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2013 South Carolina turkey harvest report

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2013 South Carolina TURKEY HARVEST REPORT



SOUTH CAROLINA DEPARTMENT
OF NATURAL RESOURCES
TURKEY RESEARCH & MANAGEMENT PROJECT



DNR

Submitted by
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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 2013 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 2013, (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 2013 Turkey Hunter Survey represented a random mail survey that involved a single mail-out. The questionnaire for the 2013 Turkey Hunter Survey was developed by Wildlife Section personnel (Figure 1). The mailing list database was constructed by randomly selecting 25,000 individuals who received a set of 2013 Turkey Transportation Tags which are required in order to hunt turkeys in South Carolina. Data entry was completed by Priority Data, Inc., Omaha, Nebraska.

Following the mail survey, a nonresponse bias test was conducted by Responsive Management of Harrisonburg, Virginia using a Computer Assisted Telephone Interview program (CATI). Results from the mail survey were corrected for nonresponse bias using data collected from the telephone survey.

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

RESULTS AND DISCUSSION

Turkey Harvest

During the 2013 spring season it is estimated that a total of 17,101 adult gobblers and 2,110 jakes were harvested for a statewide total of 19,211 turkeys (Table 1). This figure represents an 11 percent decrease in harvest from 2012 (21,552) and a 25 percent decrease from the record harvest established in 2002 (16,348 check station, 25,487 estimated by survey). The overall reduction in harvest seen since 2002 can likely be attributable to one primary factor, poor reproduction.

Although reproduction in wild turkeys was generally poor between 2003 and 2009 it was much better in both 2010 and 2011 (Figure 2) which led to a substantial increase in harvest in 2012. However, reproduction returned to poor levels following the 2012 season and since birds produced in 2010 and 2011 were subjected to harvest in 2012 there were fewer birds available in 2013. This undoubtedly led to the significant decrease in harvest during the season (Figure 3). This association between changes in reproduction and its effects on harvest are rather remarkable in South Carolina's turkey harvest and reproductive data sets.

Unlike deer, wild turkeys are much more susceptible to significant fluctuations in reproduction and recruitment and with the exception of the last two years, these measures of production have generally not been good in the last decade. Lack of reproductive success is typically associated with bad weather (cold and wet) during nesting and brood rearing season. On the other hand, habitats are continually changing in South Carolina. Although timber management activities stimulated the growth in South Carolina's turkey population in the 1980s, considerable acreage is currently in even-aged pine stands that are greater than 10 years old, a situation that does not support turkeys 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 2013 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 Newberry (2.0 turkeys/mile²), Cherokee (1.9 turkeys/mile²), Union (1.9 turkeys/mile²), Abbeville (1.8 turkeys/mile²), and Laurens (1.7 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 2013 were Newberry, Laurens, Fairfield, Union, and Spartanburg (Table 3).

Turkey Harvest by Week of Season

Gobbling by male wild turkeys occurs primarily in the spring and is for the purpose of attracting hens for mating purposes. Therefore, spring turkey hunting is characterized by hunters attempting to locate and call gobbling male turkeys using emulated hens calls. With respect to both biology and effective hunting, the timing of the spring gobbler season should take into account three primary factors; peak breeding, peak gobbling, and peak incubation. Considering these factors, seasons can be set to afford hunters the best opportunity to hunt during the best time (i.e. peak gobbling) without inhibiting reproductive success.

South Carolina currently has two spring turkey season frameworks. Throughout most of the state (Game Zones 1, 2, 3, 4, and 5) the season is April 1-May1. This season is based on a recommendation from DNR following gobbling and nesting studies that were conducted in the 1970's. The other season framework is March 15-May 1 and is only in effect in Game Zone 6 (lower coastal plain). This season is socio-politically based. For additional information on setting spring turkey season refer to: <http://www.dnr.sc.gov/wildlife/turkey/springseason09.html>.

