	Percent of Total
10	2	0.10	50	63	3.23
11	3	0.15	51	53	2.72
12	2	0.10	52	71	3.64
13	10	0.51	53	51	2.62
14	10	0.51	54	57	2.93
15	7	0.36	55	43	2.21
16	10	0.51	56	50	2.57
17	7	0.36	57	60	3.08
18	7	0.36	58	58	2.98
19	6	0.31	59	50	2.57
20	3	0.15	60	46	2.36
21	3	0.15	61	47	2.41
22	6	0.31	62	60	3.08
23	7	0.36	63	53	2.72
24	8	0.41	64	44	2.26
25	9	0.46	65	38	1.95
26	14	0.72	66	49	2.52
27	14	0.72	67	30	1.54
28	12	0.62	68	32	1.64
29	9	0.46	69	26	1.33
30	19	0.98	70	29	1.49
31	17	0.87	71	19	0.98
32	15	0.77	72	16	0.82
33	19	0.98	73	9	0.46
34	21	1.08	74	11	0.56
35	27	1.39	75	6	0.31
36	21	1.08	76	13	0.67
37	36	1.85	77	7	0.36
38	29	1.49	78	5	0.26
39	31	1.59	79	4	0.21
40	39	2.00	80	3	0.15
41	32	1.64	81	1	0.05
42	34	1.75	82	3	0.15
43	35	1.80	83	1	0.05
44	52	2.67	84	1	0.05
45	37	1.90	85	0	0.00
46	58	2.98	86	0	0.00
47	46	2.36	87	2	0.10
48	50	2.57	88	0	0.00
49	69	3.54	89	1	0.05
			90	0	0.00

^a Only 57.2% of the non-resident survey respondents actively hunted small game in the 2008-2009 seasons.

Table 19. **COUNTY OF RESIDENCE** of **RESIDENT** respondents to 2008 Small Game Harvest Survey ^a.

County	Number	Percent of Total	County	Number	Percent of Total
AL	14	0.54	LN	12	0.47
AN	8	0.31	LG	6	0.23
AT	14	0.54	LY	35	1.36
BA	10	0.39	MP	41	1.59
BT	41	1.59	MN	23	0.89
BB	18	0.70	MS	37	1.44
BR	11	0.43	ME	7	0.27
BU	68	2.64	MI	41	1.59
CS	6	0.23	MC	7	0.27
CQ	10	0.39	MG	36	1.40
CK	24	0.93	MR	10	0.39
CN	6	0.23	MT	7	0.27
CA	2	0.08	NM	21	0.81
CY	19	0.74	NO	22	0.85
CD	22	0.85	NS	15	0.58
CF	14	0.54	NT	9	0.35
CM	3	0.12	OS	37	1.44
CL	34	1.32	OB	12	0.47
CR	38	1.47	OT	28	1.09
DC	2	0.08	PN	8	0.31
DK	72	2.79	PL	17	0.66
DP	18	0.70	PT	40	1.55
DG	59	2.29	PR	11	0.43
ED	6	0.23	RA	6	0.23
EK	6	0.23	RN	56	2.17
EL	35	1.36	RP	15	0.58
EW	8	0.31	RC	18	0.70
FI	29	1.12	RL	41	1.59
FO	29	1.12	RO	12	0.47
FR	27	1.05	RH	6	0.23
GE	23	0.89	RS	14	0.54
GO	7	0.27	SA	98	3.80
GH	6	0.23	SC	14	0.54
GT	4	0.16	SG	280	10.86
GY	9	0.35	SW	12	0.47
GL	2	0.08	SN	127	4.93
GW	7	0.27	SD	5	0.19
HM	4	0.16	SH	8	0.31
HP	8	0.31	SM	10	0.39
HV	39	1.51	SF	6	0.23
HS	7	0.27	ST	5	0.19
HG	2	0.08	SV	12	0.47
JA	14	0.54	SU	32	1.24
JF	28	1.09	TH	16	0.62
JW	13	0.50	TR	7	0.27
JO	252	9.78	WB	20	0.78
KE	5	0.19	WA	5	0.19
KM	8	0.31	WS	22	0.85
KW	5	0.19	WH	3	0.12
LB	22	0.85	WL	13	0.50
LE	6	0.23	WO	8	0.31
LV	58	2.25	WY	34	1.32
LC	9	0.35			

^a Only 69.9% of the resident survey respondents actively hunted small game in the 2008-2009 seasons.

