

2019 South Carolina TURKEY HARVEST REPORT



SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES TURKEY RESEARCH & MANAGEMENT PROJECT



Submitted by
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Introduction

Ranking only behind white-tailed deer in popularity among hunters, the Eastern wild turkey is an important natural resource in South Carolina. The 2019 Turkey Hunter Survey represents the South Carolina Department of Natural Resources (SCDNR), 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 2019, (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, SCDNR 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, SCDNR 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 2019 Turkey Hunter Survey represented a random mail survey that involved a single mail-out. The questionnaire for the 2019 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 2019 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 2019 spring season it is estimated that a total of 15,783 adult gobblers and 1,591 jakes were harvested for a statewide total of 17,374 turkeys (Table 1). This figure represents a 3.1 percent decrease in harvest from 2018 (17,939). Keep in mind that 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. Although the harvest was up a combined 24 percent the first two years of the new framework, it has been down 10 percent the last two years.

This apparent up and down cycle related to harvest under the new season framework may be explained in 2 ways. First, perhaps turkey numbers initially increased when the new season went into place leading to an increase in harvest because more birds were available for harvest on the landscape. Alternatively, more hunter effort associated with the new framework may have increased the harvest regardless of the number of turkeys on the landscape.

Digging deeper into this issue we find that turkey production, as measured during the Summer Turkey Survey which has been conducted annually since 1982, has been poor since the new season began (Figure 3). In fact, recruitment during the last 5 years has been the lowest of any 5-year period since the survey began. Typically, low recruitment is followed by decreasing harvest and good recruitment is followed by increasing harvest. Based on this analysis the initial trend of higher harvest under the new season does not fit with the notion of a recent increase in the turkey population.

On the other hand, hunter effort (days/hunted) has increased an average of 23 percent under the new season framework compared to the years leading up to the new framework. Again, the new season increased opportunity (days) for hunters in 34 of 46 counties by 50 percent and this data clearly indicates that hunters took advantage of the additional opportunity. With turkey production being low recently, it appears that increased effort rather than increased turkey numbers was more influential in the initial increase in harvest that accompanied the new season. This is supported because most recently, in spite of increased hunting effort the harvest has

declined. In any event, legislation passed in 2019 establishes a completely new season framework which will likely bring about new harvest trends as well.

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 mile²). When considering the estimated turkey habitat that is available in South Carolina, the turkey harvest rate in 2019 was 0.8 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 Spartanburg (1.5 turkeys/mile²), Pickens (1.4 turkeys/mile²), Bamberg (1.3 turkeys/mile²), Abbeville (1.2 turkeys/mile²), and Williamsburg (1.2 turkeys/mile²) (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 2019 were Williamsburg, Orangeburg, Berkeley, Colleton, and Spartanburg (Table 3).

Number of Turkey Hunters

Even though all individuals receiving a set of Turkey Transportation Tags were licensed to hunt turkeys, only 57 percent indicated that they actually hunted turkeys. Based on this figure, approximately 49,060 hunters participated in the 2019 spring turkey season, a 3 percent decrease from 2018 (50,772). Counties with the highest estimates for individual hunters include, Fairfield, Williamsburg, Newberry, Orangeburg, Laurens, and Union, and (Table 4).

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 2019 season (Table 4). Successful hunters averaged significantly more days afield (7.3 days) than unsuccessful hunters (4.8 days). Extrapolating to the entire population of turkey hunters yields a figure of 258,445 total days of spring gobbler hunting, down less than one percent from 2018 (258,786 days).

cc (Table 4).

Turkey Harvest by Week of Season

There is a delicate balance between the timing of spring gobbler season and the timing of nesting because hens must breed in order to successfully nest. An underlying assumption of spring hunting seasons is that harvest of males does not impact population growth as long as it does not disrupt or impede breeding activities. However, early or excessive gobbler mortality may lead to insufficient availability of adult gobblers which can detrimentally impact localized population productivity. In essence, if gobbler abundance is severely reduced due to high harvest rates, particularly harvest concentrated early in the breeding season, it could result in an insufficient number of gobblers remaining for breeding with hens, thereby violating the assumption that spring turkey seasons do not impact reproduction.

