

MISSOURI WILDLIFE HARVEST AND POPULATION STATUS REPORT

WILD TURKEY – 2011

Jason L. Isabelle
Resource Scientist
Missouri Department of Conservation
1110 South College Avenue
Columbia, MO 65201
(573) 882-9909, ext. 3291
Jason.Isabelle@mdc.mo.gov

WILD TURKEY POPULATION STATUS

Missouri's wild turkey population estimate during fall 2011 was approximately 440,000 birds. Based on harvest and survey data, the state's turkey population has declined by approximately 30% during the last decade, although the magnitude of this decline has not been uniform across the state. Until last year's hatch, which served to increase turkey numbers in the region, it is likely that the turkey population in Northeast Missouri had declined by nearly 50%.

The cause of reduced turkey numbers in recent years has been poor production. The Missouri Department of Conservation (MDC) monitors turkey recruitment annually through its wild turkey brood survey. Results of the survey indicate that from 2007-10, Missouri's turkey population experienced 4 consecutive years of some of the poorest production on record.

Fortunately, dry weather during June and July of 2011 provided ideal conditions for turkey recruitment throughout much of Missouri. As a result, most of the state experienced a substantially better hatch than those experienced in recent years. At the statewide scale, production in 2011 was the highest since 2002, and was 42% and 21% higher than the previous 5 and 10-year averages, respectively.

The improved hatch of 2011 has served to bolster turkey numbers throughout much of Missouri. Based on results from MDC's Bowhunter Observation Survey, archers observed 30% more turkeys per unit effort during fall 2011 than they did in 2010. More turkeys were observed per unit effort in all regions of the state, with the exception of the Northwest region. Especially notable increases in turkey observations occurred in Northeast and Southeast Missouri, where observations were 98% and 86% greater in fall 2011 than they were in 2010, respectively.

Although turkey numbers in most regions have improved from where they were one year ago, they remain below the levels observed in the early 2000s. Since wild turkey abundance is driven by the success of the hatch, several more years of improved production will be needed for continued growth of the state's turkey population. Although a good hatch in 2011 will result in an abundance of jakes in 2012, the poor hatches of 2007-10 will continue to make finding mature gobblers a bit more challenging than in years past.

WILD TURKEY BROOD SURVEY

The Conservation Department has been conducting a wild turkey brood survey annually since 1959. During the survey, Department staff and citizen volunteers record observations of hens and poults during June, July, and August. Turkey sightings are recorded on observation cards, which MDC mails to participants at the beginning of each survey month. By recording observations of hens and poults, survey participants provide MDC with information that serves as an index to turkey recruitment. It is through this survey that MDC determines the success of each year's turkey hatch. Turkey observations are collected at the county-level and analyzed by Turkey Productivity Region (Figure 1), which are counties grouped together based on similar land cover composition.

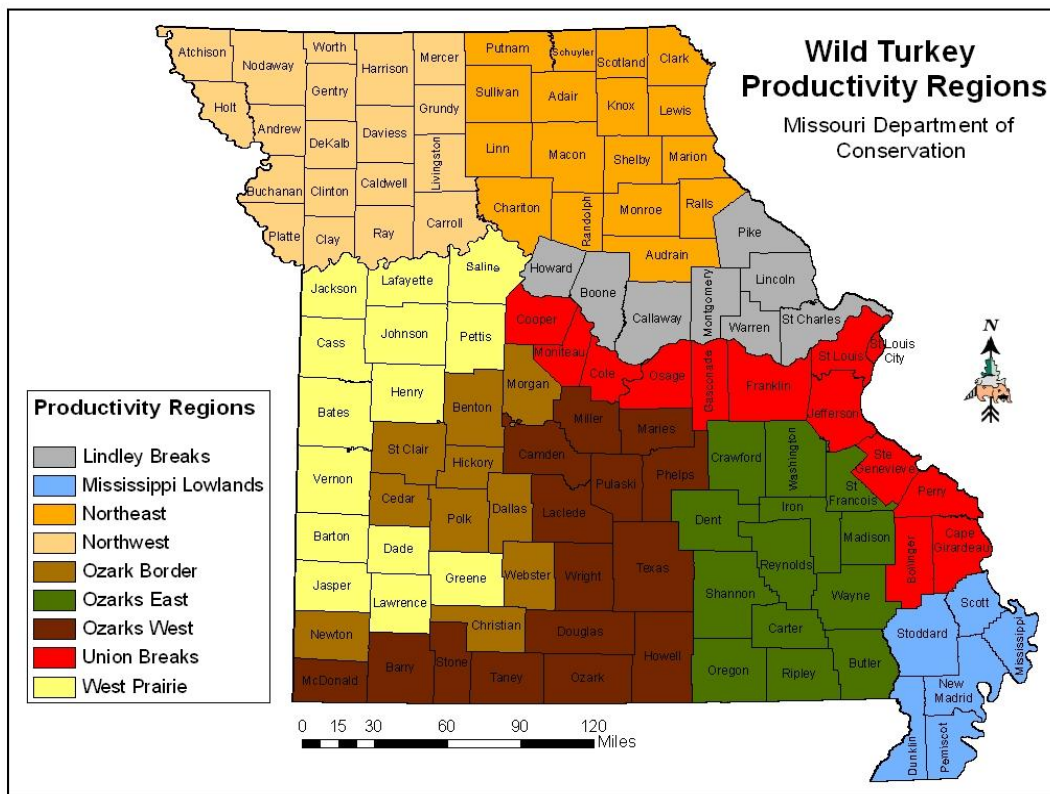


Figure 1. Turkey Productivity Regions in Missouri. Each region consists of counties grouped together based on similar land cover composition.

By examining results of the survey, MDC staff determines the percentage of hens observed with and without poults, as well as the average number of poults per hen for those hens observed with a brood. Observations of hens and poults also yield a poult-to-hen ratio, which is reported as the average number of poults per hen. The poult-to-hen ratio includes observations of hens observed with and without broods.

In 2011, MDC staff and approximately 7,000 volunteers recorded observations of over 53,000 turkeys during the 3-month survey, including 3,587 broods (Table 1). On a statewide basis, 45%

of hens were observed with poults. The percentage of hens observed with a brood ranged from a low of 35% in the Northwest region to a high of 56% in the Lindley Breaks region (Table 2). Statewide, the average brood size was 4.7 poults. Average brood size ranged from a low of 4.2 poults in the Union Breaks region to a high of 5.1 poults in the Ozark Border region (Table 2).

Table 1. Wild turkey observations by Turkey Productivity Region (Figure 1). Data were obtained during Missouri’s wild turkey brood survey conducted in June, July, and August, 2011.

Productivity Region	Hens w/ Broods	Hens w/o Broods	Total Hens	Poults	Broods	Gobblers
Lindley Breaks	1,070	824	1,894	5,149	561	786
Mississippi Lowlands	69	85	154	299	38	128
Northeast	1,092	1,111	2,203	5,493	629	1,128
Northwest	436	821	1,257	2,121	262	1,024
Ozark Border	639	931	1,570	3,257	333	982
Ozarks East	586	545	1,131	2,679	322	355
Ozarks West	628	993	1,621	3,013	352	792
Union Breaks	1,467	1,663	3,130	6,169	781	1,659
West Prairie	604	1,029	1,633	2,648	309	1,273
Statewide	6,591	8,002	14,593	30,828	3,587	8,127

Table 2. Wild turkey brood survey data by Turkey Productivity Region (Figure 1). Data were obtained during Missouri’s wild turkey brood survey conducted in June, July, and August, 2011.

