

# ***Turkey Harvest Report***

**Spring 2008**

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

**Grant W-39-R-14**

**Kansas Department of Wildlife and Parks**

**Mike Hayden  
Secretary**

**Prepared by**

**Jim Pitman  
Small Game Coordinator**

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

**Mike Mitchener, Chief  
Wildlife Section**

**August 2008**



## **PERMISSION TO QUOTE**

**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**

## INTRODUCTION AND METHODS

For the spring 2008 season there were 4 turkey hunting units in Kansas (Figure 1). An initial turkey permit could be purchased over-the-counter for all units except Unit 4 (southwest Kansas). A second turkey game tag was also available for Units 2 and 3. For the 2008 season, the Unit 4 quota was increased from 200 to 325 and those permits were issued through a pre-season drawing. Two hundred fifty of the Unit 4 permits were designated for the regular draw and 75 for a drawing of applicants 16 years of age or younger. Despite the increase in available permits the hunt was still oversubscribed by 74 applicants. Another change that took effect for the spring 2008 season was the increased number of days available for the special youth/disabled season. In the past that season was open on the Friday-Sunday prior to the regular firearms opener but the season was extended in 2008 to completely overlap the archery season (April 1-8). The spring 2008 season ran 61 days (Table 1) and the number of permits issued was 62,375 (includes 19,303 game tags; Table 2). After 12 consecutive years of increasing permit sales the total for 2008 was ~1,700 less the previous year.

The spring wild turkey harvest survey has been conducted annually since the first regulated season was established in 1974. Following the 2008 spring turkey season, a postcard was sent to all of the hunters purchasing Unit 4 permits and a random sample of 15% of all other initial permit buyers ( $n = 6,464$ ). The postcard asked the hunters to complete an online questionnaire pertaining to their hunting activity and success in Kansas during the spring 2008 season (Figure 2). A special question was added to the 2008 survey to identify the percentage of hunters that approve of hunting turkeys over bait. Individuals not responding to the survey were sent a second postcard approximately 3 weeks after the initial mailing. Results from the survey were used to develop statewide estimates of the number of turkey hunters participating in each season, harvest (by weapon and for land ownership type), perceived hunting pressure on publicly owned land and walk-in-hunting area (WIHA) tracts, weekly harvest distribution, hunter success, and hunter satisfaction with Kansas turkey hunting and management. Many of these parameters were also calculated for each of the 6 Kansas turkey management regions (Figure 3). Several parameter estimates are only available for the most recent seasons (2005-present) due to changes in survey design and analysis.

## RESULTS

A total of 2,132 of 6,464 (33.0%) survey participants completed the online questionnaire. An estimated 95.2% of the 43,072 initial permit buyers hunted turkeys during the spring 2008 season resulting in 40,992 active hunters (29,420 residents and 11,439 non-residents; Table 3). The estimated numbers of hunters participating in the early archery-only and youth/disabled spring seasons were 4,281 (95% CI = 3,765-4,859) and 5,331 (95% CI = 4,758-5,962), respectively. The mean age of all the hunters selected for the 2008 survey was 38.2 and their age distribution was bimodal with a high number of young hunters (<18), few young adults (18-35), and the vast majority of hunters being middle-aged or older (>35; Figure 4).

Total harvest during the spring 2008 season was 35,040 turkeys of which 8.7% were taken with archery equipment (Table 4). The age and sex structure of the 2008 harvest was 85.3% adult gobblers, 13.5% jakes, and 1.2% bearded hens. The percentage of turkey hunters taking at least 1 bird was 65% during the 2008 season. The overall success rate has been >60% for 6 of the last 7 spring turkey seasons in Kansas. Initial permit success was again higher than game tag success and non-residents were more successful than residents (Table 5). On a statewide scale, the percentage of the harvest taken with a second turkey game tag was 24.8% in 2008 (Table 4). Hunting pressure on publicly owned properties was perceived to be lighter than pressure on WIHA properties by resident and non-resident hunters using those property types during the spring 2008 season (Table 6).

During the spring 2008 season 6.3% of the total harvest was taken on opening day of the regular firearms season (Figure 5). Prior to the creation of the archery-only season in 2007 the percentage of total harvest taken on opening day was typically >10%. The youth/disabled season was also extended for the 2008 spring season adding more opportunity for harvest prior to the regular firearms opening day. These special early seasons not only provide unique opportunities but they spread out the harvest which helps to lessen the number of hunters in the woods during the regular firearms season. Cold and wet weather for the 2007 and 2008 opening days may have also been somewhat responsible for the lower opening day harvests in recent years. Poor weather conditions undoubtedly convinced many hunters to stay home and wait for a better day. Overall, about 30.3% of the total 2008 harvest occurred by the 5<sup>th</sup> day of the regular firearms season and 67.6% was taken by the end of April (Figure 5).

The greatest number of people hunted in the southeast and northeast management regions in 2008 (>8,000 each; Figure 6). However, the most birds were taken in the northcentral region where >8,500 turkeys were harvested. Hunter success during the spring 2008 season remained high (>55%) in all 6 management regions but generally higher in the more western regions (Figure 7). Hunter success has declined substantially (8-12%) over the last 4 years in the southeast, northeast, and southcentral management regions due to declining turkey populations as a result of poor poult production during the previous 3 summers. The percentage of jakes in the harvest was low (<20%) in every management region during the spring 2008 season (Figure 7).

The walk-in-hunting areas (WIHA) were utilized by >1,000 hunters in the northcentral and northeast regions during 2008 (Table 7). These regions also contained the most acreage enrolled in the spring 2008 WIHA program. Correspondingly, the greatest WIHA harvest occurred in the same regions and was estimated at 892 and 213 for the northcentral and northeast regions, respectively (Table 7). During the 2008 season slightly more people hunted spring turkeys on publicly owned properties (7,330) than WIHA tracts (5,896). Approximately 30% of the spring turkey hunters in Kansas utilized properties either provided (WIHA) or managed by the Kansas Department of Wildlife & Parks (KDWP) or other federal agencies (e.g. U.S. Fish & Wildlife Service, U.S. Forest Service, etc.). Of the 3 major land types, the greatest number of spring turkey hunters and harvest were both associated with private land in each of the 6 management regions. Private land was used by >85% of all active hunters and was responsible for a similar percentage of the total statewide harvest.

Spring turkey hunters in Kansas were generally satisfied or very satisfied (>80%) with turkey management and hunting on a statewide scale but satisfaction has declined over the last 4 years (Figure 8). Regional hunter satisfaction levels with Kansas turkey hunting and management are relatively stable in the northcentral, northeast, northwest, and southwest management regions (Figure 9). However, hunter satisfaction has declined sharply in the southeast and southcentral management regions in recent years. Those declines could be associated with similar declines in success which resulted from poor poult production in recent years.

