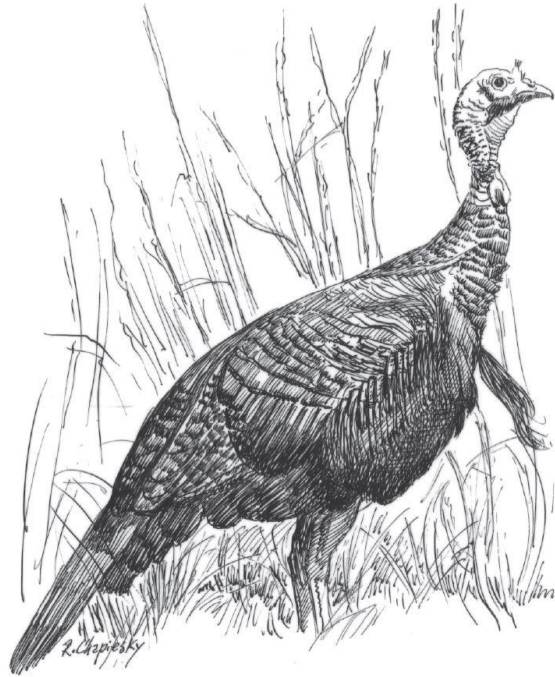


# 2017 South Carolina TURKEY HARVEST REPORT



SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES  
WILD TURKEY RESEARCH & MANAGEMENT PROJECT



Submitted by  
Charles Ruth and Jay Cantrell  
Wildlife Biologists, SCDNR Big Game Program

## INTRODUCTION

Ranking only behind the white-tailed deer in popularity among hunters, the Eastern wild turkey is an important natural resource in South Carolina. The 2017 Turkey Hunter Survey represents the South Carolina Department of Natural Resources (DNR), Wildlife Section's ongoing commitment to conduct pertinent research related to the state's wild turkey population. The primary objectives of this survey research were to obtain valid estimates of; (1) the statewide spring gobbler harvest in 2017, (2) the harvest of gobblers in the constituent counties of the state, and (3) hunting effort related to turkeys. Information on hunter's opinions of the turkey resource and other aspects of turkey hunting are also presented.

Due to the importance of turkeys as a state resource, DNR believes that accurately assessing the harvest of turkeys, as well as hunter participation in turkey hunting, is key to the management of this species. Proposed changes in turkey-related laws and regulations should have foundations in biology, therefore, the population dynamics associated with annual hunting mortality cannot be ignored. Similarly, when issues arise that do not involve biological parameters, it is important to have information related to turkey hunter activities afield because they too form an important basis for managing wild turkeys.

Since the inception of the Statewide Turkey Restoration and Research Project (Turkey Project) the methods used to document the turkey harvest have changed. Historically, turkey harvest figures were developed using a system of mandatory turkey check stations across the state. This system yielded an actual count of harvested turkey and was, therefore, an absolute minimum harvest figure. Shortcomings in this system included deterioration of check station compliance, complaints from hunters regarding the inconvenience of check stations, and costs associated with the check station system. The requirement to check harvested turkeys in South Carolina was eliminated following the 2005 season. Prior to eliminating the check-in requirement, DNR conducted surveys in order to document the rate of noncompliance, as well as, to determine the relationship between harvest figures obtained from check stations and those obtained from surveys. As would be expected, harvest figures obtained from surveys are higher than those from check stations due to lack of compliance with the check-in requirement.

## **Survey Methodology**

The 2017 Turkey Hunter Survey represented a random mail survey that involved a single mail-out. The questionnaire for the 2017 Turkey Hunter Survey was developed by Wildlife Section personnel (Figure 1). The mailing list database was constructed by randomly selecting 30,000 individuals who received a set of 2017 Turkey Transportation Tags which are required in order to hunt turkeys in South Carolina. Data entry was completed by Priority Data, Inc., Omaha, Nebraska.

Results from the mail survey were corrected for nonresponse bias using data collected during 2007-2013 by Responsive Management of Harrisonburg, Virginia using a Computer Assisted Telephone Interview program (CATI).

Statistical analysis was conducted using Statistix 7 (Analytical Software, Tallahassee, FL).

## **RESULTS AND DISCUSSION**

### **Turkey Harvest**

During the 2017 spring season it is estimated that a total of 17,093 adult gobblers and 2,078 jakes were harvested for a statewide total of 19,171 turkeys (Table 1). This figure represents a 14 percent increase in harvest from 2016 (16,783). Combined with a 10 percent increase from 2015 to 2016 the statewide turkey harvest increased 24 percent the last two seasons. These recent increases in harvest may be partially related to better reproduction and recruitment in turkeys since 2013 (Figure 2). Recruitment in 2013 was the lowest ever documented by the annual Summer Turkey Survey which has been conducted since 1982. With an expected two-year time lag, in 2015 this poor recruitment resulted in the lowest spring harvest in nearly two decades. Recruitment has been somewhat better since, therefore, recent improvements in harvest are not surprising.

However, legislative changes that went into effect in 2016 provided an earlier starting date and increased number of days in the turkey season in 34 of 46 South Carolina counties. The effect of this season change was a 50 percent increase in opportunity (days) for the majority of the state. Hunter effort statistics indicate hunters have taken advantage of the increased opportunity. Statewide man/days of effort were at an all-time high in 2017 and represent a 27 percent increase over 2015 which was the last season prior to the changes being initiated.

