



2012

# Missouri Wild Turkey Harvest and Population Status Report



Missouri Department of  
Conservation

Resource Science Division

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## Population Status

After experiencing considerable declines during much of the 2000s, wild turkey numbers in Missouri during the past five years have been stable to slightly increasing at the statewide scale. In most of western Missouri, turkey populations reached their peak abundance in the early 2000s. Following a substantial decline, turkey numbers in the West Prairie region (Figure 1) have stabilized in recent years. Turkey numbers throughout much of the Northwest region (Figure 1), however, have suffered from multiple years of poor production. As a result, turkey abundance in the region remains well-below the numbers observed a decade ago.

Similar to the trends observed in the Northwest and West Prairie regions, both the Northeast and Ozark Border regions of Missouri (Figure 1) experienced declines in turkey numbers that exceeded 50% following the population peak of the late 1990s and early 2000s. Improved production in these two regions has resulted in an increase in turkey abundance during the past two years; however, turkey numbers remain well below the peak numbers observed more than a decade ago.

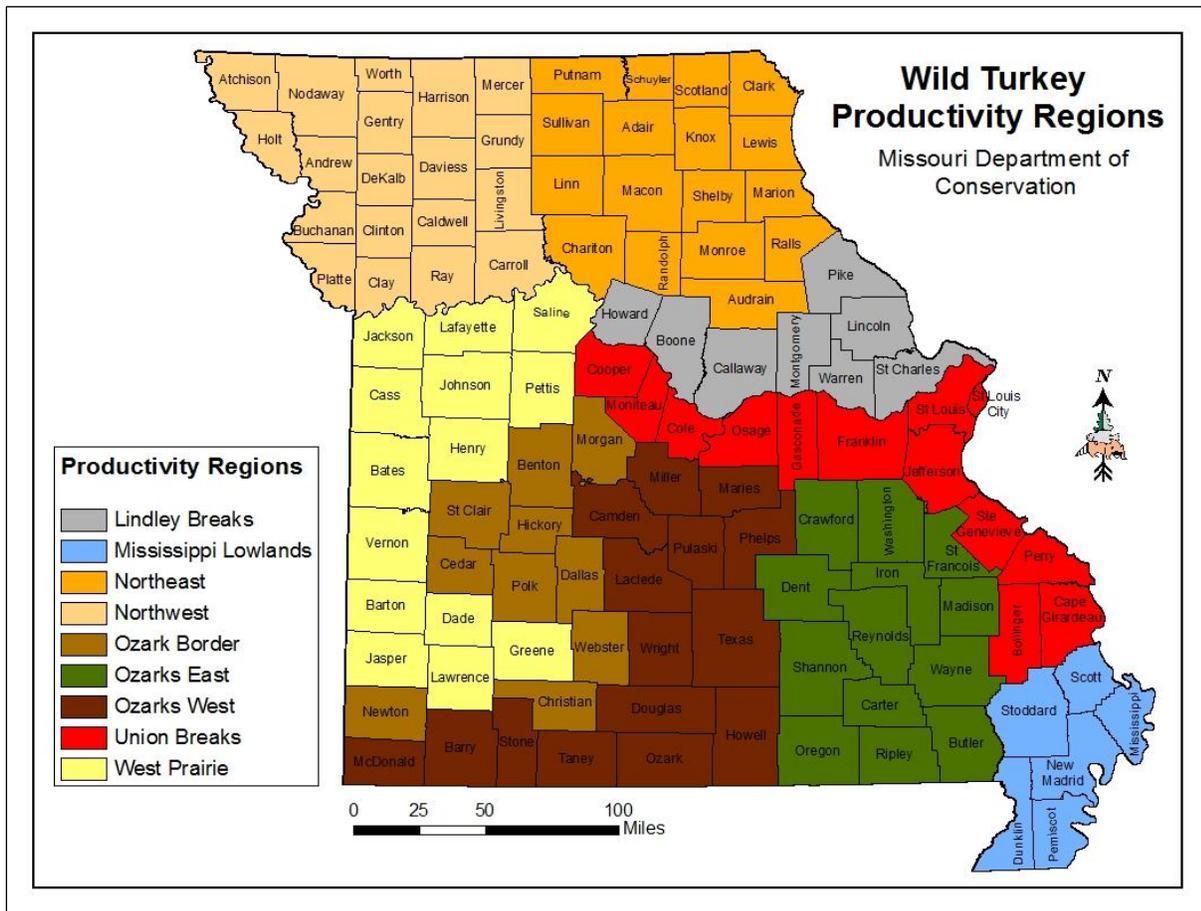
During the early 2000s, wild turkey populations in the Ozark Mountains of southern Missouri experienced the same peak in abundance as northern and western populations; however, the decline in numbers that followed was not of the same magnitude. During the past five years, wild turkey numbers throughout much of the Ozarks have shown an increasing trend as a result of two years of improved production in 2011 and 2012. In the Lindley Breaks and Union Breaks regions of east-central and southeast Missouri (Figure 1), turkey numbers during the past five years have been relatively stable to slightly increasing.

Since the late 2000s, wild turkey production has increased throughout most of Missouri. Although the hatches of 2011 and 2012 represent considerable improvements from the poor hatches that plagued the state's turkey population from 2007-2010, it will take additional years of good production for the state's turkey population to rebound from the losses that occurred during previous years of poor production.

Despite a reduction from the peak numbers of a decade ago, Missouri is still recognized as having one of the largest turkey populations in the country, as well as providing some of the nation's best turkey hunting. Each year, the state's turkey harvest ranks among the highest in the country. Missouri's turkey population remains strong, offering hunters a tremendous opportunity to enjoy one of the state's most cherished natural resources.

## REPRODUCTION – WILD TURKEY BROOD SURVEY

The Missouri Department of Conservation (MDC) 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 (and gobblers) 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 information that serves as an index to turkey production. 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 by similar land cover composition.



**Figure 1. Turkey Productivity Regions in Missouri. Each region consists of counties grouped by similar land cover composition.**

By analyzing data collected during 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 are also used to determine the poult-to-hen ratio, which is the average number of poults per hen. The poult-to-hen ratio includes observations of hens observed with a brood and those observed without a brood.

In 2012, MDC staff and citizen volunteers recorded observations of over 60,000 turkeys during the 3-month survey, including nearly 4,000 broods (Table 1). At the statewide scale, 48% of hens were observed with poults (Table 2). The percentage of hens observed with a brood ranged from 45% in the Northeast region to 69% in the Mississippi Lowlands region. Statewide, the average brood size was 4.2 poults (Table 2). Average brood size ranged from 3.9 poults in the Lindley Breaks region to 4.6 poults in the Ozarks East and Ozarks West regions.

**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, 2012.**

Productivity Region	Hens w/ Broods	Hens w/o Broods	Total Hens	Poults	Broods	Gobblers
Lindley Breaks	863	1,010	1,873	3,374	454	1,287
Mississippi Lowlands	184	81	265	799	74	171
Northeast	888	1,072	1,960	3,652	475	1,536
Northwest	582	672	1,254	2,498	324	1,129
Ozark Border	805	950	1,755	3,353	418	1,474
Ozarks East	941	570	1,511	4,337	481	883
Ozarks West	965	1,136	2,101	4,417	492	1,254
Union Breaks	1,745	1,930	3,675	7,017	877	2,324
West Prairie	724	808	1,532	3,064	346	1,199
<b>Statewide</b>	<b>7,766</b>	<b>8,271</b>	<b>16,037</b>	<b>32,768</b>	<b>3,973</b>	<b>11,301</b>

**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, 2012.**

Productivity Region	% Hens w/ Poults	Average Brood Size	Poult-to-Hen Ratio	Gobbler-to-Hen Ratio
Lindley Breaks	46%	3.9	1.6	0.69
Mississippi Lowlands	69%	4.3	2.3	0.65
Northeast	45%	4.1	1.5	0.78
Northwest	46%	4.3	1.7	0.90
Ozark Border	46%	4.2	1.7	0.84
Ozarks East	62%	4.6	2.5	0.58
Ozarks West	46%	4.6	1.6	0.60
Union Breaks	47%	4.0	1.5	0.63
West Prairie	47%	4.2	1.5	0.78
<b>Statewide</b>	<b>48%</b>	<b>4.2</b>	<b>1.7</b>	<b>0.70</b>