Productivity Region	% Hens w/ Poults	Average Brood Size	Poult-to-Hen Ratio	Gobbler-to-Hen Ratio
Lindley Breaks	56%	4.8	2.3	0.41
Mississippi Lowlands	45%	4.3	1.7	0.83
Northeast	50%	5.0	2.1	0.51
Northwest	35%	4.9	1.4	0.81
Ozark Border	41%	5.1	1.6	0.63
Ozarks East	52%	4.6	2.2	0.31
Ozarks West	39%	4.8	1.5	0.49
Union Breaks	47%	4.2	1.6	0.53
West Prairie	37%	4.4	1.4	0.78
Statewide	45%	4.7	1.7	0.56

The 2011 statewide poult-to-hen ratio of 1.7 was 55% higher than the 2010 ratio, and 42% higher, 21% higher, and 6% lower than the 5, 10, and 20-year statewide averages, respectively (Table 3). Among Turkey Productivity Regions, poult-to-hen ratios ranged from a low of 1.4 in the Northwest and West Prairie regions to a high of 2.3 in the Lindley Breaks region (Table 3).

Table 3. Index (poult-to-hen ratio) of Missouri turkey recruitment listed by Turkey Productivity Region (Figure 1). Data were obtained from the 2011 brood survey and are compared to previous years. For each interval value, the % change indicates how the 2011 index compares to the previous year or the average for periodic intervals.

Productivity Region	2011 Index	1-year (2010) Change	5-year (2006-2010) Change	10-year (2001-2010) Change	20-year (1991-2010) Change
Lindley Breaks	2.3	+92%	+92%	+53%	+15%
Mississippi Lowlands	1.7	-26%	-6%	-35%	-23%
Northeast	2.1	+91%	+91%	+62%	+24%
Northwest	1.4	+17%	+17%	0%	-30%
Ozark Border	1.6	+60%	+60%	+14%	-11%
Ozarks East	2.2	+100%	+47%	+29%	+10%
Ozarks West	1.5	+36%	+25%	0%	-12%
Union Breaks	1.6	+45%	+23%	+7%	-6%
West Prairie	1.4	+27%	+56%	+17%	-22%
Statewide	1.7	+55%	+42%	+21%	-6%

Especially notable improvements in turkey recruitment occurred in the Northeast, Lindley Breaks, and Ozarks East regions, where recruitment was 91%, 92%, and 100% higher than that observed in 2010, respectively. In the Northeast and Lindley Breaks regions, recruitment in 2011 was 62% and 53% higher than the previous 10-year averages, respectively.

Statewide, Missouri's poult-to-hen ratio peaked at 4.6 in 1971 and has steadily declined since the late 1980s (Figure 2). Recruitment has been especially poor in recent years, with the statewide poult-to-hen ratio exceeding 1.5 only once from 2005-10. The 2011 hatch represents a substantial improvement from the hatches of recent years and should serve to bolster turkey numbers, especially in Northeast Missouri where the largest decline in turkey numbers has been observed.

Index of Wild Turkey Recruitment in Missouri

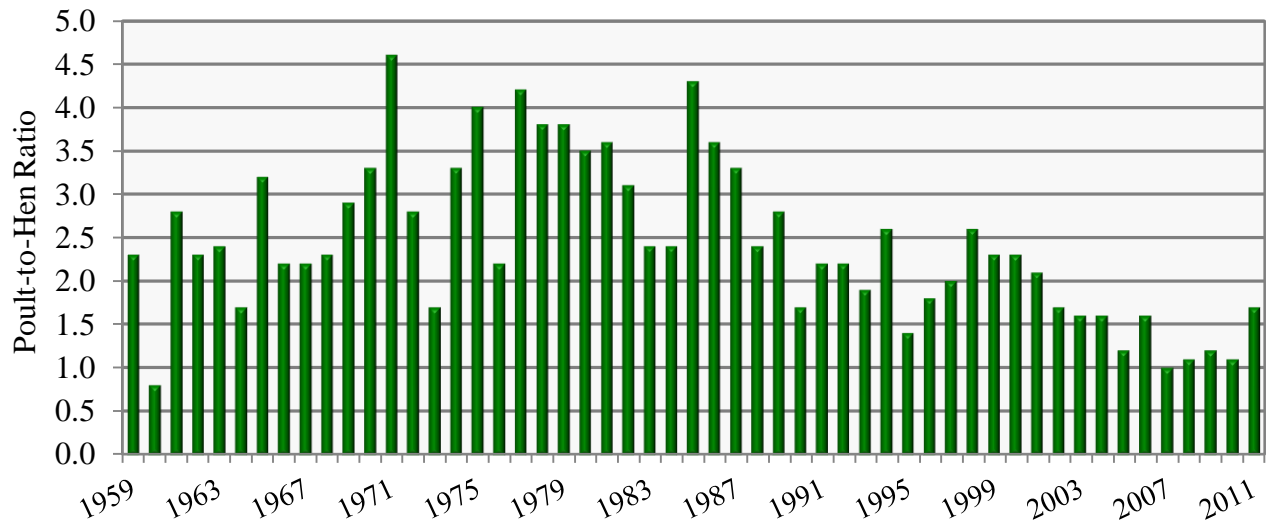


Figure 2. Missouri statewide poult-to-hen ratios derived from the wild turkey brood survey conducted in June, July, and August, 1959-2011.

BOWHUNTER OBSERVATION SURVEY

Since 1983, MDC staff and citizen volunteers have recorded the number of wild turkeys, deer, and furbearers observed while bowhunting. Since archers also record the number of hours that they bowhunt, an index of abundance can be calculated for each observed species. For wild turkeys, an index of abundance is reported as the number of turkeys observed per 1,000 hours bowhunting.

On a statewide basis, the number of turkeys observed per 1,000 hours bowhunting in 2011 was 445 (Figure 3). On a regional basis, the turkey observation index ranged from a low of 275 in the Mississippi Lowlands region to a high of 581 in the West Prairie region (Table 4). The statewide average of 445 represents a 30% increase from 2010 and a 4% increase from the previous 5-year average. The index, however, remains 16% and 18% below the previous 10 and 20-year averages, respectively (Table 4).

