2019 SOUTH CAROLINA DEER HARVEST REPORT



SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES DEER RESEARCH & MANAGEMENT PROJECT



Submitted by

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INTRODUCTION

The white-tailed deer (*Odocoileus virginianus*) is the most popular, sought after, economically important, and controversial game animal in South Carolina. The 2019 Deer 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 white-tailed deer resource. The primary objectives of this survey research were to obtain valid estimates of: (1) the statewide deer harvest in 2019, (2) the harvest of deer in the constituent counties of the state, (3) hunting effort related to deer, (4) resident and nonresident hunter activities, and (5) weapons use, weapons preference, and harvest rates by weapon type. Information on hunter opinion related to certain aspects of the deer resource as well as estimates of the wild hog and coyote harvest in the state is also presented.

Due to the importance of deer as a state resource, SCDNR believes that accurately assessing the harvest of deer, as well as hunter participation in deer hunting, is key to the management of this species. Proposed changes in deer-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 deer hunter activities afield because they too form an important basis for managing deer.

Since the inception of the Statewide Deer Research and Management Project (Deer Project) the methods used to document the state 's deer harvest have changed. Historically, deer harvest figures were developed using a system of mandatory deer check stations in the 18 county Upstate (Game Zones 1 and 2) in conjunction with reported harvests from properties enrolled in the Antlerless Deer Quota Program (ADQP) in the 28 county Coastal Plain (Game Zones 3 and 4). This system yielded an actual count of harvested deer and was, therefore, an absolute minimum harvest figure. Shortcomings in this system included deterioration of check station compliance in the Upstate and failure to report by ADQP cooperators in the Coastal Plain. Also, since the acreage enrolled in the ADQP tends to be about one-half of the deer habitat in the Coastal Plain, past harvest figures have not documented deer harvests on non-quota lands (+- 3.1 million acres) because there was no legal requirement to report harvested deer in the Coastal Plain. Therefore, it is suspected that

historic deer harvest figures only accounted for about one-half of the total deer harvest that occurred annually in the state.

Survey Methodology

The 2019 Deer Hunter Survey represents a random mail survey that involved a single mail-out. The questionnaire for the 2019 Deer Hunter Survey was developed by Wildlife Section personnel (Figure 1). The mailing list database was constructed by randomly selecting 30,000 known Big Game Permit holders that included 8 license types. The license types included: (1) Resident Sportsman's, (2) 3-year Resident Sportsman's, (3) Resident Combination, (4) 3-year Resident Combination, (5) Resident Junior Sportsman's, (6) Resident Big Game Permit, (7) 3-year Resident Big Game Permit, and (8) Nonresident Big Game Permit. The number of individuals associated with each license type was based on an attempted sampling rate of approximately 15 percent for licenses purchased through December of 2019. Since deer seasons statewide end on January 1 there was no need to sample individuals that were licensed thereafter.

Data entry was completed by Priority Data, Inc., Omaha, Nebraska. Statistical analysis was conducted using Statistix 10 (Analytical Software, Tallahassee, FL).

Acknowledgments

Thanks to South Carolina deer hunters. Funding for this report, as well as all activities related to the Statewide Deer Research and Management Project, is made possible through hunters' participation in antlerless deer tag programs.

RESULTS AND DISCUSSION

As with any mail survey, a portion of the attempted sample (30,000) was returned as undeliverable mail (521). Therefore, the actual attempted sample was 29,479 representing 18.3 percent of the entire population (161,300) of license holders. A total of 6,109 completed surveys were returned yielding a 20.7 percent response rate and 3.8 percent sampling rate on the entire licensee population.

Deer Harvest

During the 2019 deer season it is estimated that a total of 105,201 bucks and 87,872 does were harvested for a statewide total of 193,073 deer (Table 1). This represents a 1 percent decrease in harvest from 2018 (194,986) and is 40 percent below the record harvest established in 2002 (319,902). After many years of rapidly increasing during the 1970's and 1980's, the deer population in South Carolina exhibited relative stability between 1995 and 2002. Between 2002 and 2015, however, the population trended down with the overall reduction in harvest likely attributable to a number of factors, including; habitat change, two decades of aggressive antlerless deer harvest, and the complete colonization of the state by coyotes and their impact on fawn survival. Since 2015 the states' deer harvest has been stable to increasing possibly as a result of declining coyote densities.