With slightly higher recruitment and significantly higher hunter effort the last two years it is difficult to determine which is more responsible for the dramatic increase in harvest since 2015. On one hand, better recruitment has historically been followed by higher harvests, i.e. more turkeys on the landscape generally equals a higher harvest. On the other hand, more hunter effort can clearly increase the harvest, to a point, regardless of the number of turkeys on the landscape. It will likely take several years for these relationships to become clearer.

### **Harvest Per Unit Area County Rankings**

Comparisons can be made between turkey harvests from the various counties in South Carolina if a harvest per unit area is established. Harvest per unit area standardizes the harvest

among counties regardless of the size of individual counties. One measure of harvest rate is the number of turkeys taken per square mile (640ac. = 1 mile<sup>2</sup>). When considering the estimated turkey habitat that is available in South Carolina, the turkey harvest rate in 2017 was 0.9 gobblers per square mile statewide (Table 2). Although this harvest rate is not as high as it once was, it should be considered good and is similar to other Southeastern states. The top 5 counties for harvest per unit area were Union (1.8 turkeys/mile<sup>2</sup>), Cherokee (1.4 turkeys/mile<sup>2</sup>), Williamsburg (1.3 turkeys/mile<sup>2</sup>), Charleston (1.3 turkeys/mile<sup>2</sup>), and Newberry (1.3 turkeys/mile<sup>2</sup>) (Table 2).

### **Turkey Harvest Rankings by County**

Total turkey harvest is not comparable among counties because there is no standard unit of comparison, i.e. counties vary in size and are, therefore, not directly comparable. However, some readers may be interested in this type of ranking. The top 5 counties during 2017 were Williamsburg, Orangeburg, Berkeley, Colleton, and Union (Table 3).

### **Turkey Harvest by Week of Season**

South Carolina historically had two spring turkey season frameworks. Throughout most of the state (Game Zones 1, 2, and 4) the season was April 1 – May 1. This season was based on a recommendation from DNR following gobbling and nesting studies that were conducted in the 1970's. The other season framework was March 15 - May 1 and was only in effect in 12 counties in Game Zone 3 which comprised the lower coastal plain. This early opening season was socio-politically based.

Due to legislation passed in 2015, the spring 2016 season was the first with a single statewide season of March 20-May 5. In past years it was customary to compare the harvest trends between the two season frameworks. With the single statewide season now in place, this comparison is no longer available. Nonetheless, Figure 4 depicts the harvest trends over the course of the season.

### **Number of Turkey Hunters**

Even though all individuals receiving a set of Turkey Transportation Tags were licensed

to hunt turkeys, only 62 percent indicated that they actually hunted turkeys. Based on this figure, approximately 52,429 hunters participated in the 2017 spring turkey season, a 1.5 percent increase from 2016 (51,867). Counties with the highest estimates for individual hunters include Newberry, Fairfield, Orangeburg, Berkeley, and Union (Table 4) and all of these counties other than Berkeley were in the top 5 in 2016.

### **Hunter Effort**

For the purposes of this survey hunter effort was measured in days with one day being defined as any portion of the day spent afield. Turkey hunters averaged approximately 5.9 days afield during the 2017 season (Table 4). Successful hunters averaged significantly more days afield (7.1 days) than unsuccessful hunters (4.9 days). Extrapolating to the entire population of turkey hunters yields a figure of 277,300 total days of spring gobbler hunting, up 2.2 percent from 2016 (271,302 days).

The number of days devoted to turkey hunting in South Carolina is significant and points not only to the availability and popularity of turkeys as a game species, but to the obvious economic benefits related to this important natural resource. Figures generated by a 2003 Survey by the National Wild Turkey Federation estimate that approximately 35 million dollars are added to South Carolina's economy annually from turkey hunting. The top 5 South Carolina counties for overall days of turkey hunting during 2017 were Newberry, Union, Fairfield, Berkeley, and Chester counties (Table 4).

### **Hunting Success**

For determination of hunting success only those individuals that actually hunted turkeys were included in the analysis and similarly, success was defined as harvesting at least one turkey. Overall hunting success in 2017 was 26 percent (Figure 5). Unlike deer hunting which typically has high success, turkey hunting can be an inherently unsuccessful endeavor, relatively speaking. As would be expected, the majority of successful hunters take one gobbler (Figure 5). However, the percentage of successful hunters who take two birds is quite high as well. This indicates that successful hunters had essentially the same chance of taking two birds as they did one bird.

The statewide bag limit in South Carolina is 3 gobblers. Obviously, most successful hunters harvest only one or two birds. However, it is interesting to note the relative contribution to the total harvest of turkeys by the few hunters that harvest 3 birds. Ironically, the percentage of hunters taking 3 birds was only 2.9 percent, however, this small percentage of hunters harvested an estimated 28 percent of the total birds taken in the state (Figure 6).