A recent multi-year nesting study conducted in the lower coastal plain indicates that on average, hens do not initiate nesting until April 9. Therefore, the March 20 opening date that was in place between 2016 and 2019 provides for gobblers to be about 3 weeks prior to average nest initiation date. Furthermore, the March 20 opening date was nearly 5 weeks before the average nest incubation start date of April 22.

In comparing harvest by week of season (Figure 4) associated with the March 20 opening date to the April 9 date of average nest initiation we find that approximately 60 percent of the gobbler harvest in 2019 occurred prior to average nest initiation. Additionally, nearly 50 percent of the gobblers taken prior to April 9 are the second or third bird for the same hunter. These results have been consistent since the March 20 framework began in 2016. The importance of this point cannot be overemphasized because these males are lost from a reproductive standpoint

which could affect successful reproduction by hens. This may help explain the generally poor reproduction that the state has experience for a number of years.

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 2019 was 23 percent (Figure 5). Unlike deer hunting which typically has high success, turkey hunting can be an inherently unsuccessful endeavor, relatively speaking. Curiously though, the proportion of hunters who take two gobblers was slightly greater than those who take one indicating that successful hunters had essentially the same chance of taking two birds as they did one bird (Figure 5).

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 2.7 percent, however, this small percentage of hunters harvested an estimated 26 percent of the total birds taken in the state (Figure 6).

Hunter Opinion Regarding Turkey Numbers

The 2019 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 45 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 (40 percent) believed that the turkey population was decreasing than increasing (15 percent). 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 2019 Turkey Hunter Survey asked hunters to indicate the number of turkeys that they “shot but did not kill or recover during the 2019 season in South Carolina.” Approximately 10.1 percent of hunters indicated that they shot but did not kill or recover at least one turkey in 2019 (9.6 percent in 2018). There were approximately 49,060 turkey hunters in 2019 meaning that approximately 4,955 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 4,942 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 hundreds of 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 2019 Turkey Hunter Survey asked hunters to identify the number of birds harvested in the morning compared to the afternoon. Results indicate that approximately 76 percent of

gobblers were harvested in the morning compared to 24 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.

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Table 1. Estimated statewide turkey harvest in South Carolina in 2019.

County	Acres*	Square Miles	Gobbler Harvest	Jake Harvest	Total Harvest	Percent Jakes	Harvest Rates	
							Ac/Turkey	Turkey/Mi. ²
Abbeville	223,113	349	361	72	433	16.6	515	1.2
Aiken	500,546	782	284	7	291	2.4	1,720	0.4
Allendale	216,455	338	249	21	270	7.8	802	0.8
Anderson	219,068	342	301	87	388	22.4	565	1.1
Bamberg	196,573	307	361	26	387	6.7	508	1.3
Barnwell	281,764	440	163	15	178	8.4	1,583	0.4
Beaufort	147,441	230	94	7	101	6.9	1,460	0.4
Berkeley	567,530	887	688	29	717	4.0	792	0.8
Calhoun	190,584	298	232	14	246	5.7	775	0.8
Charleston	288,732	451	464	21	485	4.3	595	1.1
Cherokee	156,664	245	232	29	261	11.1	600	1.1
Chester	300,589	470	327	80	407	19.7	739	0.9
Chesterfield	372,478	582	292	43	335	12.8	1,112	0.6
Clarendon	298,087	466	335	7	342	2.0	872	0.7
Colleton	502,666	785	645	21	666	3.2	755	0.8
Darlington	286,228	447	129	7	136	5.1	2,105	0.3
Dillon	214,069	334	103	6	109	5.5	1,964	0.3
Dorchester	302,717	473	361	7	368	1.9	823	0.8
Edgefield	246,543	385	266	51	317	16.1	778	0.8
Fairfield	384,607	601	533	51	584	8.7	659	1.0
Florence	397,888	622	404	24	428	5.6	930	0.7
Georgetown	399,638	624	482	65	547	11.9	731	0.9
Greenville	294,257	460	473	51	524	9.7	562	1.1
Greenwood	204,400	319	284	36	320	11.3	639	1.0
Hampton	324,840	508	378	14	392	3.6	829	0.8
Horry	533,336	833	404	51	455	11.2	1,172	0.5
Jasper	309,889	484	275	7	282	2.5	1,099	0.6
Kershaw	360,485	563	395	21	416	5.0	867	0.7
Lancaster	266,382	416	301	7	308	2.3	865	0.7
Laurens	317,916	497	456	51	507	10.1	627	1.0
Lee	220,106	344	163	14	177	7.9	1,244	0.5
Lexington	280,742	439	111	17	128	13.3	2,193	0.3
McCormick	212,021	331	120	29	149	19.5	1,423	0.4
Marion	216,907	339	215	7	222	3.2	977	0.7
Marlboro	281,271	439	103	9	112	8.0	2,511	0.3
Newberry	317,761	497	352	51	403	12.7	788	0.8
Oconee	284,348	444	344	36	380	9.5	748	0.9
Orangeburg	504,516	788	731	7	738	0.9	684	0.9
Pickens	219,926	344	421	51	472	10.8	466	1.4
Richland	340,121	531	258	29	287	10.1	1,185	0.5
Saluda	192,173	300	206	22	228	9.6	843	0.8
Spartanburg	265,939	416	525	116	641	18.1	415	1.5
Sumter	338,968	530	301	14	315	4.4	1,076	0.6
Union	258,111	403	344	116	460	25.2	561	1.1
Williamsburg	513,851	803	921	58	979	5.9	525	1.2
York	276,650	432	396	87	483	18.0	573	1.1
Total	14,028,896	21,920	15,783	1,591	17,374	9.2	807	0.8