The fall of 2019 was the third season of the "all deer" tagging system and statewide limit on antlered deer. Although the harvest has increased (12%) since 2016, this increase is primarily a result of an increase in doe harvest (18.0%) rather than an increase in the harvest of bucks (9%). Prior to the tagging program, increases in harvest were normally the result of increases in the buck harvest or a more equal increase in buck and doe harvest. This disproportionate harvest may be indicative of the new buck limit having the desired effect of decreasing pressure on bucks. It will likely take a few years for this to become clearer.

Harvest Per Unit Area County Rankings

Comparisons can be made between deer 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 deer taken per square mile (640ac. = 1 mile²). When considering the estimated deer habitat that is available in South Carolina, the deer harvest rate in 2019 was 9.1 deer per square mile over the entire state (Table 2). Although the deer harvest in the state has generally declined in recent years, South Carolina remains at the top among southeastern states, many of which have also noted a declining trend. The top 5 counties for harvest per unit area were Spartanburg (17.7 deer/mile²), Anderson (17.3 deer/mile²), Bamberg (15.8 deer/mile²), Laurens (12.6 deer/mile²), and Beaufort (12.3 deer/mile²).

Deer Harvest Rankings by County

Total deer harvest by county is not comparable among counties because counties vary in size and are, therefore, not directly comparable. However, it has become customary to rank the counties based on number of deer harvested (Table 3). The top 5 counties during 2019 were Orangeburg, Colleton, Williamsburg, Spartanburg, and Laurens.

Deer Harvest on Wildlife Management Areas

Deer hunting on Wildlife Management Areas (WMAs) remains popular in South Carolina with approximately 60,000 licensees having a WMA Permit. Wildlife Management Areas represent lands owned by SCDNR, other state-owned lands enrolled in the WMA Program, US Forest Service lands enrolled in the WMA Program, and private and/or corporate lands that are leased by SCDNR as part of the WMA Program. Deer harvest figures for coastal WMAs are from check stations and are presented only for those WMA properties that have a deer check-in requirement. Deer harvest figures for upstate WMAs (Mountain and Central and Western Piedmont Hunt Units) were estimated by extrapolating the county deer harvest rates (deer/mi²) to the acreage of WMA land that falls within the respective counties comprising the WMA. This assumes that hunters on WMA lands exhibit effort and deer harvest patterns similar to those of the general licensee database that was surveyed. Finally, the estimated deer harvest on WMA lands is included in, not additive to, the

county and statewide estimates found throughout this report.

During the 2019 season it is estimated that 3,999 bucks, 2,978 does, and 19 deer of unknown sex were harvested for a total deer harvest on Wildlife Management Areas of 6,996 (Table 4). This figure represents a 4 percent decrease from 2018.

Hunter Opinion Regarding the Deer Population

The 2019 Deer Hunter Survey asked participants their opinion regarding the following question. Compared to past years, how would you rate the number of deer in the area that you hunt most often? Survey participants were given 3 choices; increasing, about the same, or decreasing. Most hunters (59%) indicated that the number of deer in the area they hunted most often was about the same as in past years (Table 5). Slightly more hunters (21%) believed that the deer population was decreasing than increasing (20%). On a scale of 1 to 3 with 1 being increasing, 2 being neutral, and 3 being decreasing, the overall mean rating of 2.0 suggests that hunters viewed the deer population about the same as past years.

Number of Deer Hunters

Even though all individuals receiving a survey were licensed to hunt deer, only 88 percent actually hunted deer. For residents, 87 percent of sampled licensees hunted deer and for nonresidents 90 percent hunted deer. Extrapolating to the respective licensee populations yields 126,283 residents (Table 6) and 14,833 nonresidents (Table 7) for a total of 141,116 deer hunters statewide during 2019. This figure represents a 3 percent decrease from the 146,044 hunters in 2018. Counties with the highest estimates for individual hunters include Orangeburg, Spartanburg, Berkeley, Laurens, and Colleton for resident hunters (Table 6) and Hampton, Allendale, Chester, Bamberg, and Fairfield for nonresidents (Table 7).

Hunting Success

For determination of hunting success only those individuals that actually hunted deer were included in the analysis and similarly, success was defined as harvesting at least one deer. Overall hunting success in 2019 was 69 percent, which should be considered very good. Success rates for residents (69%, Table 6) were slightly higher than nonresidents (67%, Table 7). Estimates for

resident and nonresident success rates for all counties are presented in Tables 6 and 7.