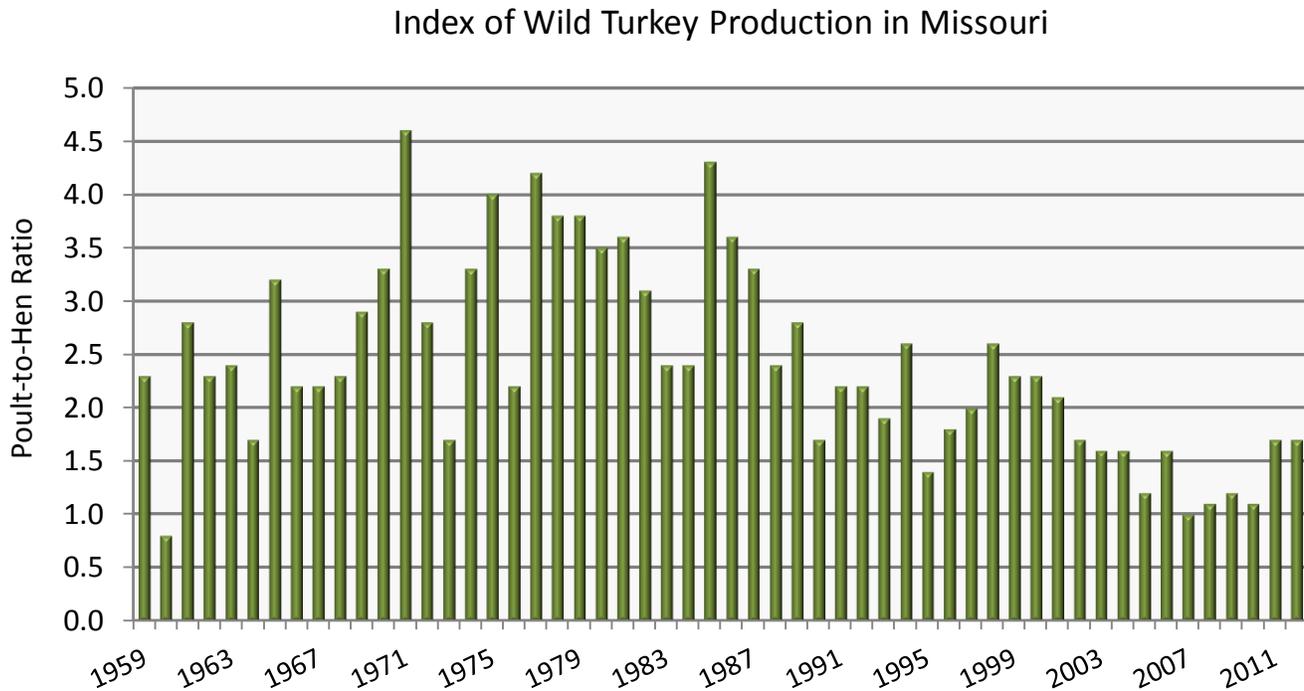
The 2012 statewide poult-to-hen ratio of 1.7 was identical to the 2011 ratio, and 42% higher, 21% higher, and 6% lower than the 5, 10, and 20-year statewide averages, respectively (Table 3). Among Turkey Productivity Regions, poult-to-hen ratios ranged from 1.5 in the Northeast, Union Breaks, and West Prairie regions to 2.5 in the Ozarks East region (Table 3).

**Table 3. Index (poult-to-hen ratio) of Missouri turkey production listed by Turkey Productivity Region (Figure 1). Data were obtained from the 2012 brood survey and are compared to previous years. For each interval value, the % change indicates how the 2012 index compares to the previous year or the average for periodic intervals.**

Productivity Region	2012 Index	1-year (2011) Change	5-year (2007-2011) Change	10-year (2002-2011) Change	20-year (1992-2011) Change
Lindley Breaks	1.6	-30%	+14%	+7%	-16%
Mississippi Lowlands	2.3	+29%	+38%	-4%	+5%
Northeast	1.5	-29%	+25%	+15%	-12%
Northwest	1.7	+21%	+55%	+21%	-11%
Ozark Border	1.7	+6%	+55%	+31%	0%
Ozarks East	2.5	+14%	+67%	+56%	+32%
Ozarks West	1.6	+7%	+33%	+14%	-6%
Union Breaks	1.5	-6%	+15%	+7%	-12%
West Prairie	1.5	+7%	+50%	+25%	-17%
<b>Statewide</b>	<b>1.7</b>	<b>0%</b>	<b>+42%</b>	<b>+21%</b>	<b>-6%</b>

The highest production in 2012 occurred in portions of southeast Missouri, where the ratio exceeded two poult per hen. Notable improvements occurred in the Northwest, Ozark Border, and West Prairie regions (Figure 1), where poult-to-hen ratios were at least 50% higher than the previous 5-year average (Table 3).

Statewide, Missouri’s poult-to-hen ratio peaked at 4.6 in 1971 and has steadily declined since the late 1980s, other than an increase in production that occurred during the late 1990s (Figure 2). Production had been especially poor in recent years, with the statewide poult-to-hen ratio exceeding 1.5 only once from 2005-2010. The 2011 and 2012 hatches represent considerable improvements from those of recent years and should serve to bolster turkey numbers throughout much of Missouri. Declines in production following peak population numbers, coupled with the increasing trend in production observed since the late 2000s, could be indicative of a density-dependent effect on production.



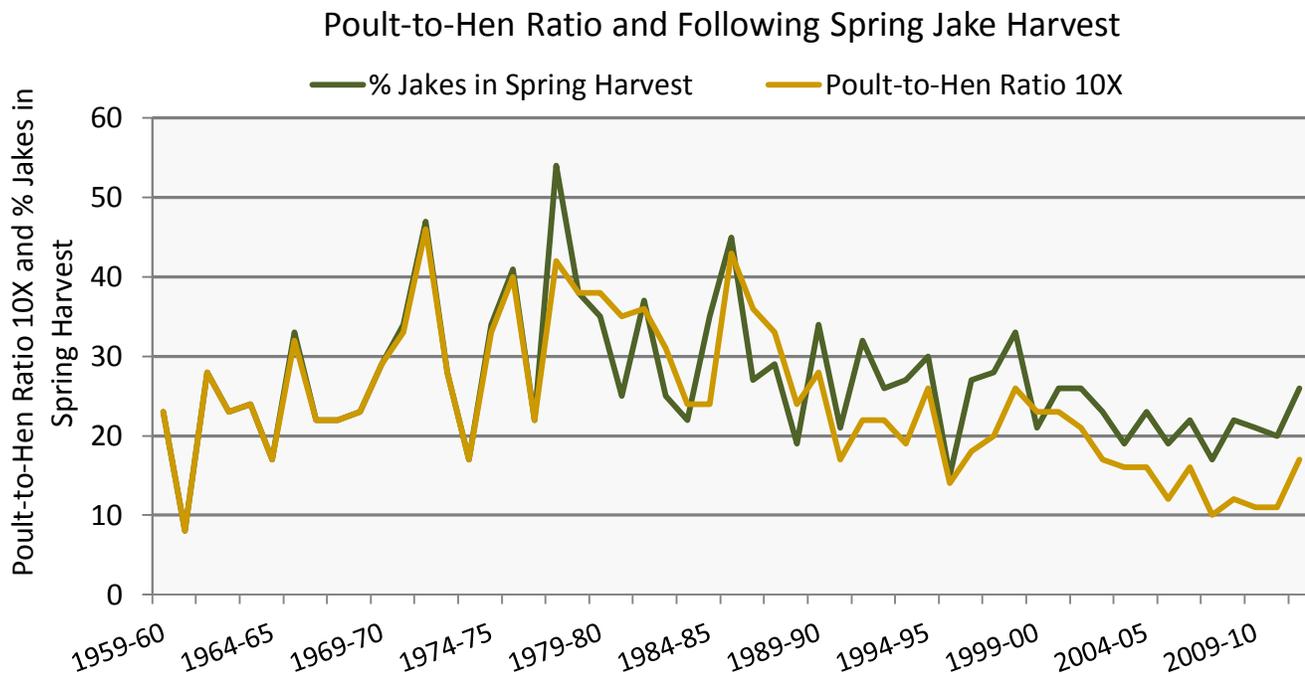
**Figure 2. Missouri statewide poult-to-hen ratios derived from the wild turkey brood survey conducted in June, July, and August, 1959-2012.**

## HARVEST

### 2012 Spring Turkey Season

During the 2012 youth spring turkey season, which took place on March 31 – April 1, hunters harvested 4,319 turkeys. This harvest total represents an 11% increase from the 2011 youth season harvest and was 26% higher than the previous 5-year average. The 2012 youth season harvest was the highest since the youth season was initiated in 2001. Hunters harvested 40,447 turkeys during the 21-day regular spring turkey season, which ran from April 16 – May 6. This harvest total represents a 6% increase from the 2011 regular season harvest, and is 4% lower than the previous 5-year average.