The 2008 spring harvest survey also included a special question to assess approval for hunting turkeys over bait. This is a legal practice in Kansas but it is unknown exactly how many people utilize it. Overall, opinions about hunting over bait were mixed with 30.1% approval, 36.9% disapproval, and 33.0% neutral (Figure 10). Residents were more approving of the practice than non-residents but opinions were still very mixed amongst both groups.

Table 1. Spring wild turkey hunting seasons in Kansas, 1974-2008.

Year	Archery <sup>a</sup>	Youth/Disabled <sup>b</sup>	Regular spring season	Total days
1974	No Season	No Season	Apr. 20-28	9
1975	No Season	No Season	Apr. 26-May 4	9
1976	No Season	No Season	Apr. 24-May 3	10
1977	No Season	No Season	Apr. 23-May 1	9
1978	No Season	No Season	Apr. 22-28	7
1979	No Season	No Season	Apr. 21-24, Apr. 21-29, Apr. 27-May 1	18
1980	No Season	No Season	Apr. 19-22, Apr. 19-27, Apr. 26-30	18
1981	No Season	No Season	Apr. 25-28, Apr. 25-May 30, Apr. 26-30	18
1982	No Season	No Season	Apr. 24-27, Apr. 24-May 2, May 1-5	18
1983	No Season	No Season	Apr. 24-27, Apr. 25-May 2, May 1-5	18
1984	No Season	No Season	Apr. 18-May 6	19
1985	No Season	No Season	Apr. 17-May 5	19
1986	No Season	No Season	Apr. 16-May 4	19
1987	No Season	No Season	Apr. 15-May 3	19
1988	No Season	No Season	Apr. 13-May 1	19
1989	No Season	No Season	Apr. 19-May 7	19
1990	No Season	No Season	Apr. 18-May 6	19
1991	No Season	No Season	Apr. 17-May 12	26
1992	No Season	No Season	Apr. 15-May 10	26
1993	No Season	No Season	Apr. 14-May 9	26
1994	No Season	No Season	Apr. 13-May 8	26
1995	No Season	No Season	Apr. 12-May 7	26
1996	No Season	No Season	Apr. 10-May 5	26
1997	No Season	No Season	Apr. 9-May 11	33
1998	No Season	No Season	Apr. 8-May 17	40
1999	No Season	No Season	Apr. 14-May 23	40
2000	No Season	No Season	Apr. 12-May 21	40
2001	No Season	No Season	Apr. 11-May 20	40
2002	No Season	No Season	Apr. 10-May 19	40
2003	No Season	Apr. 4-6	Apr. 9-May 18	43
2004	No Season	Apr. 8-10	Apr. 13-May 31	52
2005	No Season	Apr. 8-10	Apr. 13-May 31	52
2006	No Season	Apr. 7-9	Apr. 12-May 31	53
2007	Apr. 1-10	Apr. 6-8	Apr. 11-May 31	61
2008	Apr. 1-8	April. 1-8	Apr. 9 –May 31	61

<sup>a</sup> Season open only to archery hunters.

<sup>b</sup> Firearms legal for youth younger than 17 years of age and disabled individuals.

Table 2. Kansas spring turkey permit sales and generated revenue, 1974-2008.

Year	Resident	Non-Resident <sup>a</sup>	LO/T <sup>b</sup>	Game Tags <sup>c</sup>	Total Permits	Total Revenue <sup>d</sup>
1974	209	NT <sup>e</sup>	191	NT	400	\$4,000
1975	250	NT	117	NT	367	\$5,505
1976	255	NT	145	NT	400	\$6,000
1977	321	NT	179	NT	500	\$7,500
1978	319	NT	181	NT	500	\$7,500
1979	521	NT	243	NT	764	\$11,460
1980	740	NT	225	NT	965	\$19,300
1981	932	NT	330	NT	1,262	\$25,240
1982	1,290	NT	363	NT	1,653	\$33,060
1983	1,743	NT	531	NT	2,274	\$45,480
1984	3,323	NT	898	NT	4,221	\$84,420
1985	3,916	NT	937	NT	4,853	\$99,487
1986	4,763	NT	1,382	NT	6,145	\$125,973
1987	5,438	48	2,062	NT	7,548	\$134,594
1988	6,490	205	3,395	NT	10,090	\$174,945
1989	8,889	684	4,655	NT	14,228	\$251,964
1990	8,250	461	5,106	NT	13,817	\$236,799
1991	10,917	543	1,034	1,700	14,194	\$269,067
1992	10,335	739	4,246	2,000	17,320	\$299,990
1993	10,158	834	4,148	2,997	18,137	\$308,699
1994	11,976	766	4,840	NA	17,582	\$407,601
1995	13,098	1,453	5,250	7,338	27,139	\$445,020
1996	13,469	1,677	5,257	6,576	26,979	\$451,530
1997	13,481	1,791	5,776	6,356	27,404	\$458,412
1998	14,882	2,178	5,869	7,619	30,548	\$513,154
1999	17,648	2,690	7,015	9,698	37,051	\$619,536
2000	20,155	3,848	7,489	11,774	43,266	\$733,063
2001	21,350	4,589	7,590	12,396	45,925	\$787,793
2002	22,440	5,435	7,809	13,878	49,562	\$853,821
2003	23,368	6,515	8,629	14,611	53,138	\$922,499
2004	24,023	7,346	8,906	14,531 (4,299) <sup>f</sup>	54,820	\$1,033,300
2005	24,520	8,345	9,319	14,663 (4,559)	56,887	\$1,026,960
2006	24,601	9,773	7,754	18,464 (6,161)	60,592	\$1,109,000
2007	24,666	11,366	7,958	20,106 (7,642)	64,096	\$1,191,360
2008	24,586	11,425	7,063	19,303 (7,781)	62,375	\$1,132,680

<sup>a</sup> Includes non-resident archery, firearm, and the universal non-resident permit that is currently issued.

<sup>b</sup> Includes all landowner/tenant (LO/T) permits, hunt-own-land permits, and non-resident landowner permits.

<sup>c</sup> Game tags for spring turkey season were not issued until 1991 and separate tags for residents and non-residents were not issued until 2004. The total includes both resident and non-resident game tags.

<sup>d</sup> Does not include the cost of a small game license which is required to hunt turkeys.

<sup>e</sup> NT = No tag issued.

<sup>f</sup> The value in parentheses was the number of game tags issued to non-residents.

Table 3. Statewide estimates of active resident and non-resident spring wild turkey hunters in Kansas, 1974-2008.