95% Conf. Interval for harvest

(+-) 976 (+-) 299 (+-) 1,030

* 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 2019.

County	Acres*	Square Miles	Gobbler Harvest	Jake Harvest	Total Harvest	Percent Jakes	Harvest Rates	
							Ac/Turkey	Turkey/Mi. ²
Spartanburg	265,939	416	525	116	641	18.1	415	1.5
Pickens	219,926	344	421	51	472	10.8	466	1.4
Bamberg	196,573	307	361	26	387	6.7	508	1.3
Abbeville	223,113	349	361	72	433	16.6	515	1.2
Williamsburg	513,851	803	921	58	979	5.9	525	1.2
Union	258,111	403	344	116	460	25.2	561	1.1
Greenville	294,257	460	473	51	524	9.7	562	1.1
Anderson	219,068	342	301	87	388	22.4	565	1.1
York	276,650	432	396	87	483	18.0	573	1.1
Charleston	288,732	451	464	21	485	4.3	595	1.1
Cherokee	156,664	245	232	29	261	11.1	600	1.1
Laurens	317,916	497	456	51	507	10.1	627	1.0
Greenwood	204,400	319	284	36	320	11.3	639	1.0
Fairfield	384,607	601	533	51	584	8.7	659	1.0
Orangeburg	504,516	788	731	7	738	0.9	684	0.9
Georgetown	399,638	624	482	65	547	11.9	731	0.9
Chester	300,589	470	327	80	407	19.7	739	0.9
Oconee	284,348	444	344	36	380	9.5	748	0.9
Colleton	502,666	785	645	21	666	3.2	755	0.8
Calhoun	190,584	298	232	14	246	5.7	775	0.8
Edgefield	246,543	385	266	51	317	16.1	778	0.8
Newberry	317,761	497	352	51	403	12.7	788	0.8
Berkeley	567,530	887	688	29	717	4.0	792	0.8
Allendale	216,455	338	249	21	270	7.8	802	0.8
Dorchester	302,717	473	361	7	368	1.9	823	0.8
Hampton	324,840	508	378	14	392	3.6	829	0.8
Saluda	192,173	300	206	22	228	9.6	843	0.8
Lancaster	266,382	416	301	7	308	2.3	865	0.7
Kershaw	360,485	563	395	21	416	5.0	867	0.7
Clarendon	298,087	466	335	7	342	2.0	872	0.7
Florence	397,888	622	404	24	428	5.6	930	0.7
Marion	216,907	339	215	7	222	3.2	977	0.7
Sumter	338,968	530	301	14	315	4.4	1,076	0.6
Jasper	309,889	484	275	7	282	2.5	1,099	0.6
Chesterfield	372,478	582	292	43	335	12.8	1,112	0.6
Horry	533,336	833	404	51	455	11.2	1,172	0.5
Richland	340,121	531	258	29	287	10.1	1,185	0.5
Lee	220,106	344	163	14	177	7.9	1,244	0.5
McCormick	212,021	331	120	29	149	19.5	1,423	0.4
Beaufort	147,441	230	94	7	101	6.9	1,460	0.4
Barnwell	281,764	440	163	15	178	8.4	1,583	0.4
Aiken	500,546	782	284	7	291	2.4	1,720	0.4
Dillon	214,069	334	103	6	109	5.5	1,964	0.3
Darlington	286,228	447	129	7	136	5.1	2,105	0.3
Lexington	280,742	439	111	17	128	13.3	2,193	0.3
Marlboro	281,271	439	103	9	112	8.0	2,511	0.3
Total	14,028,896	21,920	15,783	1,591	17,374	9.2	807	0.8