### **Hunter Opinion Regarding Turkey Numbers**

The 2017 Turkey Hunter Survey asked participants to compare the number of turkeys in the area they hunt most often with the number of turkeys in past years. Participants were given 3 choices; increasing, about the same, or decreasing. Approximately 46 percent of hunters indicated that the number of turkeys in the area they hunted most often was about the same as in past years. A higher percentage of hunters (38%) believed that the turkey population was decreasing than increasing (16%). On a scale of 1 to 3 with 1 being increasing, 2 being the same, and 3 being decreasing, the overall mean rating of 2.2 suggests that hunters viewed the turkey population as decreasing. The opinion among hunters that the turkey population is decreasing has been consistent the last few years.

### **Turkeys Shot but not Recovered**

Harvesting game signals the end of a successful hunt and although most hunters do a good job of preparing their equipment and mental state, it goes without saying that a certain percentage of game is shot or shot at and not killed or recovered. This point is no different when turkey hunting.

In order to estimate the prevalence of errant shots at turkeys, the 2017 Turkey Hunter Survey asked hunters to indicate the number of turkeys that they “shot but did not kill or recover during the 2017 season in South Carolina.” Approximately 10.8 percent of hunters indicated that they shot but did not kill or recover at least one turkey in 2017 (9.8% in 2016). There were approximately 52,429 turkey hunters in 2017 meaning that approximately 5,245 turkeys were shot or shot at and not killed or recovered. Therefore, approximately 22 percent of the total number of turkeys shot at were not killed or recovered. These results have been consistent since this type of data has been available.

This data is certainly not indicative of “dead and unrecovered turkeys,” however, it is clear that some percentage of the 5,245 turkeys that were shot at did eventually die. Although shot shells for turkeys have become increasingly sophisticated, accurate, and lethal it is a fact that the pattern of a shotgun is relatively broad and contains between 200 and 400 pellets. Therefore, a “clean miss” is not as clear-cut for turkeys compared to other big game like deer where there is typically a single projectile. Additional research is needed on this topic.

### **Turkey Harvest in the Morning VS. Afternoon**

The typical spring turkey hunt is characterized by attempting to locate a gobbling bird prior to or just after sunrise. Once a gobbler is located most hunters position themselves as close as they can to the gobbler without scaring it away. Various types of callers that mimic the sounds of wild turkeys are then used to attempt to call the gobbler into gun range. This technique of locating a gobbling bird, setting-up, and calling is repeated as necessary.

Traditionally, spring turkey hunting was primarily carried out during the first few hours of the day. As the popularity of turkey hunting has increased, many hunters now hunt in the afternoon as well. Gobblers are generally not as vocal in the afternoon but they can be stimulated to gobble using the various turkey calls, particularly late in the afternoon near areas where turkeys frequently roost.

In order to gain a better understanding of the distribution of harvest with respect to time of day, the 2017 Turkey Hunter Survey asked hunters to identify the number of birds harvested in the morning compared to the afternoon. Results indicate that approximately 78 percent of gobblers were harvested in the morning compared to 22 percent in the afternoon. This data may be useful if discussions arise concerning the relative importance of morning compared to afternoon harvest of gobblers in the spring. These results have been consistent since this type of data has been available.



## List of Tables

<b>Table</b>	<b>Title</b>	<b>Page</b>
1	Estimated statewide turkey harvest in South Carolina in 2017 .....	9
2	County rankings based on turkeys harvested per unit area in South Carolina in 2017.....	10
3	County rankings based on total turkeys harvested in South Carolina in 2017.....	11
4	Estimated number of turkey hunters, average days hunted, and total hunting effort by county in South Carolina in 2017 .....	12

## List of Figures

<b>Figure</b>	<b>Title</b>	<b>Page</b>
1	South Carolina Department of Natural Resources 2017 Turkey Hunter Survey .....	13-14
2	Summer wild turkey recruitment ratio in South Carolina 1982-2016 .....	15
3	Spring wild turkey harvest in South Carolina 1982-2017.....	15
4	Percentage of gobblers harvested by week of season in South Carolina in 2017 .....	16
5	Hunter success during the spring turkey season in South Carolina in 2017 .....	16
6	Relative contribution to the total turkey harvest by hunters taking multiple birds in South Carolina in 2017 .....	16

Table 1. Estimated statewide turkey harvest in South Carolina in 2017.