Year	Residents	95% CI	Non-Residents	95% CI	Total <sup>a</sup>	95% CI
1974	NE <sup>b</sup>	NE	NE <sup>b</sup>	NE	400	NE
1975	NE	NE	NE	NE	367	NE
1976	NE	NE	NE	NE	400	NE
1977	NE	NE	NE	NE	500	NE
1978	NE	NE	NE	NE	500	NE
1979	NE	NE	NE	NE	764	NE
1980	NE	NE	NE	NE	965	NE
1981	NE	NE	NE	NE	1,262	NE
1982	NE	NE	NE	NE	1,653	NE
1983	NE	NE	NE	NE	2,274	NE
1984	NE	NE	NE	NE	4,221	NE
1985	NE	NE	NE	NE	4,853	NE
1986	NE	NE	NE	NE	6,145	NE
1987	NE	NE	NE	NE	7,548	NE
1988	NE	NE	NE	NE	10,090	NE
1989	NE	NE	NE	NE	14,228	NE
1990	NE	NE	NE	NE	13,817	NE
1991	NE	NE	NE	NE	12,494	NE
1992	NE	NE	NE	NE	15,320	NE
1993	NE	NE	NE	NE	15,140	NE
1994	NE	NE	NE	NE	17,582	NE
1995	NE	NE	NE	NE	19,801	NE
1996	NE	NE	NE	NE	20,403	NE
1997	NE	NE	NE	NE	21,048	NE
1998	NE	NE	NE	NE	22,929	NE
1999	NE	NE	NE	NE	27,353	NE
2000	NE	NE	NE	NE	31,492	NE
2001	NE	NE	NE	NE	33,529	NE
2002	NE	NE	NE	NE	35,684	NE
2003	NE	NE	NE	NE	38,527	NE
2004	NE	NE	NE	NE	40,289	NE
2005	32,470	(32,071 – 32,785)	8,193	(8,117 – 8,245)	40,928	(40,618 – 41,180)
2006	30,747	(30,383 – 31,048)	9,588	(9,464 – 9,664)	40,422	(40,063 – 40,722)
2007	31,018	(30,639 – 31,326)	11,184	(11,043 – 11,264)	42,265	(41,883 – 42,578)
2008	29,420	(28,979 – 29,788)	11,439	(11,307 – 11,509)	40,992	(40,564 – 41,350)

<sup>a</sup> May not equal sum of resident and non-resident hunters due to rounding errors. Prior to 2005 the number presented is the initial permit buyers.

<sup>b</sup> NE = no estimate.

Table 4. Statewide estimates of spring wild turkey harvest and hunter success in Kansas, 1974-2008.

Year	Harvest				Total <sup>a</sup>	95% CI	Overall Success <sup>b</sup>	95% CI
	Archery	95% CI	Firearms	95% CI				
1974	NE	NE	NE	NE	123	NE	40%	NE
1975	NE	NE	NE	NE	139	NE	44%	NE
1976	NE	NE	NE	NE	123	NE	39%	NE
1977	NE	NE	NE	NE	149	NE	36%	NE
1978	NE	NE	NE	NE	196	NE	44%	NE
1979	NE	NE	NE	NE	305	NE	46%	NE
1980	NE	NE	NE	NE	369	NE	45%	NE
1981	NE	NE	NE	NE	482	NE	47%	NE
1982	NE	NE	NE	NE	616	NE	44%	NE
1983	NE	NE	NE	NE	945	NE	50%	NE
1984	NE	NE	NE	NE	1,430	NE	42%	NE
1985	NE	NE	NE	NE	1,544	NE	44%	NE
1986	NE	NE	NE	NE	2,167	NE	44%	NE
1987	NE	NE	NE	NE	2,777	NE	48%	NE
1988	NE	NE	NE	NE	3,977	NE	48%	NE
1989	NE	NE	NE	NE	4,898	NE	47%	NE
1990	NE	NE	NE	NE	4,988	NE	44%	NE
1991	NE	NE	NE	NE	6,602	NE	50%	NE

<sup>a</sup>Total may not equal to sum of weapon-specific estimates due to rounding error.

<sup>b</sup>Percentage of active hunters that harvested at least 1 bird. This estimate is equal to the percentage of active initial permit buyers that harvested a bird.

<sup>c</sup>Percentage of harvest taken with a second turkey game tag.



Table 4. Continued...

Year	Harvest						Overall Success <sup>b</sup>	95% CI
	Archery	95% CI	Firearms	95% CI	Total <sup>a</sup>	95% CI		
1992	NE	NE	NE	NE	8,898	NE	54%	NE
1993	NE	NE	NE	NE	7,710	NE	46%	NE
1994	NE	NE	NE	NE	13,008	NE	38%	NE
1995	NE	NE	NE	NE	14,953	NE	48%	NE
1996	NE	NE	NE	NE	12,612	NE	56%	NE
1997	NE	NE	NE	NE	16,198	NE	60%	NE
1998	NE	NE	NE	NE	16,954	NE	56%	NE
1999	NE	NE	NE	NE	18,165	NE	49%	NE
2000	NE	NE	NE	NE	17,215	NE	56%	NE
2001	NE	NE	NE	NE	20,247	NE	46%	NE
2002	NE	NE	NE	NE	29,868	NE	67%	NE
2003	NE	NE	NE	NE	32,945	NE	62%	NE
2004	NE	NE	NE	NE	31,023	NE	58%	NE
2005	1,127	(911 - 1,392)	31,788	(31,523 - 32,004)	34,727 (17.6%) <sup>c</sup>	(33,658 - 35,796)	70%	(68% - 72%)
2006	1,452	(1,192 - 1,765)	31,713	(31,401 - 31,973)	34,164 (21.7%)	(32,953 - 35,376)	66%	(65% - 68%)
2007	2,552	(2,170 - 2,996)	31,010	(30,566 - 31,392)	33,913 (23.0%)	(32,506 - 35,322)	62%	(60% - 64%)
2008	3,025	(2,599 - 3,513)	31,742	(31,254 - 32,168)	35,040 (24.8%)	(33,615 - 36,465)	65%	(63% - 67%)

<sup>a</sup> Total may not equal to sum of weapon-specific estimates due to rounding error.

<sup>b</sup> Percentage of active hunters that harvested at least 1 bird. This estimate is equal to the percentage of active initial permit buyers that harvested a bird.

<sup>c</sup> Percentage of harvest taken with a second turkey game tag.

Table 5. Statewide estimates of spring wild turkey hunter success (%) in Kansas for residents and non-residents using the initial permit and the additional game tag, 2005-2008.

Year	Initial Permit				Game Tag			
	Resident	95% CI	Non-Resident	95% CI	Resident	95% CI	Non-Resident	95% C.I.
2005	65%	(63% - 68%)	76%	(73% - 78%)	48%	(44% - 52%)	55%	(51% - 59%)
2006	63%	(60% - 65%)	75%	(72% - 78%)	44%	(40% - 47%)	56%	(52% - 61%)
2007	59%	(56% - 61%)	69%	(65% - 72%)	41%	(37% - 45%)	49%	(44% - 53%)
2008	59%	(56%-61%)	77%	(74%-80%)	43%	(39%-47%)	54%	(49%-58%)

Table 6. Regional and statewide perceptions of hunting pressure on Kansas' public and WIHA properties as indicated by hunters actively using each property type, 2008.