Juvenile male turkeys represented 26% of the regular season harvest, which is 27% higher than the previous 5-year average. The percentage of jakes in the spring harvest continues to track the poult-to-hen ratio from the previous year; however, the datasets have shown increasing divergence since the early 2000s (Figure 3). The total 2012 spring harvest, including both the youth and regular seasons, was 44,766. This harvest total represents a 6% increase from the 2011 harvest, and is 2% lower than the previous 5-year average (Table 4). Counties with the highest total spring harvest in 2012 were Franklin, Texas, and Greene, where 971, 883, and 762 turkeys were harvested, respectively (Figure 4).



**Figure 3. Missouri’s statewide poult-to-hen ratio multiplied by 10, compared with the percentage of jakes in the following year’s spring harvest, 1959-2012.**



**Table 4. Total spring turkey harvest (regular and youth seasons) and permit sales<sup>a</sup> in Missouri, 1960-2012.**

Year	Spring Harvest	% Change From Previous Year	Spring Permit Sales <sup>a</sup>	% Change From Previous Year
1960 <sup>b</sup>	94	n/a	698	n/a
1961	154	+63.8	1,001	+43.4
1962	183	+18.8	1,400	+39.9
1963	357	+95.1	1,778	+27.0
1964	369	+3.4	2,958	+66.4
1965	476	+29.0	3,099	+4.8
1966	572	+20.2	4,873	+57.2
1967 <sup>c</sup>	1,191	+108.2	6,702	+37.5
1968	1,270	+6.6	8,102	+20.9
1969	959	-24.5	7,577	-6.5
1970	1,598	+66.6	10,072	+32.9
1971	2,864	+79.2	12,306	+22.2
1972 <sup>d</sup>	4,456	+55.6	20,077	+63.1
1973 <sup>e</sup>	5,724	+28.5	29,633	+47.6
1974	5,286	-7.7	26,363	-11.0
1975	5,583	+5.6	28,621	+8.6
1976	7,851	+40.6	35,932	+25.5
1977	9,966	+26.9	36,596	+1.8
1978	10,203	+2.4	42,244	+15.4
1979	13,741	+34.7	46,008	+8.9
1980	16,722	+21.7	56,133	+22.0
1981	22,319	+33.5	63,914	+13.9
1982	17,744	-20.5	67,150	+5.1
1983	19,063	+7.4	73,347	+9.2
1984	19,317	+1.3	76,053	+3.7

<sup>a</sup> Does not include no-cost landowner permits

<sup>b</sup> 3-day season with 1-bird bag limit

<sup>c</sup> Season length increased to 7 days

<sup>d</sup> Season length increased to 14 days

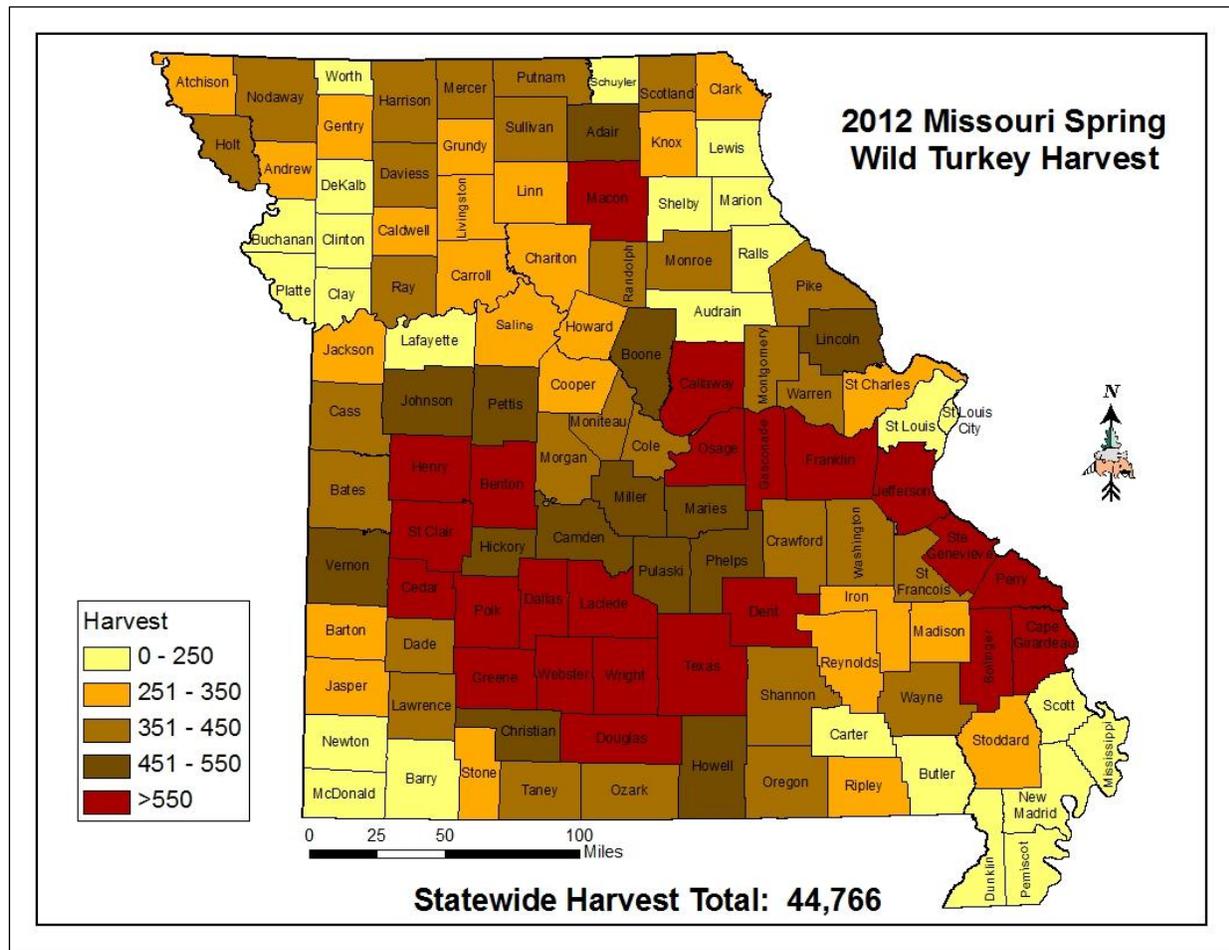
<sup>e</sup> Bag limit increased to 2 turkeys

Table 4. Continued.