County	Acres*	Square Miles	Gobbler Harvest	Jake Harvest	Total Harvest	Percent Jakes	Harvest	Rates
							Ac/Turkey	Turkey/Mi. <sup>2</sup>
Abbeville	223,113	349	297	38	335	11.3	666	1.0
Aiken	500,546	782	387	57	444	12.8	1,127	0.6
Allendale	216,455	338	327	44	371	11.9	583	1.1
Anderson	219,068	342	320	63	383	16.4	572	1.1
Bamberg	196,573	307	342	50	392	12.8	501	1.3
Barnwell	281,764	440	238	50	288	17.4	978	0.7
Beaufort	147,441	230	44	6	50	12.0	2,949	0.2
Berkeley	567,530	887	789	50	839	6.0	676	0.9
Calhoun	190,584	298	260	12	272	4.4	701	0.9
Charleston	288,732	451	558	31	589	5.3	490	1.3
Cherokee	156,664	245	290	50	340	14.7	461	1.4
Chester	300,589	470	439	69	508	13.6	592	1.1
Chesterfield	372,478	582	357	31	388	8.0	960	0.7
Clarendon	298,087	466	238	31	269	11.5	1,108	0.6
Colleton	502,666	785	677	38	715	5.3	703	0.9
Darlington	286,228	447	201	25	226	11.1	1,266	0.5
Dillon	214,069	334	134	12	146	8.2	1,466	0.4
Dorchester	302,717	473	528	42	570	7.4	531	1.2
Edgefield	246,543	385	305	57	362	15.7	681	0.9
Fairfield	384,607	601	506	63	569	11.1	676	0.9
Florence	397,888	622	506	38	544	7.0	731	0.9
Georgetown	399,638	624	305	25	330	7.6	1,211	0.5
Greenville	294,257	460	372	95	467	20.3	630	1.0
Greenwood	204,400	319	223	44	267	16.5	766	0.8
Hampton	324,840	508	484	25	509	4.9	638	1.0
Horry	533,336	833	521	63	584	10.8	913	0.7
Jasper	309,889	484	372	31	403	7.7	769	0.8
Kershaw	360,485	563	245	76	321	23.7	1,123	0.6
Lancaster	266,382	416	268	50	318	15.7	838	0.8
Laurens	317,916	497	528	114	642	17.8	495	1.3
Lee	220,106	344	320	12	332	3.6	663	1.0
Lexington	280,742	439	29	12	41	29.3	6,847	0.1
McCormick	212,021	331	201	19	220	8.6	964	0.7
Marion	216,907	339	245	6	251	2.4	864	0.7
Marlboro	281,271	439	193	6	199	3.0	1,413	0.5
Newberry	317,761	497	543	101	644	15.7	493	1.3
Oconee	284,348	444	268	57	325	17.5	875	0.7
Orangeburg	504,516	788	863	63	926	6.8	545	1.2
Pickens	219,926	344	379	38	417	9.1	527	1.2
Richland	340,121	531	238	25	263	9.5	1,293	0.5
Saluda	192,173	300	134	38	172	22.1	1,117	0.6
Spartanburg	265,939	416	357	95	452	21.0	588	1.1
Sumter	338,968	530	335	19	354	5.4	958	0.7
Union	258,111	403	625	88	713	12.3	362	1.8
Williamsburg	513,851	803	1012	50	1062	4.7	484	1.3
York	276,650	432	290	69	359	19.2	771	0.8
<b>Total</b>	<b>14,028,896</b>	<b>21,920</b>	<b>17,093</b>	<b>2,078</b>	<b>19,171</b>	<b>10.8</b>	<b>732</b>	<b>0.9</b>

95% Conf. Interval for harvest

(+-) 1,525 (+-) 566 (+-) 1,641

\* Acreage shown represents the acreage of forested land and acreage of row crops considered to be significant turkey habitat within each county.

Table 2. County rankings based on turkey harvest per unit area in South Carolina in 2017.

County	Acres*	Square Miles	Gobbler Harvest	Jake Harvest	Total Harvest	Percent Jakes	Harvest	Rates
							Ac/Turkey	Turkey/Mi. <sup>2</sup>
Union	258,111	403	625	88	713	12.3	362	1.8
Cherokee	156,664	245	290	50	340	14.7	461	1.4
Williamsburg	513,851	803	1012	50	1062	4.7	484	1.3
Charleston	288,732	451	558	31	589	5.3	490	1.3
Newberry	317,761	497	543	101	644	15.7	493	1.3
Laurens	317,916	497	528	114	642	17.8	495	1.3
Bamberg	196,573	307	342	50	392	12.8	501	1.3
Pickens	219,926	344	379	38	417	9.1	527	1.2
Dorchester	302,717	473	528	42	570	7.4	531	1.2
Orangeburg	504,516	788	863	63	926	6.8	545	1.2
Anderson	219,068	342	320	63	383	16.4	572	1.1
Allendale	216,455	338	327	44	371	11.9	583	1.1
Spartanburg	265,939	416	357	95	452	21.0	588	1.1
Chester	300,589	470	439	69	508	13.6	592	1.1
Greenville	294,257	460	372	95	467	20.3	630	1.0
Hampton	324,840	508	484	25	509	4.9	638	1.0
Lee	220,106	344	320	12	332	3.6	663	1.0
Abbeville	223,113	349	297	38	335	11.3	666	1.0
Fairfield	384,607	601	506	63	569	11.1	676	0.9
Berkeley	567,530	887	789	50	839	6.0	676	0.9
Edgefield	246,543	385	305	57	362	15.7	681	0.9
Calhoun	190,584	298	260	12	272	4.4	701	0.9
Colleton	502,666	785	677	38	715	5.3	703	0.9
Florence	397,888	622	506	38	544	7.0	731	0.9
Greenwood	204,400	319	223	44	267	16.5	766	0.8
Jasper	309,889	484	372	31	403	7.7	769	0.8
York	276,650	432	290	69	359	19.2	771	0.8
Lancaster	266,382	416	268	50	318	15.7	838	0.8
Marion	216,907	339	245	6	251	2.4	864	0.7
Oconee	284,348	444	268	57	325	17.5	875	0.7
Horry	533,336	833	521	63	584	10.8	913	0.7
Sumter	338,968	530	335	19	354	5.4	958	0.7
Chesterfield	372,478	582	357	31	388	8.0	960	0.7
McCormick	212,021	331	201	19	220	8.6	964	0.7
Barnwell	281,764	440	238	50	288	17.4	978	0.7
Clarendon	298,087	466	238	31	269	11.5	1,108	0.6
Saluda	192,173	300	134	38	172	22.1	1,117	0.6
Kershaw	360,485	563	245	76	321	23.7	1,123	0.6
Aiken	500,546	782	387	57	444	12.8	1,127	0.6
Georgetown	399,638	624	305	25	330	7.6	1,211	0.5
Darlington	286,228	447	201	25	226	11.1	1,266	0.5
Richland	340,121	531	238	25	263	9.5	1,293	0.5
Marlboro	281,271	439	193	6	199	3.0	1,413	0.5
Dillon	214,069	334	134	12	146	8.2	1,466	0.4
Beaufort	147,441	230	44	6	50	12.0	2,949	0.2
Lexington	280,742	439	29	12	41	29.3	6,847	0.1
<b>Total</b>	<b>14,028,896</b>	<b>21,920</b>	<b>17,093</b>	<b>2,078</b>	<b>19,171</b>	<b>10.8</b>	<b>732</b>	<b>0.9</b>
95% Conf. Interval for harvest			(+-) 1,525	(+-) 566	(+-) 1,641			