Region-Residency	Public Land				WIHA Properties			
	<i>n</i> <sup>a</sup>	Light	Moderate	Heavy	<i>n</i>	Light	Moderate	Heavy
Northcentral	42	38.1%	42.9%	19.0%	82	14.6%	32.9%	52.4%
Non-resident	16	50.0%	37.5%	12.5%	46	15.2%	28.3%	56.5%
Resident	26	30.8%	46.2%	23.1%	36	13.9%	38.9%	47.2%
Northeast	100	37.0%	47.0%	16.0%	67	9.0%	31.3%	59.7%
Non-resident	29	44.8%	44.8%	10.3%	28	7.1%	28.6%	64.3%
Resident	71	33.8	47.9%	18.3%	39	10.3%	33.3%	56.4%
Northwest	48	41.7%	50.0%	8.3%	42	7.1%	28.6%	64.3%
Non-resident	13	38.5%	53.8%	7.7%	24	8.3%	29.2%	62.5%
Resident	35	42.9%	48.6%	8.6%	18	5.6%	27.8%	66.7%
Southcentral	58	29.3%	53.4%	17.2%	37	13.5%	32.4%	54.1%
Non-resident	13	15.4%	69.2%	15.4%	12	16.7%	25.0%	58.3%
Resident	45	33.3%	48.9%	17.8%	25	12.0%	36.0%	52.0%
Southeast	73	28.8%	43.8%	27.4%	41	26.8%	43.9%	29.3%
Non-resident	28	28.6%	57.1%	14.3%	16	25.0%	56.3%	18.8%
Resident	45	28.9%	35.6%	35.6%	25	28.0%	36.0%	36.0%
Southwest	23	43.5%	56.5%	0.0%	18	5.6%	16.7%	77.8%
Non-resident	3	100.0%	0.0%	0.0%	2	0.0%	0.0%	100.0%
Resident	20	35.0%	65.0%	0.0%	16	6.3%	18.8%	75.0%
Statewide	365	37.3%	46.0%	16.7%	289	13.1%	32.2%	54.7%
Non-resident	115	42.6%	47.0%	10.4%	130	13.1%	30.8%	56.2%
Resident	250	34.8%	45.6%	19.6%	159	13.2%	33.3%	53.5%

<sup>a</sup> *n* = number of respondents.

Variable -Region	Land Type					
	WIHA <sup>a</sup>	95% CI	Public	95% CI	Private	95% CI
Hunters <sup>b</sup>						
Northcentral	1,797	(1,489-2,148)	1,676	(1,378-2,020)	6,542	(6,195-6,846)
Northeast	1,454	(1,172-1,790)	1,676	(1,374-2,028)	7,835	(7,486-8,134)
Northwest	808	(606-1,060)	1,030	(803-1,300)	3,776	(3,515-3,990)
Southcentral	767	(565-1,031)	989	(759-1,278)	7,088	(6,812-7,303)
Southeast	868	(652-1,145)	1,434	(1,156-1,763)	7,047	(6,720-7,324)
Southwest	404	(266-602)	565	(399-785)	3,029	(2,793-3,218)
Statewide	5,896	(5,296-6,553)	7,330	(6,669-8,042)	34,793	(34,049-35,489)
Harvest						
Northcentral	892	(675-1,174)	737	(541-999)	6,849	(6,374-7,314)
Northeast	213	(119-379)	563	(394-799)	6,266	(5,782-6,753)
Northwest	155	(79-300)	446	(301-652)	2,968	(2,660-3,265)
Southcentral	116	(53-252)	213	(120-378)	5,491	(5,039-5,942)
Southeast	116	(53-252)	485	(330-708)	5,471	(5,010-5,936)
Southwest	97	(42-223)	330	(208-515)	2,716	(2,420-3,002)
Statewide	1,591	(1,285-1,968)	2,930	(2,506-3,420)	30,072	(28,997-31,150)

<sup>b</sup> Many hunters reported hunting on more than one land type. Thus, the sum of the estimates will be greater than the estimated number of active hunters regionally and statewide.

The map displays the 105 counties of Kansas, grouped into four units for the 2010 Census. The units are labeled as follows:

- Unit 1:** Cheyenne, Rawlins, Decatur, Norton, Phillips, Smith, Jewell, Republic, Washington, Marshall, Nemaha, Brown, Doniphan, Sherman, Thomas, Sheridan, Graham, Rooks, Ellis, Osborne, Mitchell, Cloud, Cloy, Clay, Pottawatomie, Jackson, Atchison, Jefferson, Leavenworth, Wyandott, Wallace, Logan, Gove, Trego, Lincoln, Ells, Ottawa, Riley, Geary, Wabaunsee, Shawnee, Osage, Douglas, Johnson, Greeley, Wichita, Scott, Lane, Ness, Rush, Pawnee, Russell, Barton, Saline, Dickinson, Morris, Lyon, Franklin, Miami, Linn, Coffey, Anderson, Allen, Bourbon, Hamilton, Kearny, Finney, Edwards, Stafford, Pratt, Reno, Kingman, Sedgwick, Butler, Cowley, Greenwald, Elk, Wilson, Neosho, Labette, Crawford, Cherokee, Stanton, Grant, Haskell, Gray, Ford, Kiowa, Barber, Harper, Morton, Stevens, Seward, Meade, Clark, Comanche, Montgomery, and Chautauque.
- Unit 2:** (No specific counties listed in the image).
- Unit 3:** (No specific counties listed in the image).
- Unit 4:** (No specific counties listed in the image).

Major highways shown include I-70, I-183, I-14, I-2, and I-54.

Figure 2. Spring 2008 Kansas wild turkey harvest questionnaire.

1 Which Unit Turkey Permit did you purchase this year (referred to as your initial permit)?

- 1 Unlimited Units
- 2 Unit 4

2 What is your state of residence?

3 What is your county of residence?

4 Did you hunt during the early archery-only turkey season (April 1 – April 8, 2008)? Check NO if you only hunted during the special youth and disabled season with a firearm.

- 1 Yes
- 2 No

5 Did you hunt during the special youth and disabled season (April 1 – April 8, 2007) using a firearm?

- 1 Yes
- 2 No

6 Did you hunting during the regular turkey season (April 9 – May 31, 2008)?

- 1 Yes
- 2 No

7 Please indicate the below option that best describes your harvest while using your initial unit permit (first tag)? Mark the appropriate circle if you did not hunt or did not harvest a turkey.

- 1 Adult Male
- 2 Juvenile Male
- 3 Bearded Female
- 4 Hunted but did not harvest
- 5 Did not hunt

8 In which county did you hunt most often while using your initial permit?

9 In which county did you harvest your first turkey?

10 Did you hunt on a KDWP Wildlife Area while using your initial permit?

- 1 Yes
- 2 No

11 On which area did you hunt the most while using your initial permit?

12 How did you perceive hunting pressure on this KDWP wildlife area while using your initial permit?

- 1 Heavy
- 2 Moderate
- 3 Light

13 Did you hunt on Walk In Hunting Access (WIHA) land?

- 1 Yes
- 2 No

Figure 2. Continued...