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. Resident hunters averaged 15 days afield for a total of 1,867,504 days deer hunting and nonresidents averaged 13 days for a total of 194,616 days (Table 8). Total effort expended deer hunting in South Carolina during 2019 was estimated at 2,083,728 days (Table 8), a one percent decrease from 2018. The number of days devoted to deer hunting in South Carolina is very significant and points not only to the availability and popularity of deer as a game species, but to the obvious economic benefits related to this important natural resource. Previous surveys conducted by the United States Fish and Wildlife Service indicate that approximately 200 million dollars in direct retail sales are related to deer hunting in South Carolina annually.

The top 5 South Carolina counties for overall days of deer hunting during 2019 were Orangeburg, Colleton, Spartanburg, Anderson, and Berkeley (Table 8). Resident hunters expended the most hunting effort in Orangeburg, Spartanburg, Colleton, Anderson, and Berkeley counties. Nonresidents hunted the most in Hampton, Chester, Allendale, Jasper, and Bamberg counties and these 5 counties totaled 45 percent of all the nonresident deer hunting effort that took place in South Carolina in 2019.

Resident hunters who were successful at harvesting at least one deer averaged nearly twice as many days (17 days) afield as unsuccessful residents (9 days) (Table 8). Similarly, successful nonresidents (15 days) averaged more days afield when compared with unsuccessful nonresidents (8 days).

The amount of effort required to harvest a deer varied between residents and nonresidents and by the county hunted. On the average it took less time for nonresidents to harvest a deer (9 days, Table 7) compared to residents (11 days, Table 6). This may be due to the fact that many nonresidents hunt commercially where considerable preparation is done prior to the hunter's arrival. Also, there may be less selectivity with respect to deer harvested by nonresidents. Counties requiring the least effort to harvest a deer included Jasper, Beaufort, Allendale, Marlboro, and Barnwell and Williamsburg (tie) counties for resident hunters (Table 6). On the other hand,

nonresidents spent less time to harvest a deer in Spartanburg, Greenville, Dillon, Clarendon, and Richland counties (Table 7), however, none of these counties experienced what should be considered a high level of nonresident hunting activity.

Deer Harvest by Weapon Type and Weapons Utilization and Preference

All areas of South Carolina have long and liberal firearms seasons and the majority (81%) of deer were harvested with centerfire rifles (Table 9). Shotguns (9.3%) and archery equipment (6%) also contribute significantly to the overall deer harvest in the state, whereas, muzzleloaders, crossbows, and handguns combine to contribute less than 5 percent to the total harvest (Table 9).

Although rifles are used by over 90 percent of hunters, nearly 80 percent of hunters use multiple weapons during the course of the deer season (Table 10, Table 11). Resident hunters appear to be more flexible than nonresidents in their use of multiple weapons and significantly more residents use archery equipment (20%) and shotguns (20%) than nonresidents (12% archery and 6% shotguns) (Table 11). This finding has been consistent for many years and two points can likely be made. First, since most aspects of deer hunting (travel, accommodations, etc.) are typically more convenient for residents, they may have more time to devote to becoming comfortable or proficient with additional weapons, in this case archery equipment. Second, shotguns are the customary weapon related to hunting deer with dogs and the argument can be made that dog hunting is being practiced more by residents than nonresidents. The weapons utilization data supports this contention.

On the other hand, nonresidents (13%) used muzzleloaders more frequently than residents (10%). Keep in mind that muzzleloader or primitive weapons seasons on private land are only available in Game Zones 1 and 2 (the Upstate). It is suspected that the high utilization of muzzleloaders by nonresidents is related to the availability of this special season at an earlier date in South Carolina than in neighboring states. Also, the argument can be made that muzzleloaders require less commitment than archery equipment and would allow nonresidents a comparatively easy method of harvesting deer during the special season. This finding has been consistent for many years.