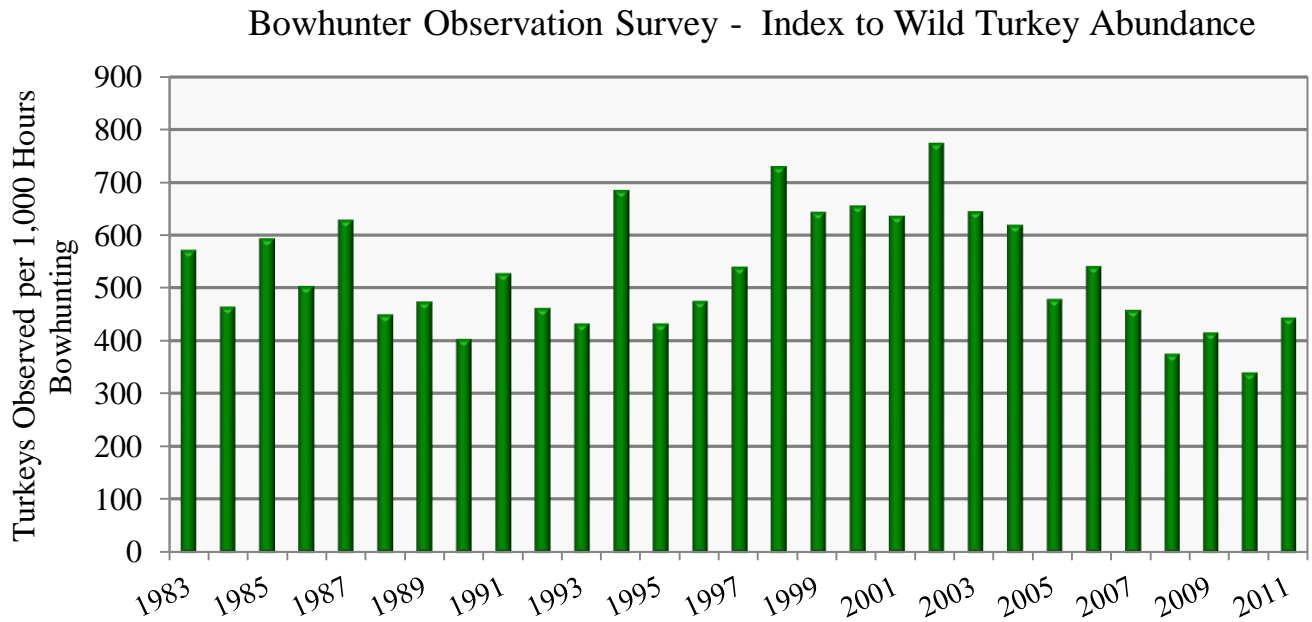


Figure 3. Statewide observations of wild turkeys by bowhunters in Missouri, 1983-2011. Data are the average number of turkeys observed per 1,000 hours bowhunting.

Table 4. Index of wild turkey abundance in Missouri listed by Turkey Productivity Region (Figure 1). Data were obtained from the Bowhunter Observation Survey. Index values are the number of turkeys observed per 1,000 hours bowhunting. For each interval value, the % change indicates how the 2011 index compares to the previous year or the average for periodic intervals.

Productivity Region	2011 Index	1-year (2010) Change	5-year (2006-2010) Change	10-year (2001-2010) Change	20-year (1991-2010) Change
Lindley Breaks	370	+27%	+9%	-2%	-12%
Mississippi Lowlands	275	+25%	-33%	-18%	-5%
Northeast	577	+98%	+39%	-1%	-16%
Northwest	489	-19%	-25%	-39%	-37%
Ozark Border	413	+38%	+6%	-21%	-25%
Ozarks East	299	+86%	+12%	-12%	-4%
Ozarks West	309	+11%	-14%	-31%	-33%
Union Breaks	406	+21%	+1%	-10%	-10%
West Prairie	581	+12%	0%	-18%	-11%
Statewide	445	+30%	+4%	-16%	-18%

HARVEST

2011 Spring Turkey Season

During the youth spring turkey season, which took place on April 9-10, hunters harvested 3,892 turkeys. This harvest total represents a slight decline (1%) from the 2010 harvest of 3,941 turkeys, which was the highest harvest since the youth season was initiated in 2001. Hunters harvested 38,328 turkeys during the 21-day regular spring turkey season, which ran from April 18 – May 8.

Juvenile male turkeys represented 20% of the regular season harvest, which is identical to the previous 5-year average and slightly below the previous 10-year average of 22%. The percentage of juvenile males in the spring harvest continues to track the poult-to-hen ratio from the previous year (Figure 4). The total 2011 spring harvest, including both the youth and regular seasons, was 42,220. This harvest total represents a 9% decline from the 2010 harvest (Table 5). Counties with the highest total spring harvest were Franklin, Texas, and Bollinger, where 941, 757, and 737 turkeys were harvested, respectively.

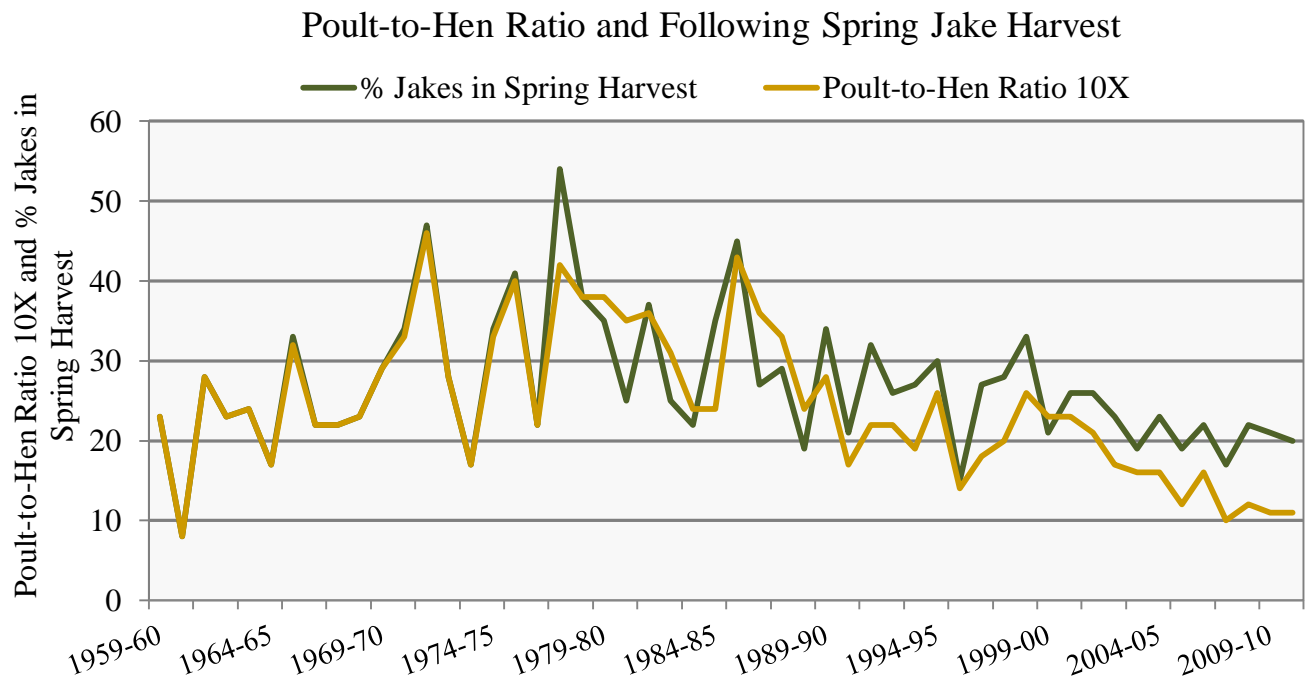


Figure 4. Missouri's statewide poult-to-hen ratio multiplied by 10 compared with the percentage of jakes (juvenile males) in the following year's spring harvest, 1959-2011.

Table 5. Total spring turkey harvest and permit sales^a in Missouri, 1985-2011.

Year	Spring Harvest	% Change From Previous Year	Spring Permit Sales ^a	% Change From Previous Year
1985 ^b	24,770	+26.6	69,945	-8.0
1986	30,965	+25.0	77,972	+11.5
1987	35,951	+16.1	85,723	+9.9
1988	33,187	-7.7	94,301	+10.0
1989	35,618	+7.3	92,901	-1.5
1990	30,056	-15.6	92,093	-0.9
1991	32,237	+7.3	89,077	-3.3
1992	33,035	+2.5	89,803	+0.8
1993	34,354	+4.0	89,899	+0.1
1994	37,721	+9.8	90,810	0.0
1995	37,472	-1.2	99,412	+8.8
1996	37,708	+0.3	99,879	+0.5
1997	33,216	-12.4	99,933	+0.1
1998 ^c	48,462	+45.9	105,518	+5.6
1999	50,299	+3.8	110,939	+5.1
2000	56,841	+13.0	115,190	+3.8
2001 ^d	57,842	+1.7	117,736	+2.2
2002	57,034	-1.3	125,157	+6.3
2003	58,421	+2.4	130,021	+3.8
2004	60,744	+3.9	124,533	-4.2
2005	57,743	-5.2	120,215	-3.5
2006	54,712	-5.2	114,529	-4.8
2007	48,472	-11.0	115,897	+1.2
2008	46,134	-4.4	115,047	-0.7
2009	44,713	-3.5	112,579	-2.1
2010	46,194	+3.3	105,501	-6.3
2011	42,220	-8.6	101,106	-4.2

^a Does not include resident landowner permits.