Table 3. County rankings based on total turkeys harvested in South Carolina in 2017.

County	Acres*	Square Miles	Gobbler Harvest	Jake Harvest	Total Harvest	Percent Jakes	Harvest	Rates
							Ac/Turkey	Turkey/Mi. <sup>2</sup>
Williamsburg	513,851	803	1012	50	1062	4.7	484	1.3
Orangeburg	504,516	788	863	63	926	6.8	545	1.2
Berkeley	567,530	887	789	50	839	6.0	676	0.9
Colleton	502,666	785	677	38	715	5.3	703	0.9
Union	258,111	403	625	88	713	12.3	362	1.8
Newberry	317,761	497	543	101	644	15.7	493	1.3
Laurens	317,916	497	528	114	642	17.8	495	1.3
Charleston	288,732	451	558	31	589	5.3	490	1.3
Horry	533,336	833	521	63	584	10.8	913	0.7
Dorchester	302,717	473	528	42	570	7.4	531	1.2
Fairfield	384,607	601	506	63	569	11.1	676	0.9
Florence	397,888	622	506	38	544	7.0	731	0.9
Hampton	324,840	508	484	25	509	4.9	638	1.0
Chester	300,589	470	439	69	508	13.6	592	1.1
Greenville	294,257	460	372	95	467	20.3	630	1.0
Spartanburg	265,939	416	357	95	452	21.0	588	1.1
Aiken	500,546	782	387	57	444	12.8	1,127	0.6
Pickens	219,926	344	379	38	417	9.1	527	1.2
Jasper	309,889	484	372	31	403	7.7	769	0.8
Bamberg	196,573	307	342	50	392	12.8	501	1.3
Chesterfield	372,478	582	357	31	388	8.0	960	0.7
Anderson	219,068	342	320	63	383	16.4	572	1.1
Allendale	216,455	338	327	44	371	11.9	583	1.1
Edgefield	246,543	385	305	57	362	15.7	681	0.9
York	276,650	432	290	69	359	19.2	771	0.8
Sumter	338,968	530	335	19	354	5.4	958	0.7
Cherokee	156,664	245	290	50	340	14.7	461	1.4
Abbeville	223,113	349	297	38	335	11.3	666	1.0
Lee	220,106	344	320	12	332	3.6	663	1.0
Georgetown	399,638	624	305	25	330	7.6	1,211	0.5
Oconee	284,348	444	268	57	325	17.5	875	0.7
Kershaw	360,485	563	245	76	321	23.7	1,123	0.6
Lancaster	266,382	416	268	50	318	15.7	838	0.8
Barnwell	281,764	440	238	50	288	17.4	978	0.7
Calhoun	190,584	298	260	12	272	4.4	701	0.9
Clarendon	298,087	466	238	31	269	11.5	1,108	0.6
Greenwood	204,400	319	223	44	267	16.5	766	0.8
Richland	340,121	531	238	25	263	9.5	1,293	0.5
Marion	216,907	339	245	6	251	2.4	864	0.7
Darlington	286,228	447	201	25	226	11.1	1,266	0.5
McCormick	212,021	331	201	19	220	8.6	964	0.7
Marlboro	281,271	439	193	6	199	3.0	1,413	0.5
Saluda	192,173	300	134	38	172	22.1	1,117	0.6
Dillon	214,069	334	134	12	146	8.2	1,466	0.4
Beaufort	147,441	230	44	6	50	12.0	2,949	0.2
Lexington	280,742	439	29	12	41	29.3	6,847	0.1
<b>Total</b>	<b>14,028,896</b>	<b>21,920</b>	<b>17,093</b>	<b>2,078</b>	<b>19,171</b>	<b>10.8</b>	<b>732</b>	<b>0.9</b>

95% Conf. Interval for harvest

(+-) 1,525	(+-) 566	(+-) 1,641
------------	----------	------------

Table 4. Estimated number of turkey hunters, average days hunted, and total hunting effort in South Carolina in 2017.