Unlike weapons utilization, weapons preference is the single weapon that a hunter prefers. Obviously, a majority (80%) of deer hunters prefer rifles (Table 12). Bows (11%) are the second most preferred weapon which is interesting because compared to other states, there are limited

exclusive opportunities for bow hunters in South Carolina. Nonetheless, the number of hunters indicating that bows are their preferred weapon has increased over time. Finally, there are several interesting points that can be made about preferences for other weapons based on residency. Shotguns are preferred significantly more by residents (6%) than nonresidents (2%) and muzzleloaders are preferred more by nonresidents (2.3%) than by residents (1%) (Table 12). The explanation of this situation is likely similar to that for weapons utilization in that, (1) residents do most of the dog hunting in the state and tend to use shotguns, and (2) nonresidents use muzzleloaders to take advantage of a special season that is not available as early in their home state.

Deer Harvest by Month of Season

The 2019 Deer Hunter Survey asked hunters to provide information on the month of kill for deer taken during the 2019 season. Although South Carolina is noted to have the longest firearms deer season in the country, the relationship between season length and deer harvest is often misunderstood. Deer naturally increase their movements during the breeding season or rut making them more susceptible to being seen and harvested by hunters. In contrast, outside of the breeding season deer movements are reduced, therefore the chances of hunters seeing and harvesting deer are reduced.

Deer harvest by month of season demonstrates this phenomenon (Figure 2). Although firearms seasons are not open in all parts of the state in late August and early September, relatively few deer are harvested during that time where the season is open. On the other hand, a disproportionately high number of deer are taken during October and November. October and November encompass the majority of the breeding season in South Carolina with over 80 percent of does conceiving during that period (Figure 3). Ultimately, timing of the season is a more important factor in determining deer harvest and quality hunting than the length of the season. Although South Carolina offers early opening seasons, there may be negative consequences as it relates to deer harvest. Hunters should understand that hunting pressure that builds prior to the breeding season can suppress daytime movements of deer during the breeding season when deer movements and hunter harvests should be greatest.

Wild Hog Harvest

The 2019 Deer Hunter Survey also asked hunters to provide information on their wild hog and coyote harvesting activities. Documenting the hog harvest became customary several years ago because wild hogs are commonly taken incidental to deer hunting. Wild or feral hogs are often thought of as "game" and there is a certain amount of sport associated with harvesting hogs. Wild hogs provide quality meat for the hunter and mature hogs can make a highly sought-after "trophy". Wild hogs are not native to South Carolina or any part of the North American continent. They are descendants of European domestic hogs that escaped or were released dating back as far as the early Spanish explorers. Also, closed-range or fencing requirements for livestock did not arise until the 1900's and letting hogs "free-range" was common prior to fencing laws. Wild hogs were historically associated with the major river flood plain systems in Coastal South Carolina. Unfortunately, recent relocations of wild hogs by hunters appear to be responsible for the species populating areas where they were not found in the past. Wild hogs directly compete with native species like deer and wild turkey for habitat and food, and hogs can do significant damage to the habitat and agricultural production through their rooting activities. Legislation passed during the 2005 session of the South Carolina General Assembly prohibits the release of hogs in the state and legislation passed in 2010 prohibits the removal of a live hog from the woods without a permit (SC Code Section 50-16-25). Hogs are not protected animals in South Carolina and hunters are allowed to harvest them throughout the year during daylight hours and at night by registering their property.

During 2019 an estimated 31,508 wild hogs were incidentally harvested by deer hunters in South Carolina (Table 13), a 20 percent decrease from 2018 (39,347 hogs). Hog numbers and thus harvest, can vary substantially from year to year due to bottomland flooding during the fall and winter farrowing season which can cause mortality in piglets (and some adults), as well as, increasing vulnerability to hunters as hogs move to higher ground. The dramatic decrease in harvest in 2019 is likely related to these factors as bottomland flooding was relatively widespread due to tropical systems in 2018 and the resulting record hog harvest that year. Evidence of the presence of hogs in 46 of 46 counties was made by hunter harvest activities (46 of 46 counties in 2018). Statewide, approximately 1.4 hogs/mile² were harvested, however, this figure is deceiving because hogs only inhabit a relatively small portion of the state as a whole. The top 5 counties for wild hog harvest per unit area were Anderson (4.6 hogs/mile²), Abbeville (3.7 hogs/mile²), Allendale (3.6 hogs/mile²), Richland (3.3 hogs/mile²), and Hampton (3.1 hogs/mile²).