^b All 114 counties open to spring turkey hunting.

^c Season length increased from 14 to 21 days.

^d 2-day youth season initiated.

The majority of the wild turkeys harvested during the 2011 spring season were shot in southern Missouri (Figure 5). There were 26 counties in which hunters harvested more than 500 turkeys during the combined youth and regular seasons. This number represents a substantial decline from 5 years ago when over 500 birds were harvested in 53 counties. During the 2011 spring turkey season, only three counties in the 500-or-better category were located north of the Missouri River, compared to five years ago when this region had 18 counties in this category.

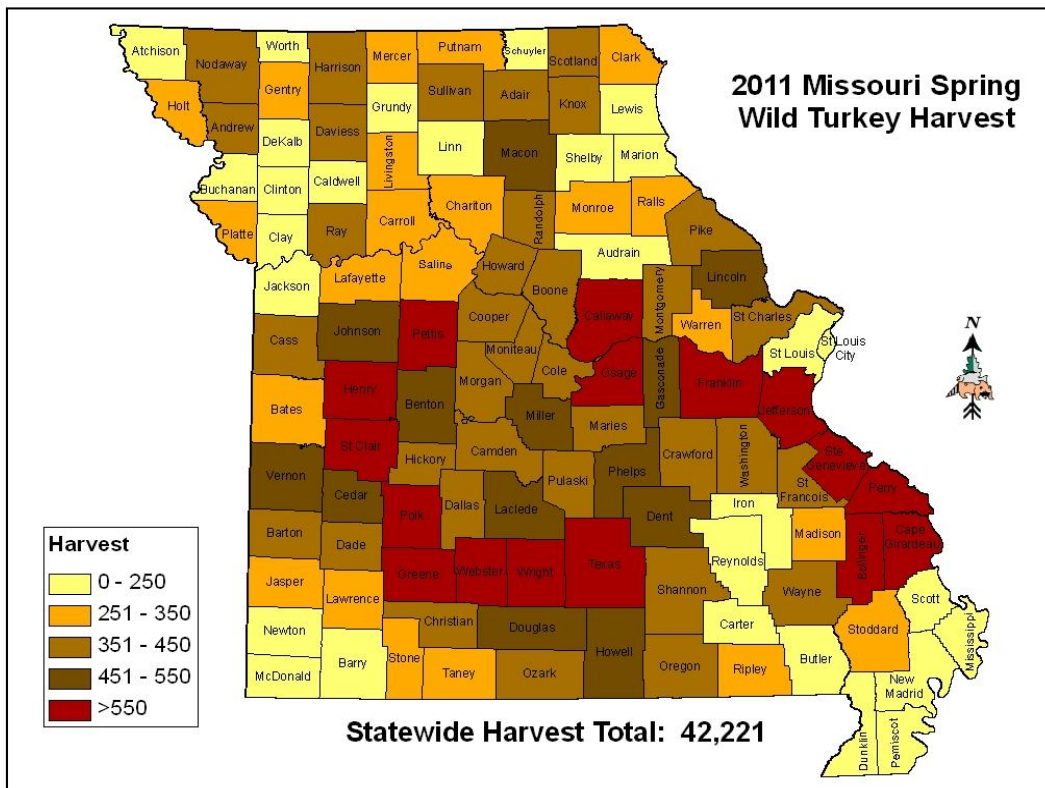


Figure 5. Total spring wild turkey harvest in Missouri, 2011.

Spring turkey hunting in Missouri is a substantial recreational activity with more than 500,000 days spent afield each year. Total permit sales for the 2011 spring turkey season (101,106; excluding resident landowner permits), however, declined by 4% from the 2010 spring permit sales total of 105,501. Spring turkey permit sales have declined by 22% from the peak year of 2003, when over 130,000 permits were sold (Figure 6, Table 5). Spring turkey permit sales in 2011 included 94,934 resident permits and 6,172 nonresident permits. An additional 42,163 permits were distributed to resident landowners, which brought the total number of spring turkey hunters in Missouri in 2011 to 143,269.

Missouri Spring Wild Turkey Harvest and Permit Sales

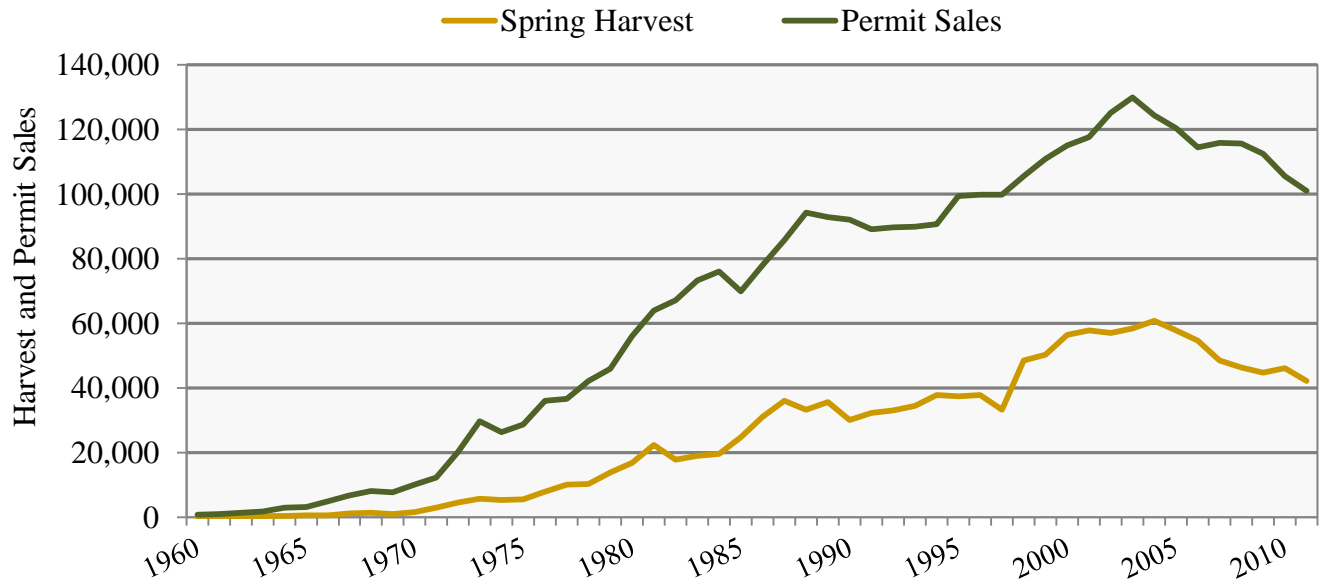


Figure 6. Number of wild turkeys harvested during the spring season (youth and regular seasons) in Missouri, and the number of turkey hunting permits sold for the spring season, 1960-2011. Permit sales do not include resident landowner permits.

Spring turkey harvest in Missouri has declined by 30% since the record harvest of over 60,000 birds in 2004. Although low production from 2007-10 and the resulting lower numbers of turkeys on the landscape have impacted harvest, spring permit sale declines have impacted harvest as well. Spring permit sales have declined by 22% since 2003, contributing in part to a 23% reduction in the number of hunting trips. Spring turkey hunter success, which takes into account both harvest and effort, has stabilized since 2007 after declining from 2000-06 (Figure 7). In 2011, 31% of permit buyers that hunted during the spring turkey season in Missouri harvested at least 1 turkey.