<b>County</b>	<b>Total Harvest</b>	<b>Number Hunters</b>	<b>Avg. Days Hunted</b>	<b>Total Man/Days</b>
Abbeville	335	1,375	5.8	7,977
Aiken	444	1,047	5.8	6,122
Allendale	371	913	4.9	4,432
Anderson	383	1,283	5.1	6,533
Bamberg	392	811	4.7	3,783
Barnwell	288	575	7.0	4,021
Beaufort	50	267	2.5	676
Berkeley	839	2,032	5.3	10,682
Calhoun	272	780	5.6	4,368
Charleston	589	1,539	4.4	6,716
Cherokee	340	821	5.8	4,788
Chester	508	1,580	6.1	9,649
Chesterfield	388	1,016	7.5	7,584
Clarendon	269	841	3.9	3,271
Colleton	715	1,683	5.1	8,553
Darlington	226	718	5.5	3,938
Dillon	146	421	4.4	1,837
Dorchester	570	1,098	5.7	6,250
Edgefield	362	1,149	6.2	7,182
Fairfield	569	2,093	5.1	10,764
Florence	544	1,016	6.4	6,497
Georgetown	330	872	4.4	3,874
Greenville	467	1,385	5.2	7,264
Greenwood	267	1,098	5.2	5,729
Hampton	509	1,262	5.4	6,835
Horry	584	1,190	5.5	6,588
Jasper	403	800	4.8	3,865
Kershaw	321	934	6.2	5,821
Lancaster	318	1,016	5.3	5,346
Laurens	642	1,868	4.7	8,763
Lee	332	749	5.7	4,286
Lexington	41	400	3.5	1,416
McCormick	220	1,201	5.6	6,725
Marion	251	534	4.2	2,257
Marlboro	199	400	5.6	2,248
Newberry	644	2,114	5.7	12,144
Oconee	325	985	6.2	6,067
Orangeburg	926	2,042	5.0	10,143
Pickens	417	1,160	5.3	6,095
Richland	263	1,026	4.2	4,267
Saluda	172	852	5.0	4,231
Spartanburg	452	1,416	5.0	7,027
Sumter	354	1,160	4.5	5,181
Union	713	1,960	5.7	11,230
Williamsburg	1,062	1,704	4.6	7,913
York	359	1,242	5.1	6,360
<b>Total</b>	<b>19,171</b>	<b>52,429</b>	<b>5.9</b>	<b>277,300</b>

Figure 1. South Carolina Department of Natural Resources 2017 Turkey Hunter Survey.

**2017 South Carolina Turkey Hunter Survey**

1. Did you turkey hunt in SC this past season (2017)? **1. Yes 2. No**  
If you answered **No** to this question please **go to question # 8.**
2. Did you harvest any turkeys in SC this past season? **1. Yes 2. No**
3. Even if you did not harvest a turkey, please record the SC counties you turkey hunted and the number of days hunted in each county this past season (2017). If you harvested turkeys please record the number of adult gobblers and jakes taken in each county. A day of hunting is defined as any portion of the day spent afield. Please do not give ranges (i.e. 5-10), rather provide absolute numbers (i.e. 5). Provide information only for yourself - not friends, relatives, or other people you may have called or guided for. See the diagram below if you are unsure how to determine an adult gobbler or "longbeard" from a juvenile gobbler or "jake".

SC Counties You Turkey Hunted	# Days Hunted	Number Turkeys Harvested
1		Adult gobblers_____ Jakes_____
2		Adult gobblers_____ Jakes_____
3		Adult gobblers_____ Jakes_____
4		Adult gobblers_____ Jakes_____
5		Adult gobblers_____ Jakes_____

**If you did not harvest any turkeys in SC this past season please go to question 6.**

4. If you harvested turkeys in SC this past season, please indicate as best you can the number of turkeys killed by week of season.

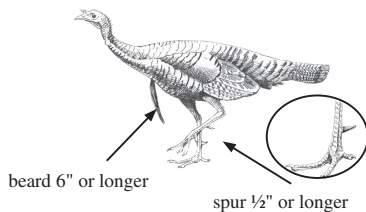
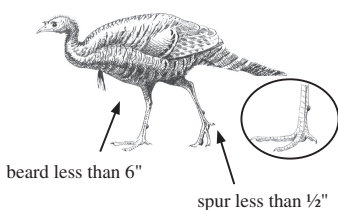
Date of Season	# Turkeys Harvested	Date of Season	# Turkeys Harvested
1 March 20-31		4 April 15-21	
2 April 1-7		5 April 22-30	
3 April 8-14		6 May 1-5	

5. How many turkeys did you kill in the morning \_\_\_\_\_ after 12:00 noon \_\_\_\_\_?
6. How many turkeys did you shoot but not kill or recover in SC this past season? \_\_\_\_\_
7. Compared to past years, how would you describe the number of turkeys in the area that you hunted most often this spring? **Circle one**  
**1. Increasing                      2. About the same                      3. Decreasing**
8. Are you a resident of SC? **1. Yes                      2. No**
9. If yes, which county \_\_\_\_\_

**Separate and return this portion of the survey. Postage is prepaid. Please do not staple this form.**

**Juvenile "Jake"**

**Adult "Gobbler"**



**HELP MANAGE  
TURKEYS IN S.C.  
COMPLETE YOUR  
HUNTER SURVEY**

**DNR**



**TURKEY HUNTER SURVEY**  
SCDNR  
PO BOX 167  
COLUMBIA SC 29202-0167  
www.dnr.sc.gov

PRESORTED  
FIRST CLASS  
US POSTAGE  
PAID  
COLUMBIA SC  
PERMIT 535

Figure 1. continued

May, 2017

Dear Sportsman:

Eastern wild turkeys are one of the most important game species in South Carolina. Therefore, it is important that this species be monitored for population status and harvesting activities. Wildlife resource managers require current and accurate information about wild turkey harvests to aid in successfully managing this important natural resource and to optimize future hunting potential. To obtain this needed data, the South Carolina Department of Natural Resources (SCDNR) is conducting a survey of hunters who received a set of turkey tags during spring 2017.