Coyote Harvest

Unlike wild hogs which are treated like game to some degree, coyotes are typically thought of as varmints that pose a threat to native game species. Like wild hogs, coyotes are a non-native species in South Carolina. Although a popular notion among hunters is that SCDNR released coyotes, the agency has never released coyotes in South Carolina. The occurrence of coyotes in the state is more recent than hogs and they appear to have gotten to the state by two methods, (1) natural movements from western states and (2) illegal importation. Coyotes were first documented in Oconee and Pickens Counties in 1978 and were thought to be linked to animals that were illegally imported for hunting purposes. Evidence for this includes an illegal importation case that was made and the fact that coyotes had not been documented in adjacent counties in Georgia and North Carolina. Within a few years coyotes began to appear in the western piedmont counties of Anderson, Abbeville, McCormick, etc. indicating a southeastern expansion from the original site. In the early 1980's coyotes were documented in Allendale County and were thought to be natural immigrants from Georgia since they had previously been documented in the adjacent Georgia counties. Coyotes from this source apparently populated to the Northeast until they encountered the Santee Cooper Lakes. In the late 1980's coyotes were documented in the Pee Dee Region, again associated with illegal imports. In any event, by the mid-1990's coyotes had been documented in all South Carolina counties.

Sportsmen often voice concern over the presence of coyotes and the potential impact they have on game species such as deer. Though coyotes are one of the most adaptable animals, they are not designed to prey on big game. The coyote's diet is chiefly composed of small mammals (rats and mice), insects, and a variety of vegetable matter including fruits. On the other hand, coyotes will take deer fawns and deer that are sick or injured. SCDNR completed a major study with researchers at the Savannah River Site investigating the affects coyotes are having on the survival of deer fawns. Cumulative data through the first 3 years of the study indicated approximately 70 percent total fawn mortality with coyotes being responsible for approximately 80 percent of these mortalities. If these findings even moderately represent a statewide situation, this "new mortality factor" is clearly involved in the reduction in deer numbers. This is especially true when combined with extremely liberal deer harvests that have been the norm in South Carolina.

The last 3 years of the study were for the purpose of determining if reducing coyote density through trapping increases fawn survival. It seems logical that if coyotes are preying on fawns, then

significantly reducing coyote densities should increase fawn survival. Over the course of the 3-year coyote "control" phase, 474 coyotes were trapped/killed on the study areas. Overall, results showed only modest increases in fawn survival following these efforts with an overall average of about 35 percent increase in survival. Also, trapping seemed to help in some years but have little effect on predation in others. This "year" effect may have something to do with the availability of coyote food sources that may change in abundance annually. Given these results and the difficulty and high cost of coyote control, it seems apparent that making adjustments to how we manage deer, particularly female deer, is more important now than prior to the colonization of the state by coyotes.

Coyotes are not protected animals in South Carolina and hunters are allowed to harvest them throughout the year during daylight hours and at night by registering their property. During 2019 it is estimated that approximately 20,674 coyotes were harvested incidental to deer hunting in South Carolina (Table 13), a decrease of 9 percent from 2018 (22,731 coyotes). As in past years, there was evidence of coyotes being harvested in all counties. Although the number of coyotes killed by deer hunters increased exponentially from the late 1990's to 2014 pointing to the expansion of this species in South Carolina, the harvest has decreased 34 percent in recent years likely indicating a moderation in coyote populations across the state which is typical of a species following colonization. Statewide approximately 1.0 coyotes/mile² were harvested and the top 5 counties for coyote harvest per unit area included Spartanburg (3.3 coyotes/mile²), Laurens (2.2 coyotes/mile²), Anderson (2.0 coyotes/mile²), Chester (1.7 coyotes/mile²), and Calhoun (1.6 coyotes/mile²).

Supplementary Information

The following section is not related to the 2019 Deer Hunter Survey but is offered as information relevant to the state's deer population.

Based on preliminary data provided by the South Carolina Department of Public Safety (SCDPS) the number of reported deer-vehicle collisions for 2019 was 3,085 (Table 14). Since reporting of deer vehicle collisions is contingent upon notification of some law enforcement agency and then SCDPS, this figure should be considered a minimum. Also, the reader should bear in mind that reporting criteria have changed over time.

Average body weights and antler characteristic of deer vary among the constituent counties in South Carolina and are dependent on deer density and available nutrition (Tables 15 and 16).