If seasons are set appropriately, the greatest proportion of turkeys should be harvested during the first week of the season because hens should be laying or nesting resulting in gobblers

that are naïve and most responsive to hunter's calls. Harvest by week of season demonstrates that the timing of the April 1 opening season affords higher turkey harvests as most turkeys are harvested during the week following the April 1 opening date (Figure 4). When broken-out by specific season frameworks the results are similar. In areas where the season begins March 15, only 27 percent of the total harvest was accounted for during the first week of the season (Figure 5). This is likely due to the fact that late March is the time of peak breeding and males gobble less because "they are all henned up". On the other hand, 43 percent of the harvest occurred during the first week of the season in areas where the season begins April 1 (Figure 6). This is due to the fact that by the first week in April, a significant number of hens have left the gobblers and begun continuous incubation.

Comparing the first two weeks of each season format, we find that where the season opens March 15, 45 percent of gobblers were harvested while this figure is 67 percent where the season opens on April 1. Finally, the percentage of turkeys harvested in the first week of the season in areas where the season opens April 1 is essentially the same as the percentage of turkeys harvested during the first two weeks of the season in areas where the season opens March 15. Again, this is a reflection of fewer available hens due to nesting and this lack of hens stimulates peak gobbling resulting in hunters being more successful in locating and calling responsive birds. These results have been consistent since this type of data has been available.

Number of Turkey Hunters

Even though all individuals receiving a set of Turkey Transportation Tags were licensed to hunt turkeys, only 48 percent actually hunted turkeys. Based on this figure, approximately 50,752 hunters participated in the 2013 spring turkey season, an 18 percent increase from 2011 (41,420). Counties with the highest estimates for individual hunters include Fairfield, Newberry, Orangeburg, Laurens, and Union (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 5.0 days

afield during the 2013 season (Table 4). Successful hunters averaged significantly more days afield (6.8 days) than unsuccessful hunters (4.4 days). Extrapolating to the entire population of turkey hunters yields a figure of 240,256 total days of spring gobbler hunting, up 14 percent from 2012 (206,096 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 2013 were Newberry, Fairfield, Laurens, Union, and Berkeley 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 2013 was 18 percent (Table 7). 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 7). However, the percentage of successful hunters who take two birds is quite high as well. This indicates that successful hunters had nearly the same chance of taking two birds as they did one bird.

The statewide bag limit in South Carolina is five 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 many birds. Ironically, the percentage of hunters taking more than 3 birds was only 2.5 percent, however, this small percentage of hunters harvested 32 percent of the total birds taken in the state (Figure 8). These results have been consistent since this type of data has been available.

Hunter Opinion Regarding Turkey Numbers

The 2013 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. About half (52%) of hunters indicated that the number of turkeys in the area they hunted most often was about the same as in past years. The same percentage of hunters (24%) believed that the turkey population was increasing as decreasing. On a scale of 1 to 3 with 1 being increasing, 2 being the same, and 3 being decreasing, the overall mean rating of 1.9 suggests that hunters viewed the turkey population as being about the same as in 2012. As previously discussed, this is likely attributable to substantially better reproduction by turkeys in 2010 and 2011.

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 2013 Turkey Hunter Survey asked hunters to indicate the number of turkeys that they “shot but did not kill or recover during the 2013 season in South Carolina”. Approximately 10.9 percent of hunters indicated that they shot but did not kill or recover at least one turkey in 2013 (10.9% in 2012). There were approximately 50,752 turkey hunters in 2013 meaning that approximately 5,573 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 5,573 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 2013 Turkey Hunter Survey asked hunters to identify the number of birds harvested in the morning compared to the afternoon. Results indicate that approximately 73 percent of gobblers are harvested in the morning compared to 27 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 2013.