Year	Spring Harvest	% Change From Previous Year	Spring Permit Sales <sup>a</sup>	% Change From Previous Year
1985	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 <sup>f</sup>	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 <sup>g</sup>	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
2012	44,766	+6.0	101,534	+0.4

<sup>f</sup> Season length increased to 21 days

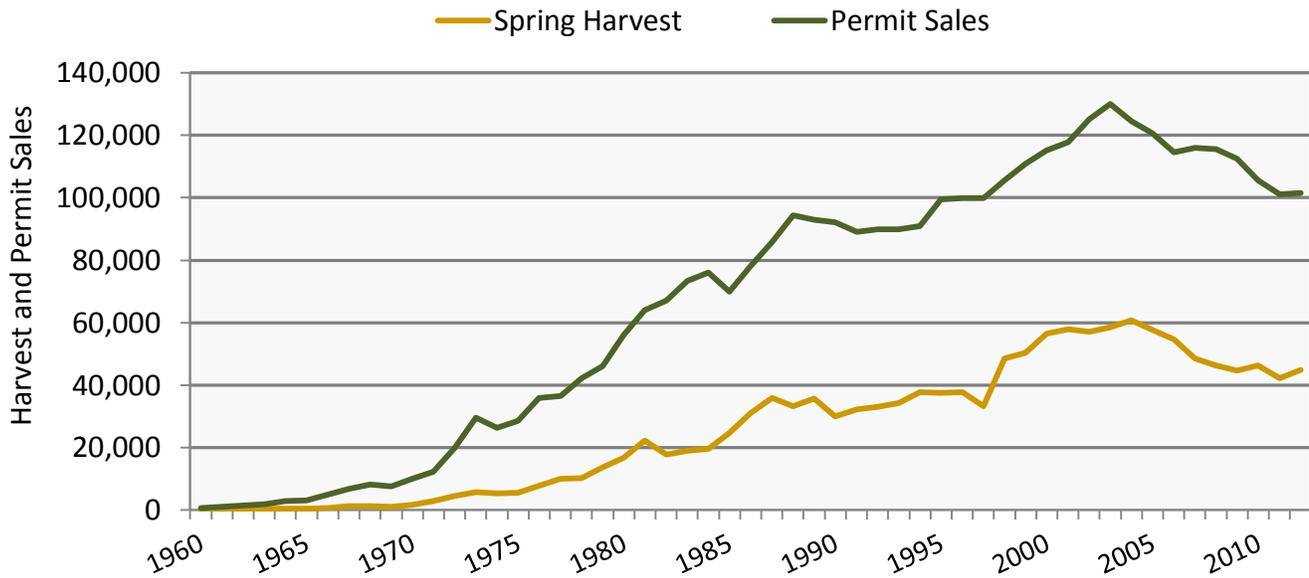
<sup>g</sup> 2-day youth season initiated



**Figure 4. Total spring wild turkey harvest in Missouri, 2012.**

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 2012 spring turkey season (101,534; excluding no-cost landowner permits) increased slightly (< 1%) from the 2011 spring permit sales total. Spring turkey permit sales have declined by 22% from the peak year of 2003 (Figure 5, Table 4). Some of the permit sales decline, however, can be attributed to no-cost landowner permits, which first became available in 2005. Spring turkey permit sales in 2012 included 95,089 (94%) resident permits and 6,445 (6%) nonresident permits. An additional 41,108 no-cost permits were distributed to landowners. The total number of spring turkey hunters in Missouri in 2012 was 138,372. Note that the total number of hunters does not equal the permit sales total, as some hunters purchase a permit in addition to receiving a no-cost landowner permit.

### Missouri Spring Wild Turkey Harvest and Permit Sales

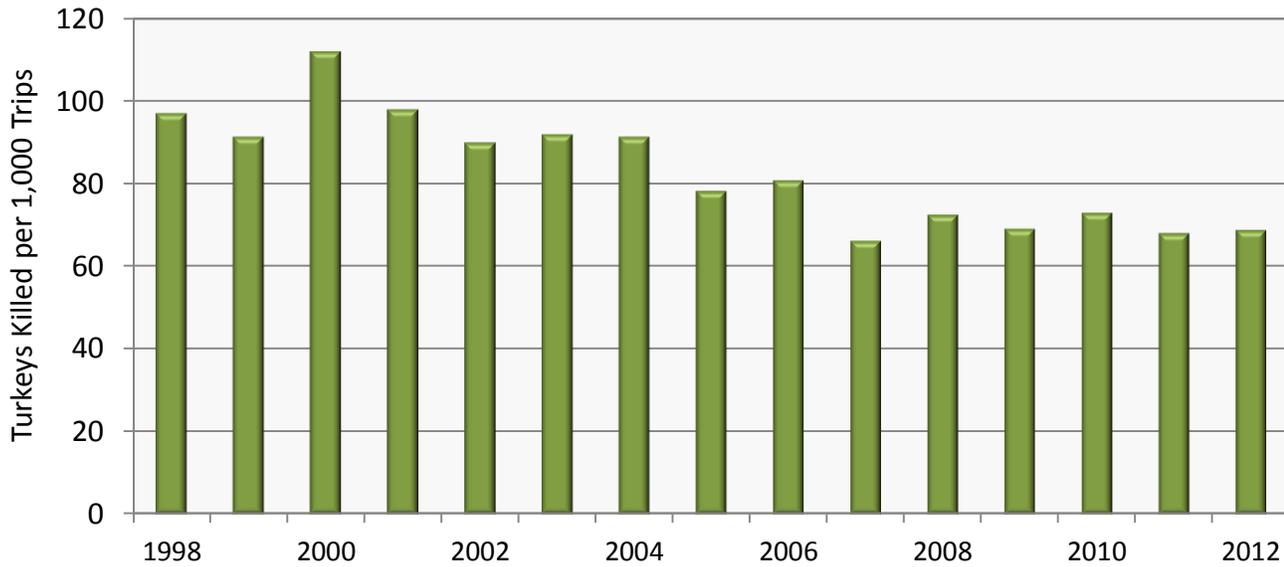


**Figure 5. Number of wild turkeys harvested during the spring season (youth and regular seasons) in Missouri, and the number of turkey hunting permits sold for the spring season, 1960-2012. Permit sales do not include no-cost landowner permits.**

Spring turkey harvest in Missouri has declined by 26% since the record harvest of over 60,000 birds in 2004. Although low production from 2007-2010 and the resulting lower numbers of turkeys on the landscape have impacted harvest, spring permit sale declines are likely to have had an impact as well. Spring permit sales have declined by 22% since 2003, contributing in part to a 15% reduction in the number of hunting trips between the 2003 and 2012 spring seasons. Spring turkey hunter success has been relatively stable since 2007, after declining from 2000-2006 (Figure 6). Based on harvest and hunter effort data, the success rate for permit-buyers that hunted during the 2012 spring season was 31%. The previous 5 and 10-year average success rates for permit-buyers were 30% and 33%, respectively.



## Spring Turkey Hunter Success in Missouri



**Figure 6. Statewide spring turkey hunter success in Missouri. Data are the number of turkeys harvested per 1,000 hunting trips, 1998-2012. Harvest data were obtained from the Telecheck reporting system and trip data from post-season turkey hunter surveys.**

### 2012 Fall Firearms Turkey Season

The 2012 fall firearms turkey harvest total of 8,498 represents a 20% increase in harvest from the 2011 season, and was 7% higher than the previous 5-year average. The majority of the fall firearms harvest occurred in southern Missouri (Figure 7). The top 3 counties in harvest were Webster, Laclede, and Greene, where 225, 223, and 216 turkeys were harvested, respectively.

The increase in fall firearms turkey harvest in 2012 was likely due in part to a greater abundance of turkeys on the landscape throughout much of Missouri. In addition to increased turkey numbers, fall firearms turkey permit sales increased by 9% in 2012. Of the 16,413 fall firearms turkey permits sold in 2012, 16,161 (98%) were purchased by Missouri residents and 252 (2%) by nonresidents; an additional 63,715 no-cost permits were distributed to resident landowners. Although permit sales increased in 2012, 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 8, Table 5).