95% Conf. Interval for harvest

(+-) 976 (+-) 299 (+-) 1,030

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

Table 3. County rankings based on total turkeys harvested in South Carolina in 2019.

County	Acres*	Square Miles	Gobbler Harvest	Jake Harvest	Total Harvest	Percent Jakes	Harvest Rates	
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Williamsburg	513,851	803	921	58	979	5.9	525	1.2
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Dillon	214,069	334	103	6	109	5.5	1,964	0.3
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Table 4. Estimated number of turkey hunters, average days hunted, and total hunting effort in South Carolina in 2019.

County	Total Harvest	Number Hunters	Avg. Days Hunted	Total Man/Days
Abbeville	433	1,316	6.2	8,148
Aiken	291	1,017	5.1	5,205
Allendale	270	682	5.0	3,378
Anderson	388	1,400	5.0	7,033
Bamberg	387	873	5.7	4,940
Barnwell	178	514	5.1	2,645
Beaufort	101	371	3.4	1,254
Berkeley	717	1,603	6.1	9,784
Calhoun	246	682	4.5	3,060
Charleston	485	1,268	4.2	5,301
Cherokee	261	730	6.3	4,600
Chester	407	1,567	5.0	7,883
Chesterfield	335	945	5.0	4,717
Clarendon	342	766	4.9	3,718
Colleton	666	1,376	5.1	7,043
Darlington	136	431	4.9	2,093
Dillon	109	203	6.8	1,392
Dorchester	368	885	6.1	5,386
Edgefield	317	1,089	5.6	6,140
Fairfield	584	2,141	5.0	10,698
Florence	428	802	5.7	4,557
Georgetown	547	1,005	4.9	4,897
Greenville	524	1,340	5.5	7,373
Greenwood	320	1,148	5.0	5,715
Hampton	392	1,148	4.3	4,961
Horry	455	1,101	5.5	6,098
Jasper	282	754	4.5	3,357
Kershaw	416	1,316	6.1	8,053
Lancaster	308	1,029	5.6	5,715
Laurens	507	1,759	5.4	9,434
Lee	177	622	4.9	3,028
Lexington	128	574	3.0	1,732
McCormick	149	885	4.6	4,069
Marion	222	407	5.1	2,061
Marlboro	112	299	4.7	1,402
Newberry	403	1,639	4.8	7,883
Oconee	380	1,041	6.7	7,022
Orangeburg	738	1,818	4.8	8,743
Pickens	472	1,304	5.8	7,553
Richland	287	1,065	4.6	4,855
Saluda	228	754	5.8	4,356
Spartanburg	641	1,651	5.3	8,796
Sumter	315	825	5.0	4,133
Union	460	1,663	7.1	11,803
Williamsburg	979	1,866	4.7	8,828
York	483	1,388	5.5	7,606
Total	17,374	49,060	5.9	258,445

Figure 1. South Carolina Department of Natural Resources 2019 Turkey Hunter Survey.

2019 South Carolina Turkey Hunter Survey

- Did you turkey hunt in SC this past season (2019)? **1. Yes 2. No**
If you answered **No** to this question please **go to question # 8.**
- Did you harvest any turkeys in SC this past season? **1. Yes 2. No**
- 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 (2019). 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".



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



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

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.

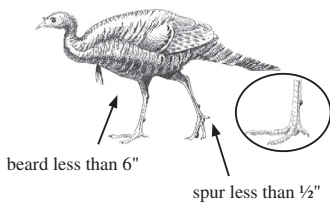
- If you harvested turkeys in SC this past season, please indicate as best you can the number of turkeys killed by week of season.