County	Acres*	Square Miles	Gobbler Harvest	Jake Harvest	Total Harvest	Percent Jakes	Harvest Rates	
							Ac/Turkey	Turkey/Mi. ²
Abbeville	223,113	349	592	42	634	6.6	351.9	1.8
Aiken	500,546	782	249	56	305	18.4	1641.1	0.4
Allendale	216,455	338	179	49	228	21.5	949.4	0.7
Anderson	219,068	342	436	92	528	17.4	414.9	1.5
Bamberg	196,573	307	226	28	254	11.0	773.9	0.8
Barnwell	281,764	440	93	7	100	7.0	2817.6	0.2
Beaufort	147,441	230	109	12	121	9.9	1218.5	0.5
Berkeley	567,530	887	600	35	635	5.5	893.7	0.7
Calhoun	190,584	298	62	42	104	40.4	1832.5	0.3
Charleston	288,732	451	303	28	331	8.5	872.3	0.7
Cherokee	156,664	245	420	56	476	11.8	329.1	1.9
Chester	300,589	470	584	49	633	7.7	474.9	1.3
Chesterfield	372,478	582	257	42	299	14.0	1245.7	0.5
Clarendon	298,087	466	327	7	334	2.1	892.5	0.7
Colleton	502,666	785	428	56	484	11.6	1038.6	0.6
Darlington	286,228	447	148	21	169	12.4	1693.7	0.4
Dillon	214,069	334	116	21	137	15.3	1562.5	0.4
Dorchester	302,717	473	264	21	285	7.4	1062.2	0.6
Edgefield	246,543	385	537	49	586	8.4	420.7	1.5
Fairfield	384,607	601	740	42	782	5.4	491.8	1.3
Florence	397,888	622	459	14	473	3.0	841.2	0.8
Georgetown	399,638	624	241	21	262	8.0	1525.3	0.4
Greenville	294,257	460	452	77	529	14.6	556.3	1.2
Greenwood	204,400	319	413	7	420	1.7	486.7	1.3
Hampton	324,840	508	241	38	279	13.6	1164.3	0.5
Horry	533,336	833	264	63	327	19.3	1631.0	0.4
Jasper	309,889	484	280	7	287	2.4	1079.8	0.6
Kershaw	360,485	563	358	28	386	7.3	933.9	0.7
Lancaster	266,382	416	405	56	461	12.1	577.8	1.1
Laurens	317,916	497	763	99	862	11.5	368.8	1.7
Lee	220,106	344	210	28	238	11.8	924.8	0.7
Lexington	280,742	439	7	14	21	66.7	13368.7	0.0
McCormick	212,021	331	358	49	407	12.0	520.9	1.2
Marion	216,907	339	233	49	282	17.4	769.2	0.8
Marlboro	281,271	439	140	17	157	10.8	1791.5	0.4
Newberry	317,761	497	904	113	1017	11.1	312.4	2.0
Oconee	284,348	444	366	56	422	13.3	673.8	0.9
Orangeburg	504,516	788	545	92	637	14.4	792.0	0.8
Pickens	219,926	344	366	77	443	17.4	496.4	1.3
Richland	340,121	531	358	28	386	7.3	881.1	0.7
Saluda	192,173	300	452	35	487	7.2	394.6	1.6
Spartanburg	265,939	416	600	106	706	15.0	376.7	1.7
Sumter	338,968	530	241	63	304	20.7	1115.0	0.6
Union	258,111	403	646	134	780	17.2	330.9	1.9
Williamsburg	513,851	803	662	21	683	3.1	752.3	0.9
York	276,650	432	467	63	530	11.9	522.0	1.2
Total	14,028,896	21,920	17,101	2,110	19,211	11.0	730.3	0.9

95% Conf. Interval for harvest

(+) 2,116 (+) 639 (+) 2,248

* 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 turkeys harvested per unit area in South Carolina in 2013.

County	Acres*	Square Miles	Gobbler Harvest	Jake Harvest	Total Harvest	Percent Jakes	Harvest Rates	
							Ac/Turkey	Turkey/Mi. ²
Newberry	317,761	497	904	113	1017	11.1	312.4	2.0
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Lexington	280,742	439	7	14	21	66.7	13368.7	0.0
Total	14,028,896	21,920	17,101	2,110	19,211	11.0	730.3	0.9

Table 3. County rankings based on total turkeys harvested in South Carolina in 2013.