14 How did you perceive hunting pressure on the WIHA properties that you hunted while using your initial permit?

- 1 Heavy
- 2 Moderate
- 3 Light

15 Was your turkey harvested on a Wildlife Area, WIHA, or Private Land?

- 1 Wildlife Area
- 2 WIHA
- 3 Private Land

16 On which wildlife area did you harvest your first turkey?

17 On which day did you harvest your first turkey?

18 Was this bird taken by Firearm or Archery?

- 1 Firearm
- 2 Archery

19 Did you purchase a game tag (permit for second turkey) for the 2008 spring season?

- 1 Yes
- 2 No

20 The following questions pertain to your hunting activities while using ONLY a game tag. Please select the below option that best describes the type of bird you harvested using this second tag? Please indicate if you did not hunt or did not harvest a turkey while using a game tag.

- 1 Adult Male
- 2 Juvenile Male
- 3 Bearded Female
- 4 Hunted but did not harvest
- 5 Did not hunt

21 In which county did you hunt most while using your game tag?

22 In which county did you harvest your second turkey?

23 Did you hunt on a Wildlife Area while using your game tag?

- 1 Yes
- 2 No

24 On which Wildlife Area did you hunt the most while using your game tag?

25 How did you perceive hunting pressure on this KDWP wildlife area while using your game tag?

- 1 Heavy
- 2 Moderate
- 3 Light

26 Did you hunt Walk In Hunting Access (WIHA) land while using your game tag?

- 1 Yes
- 2 No

Figure 2. Continued...

27 How did you perceive hunting pressure on the WIHA tracts that you hunted while using your game tag?

- 1 Heavy
- 2 Moderate
- 3 Light

28 Was your second turkey harvested on a Wildlife Area, WIHA, or Private Land?

- 1 Wildlife Area
- 2 WIHA
- 3 Private Land

29 On which Wildlife Area did you harvest your second turkey?

30 On what date did you harvest your second bird?

31 Did you take this bird by firearm or by archery?

- 1 Firearm
- 2 Archery

32 How would you best describe your satisfaction with the Kansas turkey management program?

- 1 Very Dissatisfied
- 2 Dissatisfied
- 3 Uncertain
- 4 Satisfied
- 5 Very Satisfied

33 Which of the following best describes your satisfaction with Kansas turkey hunting?

- 1 Very Dissatisfied
- 2 Dissatisfied
- 3 Uncertain
- 4 Satisfied
- 5 Very Satisfied

34 Do you approve of hunting turkeys over bait during the spring season?

- 1 Approve
- 2 Disapprove
- 3 Neutral

35 Please include any additional comments you may have. Thank you for your time! Be sure to click the submit button to complete the survey.

Figure 3. The 6 wild turkey management regions in Kansas.

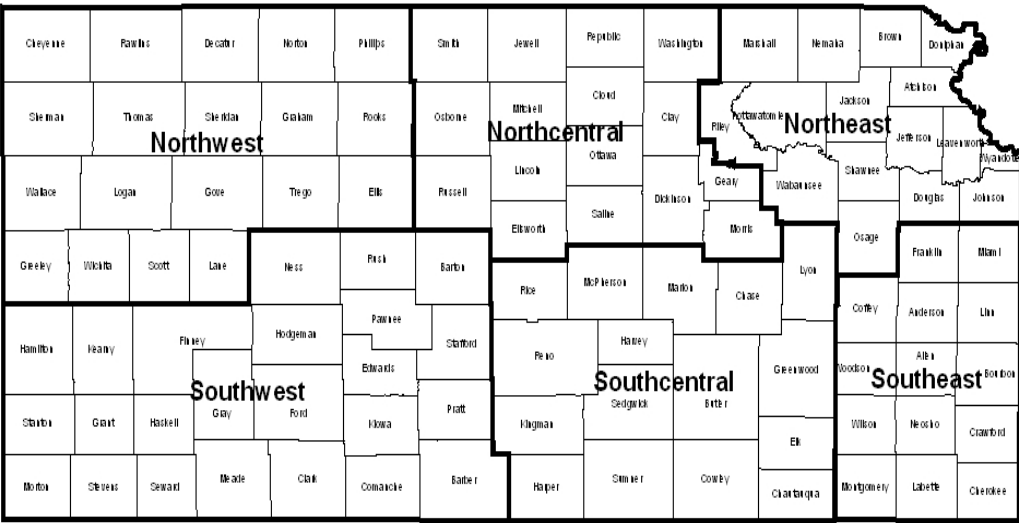


Figure 4. Age distribution of 6,651 spring turkey hunters randomly selected to receive the harvest survey, 2008.

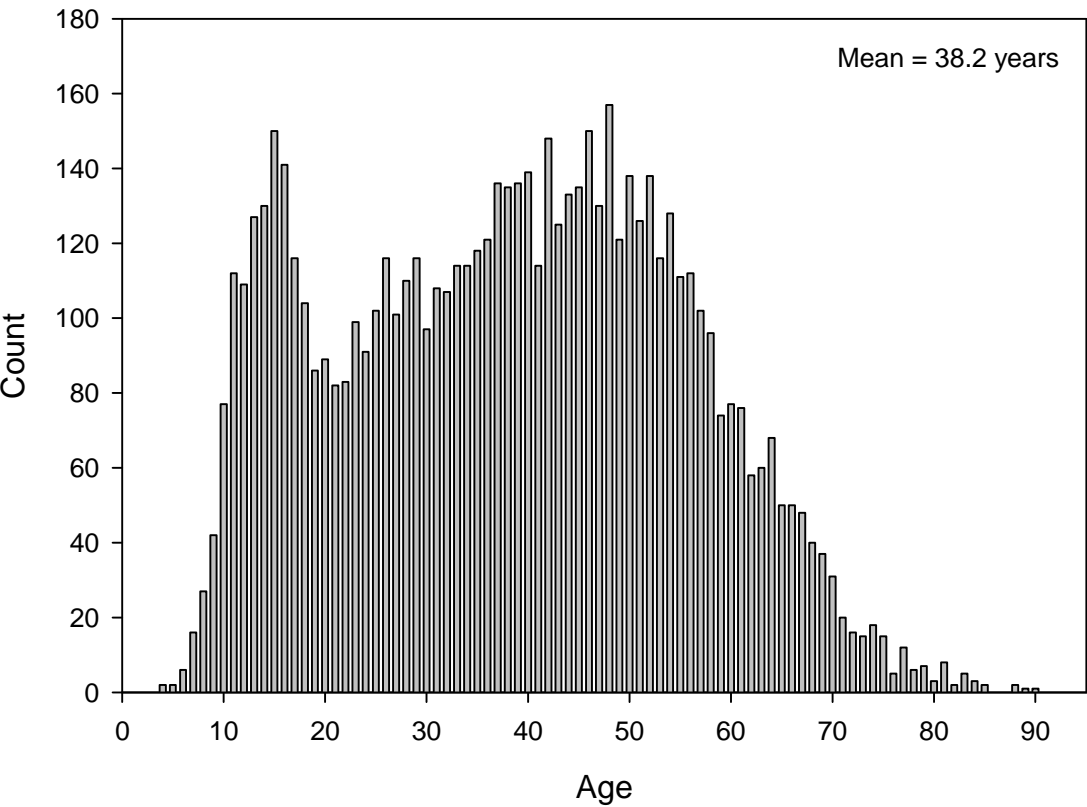


Figure 5. Daily (A) and cumulative (B) harvest distribution during the spring 2008 wild turkey seasons in Kansas. The black bars on the daily distribution histogram indicate the weekends. The dashed line on the cumulative graph is a reference line at the 50<sup>th</sup> percentile.