Spring Turkey Hunter Success in Missouri

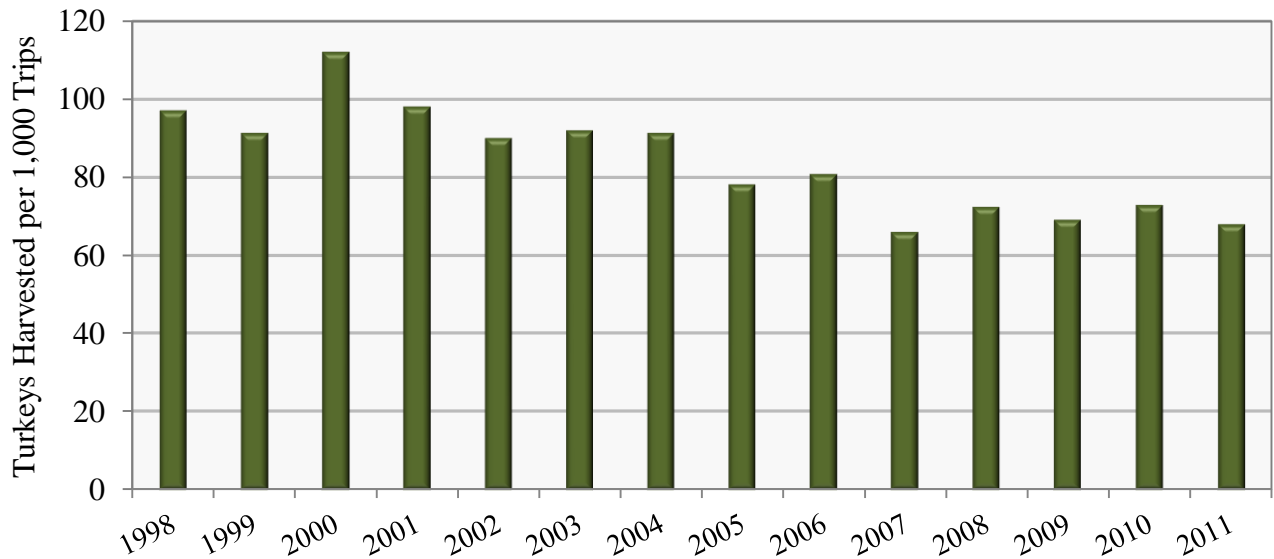


Figure 7. Statewide spring turkey hunter success in Missouri. Data are the number of turkeys harvested per 1,000 hunting trips, 1998-2011.

2011 Fall Firearms Turkey Season

The 2011 fall firearms turkey harvest total of 7,077 represents a 19% increase in harvest from the 2010 season. The majority of the fall firearms harvest occurred in southern Missouri (Figure 8). Counties where hunters harvested more than 100 turkeys included Benton, Bollinger, Callaway, Cass, Cedar, Dade, Dent, Franklin, Greene, Henry, Laclede, Polk, St. Clair, St. Francois, Ste. Genevieve, Vernon, Webster, and Wright. The top three counties in harvest were Greene, Franklin, and Henry, where 210, 194, and 175 turkeys were harvested, respectively.

The increase in fall firearms turkey harvest in 2011 was due in part to a greater abundance of turkeys on the landscape. The improved production observed throughout much of Missouri in 2011 bolstered turkey numbers, resulting in more turkeys available for fall turkey hunters. In addition to increased turkey numbers, fall firearms turkey permit sales increased by 9% in 2011.

Of the 15,020 fall firearms turkey permits sold in 2011, 14,779 were purchased by Missouri residents and 241 by nonresidents; an additional 60,153 permits were distributed to resident landowners. Although permit sales increased in 2011, fall firearms turkey hunting in Missouri has generally been declining in popularity since the late 1980s when over 50,000 permits were sold and over 28,000 turkeys were harvested during the 14-day season (Figure 9, Table 6).

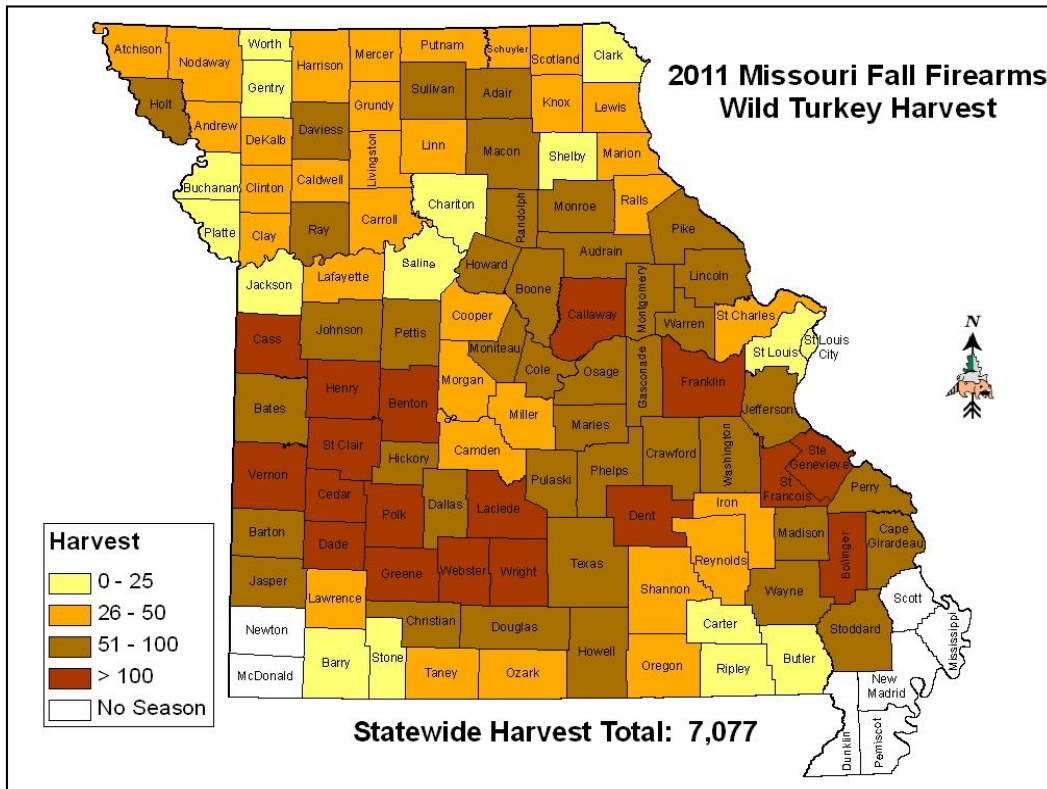


Figure 8. Missouri fall firearms wild turkey harvest, 2011.