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Total	14,028,896	21,920	17,101	2,110	19,211	11.0	730.3	0.9

Table 4. Estimated number of turkey hunters, average days hunted, and total hunting effort in South Carolina in 2013

County	Total Harvest	Number Hunters	Avg. Days Hunted	Total Man/Days
Abbeville	634	1,345	4.0	5,441
Aiken	305	831	4.0	3,308
Allendale	228	648	5.7	3,720
Anderson	528	1,553	4.1	6,348
Bamberg	254	844	4.6	3,854
Barnwell	100	489	5.8	2,855
Beaufort	121	306	4.4	1,350
Berkeley	635	1,687	5.7	9,584
Calhoun	104	575	4.8	2,782
Charleston	331	1,272	4.9	6,173
Cherokee	476	770	4.8	3,700
Chester	633	1,687	4.7	7,904
Chesterfield	299	1,162	4.6	5,400
Clarendon	334	782	4.4	3,463
Colleton	484	1,345	5.5	7,358
Darlington	169	587	5.2	3,061
Dillon	137	293	4.0	1,175
Dorchester	285	831	5.6	4,627
Edgefield	586	1,247	5.1	6,379
Fairfield	782	2,127	4.7	9,996
Florence	473	1,198	4.0	4,771
Georgetown	262	782	3.6	2,813
Greenville	529	1,296	4.5	5,792
Greenwood	420	1,113	4.3	4,792
Hampton	279	954	5.0	4,771
Horry	327	978	3.9	3,803
Jasper	287	648	4.8	3,102
Kershaw	386	1,333	4.5	6,039
Lancaster	461	1,039	5.0	5,225
Laurens	862	2,030	4.9	9,924
Lee	238	660	3.9	2,587
Lexington	21	293	3.5	1,020
McCormick	407	990	4.1	4,029
Marion	282	709	5.3	3,792
Marlboro	157	428	3.6	1,525
Newberry	1017	2,176	5.3	11,635
Oconee	422	893	5.3	4,751
Orangeburg	637	1,871	4.6	8,574
Pickens	443	1,320	5.0	6,585
Richland	386	1,198	4.3	5,184
Saluda	487	978	5.2	5,091
Spartanburg	706	1,589	5.0	7,925
Sumter	304	990	4.8	4,792
Union	780	2,005	4.8	9,677
Williamsburg	683	1,504	4.7	7,008
York	530	1,394	4.7	6,575
Total	19,211	50,752	5.0	240,256

Figure 1. South Carolina Department of Natural Resources 2013 Turkey Hunter Survey.

May, 2013

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 2013.

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. Each survey form is numbered, but only so we can avoid costly repeat mailings to those survey participants who have not returned their survey.

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 2012 survey can be found at: www.dnr.sc.gov/wildlife/turkey/2012TurkeyHarvest.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 2013 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

13-8828



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

BUSINESS REPLY MAIL
FIRST CLASS MAIL PERMIT NO 1371 COLUMBIA SC
POSTAGE WILL BE PAID BY ADDRESSEE



**NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES**

Figure 1. continued

2013 South Carolina Turkey Hunter Survey

- Did you turkey hunt in SC this past season (2013)? **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 (2013). 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.

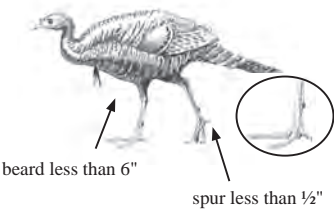
- If you harvested turkeys in SC this past season, please indicate as best you can the number of turkeys killed by week of season.