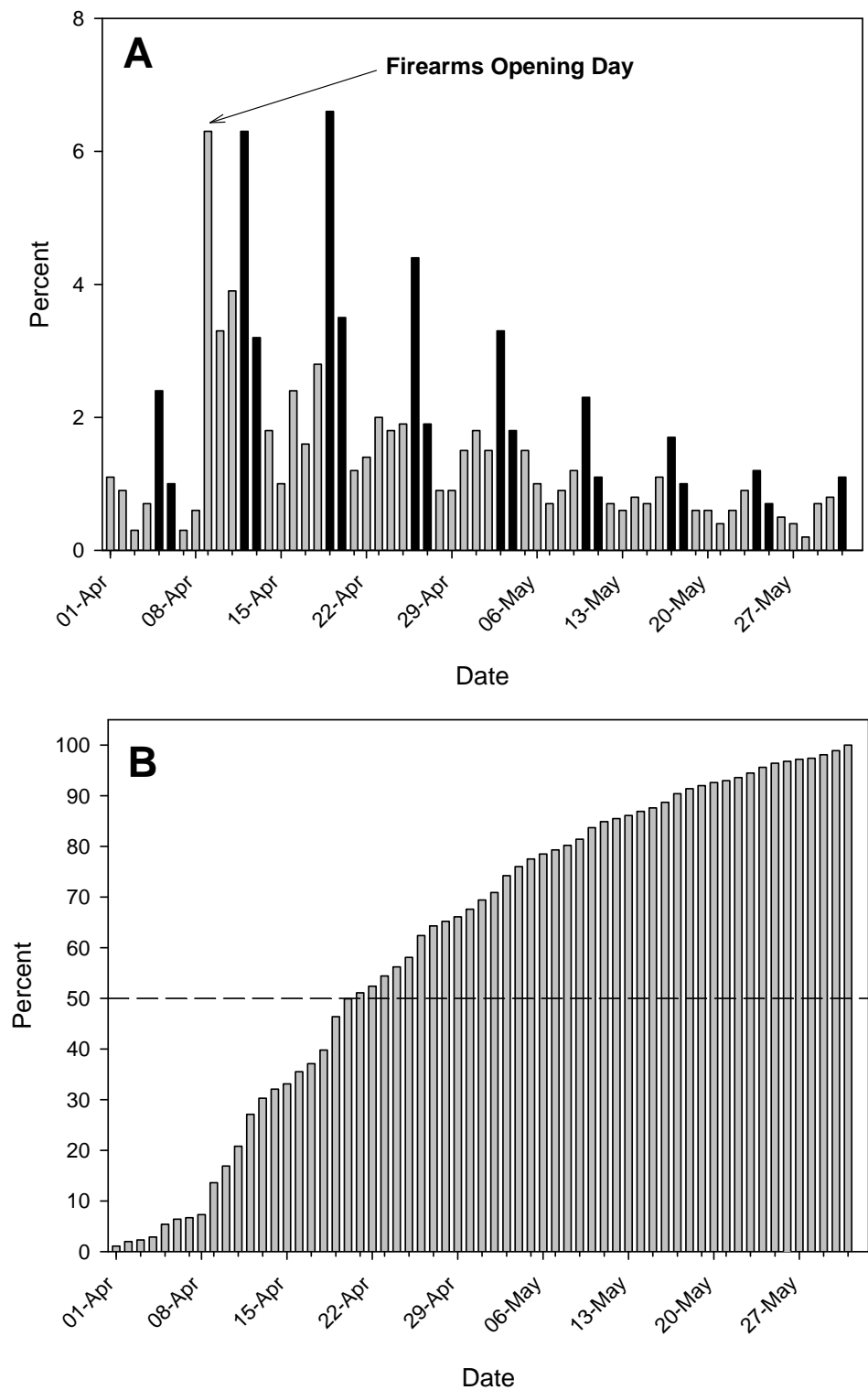




Figure 6. Regional estimates of spring wild turkey hunter numbers and harvest in Kansas, 2005-2008. The error bars represent the 95% confidence intervals.