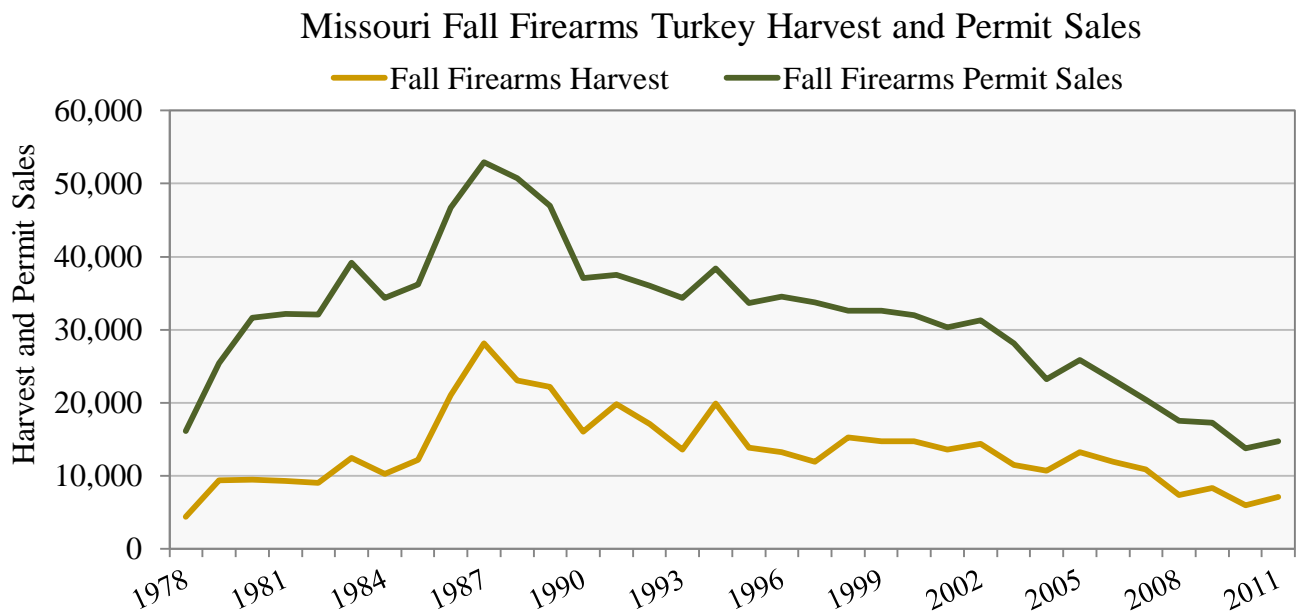


Figure 9. Number of wild turkeys harvested during the fall firearms turkey season in Missouri, and the number of fall firearms permits sold, 1978-2011. Permit sales do not include resident landowner permits.

Table 6. Fall firearms turkey harvest and permit sales^a in Missouri, 1986-2011.

Year	Fall Firearms Harvest	% Change From Previous Year	Fall Permit Sales ^a	% Change From Previous Year
1986 ^b	21,019	+72.6	46,688	+28.9
1987	28,139	+33.9	52,922	+13.4
1988	23,080	-18.0	50,715	-4.2
1989	22,131	-4.1	46,946	-7.4
1990	16,015	-27.6	37,080	-21.0
1991	19,788	+23.6	37,469	+1.0
1992	17,061	-13.8	36,033	-3.8
1993	13,569	-20.4	34,379	-4.6
1994	19,869	+46.4	38,424	+11.8
1995	13,866	-30.2	33,642	-12.6
1996	13,207	-4.8	34,522	+2.6
1997	11,866	-10.2	33,765	-2.2
1998	15,343	+29.3	32,593	-3.5
1999	14,651	-4.5	32,606	0.0
2000	13,230	-9.7	31,968	-2.0
2001	13,596	+2.8	30,949	-3.2
2002	14,392	+5.9	31,329	+1.2
2003	11,436	-20.5	28,108	-10.3
2004	11,824	+3.4	23,215	-17.4
2005 ^c	13,233	+11.9	25,805	+11.2
2006	11,927	-9.9	23,141	-10.3
2007	10,859	-9.0	20,397	-11.9
2008	7,389	-32.0	17,533	-14.0
2009	8,351	+13.0	17,287	-1.4
2010	5,928	-29.0	13,736	-20.5
2011	7,077	+19.4	15,020	+9.3

^a Does not include resident landowner permits.

^b Bag limit increased from 1 to 2 birds.

^c Season length increased from 14 to 31 days.

2011-12 Fall Archery Turkey Season

Hunters harvested 2,923 turkeys during the 2011-12 fall archery turkey season (Figure 10); the third highest archery harvest since the season began in 1975 (Figure 11). The 2011-12 archery turkey harvest total represents a 34% increase from the 2010-11 season. Unlike the fall firearms turkey harvest, which has shown a declining trend since the late 1980s (Figure 9), the fall archery harvest continued to increase until the mid-2000s. Since 2005, archery turkey harvests have fluctuated substantially on an annual basis, while showing a general trend towards stabilization (Figure 11, Table 7).

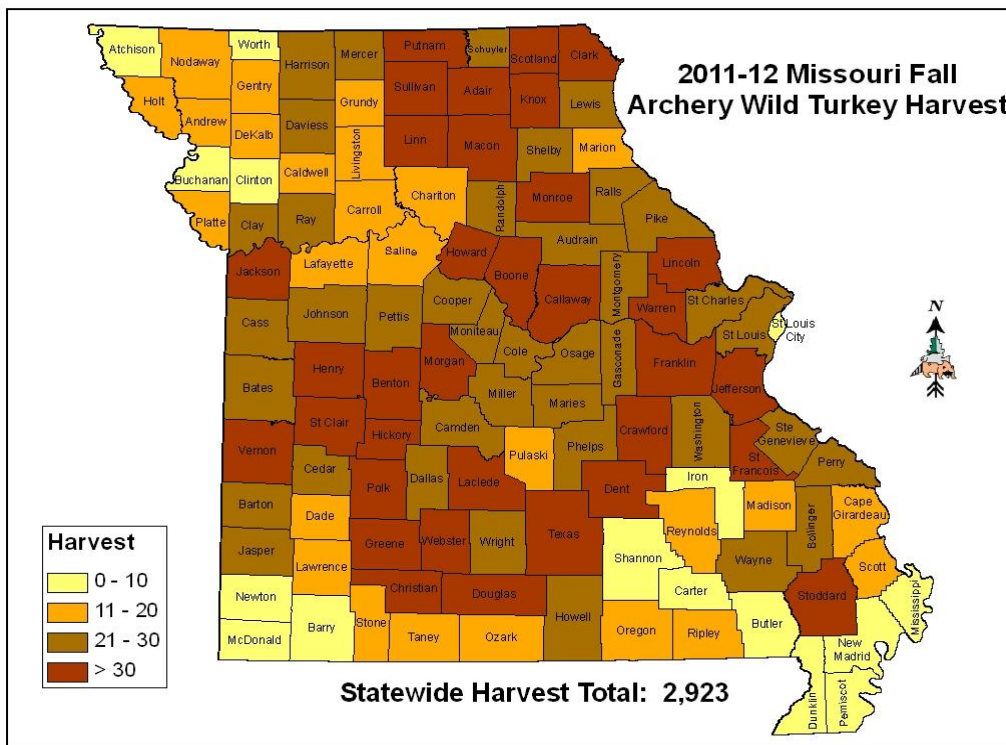


Figure 10. Missouri fall archery wild turkey harvest during the 2011-12 season.

Although archery permit sales have been relatively stable since the mid-1990s (Figure 12, Table 7), 110,647 permits were sold in 2011; the highest number sold since the season's inception. An additional 82,486 resident landowner permits were distributed in 2011, which brought the total number of archery hunters to 193,133. Of the 110,647 archery permits sold in 2011, 102,681 were purchased by Missouri residents and 7,966 were purchased by nonresident hunters.