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	

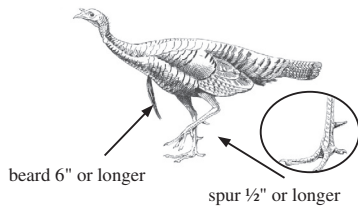
- How many turkeys did you kill in the morning _____ after 12:00 noon _____?
- How many turkeys did you shoot but not kill or recover in SC this past season? _____
- Compared to past years, how would you describe the number of turkeys in the area that you hunted most often this spring? **Circle one**
1. Increasing 2. About the same 3. Decreasing
- Are you a resident of SC? **1. Yes 2. No**
- 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"



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COLUMBIA SC
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Figure 1. continued

May, 2019

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 2019.

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 2018 survey can be found at: www.dnr.sc.gov/wildlife/turkey/2018TurkeyHarvest.html

Thank you for your assistance.



Charles Ruth
Wildlife Biologist
Big Game Program Coordinator

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 2019 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

19-12135



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

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UNITED STATES**

Figure 2. Spring wild turkey harvest in South Carolina 1982-2019. Harvest increased ($R^2 = 0.92$) between 1982 and 2002 as a result of increasing turkey population during restoration efforts. Since 2002 harvest has generally decreased likely due to less than desirable annual recruitment.

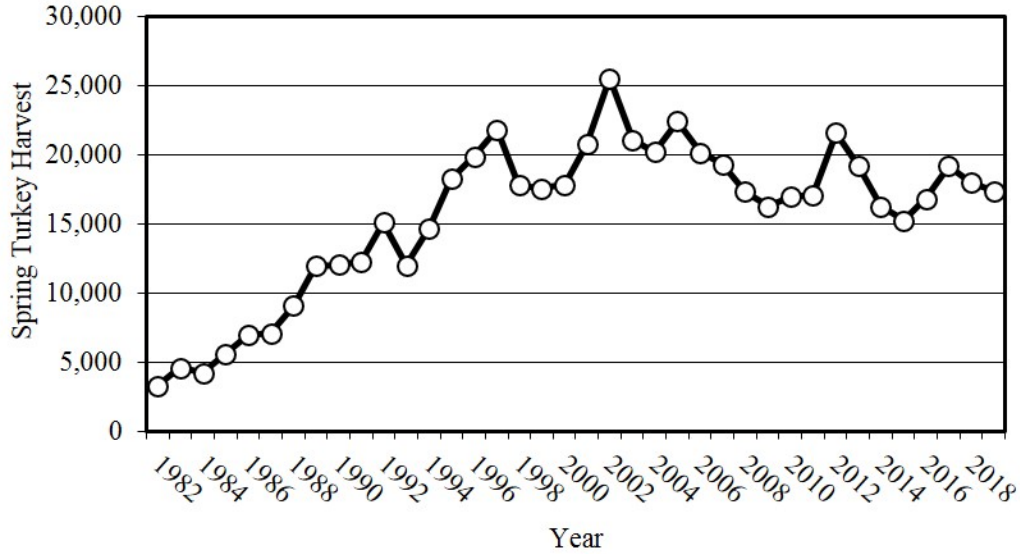


Figure 3. Summer wild turkey recruitment ratio in South Carolina 1982-2018. Note declining trend since 1988. Average recruitment prior to 1988 = 3.5. Average recruitment since 1988 = 2.1. This represents a 40 percent decrease in average recruitment.