RELATIVE RESIDENT AND NON-RESIDENT SMALL GAME HUNTING INTERESTS

2008

Implementation of the Kansas Outdoor Licensing System (KOWLS) has made it possible to make direct comparisons of Kansas Resident (R) and Non-Resident (NR) hunting activity since a randomly-selected, same-year sample can now be obtained for NR hunters. Similar comparisons of residents and non-residents were made in the past using non-random samples from NR hunters and, generally, the new random-sampling method corroborates the hunting patterns of non-residents as previously estimated.

This survey, as those of previous years, indicates that ring-necked pheasants remain the species most pursued by both R and NR small-game hunters in Kansas, with a greater proportion (89%) of NR small game hunters pursuing pheasants than R small game hunters (73%). The presence of substantial pheasant populations also influences where NR hunters pursue other species such as bobwhite. About 84% of NR Bobwhite hunters hunt the species in the NW (M1), SW (M2), and NC (M3) regions (combined) as compared to 67% for R small game hunters. Pheasant population levels exert a disproportionate influence on the number of NR hunters who come to Kansas each fall. In the past, a one-year lag effect has been evident in that NR hunters have been more closely correlated with pheasant populations of the previous year rather than those of the current year. That is, improved hunting resultant from good pheasant production in one year produced an increase in NR hunters the following year, and the reverse. The growth and popularity of the WIHA program has played a significant role in increases in NR hunters and may have partially masked this lag effect in recent years.

Resident and NR small game hunters show similar preferences for hunting bobwhite, greater prairie-chickens, and jackrabbits. However, NR hunters exhibit much lower tendencies to hunt doves, cottontails, and squirrels than R small game hunters. Although hunting participation for lesser prairie chickens is quite low (1% or less) for both R and NR hunters, there appears to be greater interest on the part of NR hunters in pursuing this species. This may reflect the fact that Kansas is currently the only state where lesser prairie-chickens may be legally taken. Some of these NR hunters may also pursue this species as part of a North American grouse grand slam.

Hunting participation also reflects changes in small game populations over time. The clearest examples of this are the changes, both over time and regionally, in the numbers and proportions of small game hunters who have pursued bobwhite. The proportion of resident small game hunters who hunt bobwhite has typically diminished in years following population crashes and increased around population highs. Since the bobwhite crash that occurred in the winter of 2000–2001, not only have overall numbers of quail hunters declined, but the proportion of small-game hunters who pursued quail has also remained low. Regionally, the northeast (M5) and southeast (M6) quail management regions only accounted for 23% of Kansas' resident bobwhite hunters in 2008, compared to values of 40–42% in the early 1980's. These same eastern regions only account for 10% of the bobwhite hunting done by non-residents. Quail habitat deterioration and changes in societal interests probably account for these declines.

Table 20a. Regional breakdown of **RESIDENT** hunting activity as indicated by sample sizes for the 2008-2009 season. State values in () indicate percent of the 1,815 active **Resident** respondents. Regional values in () indicate percent of the state total for the species.