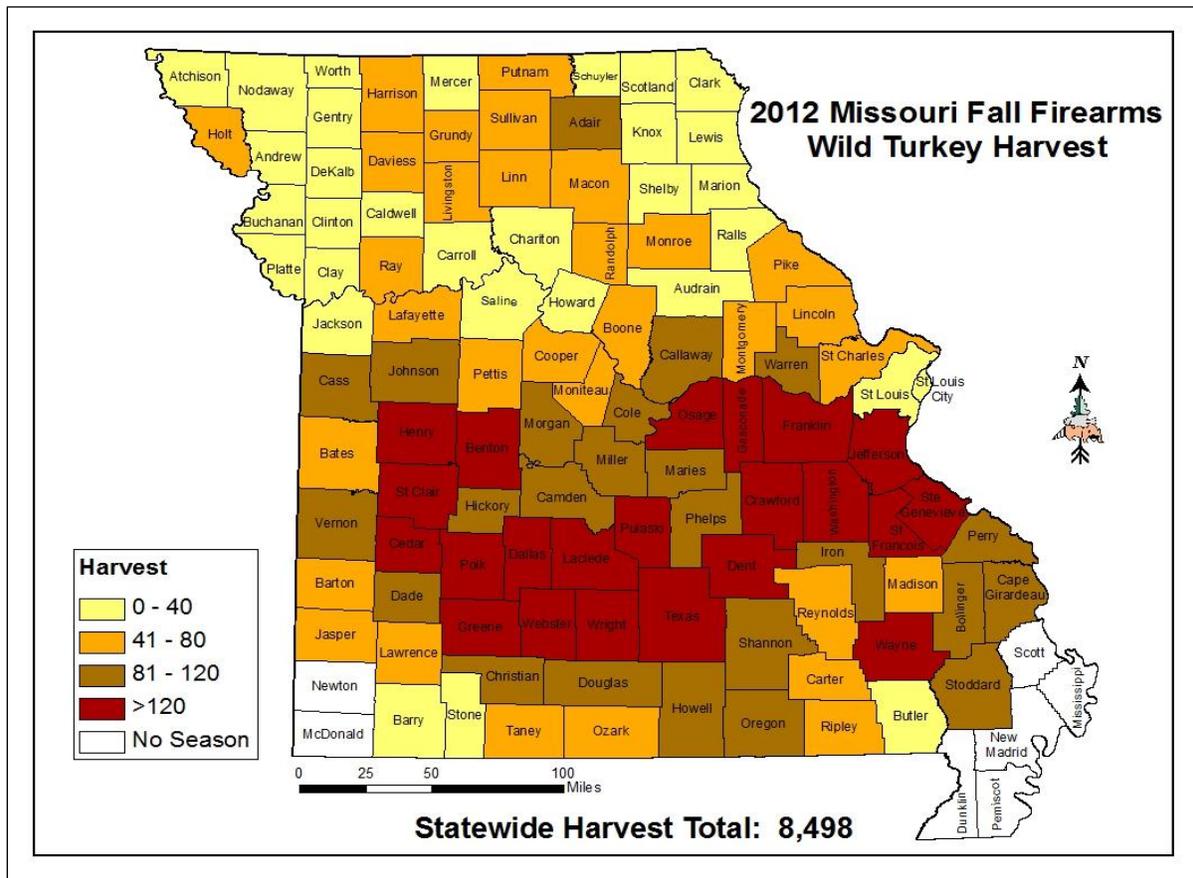


Figure 7. Missouri fall firearms wild turkey harvest, 2012.

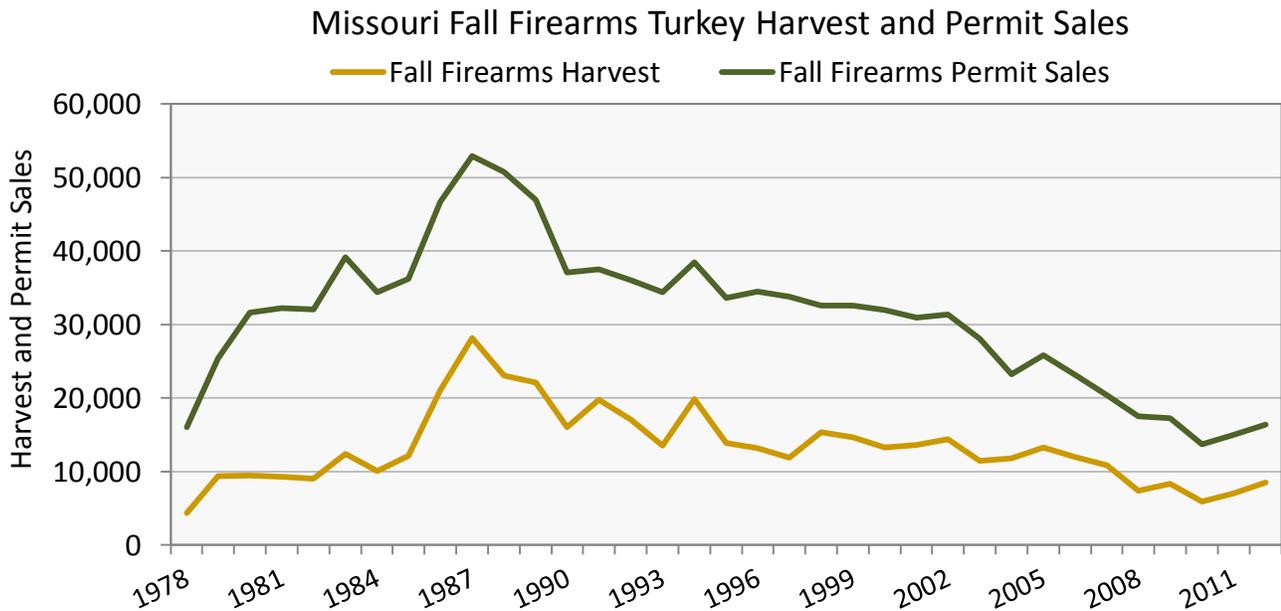


Figure 8. Number of wild turkeys harvested during the fall firearms turkey season in Missouri, and the number of fall firearms permits sold, 1978-2012. Permit sales do not include no-cost landowner permits.

Table 5. Fall firearms turkey harvest and permit sales<sup>a</sup> in Missouri, 1978-2012.

Year	Fall Firearms Harvest	% Change From Previous Year	Fall Permit Sales <sup>a</sup>	% Change From Previous Year
1978 <sup>b</sup>	4,389	n/a	16,072	n/a
1979	9,387	+113.9	25,414	+58.1
1980 <sup>c</sup>	9,424	+0.4	31,606	+24.4
1981	9,293	-1.4	32,199	+1.9
1982	8,989	-3.3	32,051	-0.5
1983	12,394	+37.9	39,160	+22.2
1984	10,034	-19.0	34,375	-12.2
1985	12,179	+21.4	36,218	+5.4
1986 <sup>d</sup>	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

<sup>a</sup> Does not include no-cost landowner permits

<sup>b</sup> 12-day season with 1-bird bag limit

<sup>c</sup> Season length increased to 14 days

<sup>d</sup> Bag limit increased to 2 turkeys

Table 5. Continued

Year	Fall Firearms Harvest	% Change From Previous Year	Fall Permit Sales <sup>a</sup>	% Change From Previous Year
2004	11,824	+3.4	23,215	-17.4
2005 <sup>e</sup>	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
2012	8,498	+20.1	16,413	+9.3

<sup>e</sup> Season length increased to 31 days

## 2012 Fall Archery Turkey Season

Hunters harvested 3,217 turkeys during the 2012 fall archery turkey season (Figure 9), the second highest archery harvest since the season's inception in 1975 (Figure 10). The 2012 archery turkey harvest total represents a 10% increase from the 2011 season, and was 20% higher than the previous 5-year average. Unlike the fall firearms turkey harvest, which has shown a declining trend since the late 1980s (Figure 8), the fall archery harvest continued to increase until the mid-2000s. Since 2005, archery turkey harvests have fluctuated substantially on an annual basis (Figure 10, Table 6).