Week of Season	# Turkeys Harvested	Week of Season	# Turkeys Harvested
1 March 15-22		4 April 8-14	
2 March 23-31		5 April 15-21	
3 April 1-7		6 April 22-May 1	

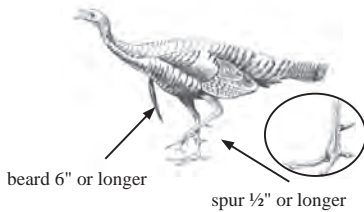
- How many turkeys did you kill in the morning _____ after 12:00 noon _____?
- How many turkeys did you shoot but not kill or recover in SC this past season? _____
- Compared to past years, how would you describe the number of turkeys in the area that you hunted most often this spring? **Circle one**
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"



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



TURKEY HUNTER SURVEY
SC DNR
PO BOX 167
COLUMBIA SC 29202-0167
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Figure 2. Summer wild turkey recruitment ratio in South Carolina 1982-2012. Note improved harvest (Fig. 3 below) related to improved recruitment in 2010 and 2011. Recruitment ratio is a measure of young entering the population based on the number of hens in the population.

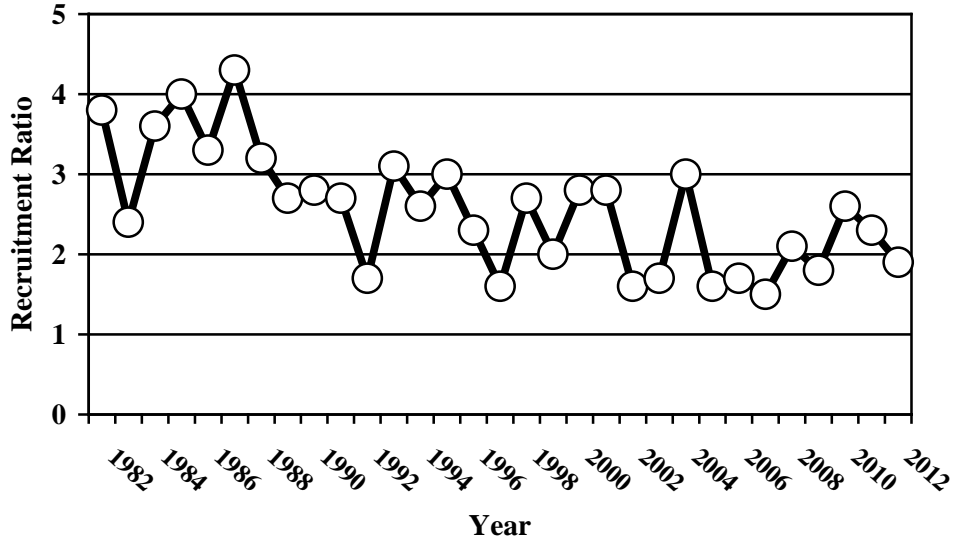


Figure 3. Spring wild turkey harvest in South Carolina 1982-2013. Note declines in harvest associated with years of poor recruitment 2003-2009 and improved harvests in recent years resulting from improved recruitment in 2010 and 2011.