Region ^a	Sample Size by Species							
	Doves	Bobwhite	Pheasants	Greater Prairie Chickens (Regular)	Lesser Prairie Chickens	Cottontails	Jackrabbits	Squirrels
State	650 (36)	938 (52)	1,328 (73)	95 (5)	8 (<1)	267 (15)	51 (3)	257 (14)
A1-NW	131 (20)	242 (26)	507 (38)	48 (50)		46 (17)	13 (25)	20 (8)
A2-NE	157 (24)	207 (22)	191 (14)	25 (26)		85 (32)	2 (4)	109 (42)
A3-SW	111 (17)	177 (19)	397 (30)	2 (2)	8 (<1)	34 (13)	29 (58)	9 (4)
A4-SC	159 (24)	210 (22)	211 (16)	15 (16)		57 (21)	5 (10)	48 (19)
A5-SE	92 (14)	102 (11)	22 (2)	5 (5)		45 (17)	2 (4)	71 (28)
A0-NS ^b								
M1	67 (10)	182 (19)	159 (12)	0 (0)	8 (<1)	42 (16)	37 (73)	5 (2)
M2	102 (16)	231 (25)	339 (26)	19 (20)		41 (15)	5 (10)	27 (10)
M3	120 (18)	215 (23)	364 (27)	25 (26)		47 (18)	4 (8)	38 (15)
M4	162 (25)	92 (10)	201 (15)	11 (12)		32 (12)	2 (4)	37 (14)
M5	112 (17)	136 (14)	238 (18)	0 (0)		63 (24)	1 (2)	81 (31)
M6	87 (13)	82 (9)	27 (2)	40 (42)		42 (16)	2 (4)	69 (27)

^a Management regions differ between species.

^b County hunted not specified. Non-specified management region equals non-specified administrative region.

Table 20b. Regional breakdown of **NON-RESIDENT** hunting activity as indicated by sample sizes for the 2008-2009 season. State values in () indicate percent of the 1,115 active **NR** respondents. Regional values in () indicate percent of the state total for the species.

Region ^a	Sample Size by Species							
	Doves	Bobwhite	Pheasants	Greater Prairie Chickens (Regular)	Lesser Prairie Chickens	Cottontails	Jackrabbits	Squirrels
State	77 (7)	499 (45)	990 (89)	55 (5)	8 (<1)	63 (6)	21 (2)	11 (1)
A1-NW	42 (55)	220 (44)	479 (48)	43 (78)		31 (49)	11 (52)	5 (45)
A2-NE	9 (12)	48 (10)	50 (5)	4 (7)		2 (3)		3 (27)
A3-SW	13 (17)	160 (32)	379 (38)	0 (0)	8 (<1)	20 (32)	9 (43)	
A4-SC	4 (5)	45 (9)	76 (8)	5 (9)		5 (8)	1 (5)	1 (9)
A5-SE	9 (12)	26 (5)	6 (<1)	3 (5)		5 (8)		2 (18)
A0-NS ^b								
M1	27 (35)	164 (33)	211 (21)	0 (0)	8 (<1)	27 (43)	16 (76)	2 (18)
M2	11 (14)	172 (34)	350 (35)	6 (11)		24 (38)	4 (19)	3 (27)
M3	20 (26)	98 (20)	279 (28)	7 (13)		6 (10)	1 (5)	1 (9)
M4	7 (9)	15 (3)	82 (8)	1 (2)		2 (3)		1 (9)
M5	6 (8)	32 (6)	62 (6)	0 (0)		1 (2)		3 (27)
M6	6 (8)	18 (4)	6 (<1)	41 (75)		3 (5)		1 (9)

^a Management regions differ between species.

^b County hunted not specified. Non-specified management region equals non-specified administrative region.

Aging of the Kansas Resident Small Game Hunter Population (Age Distribution of Respondents to the SGHS Since 1981)

The graphs below illustrate a pulse of resident small-game hunters of the baby-boom generation that will begin to disappear from the potential SGHS sample over the next decade. These resident hunters will either move into the non-license-buying category (65 or older) or will simply no longer hunt small game. The loss of the boomer generation of small game hunters has probably already started and will accelerate rapidly in the next 10–15 years, with significant negative implications for both harvest statistics and conservation revenue. Although comparable long-term data are not available for Kansas non-resident small game hunters, it is likely that similar demographics apply. Harvest and revenue losses from residents will probably begin sooner than losses from non-residents. For perhaps as long as another decade, retirements of non-residents may give them more time to come to Kansas to hunt, possibly stabilizing or even increasing harvest and revenues through 2020. However, when the non-resident boomers stop hunting, small game harvest and revenues will likely decline.