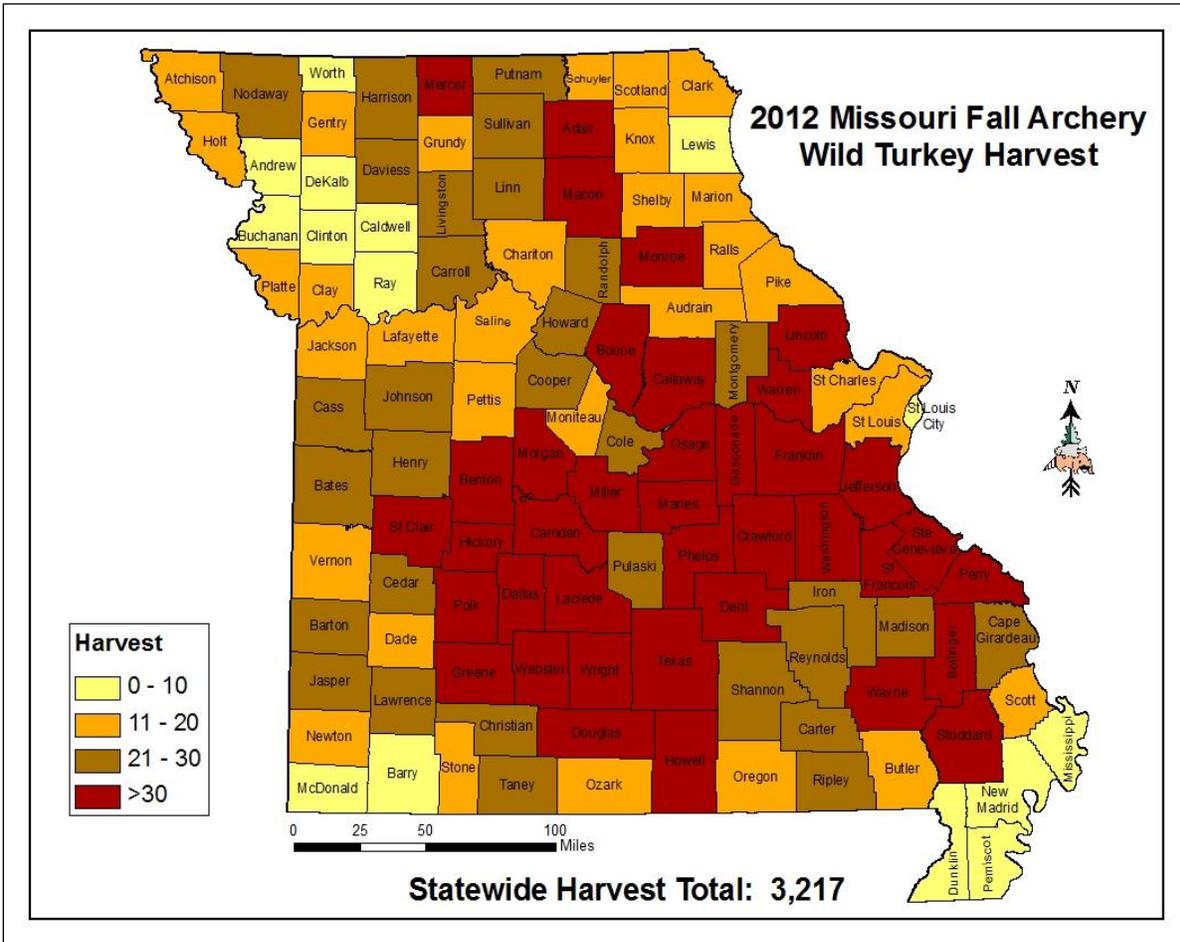


Figure 9. Missouri fall archery wild turkey harvest during the 2012 season.

Although archery permit sales were relatively stable from the mid-1990s through the mid-2000s, sales have since shown an increasing trend (Figure 11, Table 6). In 2012, 116,209 permits were sold, the highest number since the season's inception. Of the 116,209 archery permits sold in 2012, 107,787 (93%) were purchased by Missouri residents and 8,422 (7%) by nonresidents. An additional 86,212 no-cost landowner permits were distributed, which brought the total number of archery permits in 2012 to 202,421.



Missouri Fall Archery Turkey Harvest

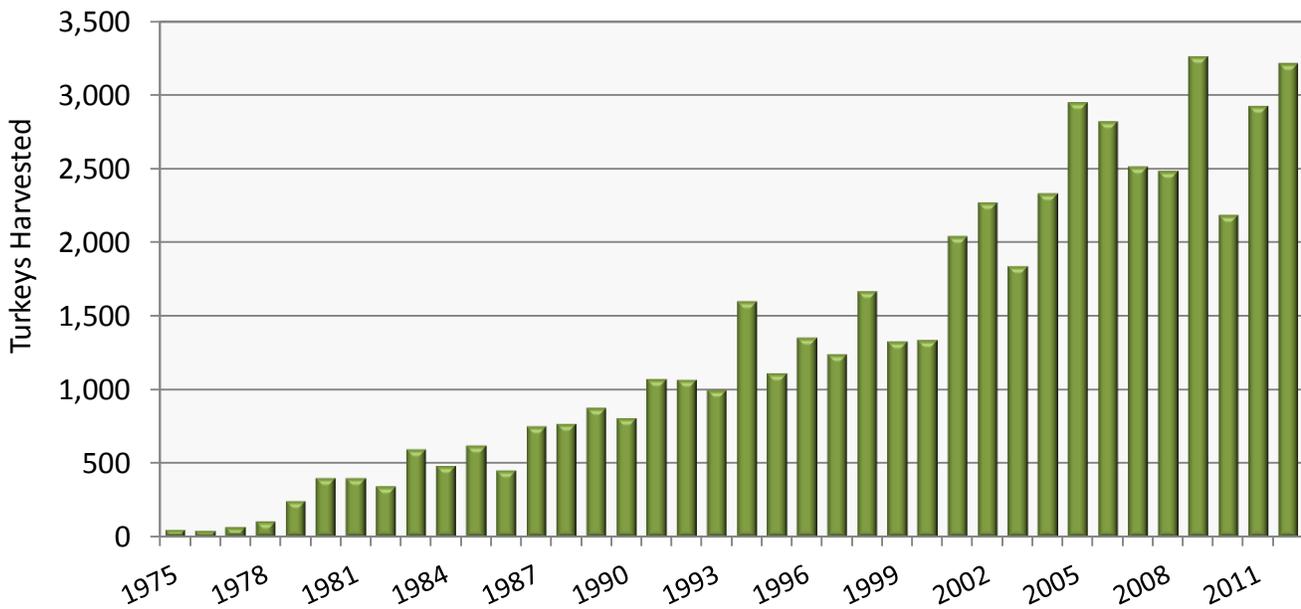


Figure 10. Missouri fall archery wild turkey harvest, 1975-2012.

Missouri Fall Archery Deer and Turkey Permit Sales

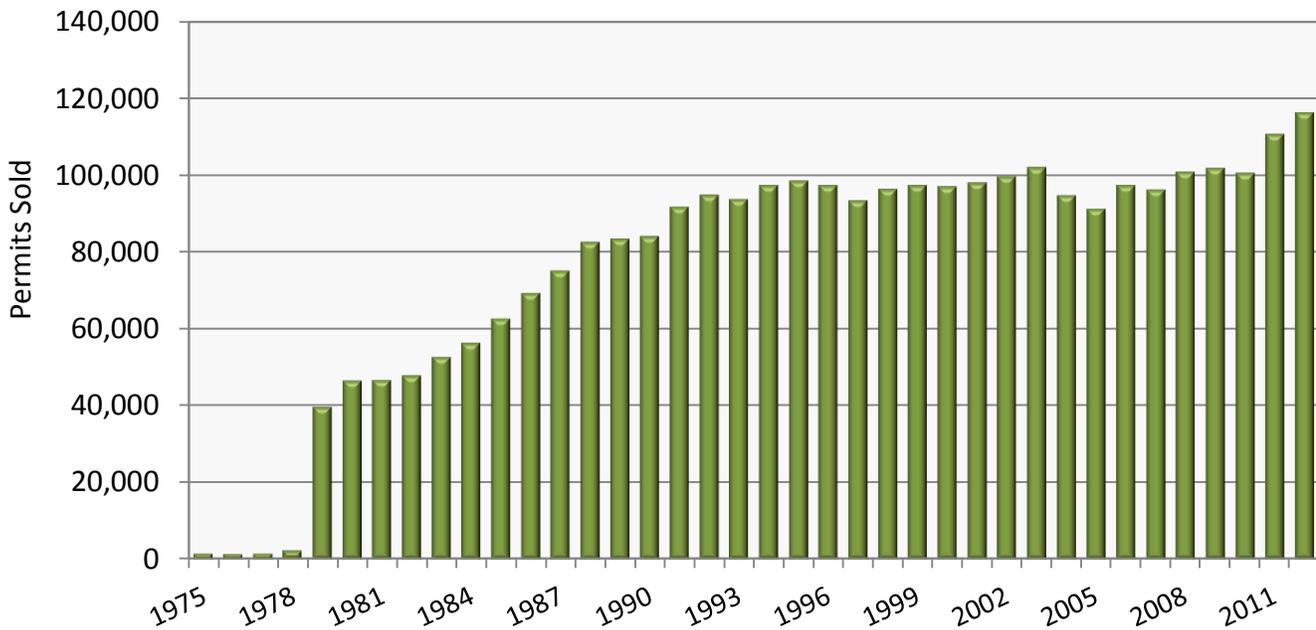


Figure 11. Missouri archery deer and turkey permit sales, 1975-2012. Permit sales do not include no-cost landowner permits. Prior to 1979, hunters purchased archery deer and turkey permits separately.