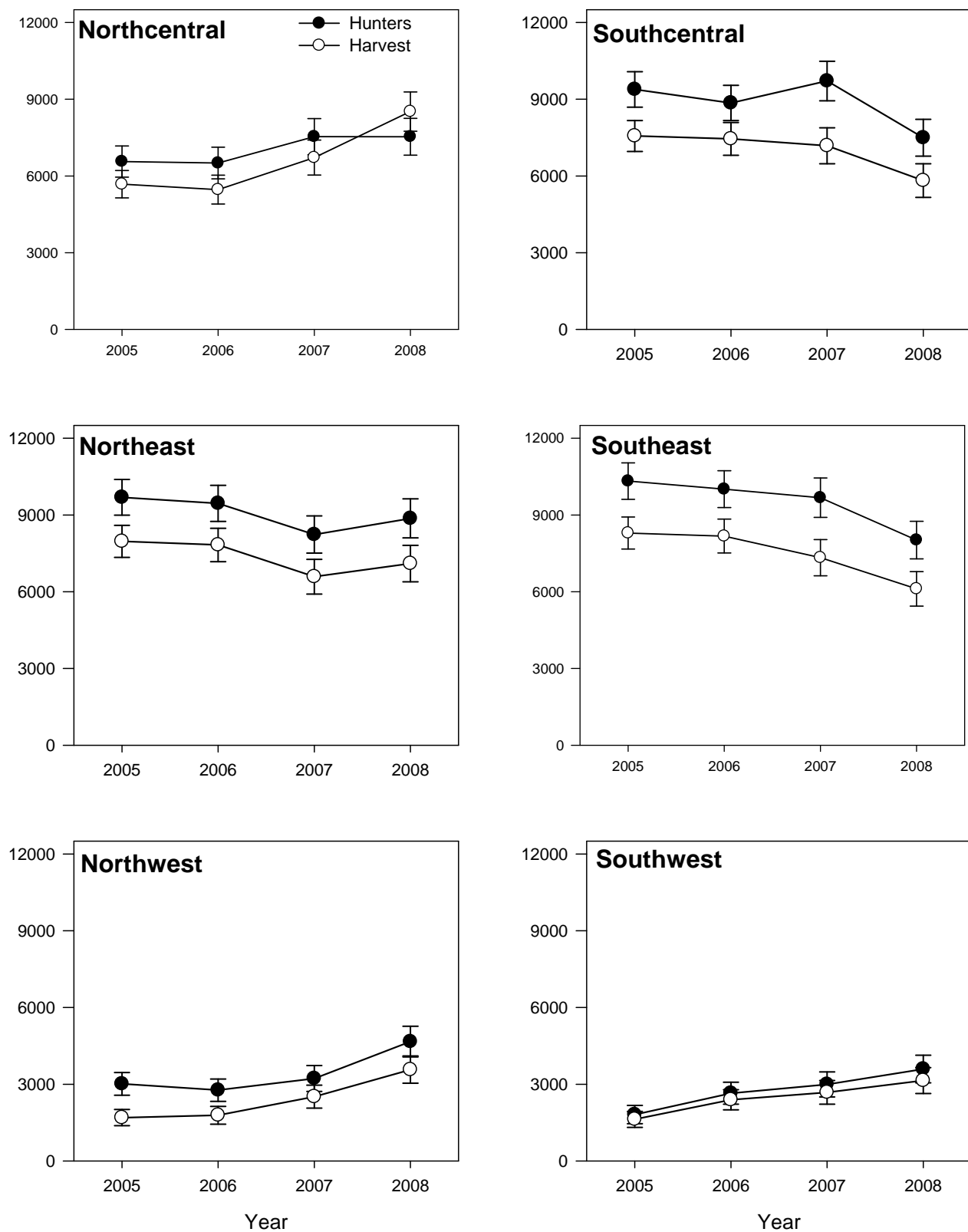


Figure 7. Percent of active turkey hunters harvesting at least one bird and the percentage of harvest composed of jakes during Kansas' spring turkey seasons, 2005-2008.

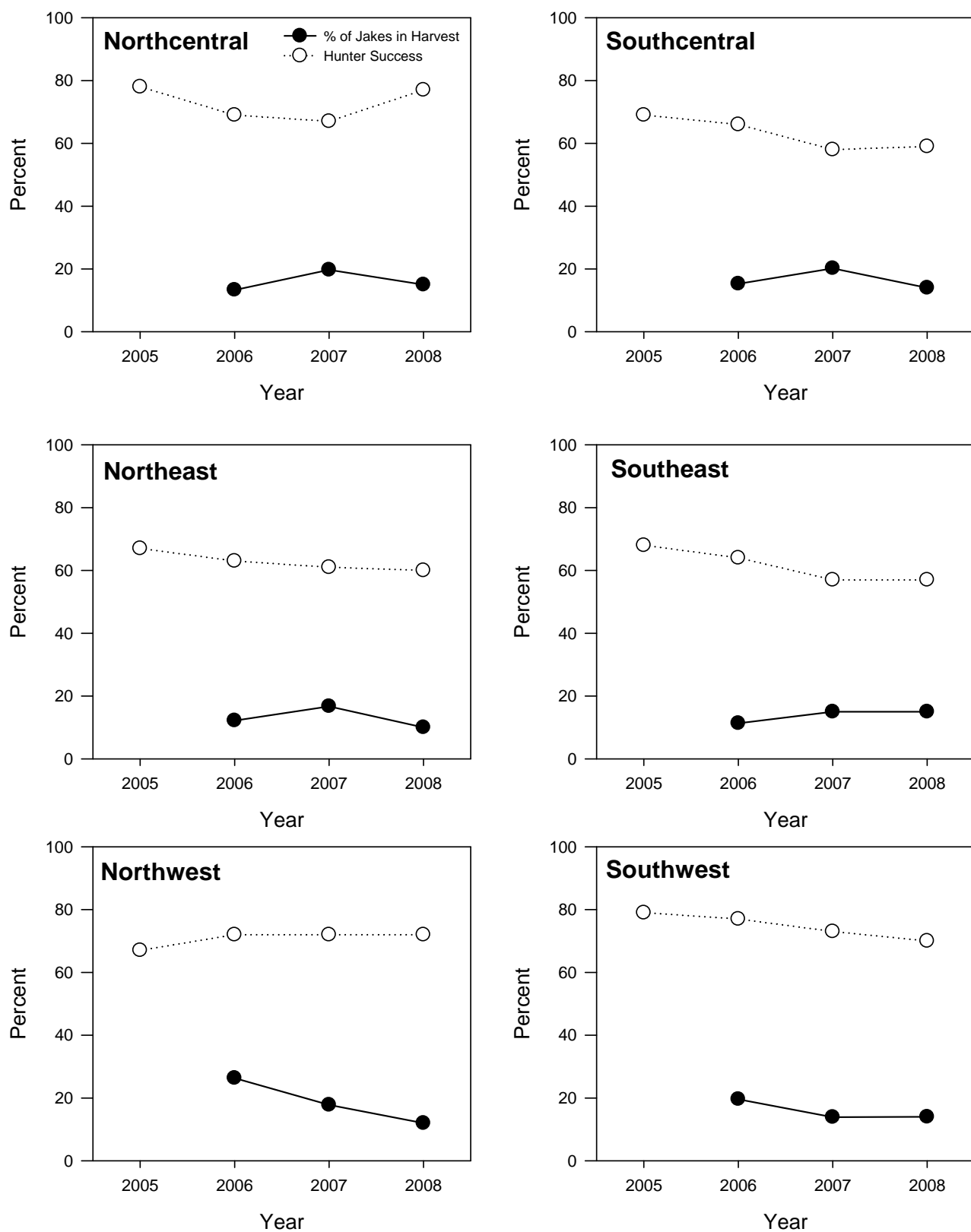


Figure 8. Statewide percentage of Kansas wild turkey hunters that indicated they are 'satisfied' or 'very satisfied' with management and hunting, 2005-2008.