You are one of a group of randomly selected hunters asked to participate in this survey. To draw accurate conclusions it is very important that you complete the survey and return it. Please take time to read each question. Even if you did not hunt wild turkeys this spring please indicate this by answering the appropriate questions and moving on to the next set of questions.

Please note that complete confidentiality will be given to you. There is no number on your survey form, therefore, there is no way to link your responses to you. Keep in mind that the purpose of the survey is to determine the wild turkey harvest in South Carolina and not to determine whether game laws are observed. By accurately answering the survey questions you will enable SCDNR biologists to better manage the Eastern wild turkey resource for you and other citizens of the state. Therefore, it is very important that you take a few minutes to complete this survey and mail it. Return postage is prepaid.

Results of this survey will be posted on the SCDNR web site once completed. The results from the 2016 survey can be found at:  
[www.dnr.sc.gov/wildlife/turkey/2016TurkeyHarvest.html](http://www.dnr.sc.gov/wildlife/turkey/2016TurkeyHarvest.html)

Thank you for your assistance.



Charles Ruth  
Wildlife Biologist  
Deer/Turkey Project Supervisor

**PLEASE MAIL YOUR SURVEY AFTER SEPARATING THIS HALF FROM THE SIDE ON WHICH YOUR ANSWERS HAVE BEEN ENTERED. NO POSTAGE IS NECESSARY.**

If you have questions regarding this survey, please call 803-734-3886 or write 2017 Turkey Hunter Survey, SCDNR, P.O. Box 167, Columbia, SC 29202.

The South Carolina Department of Natural Resources prohibits discrimination on the basis of race, color, sex, national origin, disability, religion or age. Direct all inquiries to the Office of Human Resources, P.O. Box 167, Columbia, SC 29202

17-11297



**TURKEY HUNTER SURVEY  
SC DEPARTMENT OF NATURAL RESOURCES  
PO BOX 167  
COLUMBIA SC 29202-9976**

POSTAGE WILL BE PAID BY ADDRESSEE

**BUSINESS REPLY MAIL**  
FIRST CLASS MAIL PERMIT NO 1371 COLUMBIA SC



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

Figure 2. Summer wild turkey recruitment ratio in South Carolina 1982-2016. Note declining trend since 1988. Average recruitment prior to 1988 = 3.5. Average recruitment since 1988 = 2.2. This represents a 37 percent decrease.

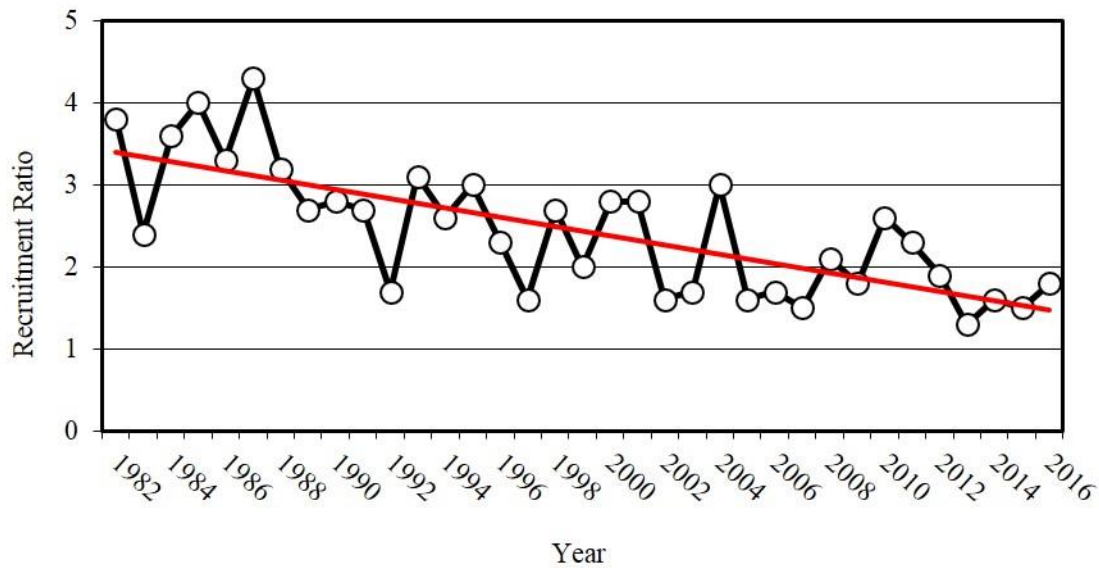


Figure 3. Spring wild turkey harvest in South Carolina 1982-2017. Harvest increased ( $R^2 = 0.95$ ) between 1982 and 1997 as a result of increasing turkey population during restoration efforts. Since 1998 the harvest has been up and down but statistically has remained relatively stable ( $R^2 = 0.14$ ) over the long-term averaging approximately 18,900 birds. Restoration ended in 2005.