Table 6. Fall archery turkey harvest and permit sales<sup>a</sup> in Missouri, 1975-2012.

Year	Fall Archery Harvest	% Change From Previous Year	Fall Archery Permit Sales <sup>a</sup>	% Change From Previous Year
1975	54	n/a	1,568	n/a
1976	46	-14.8	1,469	-6.3
1977	72	+56.5	1,701	+15.8
1978	108	+50.0	2,478	+45.7
1979 <sup>b</sup>	248	+129.6	39,830	+1,507.3
1980	406	+63.7	46,548	+16.9
1981	405	-0.2	46,776	+0.5
1982	349	-13.8	47,931	+2.5
1983	598	+71.3	52,666	+9.9
1984	488	-18.4	56,378	+7.0
1985	624	+27.9	62,731	+11.3
1986	454	-27.2	69,265	+10.4
1987	753	+65.9	75,064	+8.4
1988 <sup>c</sup>	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 <sup>d</sup>	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

<sup>a</sup> Does not include no-cost landowner permits

<sup>b</sup> Archery deer and archery turkey permits combined

<sup>c</sup> Bag limit increased from 1 to 2 turkeys

<sup>d</sup> Season expansion: October 1 – January 15

Table 6. Continued.

Year	Fall Archery Harvest	% Change From Previous Year	Fall Archery Permit Sales <sup>a</sup>	% Change From Previous Year
2001	2,043	+52.5	97,966	+1.0
2002	2,272	+11.2	99,630	+1.7
2003 <sup>e</sup>	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
2012	3,217	+10.1	116,209	+5.0

<sup>e</sup> Season expansion: September 15 – January 15

## HUNTING INCIDENTS

There were 4 non-fatal hunting incidents that occurred during the 2012 spring turkey season.

## RECENT REGULATION CHANGES

Other than changes to some Conservation Area and managed hunt regulations, no additional turkey hunting regulation changes were implemented in 2012.

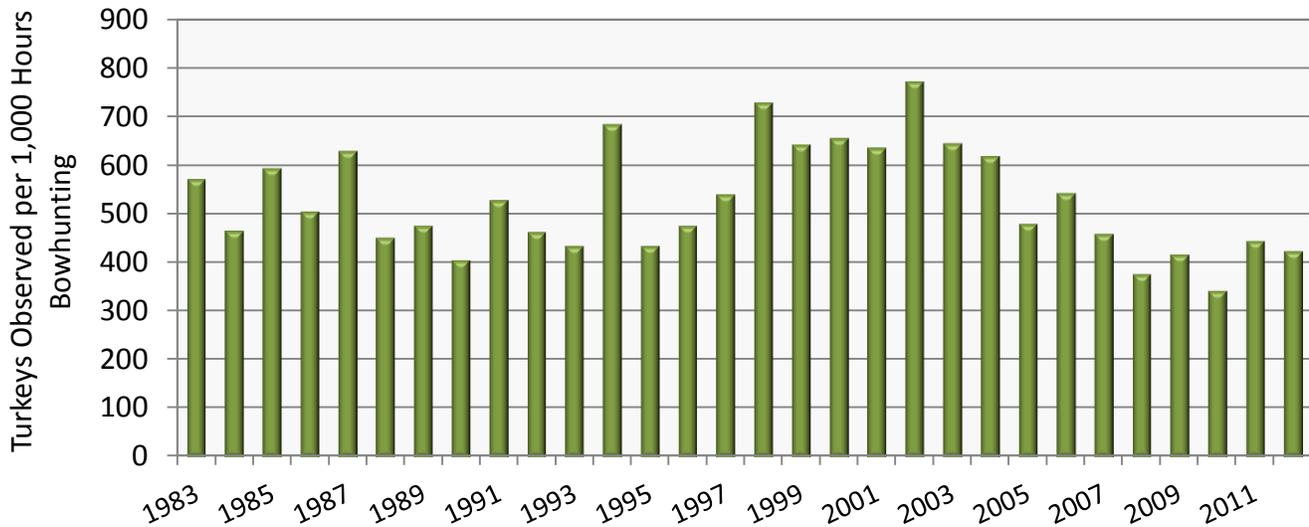
## POPULATION/ABUNDANCE INDEX - BOWHUNTER OBSERVATION SURVEY

Since 1983, MDC staff and citizen volunteers participating in the bowhunter observation survey have recorded the number of wild turkeys observed while archery hunting. Since survey participants also record the number of hours that they bowhunt, an index of wild turkey abundance can be calculated as the number of turkeys observed per 1,000 hours bowhunting.

At the statewide scale, the number of turkeys observed per 1,000 hours bowhunting in 2012 was 424 (Figure 12). At the regional scale, index values ranged from 109 in the Mississippi Lowlands region to 549 in the Ozark Border region (Table 7). The statewide average of 424 represents a 5%

decline from 2011 and a 4% increase from the previous 5-year average. The statewide index remains 17% and 22% below the previous 10 and 20-year averages, respectively (Table 7).

### Bowhunter Observation Survey - Index to Wild Turkey Abundance



**Figure 12. Statewide observations of wild turkeys by bowhunters in Missouri, 1983-2012. Data are the average number of turkeys observed per 1,000 hours bowhunting.**

**Table 7. Index of wild turkey abundance in Missouri 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 2012 index compares to the previous year or the average for periodic intervals.**

Productivity Region	2012 Index	1-year (2011) Change	5-year (2007-2011) Change	10-year (2002-2011) Change	20-year (1992-2011) Change
Lindley Breaks	378	+2%	+13%	+2%	-10%
Mississippi Lowlands	109	-60%	-69%	-68%	-63%
Northeast	458	-21%	+14%	-19%	-32%
Northwest	466	-5%	-22%	-39%	-40%
Ozark Border	549	+33%	+44%	+11%	+2%
Ozarks East	319	+7%	+19%	+2%	0%
Ozarks West	382	+24%	+13%	-9%	-15%
Union Breaks	379	-7%	-3%	-12%	-15%
West Prairie	467	-20%	-15%	-34%	-29%
<b>Statewide</b>	<b>424</b>	<b>-5%</b>	<b>+4%</b>	<b>-17%</b>	<b>-22%</b>

## Appendix A. 2012 Missouri spring turkey harvest (youth and regular seasons combined).

County	Adult Males	Juvenile Males	Bearded Hens	Total
Adair	333	117	8	458
Andrew	283	63	3	349
Atchison	227	27	7	261
Audrain	149	97	3	249
Barry	84	40	0	124
Barton	235	94	9	338
Bates	274	133	4	411
Benton	440	198	6	644
Bollinger	476	180	9	665
Boone	285	171	3	459
Buchanan	130	30	0	160
Butler	139	53	1	193
Caldwell	188	64	6	258
Callaway	456	270	15	741
Camden	352	154	4	510
Cape Girardeau	497	89	1	587
Carroll	269	60	2	331
Carter	138	87	0	225
Cass	297	126	5	428
Cedar	466	140	10	616
Chariton	210	86	1	297
Christian	350	123	3	476
Clark	221	76	0	297
Clay	175	56	1	232
Clinton	139	52	3	194
Cole	273	126	11	410
Cooper	230	97	1	328
Crawford	250	158	7	415
Dade	300	95	5	400
Dallas	381	174	2	557
Daviess	285	80	6	371
Dekalb	175	64	1	240
Dent	371	181	6	558
Douglas	468	189	13	670
Dunklin	23	4	0	27
Franklin	614	338	20	972