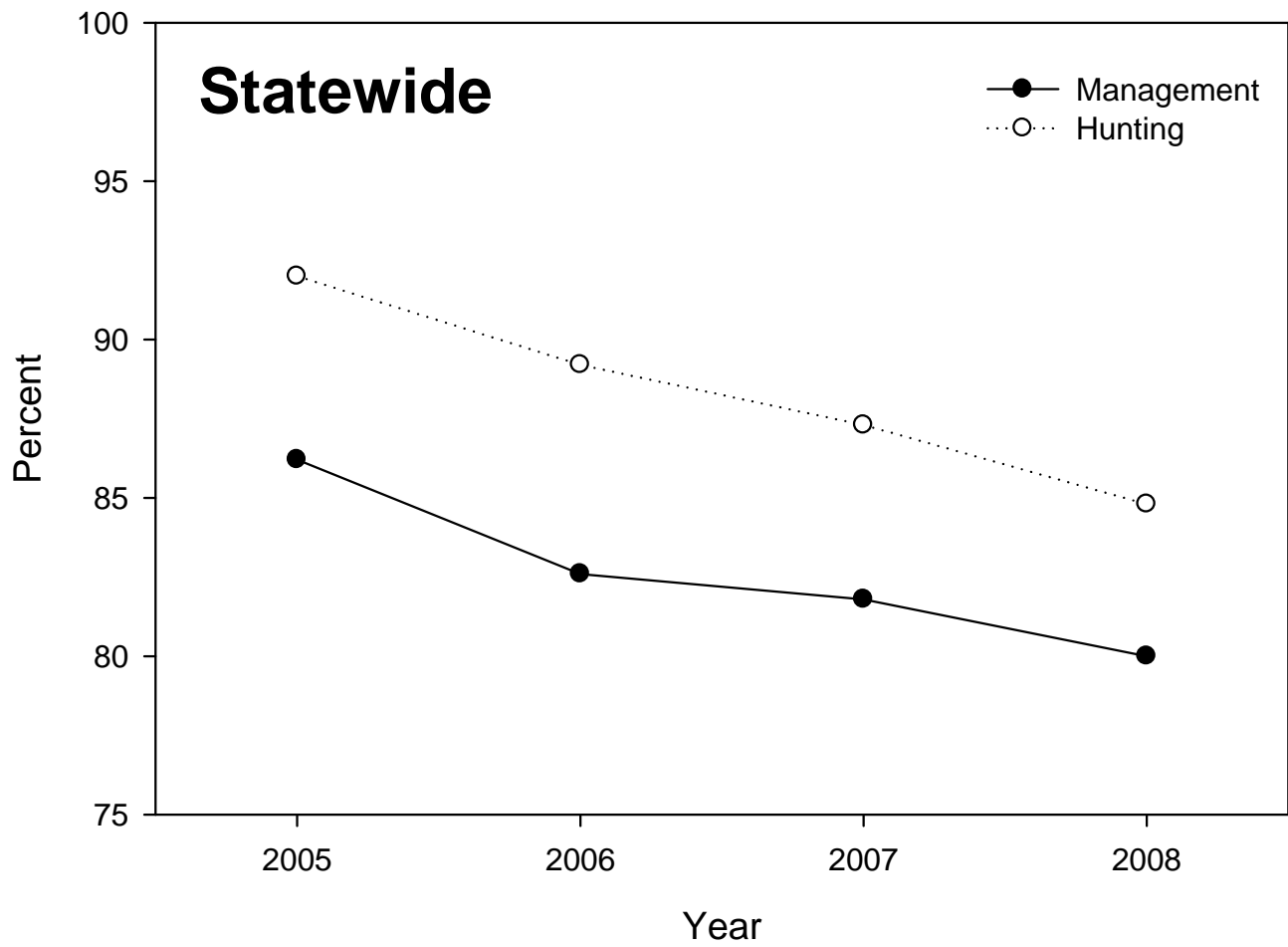


Figure 9. Regional percentages of Kansas wild turkey hunters indicating that they are 'satisfied' or 'very satisfied' with management and hunting, 2005-2008.

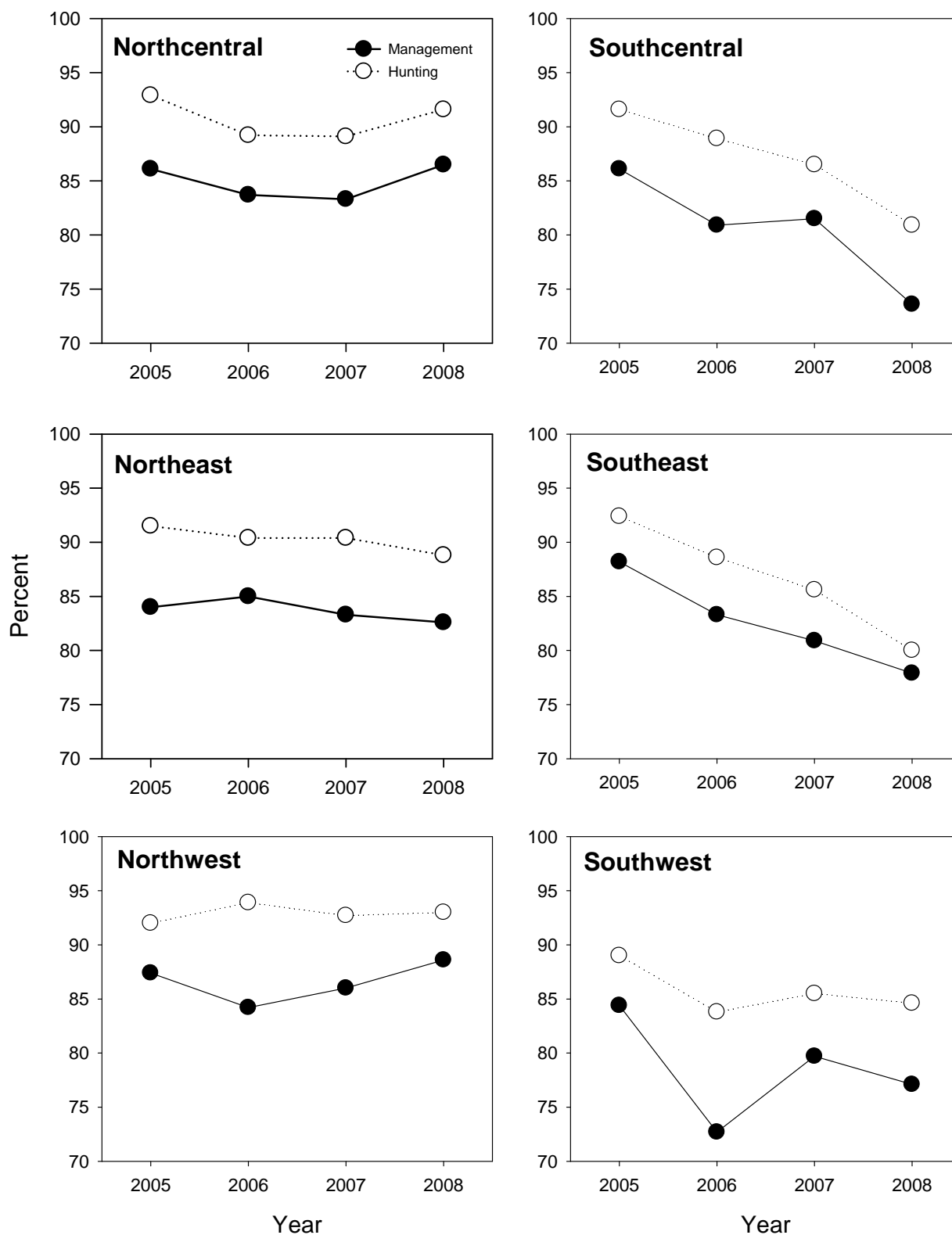


Figure 10. Percentages of residents ( $n = 1,413$ ) and non-residents ( $n = 690$ ) expressing each level of approval for hunting turkeys over bait during Kansas' spring season.