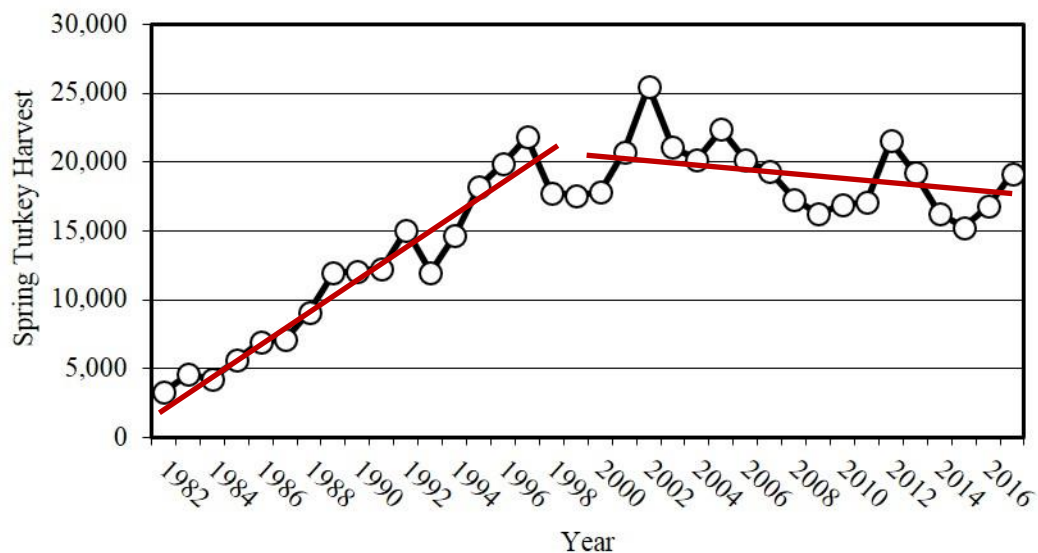




Figure 4. Percentage of gobblers harvested by week of season in South Carolina in 2017.

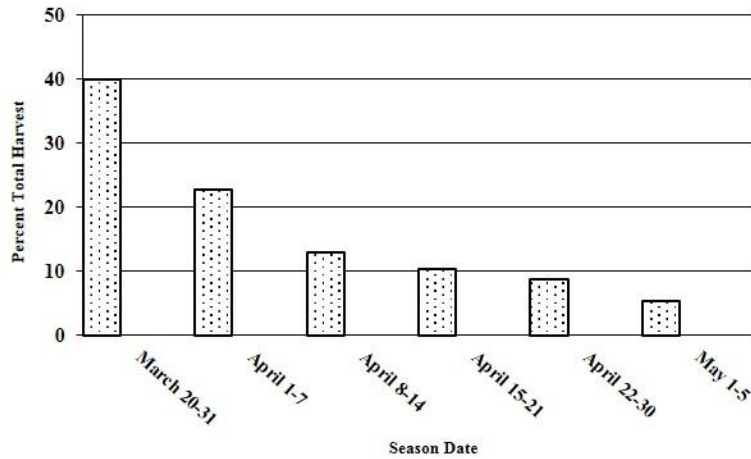


Figure 5. Hunter success during the spring turkey season in South Carolina in 2017. Overall success was 26 percent at harvesting at least one gobbler.

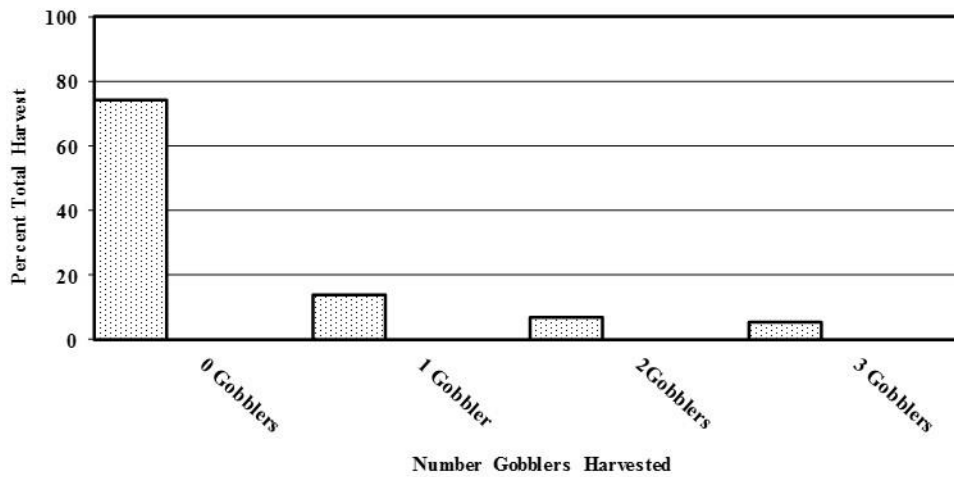


Figure 6. Relative contribution to the total turkey harvest by hunters taking between 1 and 3 gobblers in South Carolina in 2017.