Missouri Fall Archery Wild Turkey Harvest

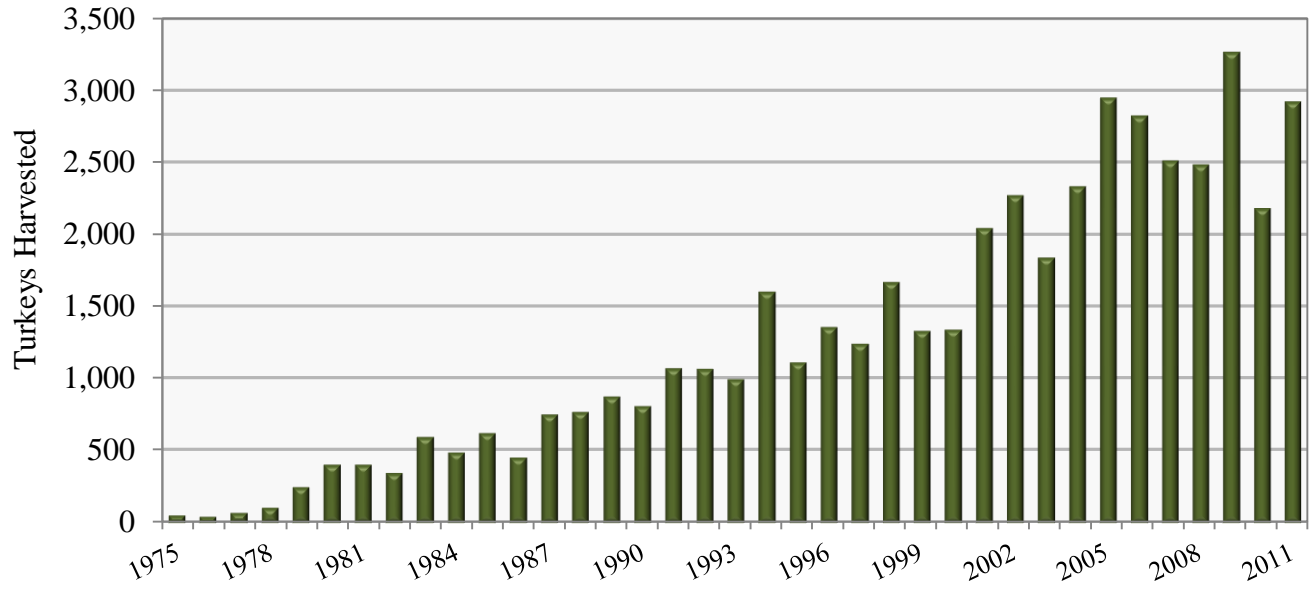


Figure 11. Missouri fall archery wild turkey harvest, 1975-2011.

Missouri Archery Deer and Turkey Permit Sales

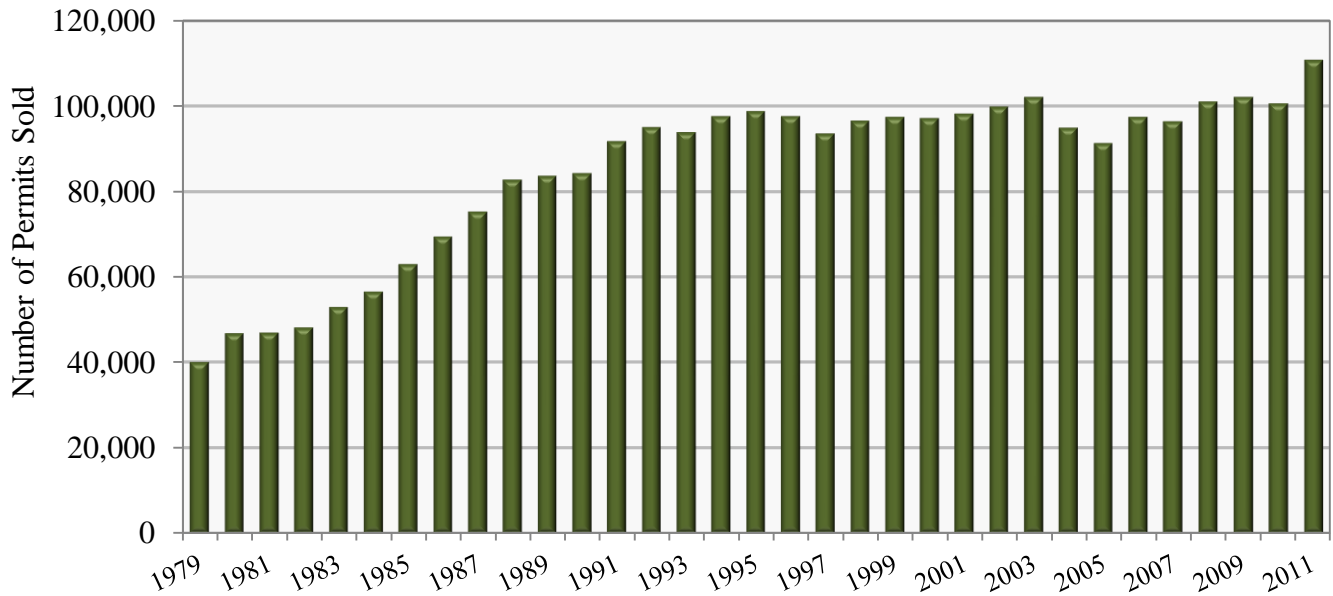


Figure 12. Missouri archery deer and turkey permit sales, 1979-2011. Permit sales do not include resident landowner permits.

Table 7. Fall archery turkey harvest and permit sales^a in Missouri, 1988-2011.

Year	Fall Archery Harvest	% Change From Previous Year	Fall Archery Permit Sales ^a	% Change From Previous Year
1988 ^b	770	+2.3	82,612	+10.1
1989	878	+14.0	83,440	+1.0
1990	812	-7.5	84,018	+0.7
1991	1,073	+32.1	91,656	+9.1
1992	1,071	-0.2	94,835	+3.5
1993	999	-6.7	93,729	-1.2
1994	1,604	+60.6	97,441	+4.0
1995 ^c	1,113	-30.6	98,601	+1.2
1996	1,357	+21.9	97,417	-1.2
1997	1,241	-8.5	93,402	-4.1
1998	1,670	+34.6	96,374	+3.2
1999	1,331	-20.3	97,345	+1.0
2000	1,340	+0.7	96,980	-0.4
2001	2,043	+52.5	97,966	+1.0
2002	2,272	+11.2	99,630	+1.7
2003 ^d	1,840	-19.0	102,012	+2.4
2004	2,333	+26.8	94,693	-7.2
2005	2,949	+26.4	91,152	-3.7
2006	2,823	-4.3	97,302	+6.7
2007	2,513	-11.0	96,204	-1.1
2008	2,484	-1.2	100,860	+4.8
2009	3,263	+31.4	101,930	+1.1
2010	2,184	-33.1	100,491	-1.4
2011	2,923	+33.8	110,647	+10.1

^a Does not include resident landowner permits.

^b Bag limit increased from 1 to 2 turkeys.

^c Season expansion: October 1 – January 15.

^d Season expansion: September 15 – January 15.

Appendix A. 2011 Missouri spring turkey harvest (youth and regular seasons combined).

County	Adult Males	Juvenile Males	Bearded Hens	Total
Adair	320	59	11	390
Andrew	308	48	9	365
Atchison	206	32	1	239
Audrain	177	52	0	229
Barry	60	26	0	86
Barton	289	61	8	358
Bates	243	98	9	350
Benton	451	84	7	542
Bollinger	594	135	8	737
Boone	362	71	3	436
Buchanan	110	26	2	138
Butler	112	45	0	157
Caldwell	164	34	4	202
Callaway	536	149	15	700
Camden	299	97	3	399
Cape Girardeau	530	165	9	704
Carroll	303	34	3	340
Carter	170	30	4	204
Cass	294	93	3	390
Cedar	435	97	9	541
Chariton	246	37	1	284
Christian	310	103	9	422
Clark	280	29	5	314
Clay	182	45	2	229
Clinton	158	37	2	197
Cole	292	78	4	374
Cooper	310	41	3	354
Crawford	319	107	5	431
Dade	305	75	8	388
Dallas	331	101	11	443
Daviess	279	67	6	352
Dekalb	199	33	3	235
Dent	371	138	5	514
Douglas	427	104	13	544
Dunklin	12	3	0	15
Franklin	703	225	13	941