## Appendix A. Continued.

County	Adult Males	Juvenile Males	Bearded Hens	Total
Gasconade	366	194	6	566
Gentry	221	45	3	269
Greene	587	170	5	762
Grundy	209	52	4	265
Harrison	358	89	3	450
Henry	410	184	3	597
Hickory	333	113	5	451
Holt	314	43	7	364
Howard	219	124	1	344
Howell	365	172	3	540
Iron	176	111	2	289
Jackson	209	69	8	286
Jasper	199	114	6	319
Jefferson	454	181	5	640
Johnson	374	142	3	519
Knox	268	71	3	342
Laclede	529	219	7	755
Lafayette	180	69	2	251
Lawrence	251	114	2	367
Lewis	186	54	3	243
Lincoln	288	203	10	501
Linn	226	67	1	294
Livingston	191	78	4	273
Macon	401	173	4	578
Madison	201	94	4	299
Maries	286	172	8	466
Marion	132	72	4	208
McDonald	48	15	1	64
Mercer	308	60	1	369
Miller	335	163	7	505
Mississippi	40	5	0	45
Moniteau	251	104	3	358
Monroe	220	131	7	358
Montgomery	231	151	11	393
Morgan	288	142	3	433
New Madrid	35	4	0	39

## Appendix A. Continued

County	Adult Males	Juvenile Males	Bearded Hens	Total
Newton	48	21	1	70
Nodaway	389	56	3	448
Oregon	265	94	3	362
Osage	453	184	7	644
Ozark	272	88	4	364
Pemiscot	25	1	0	26
Perry	448	109	7	564
Pettis	380	138	3	521
Phelps	361	162	6	529
Pike	286	128	5	419
Platte	183	44	2	229
Polk	510	134	5	649
Pulaski	331	137	5	473
Putnam	301	93	1	395
Ralls	142	90	3	235
Randolph	243	123	1	367
Ray	291	82	6	379
Reynolds	168	98	2	268
Ripley	197	80	2	279
Saint Charles	238	96	8	342
Saint Clair	468	186	12	666
Saint Francois	323	126	0	449
Saint Louis	99	21	2	122
Sainte Genevieve	519	198	7	724
Saline	197	97	2	296
Schuyler	165	44	3	212
Scotland	300	69	4	373
Scott	94	25	2	121
Shannon	256	130	3	389
Shelby	165	42	2	209
Stoddard	228	68	5	301
Stone	191	68	4	263
Sullivan	296	86	2	384
Taney	327	95	5	427
Texas	628	246	9	883
Vernon	396	134	9	539

## Appendix A. Continued.

County	Adult Males	Juvenile Males	Bearded Hens	Total
Warren	224	156	10	390
Washington	243	147	2	392
Wayne	291	153	4	448
Webster	470	159	10	639
Worth	108	21	1	130
Wright	448	168	11	627
<b>Totals</b>	<b>31,839</b>	<b>12,453</b>	<b>508</b>	<b>44,800</b>

## Appendix B. 2012 Missouri fall turkey harvest (firearms and archery seasons combined).

County	Adult Males	Adult Females	Juvenile Males	Juvenile Females	Total
Adair	24	30	24	43	121
Andrew	13	11	6	16	46
Atchison	16	12	7	12	47
Audrain	15	16	8	19	58
Barry	1	8	7	5	21
Barton	27	23	15	23	88
Bates	20	35	13	25	93
Benton	56	82	31	60	229
Bollinger	19	42	27	57	145
Boone	34	29	10	27	100
Buchanan	2	7	5	4	18
Butler	8	14	16	20	58
Caldwell	17	10	6	16	49
Callaway	56	43	26	49	174
Camden	41	34	29	44	148
Cape Girardeau	20	48	15	38	121
Carroll	8	12	10	11	41
Carter	7	14	22	35	78
Cass	26	31	23	34	114
Cedar	22	46	35	55	158
Chariton	12	11	9	14	46
Christian	28	32	14	46	120
Clark	7	9	4	7	27
Clay	9	18	5	14	46
Clinton	7	16	6	5	34
Cole	33	39	15	31	118
Cooper	24	12	9	17	62
Crawford	62	51	47	82	242
Dade	25	33	27	34	119
Dallas	48	71	35	77	231
Daviess	22	21	11	33	87
Dekalb	12	14	2	19	47
Dent	39	34	36	75	184
Douglas	15	28	25	57	125
Dunklin	0	1	0	1	2

## Appendix B. Continued.

County	Adult Males	Adult Females	Juvenile Males	Juvenile Females	Total
Franklin	59	85	46	91	281
Gasconade	50	62	29	54	195
Gentry	11	8	7	11	37
Greene	72	88	49	83	292
Grundy	14	19	3	25	61
Harrison	19	26	9	19	73
Henry	55	44	32	59	190
Hickory	40	46	14	38	138
Holt	18	24	13	25	80
Howard	19	11	9	15	54
Howell	18	32	30	43	123
Iron	31	34	21	49	135
Jackson	4	11	8	9	32
Jasper	16	29	14	11	70
Jefferson	76	82	20	61	239
Johnson	36	25	11	41	113
Knox	14	8	2	21	45
Laclede	51	102	47	102	302
Lafayette	11	21	10	15	57
Lawrence	15	21	20	21	77
Lewis	4	8	4	17	33
Lincoln	33	46	14	33	126
Linn	17	22	11	26	76
Livingston	14	28	9	33	84
Macon	28	25	17	25	95
Madison	25	22	13	48	108
Maries	41	41	21	63	166
Marion	10	6	2	10	28
McDonald	2	0	1	0	3
Mercer	25	18	4	24	71
Miller	29	37	13	43	122
Mississippi	0	1	1	1	3
Moniteau	17	23	8	20	68
Monroe	37	26	11	34	108
Montgomery	31	21	18	30	100

## Appendix B. Continued.

County	Adult Males	Adult Females	Juvenile Males	Juvenile Females	Total
Morgan	38	37	13	43	131
New Madrid	3	3	1	3	10
Newton	0	9	4	1	14
Nodaway	27	8	2	13	50
Oregon	21	11	29	51	112
Osage	37	45	28	69	179
Ozark	6	20	20	20	66
Pemiscot	2	6	0	1	9
Perry	30	29	32	38	129
Pettis	22	22	7	16	67
Phelps	34	44	27	60	165
Pike	34	24	14	19	91
Platte	9	12	5	12	38
Polk	36	56	32	58	182
Pulaski	26	47	24	59	156
Putnam	24	30	16	24	94
Ralls	16	19	9	11	55
Randolph	18	22	15	16	71
Ray	22	21	13	19	75
Reynolds	16	17	21	36	90
Ripley	12	21	17	23	73
Saint Charles	14	23	15	27	79
Saint Clair	73	46	45	65	229
Saint Francois	55	38	31	54	178
Saint Louis	12	9	4	6	31
Sainte Genevieve	36	44	38	55	173
Saline	7	5	2	10	24
Schuyler	9	17	9	20	55
Scotland	10	17	5	18	50
Scott	4	5	2	1	12
Shannon	26	19	27	46	118
Shelby	10	12	1	12	35
Stoddard	16	46	31	51	144
Stone	8	17	10	14	49
Sullivan	32	24	15	20	91

## Appendix B. Continued.

County	Adult Males	Adult Females	Juvenile Males	Juvenile Females	Total
Taney	23	19	25	18	85
Texas	22	48	40	78	188
Vernon	30	29	14	28	101
Warren	35	35	25	32	127
Washington	70	47	42	72	231
Wayne	32	55	34	84	205
Webster	47	53	68	106	274
Worth	6	3	2	5	16
Wright	34	48	41	58	181
<b>Totals</b>	<b>2,761</b>	<b>3,201</b>	<b>1,976</b>	<b>3,777</b>	<b>11,715</b>



**Missouri Department of Conservation**