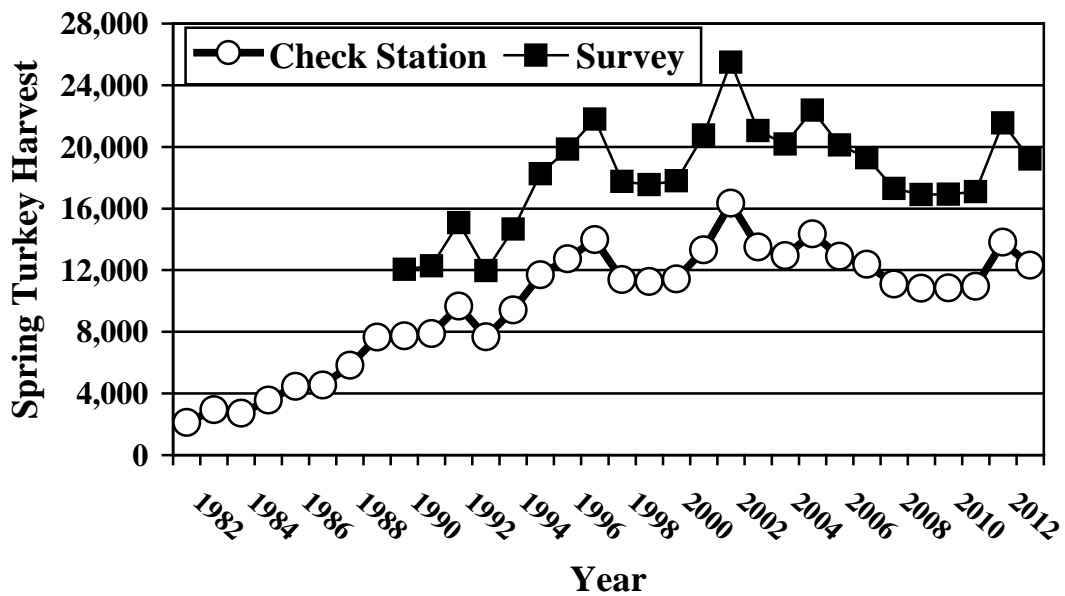


Figure 4. Percentage of gobblers harvested by week of season in South Carolina in 2013.

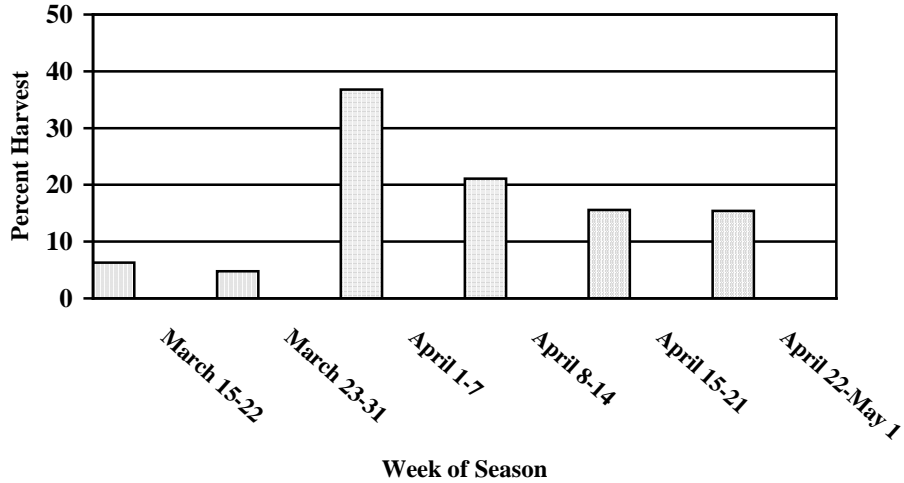


Figure 5. Percentage of gobblers harvested by week in areas with March 15-May 1 season.

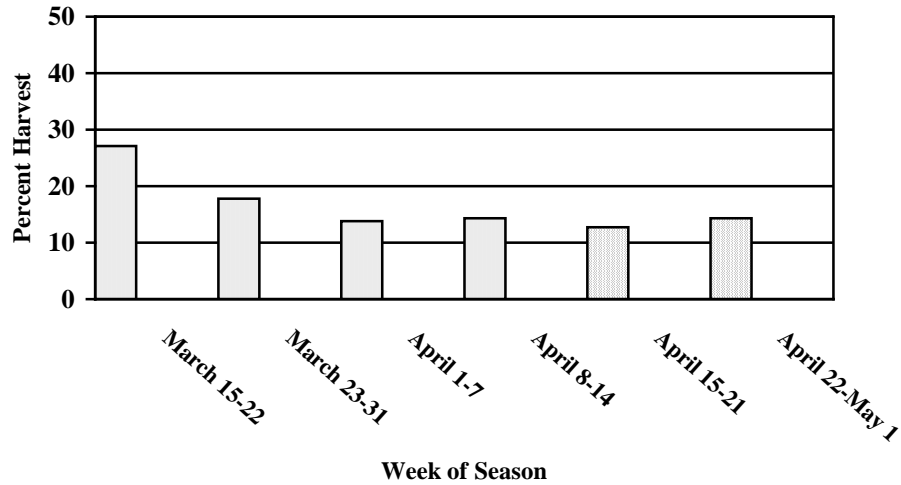


Figure 6. Percentage of gobblers harvested by week in areas with April 1-May 1 season.