Appendix A. (Continued)

County	Adult Males	Juvenile Males	Bearded Hens	Total
Gasconade	399	136	12	547
Gentry	202	46	3	251
Greene	525	151	12	688
Grundy	184	48	3	235
Harrison	312	81	4	397
Henry	424	126	9	559
Hickory	328	61	8	397
Holt	302	39	3	344
Howard	308	45	1	354
Howell	391	117	5	513
Iron	203	44	2	249
Jackson	197	52	0	249
Jasper	227	93	3	323
Jefferson	468	155	12	635
Johnson	410	132	5	547
Knox	292	56	7	355
Laclede	410	133	7	550
Lafayette	197	67	7	271
Lawrence	237	77	4	318
Lewis	177	38	2	217
Lincoln	414	94	8	516
Linn	183	46	1	230
Livingston	226	49	3	278
Macon	447	77	7	531
Madison	245	65	1	311
Maries	352	86	8	446
Marion	170	37	0	207
McDonald	39	13	0	52
Mercer	280	58	2	340
Miller	373	104	1	478
Mississippi	10	1	0	11
Moniteau	316	58	2	376
Monroe	284	60	0	344
Montgomery	271	103	6	380
Morgan	315	73	4	392
New Madrid	6	3	0	9

Appendix A. (Continued)

County	Adult Males	Juvenile Males	Bearded Hens	Total
Newton	51	22	1	74
Nodaway	318	64	6	388
Oregon	320	69	5	394
Osage	538	120	8	666
Ozark	267	78	10	355
Pemiscot	2	0	0	2
Perry	413	128	10	551
Pettis	485	83	6	574
Phelps	379	97	5	481
Pike	364	72	6	442
Platte	230	46	4	280
Polk	511	92	9	612
Pulaski	284	89	9	382
Putnam	294	47	3	344
Ralls	227	34	1	262
Randolph	307	48	2	357
Ray	320	60	3	383
Reynolds	177	30	2	209
Ripley	231	55	5	291
Saint Charles	265	92	7	364
Saint Clair	515	131	15	661
Saint Francois	287	127	5	419
Saint Louis	100	18	2	120
Sainte Genevieve	453	195	3	651
Saline	222	42	5	269
Schuyler	185	32	8	225
Scotland	299	54	5	358
Scott	98	25	1	124
Shannon	306	73	3	382
Shelby	168	32	5	205
Stoddard	236	107	1	344
Stone	203	69	2	274
Sullivan	303	56	4	363
Taney	257	86	4	347
Texas	550	194	13	757
Vernon	353	129	18	500

Appendix A. (Continued)

County	Adult Males	Juvenile Males	Bearded Hens	Total
Warren	249	81	7	337
Washington	242	109	2	353
Wayne	334	67	1	402
Webster	441	134	11	586
Worth	106	22	1	129
Wright	398	146	15	559
Totals	33,099	8,538	583	42,220

Appendix B. 2011 Missouri fall turkey harvest (firearms and archery seasons combined).

County	Adult Males	Adult Females	Juvenile Males	Juvenile Females	Total
Adair	16	27	14	57	114
Andrew	11	16	9	18	54
Atchison	11	17	9	10	47
Audrain	7	30	16	32	85
Barry	2	7	0	4	13
Barton	30	38	14	26	108
Bates	16	34	9	22	81
Benton	22	50	20	56	148
Bollinger	14	45	23	61	143
Boone	12	35	23	35	105
Buchanan	3	5	4	5	17
Butler	2	10	2	12	26
Caldwell	11	15	11	14	51
Callaway	20	75	30	81	206
Camden	12	24	2	28	66
Cape Girardeau	22	26	14	26	88
Carroll	16	22	9	12	59
Carter	0	15	6	11	32
Cass	34	33	21	47	135
Cedar	29	37	31	57	154
Chariton	2	15	9	16	42
Christian	20	28	16	36	100
Clark	10	17	12	16	55
Clay	13	28	7	17	65
Clinton	5	22	11	21	59
Cole	10	26	24	35	95
Cooper	13	16	8	26	63
Crawford	21	27	29	51	128
Dade	26	34	25	47	132
Dallas	9	33	21	35	98
Daviess	16	20	7	39	82
Dekalb	10	10	8	21	49
Dent	15	40	33	64	152
Douglas	24	34	32	44	134
Dunklin	1	0	1	0	2

Appendix B. (Continued)

County	Adult Males	Adult Females	Juvenile Males	Juvenile Females	Total
Franklin	27	83	44	107	261
Gasconade	19	33	17	53	122
Gentry	5	11	9	13	38
Greene	46	80	41	96	263
Grundy	12	11	10	23	56
Harrison	11	18	13	29	71
Henry	25	73	28	86	212
Hickory	19	41	23	33	116
Holt	13	15	13	21	62
Howard	11	22	18	33	84
Howell	14	22	24	40	100
Iron	9	14	12	20	55
Jackson	21	29	7	22	79
Jasper	20	30	17	17	84
Jefferson	20	54	17	64	155
Johnson	22	30	23	51	126
Knox	12	23	8	32	75
Laclede	21	33	31	95	180
Lafayette	9	15	7	16	47
Lawrence	7	21	6	14	48
Lewis	5	26	7	16	54
Lincoln	29	47	21	44	141
Linn	10	28	9	23	70
Livingston	6	12	6	22	46
Macon	13	38	32	58	141
Madison	11	18	19	38	86
Maries	13	22	23	56	114
Marion	7	9	2	25	43
McDonald	0	1	0	0	1
Mercer	17	17	16	15	65
Miller	13	24	14	25	76
Mississippi	0	2	0	0	2
Moniteau	12	29	16	22	79
Monroe	7	40	10	42	99
Montgomery	12	24	15	33	84

Appendix B. (Continued)

County	Adult Males	Adult Females	Juvenile Males	Juvenile Females	Total
Morgan	11	26	11	30	78
New Madrid	0	1	0	0	1
Newton	0	1	0	2	3
Nodaway	13	15	5	15	48
Oregon	8	14	9	34	65
Osage	11	29	12	62	114
Ozark	10	12	10	22	54
Pemiscot	0	1	0	0	1
Perry	16	35	16	47	114
Pettis	20	39	22	40	121
Phelps	5	28	16	42	91
Pike	12	32	18	32	94
Platte	13	17	5	7	42
Polk	32	58	22	53	165
Pulaski	15	36	9	27	87
Putnam	13	29	18	23	83
Ralls	7	27	10	32	76
Randolph	17	34	12	36	99
Ray	30	24	9	27	90
Reynolds	4	5	12	23	44
Ripley	5	13	4	10	32
Saint Charles	8	32	9	21	70
Saint Clair	29	70	41	77	217
Saint Francois	24	51	27	73	175
Saint Louis	12	16	1	6	35
Sainte Genevieve	23	43	24	55	145
Saline	4	10	4	14	32
Schuyler	6	23	6	28	63
Scotland	14	32	6	14	66
Scott	4	5	3	2	14
Shannon	5	7	12	20	44
Shelby	5	11	8	13	37
Stoddard	15	37	16	36	104
Stone	14	10	1	12	37
Sullivan	16	30	25	67	138

Appendix B. (Continued)

County	Adult Males	Adult Females	Juvenile Males	Juvenile Females	Total
Taney	10	18	6	18	52
Texas	27	36	27	51	141
Vernon	30	48	24	68	170
Warren	8	34	8	39	89
Washington	13	25	17	61	116
Wayne	10	24	16	42	92
Webster	30	61	28	74	193
Worth	4	2	5	5	16
Wright	17	31	25	60	133
Totals	1,553	3,038	1,627	3,786	10,004