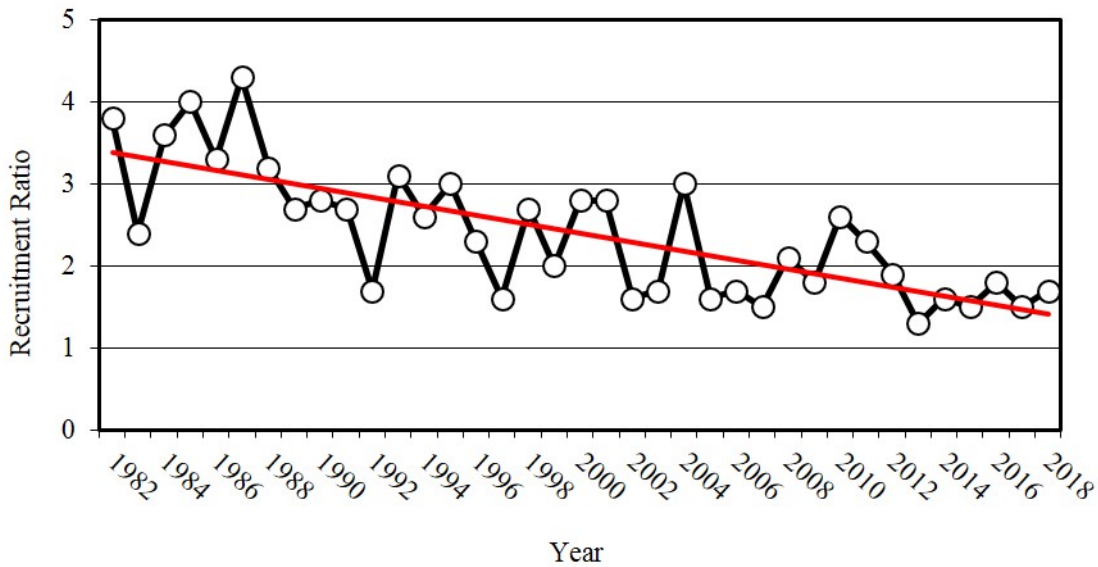


Figure 4. Percentage of gobblers harvested by period of season in South Carolina in 2019.

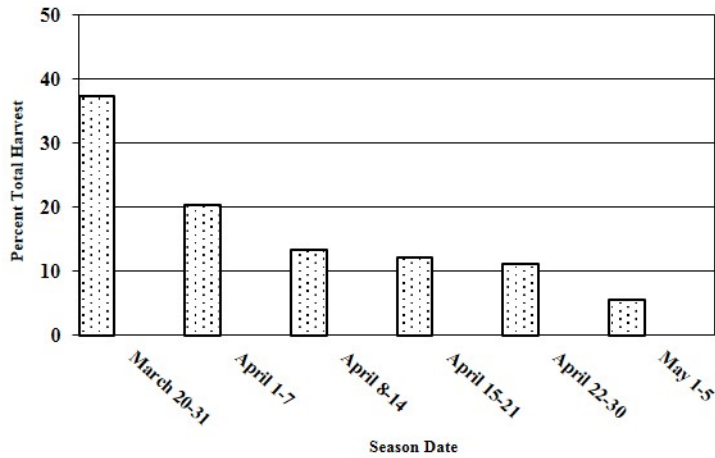


Figure 5. Hunter success during the spring turkey season in South Carolina in 2019. Overall success was 23 percent at harvesting at least one gobbler.

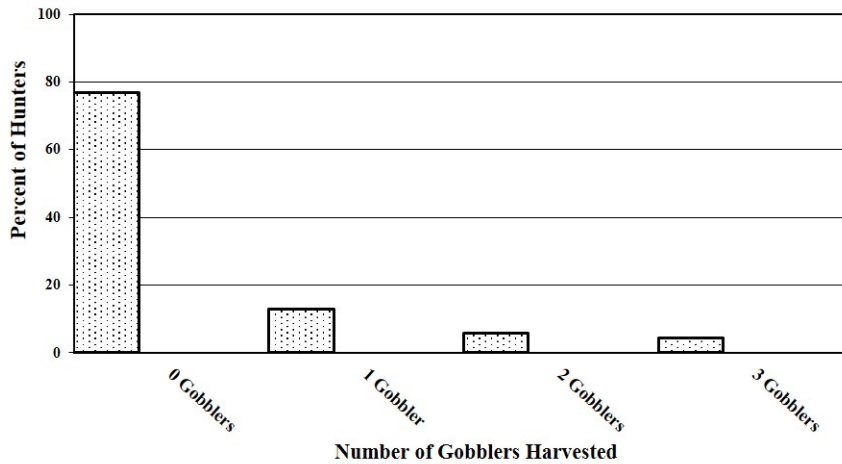


Figure 6. Relative contribution to the total turkey harvest by hunters taking between 1 and 3 gobblers in South Carolina in 2019.