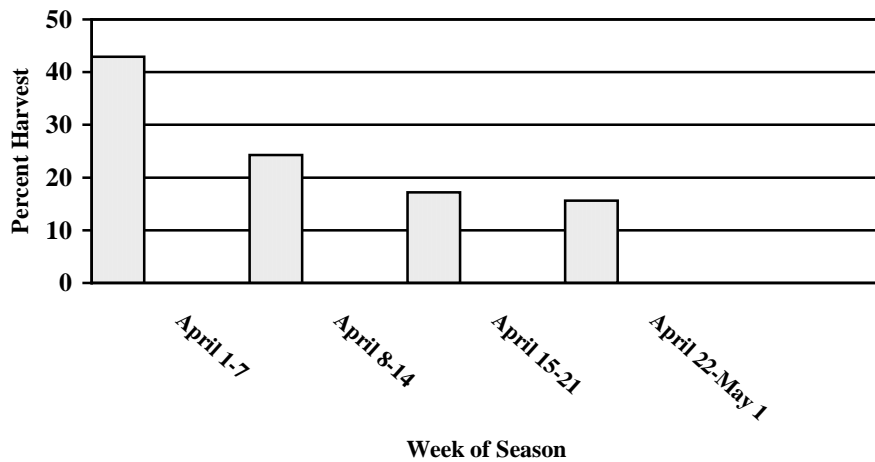


Figure 7. Hunter success during the spring turkey season in South Carolina in 2013. Overall success was 18 percent at harvesting at least one gobbler.

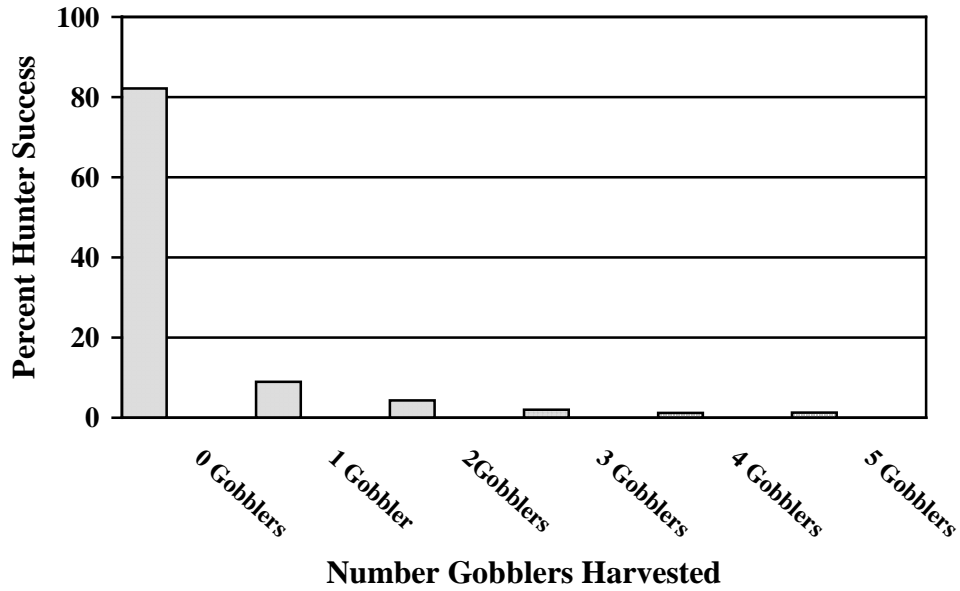


Figure 8. Relative contribution to the total turkey harvest by hunters taking between 1 and 5 gobbler in South Carolina in 2013. Hunters taking more than 3 birds accounted for 32% of total statewide harvest.