Statewide averages for male deer indicate that 1.5 year old bucks average about 107 lbs. and 3.6 antler points while bucks 2.5 years old and older average about 138 lbs. and 6.5 antler points. Yearling (1.5 years old) females average approximately 88 lbs. while does 2.5 years old and older average nearly 101 lbs. This information is based on sampling completed between 1987 and 1994.

The history of the deer population and harvest in South Carolina demonstrates a trend typical of a species that initially expands into available habitat, stabilizes, and begins to decline as habitat changes (Figures 4 and 5). It is important to recognize that habitat is the primary factor controlling deer density in South Carolina, though regulated harvest is important as well. Keep in mind that between 1750 and 1900 the deer population in South Carolina experienced a tremendous decline as it did in most of North America. Although unrestricted subsistence and commercial harvest of deer was important in the decline, major changes in habitat related to clearing of land for agriculture was the controlling factor.

By 1900 deer numbers in the State were very low, perhaps 20,000. However, in the 1920's, significant drought and the cotton boll weevil had devastating consequences for farming. With the decline in farming, reforestation of the state began and was largely complete by the 1970's. Timber harvest activities that followed into and throughout the 1980's created vast areas of early successional habitat that allowed for a dramatic increase in the State's deer population. South Carolina's deer population peaked in the mid to late 1990's at just over 1,000,000 deer.

Over time, deer hunters gained a better understanding of the relationship between deer numbers, habitat, and deer quality leading to more aggressive female harvests in many parts of the state. This increased emphasis on harvesting female deer as a means to control deer densities has played a role in the stabilization and ultimate reduction in the State's deer population. Habitat is also very important. Keep in mind that the same forest management activities that stimulated the growth in South Carolina's deer population in the 1980s have resulted in considerable acreage currently being in even-aged stands that are greater than 15 years old. This habitat type simply does not support deer densities at the same level as habitat in early stages of ecological succession. As a result, a combination of habitat change, high deer harvests, and the establishment of coyotes has caused the deer population to trend down since 2000. Currently the statewide population is estimated at about 700,000 deer.

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

County	Acres*	Square	Buck	Doe	Total	Harvest	Rates	% Change
		Miles	Harvest	Harvest	Harvest	Ac/Deer	Deer/Mi. ²	from 2018
Abbeville	223,113	349	2,092	1,557	3,649	61.1	10.5	-8.0
Aiken	500,546	782	2,620	1,614	4,234	118.2	5.4	-15.6
Allendale	216,455	338	1,741	1,733	3,474	62.3	10.3	-24.6
Anderson	219,068	342	3,435	2,491	5,926	37.0	17.3	1.6
Bamberg	196,573	307	2,137	2,719	4,856	40.5	15.8	-22.4
Barnwell	281,764	440	1,991	2,043	4,034	69.8	9.2	-10.6
Beaufort	147,441	230	1,588	1,250	2,838	52.0	12.3	19.8
Berkeley	567,530	887	3,231	2,902	6,133	92.5	6.9	17.3
Calhoun	190,584	298	1,209	1,362	2,571	74.1	8.6	-33.0
Charleston	288,732	451	1,853	2,328	4,181	69.1	9.3	7.2
Cherokee	156,664	245	1,645	1,269	2,914	53.8	11.9	18.1
Chester	300,589	470	3,042	1,772	4,814	62.4	10.3	17.5
Chesterfield	372,478	582	2,047	1,417	3,464	107.5	6.0	0.3
Clarendon	298,087	466	2,012	1,708	3,720	80.1	8.0	19.4
Colleton	502,666		4,048	3,677	7,725	65.1	9.8	-1.0
Darlington	286,228		1,350	1,366	2,716	105.4	6.1	11.2
Dillon	214,069	334	834	514	1,348	158.8	4.0	-16.0
Dorchester	302,717	473	2,942	2,146	5,088	59.5	10.8	0.8
Edgefield	246,543	385	1,734	1,700	3,434	71.8	8.9	5.7
Fairfield Fairfield	384,607	601	3,394	2,588	5,982	64.3	10.0	-9.9
Florence	397,888	622	3,265	1,950	5,215	76.3	8.4	11.1
Georgetown	399,638		1,245	1,411	2,656	150.5	4.3	-33.9
Greenville	294,257	460	2,363	1,580	3,943	74.6	8.6	16.2
Greenwood	204,400		1,557	1,345	2,902	74.0	9.1	-4.0
Hampton	324,840		2,885	2,742	5,627	57.7	11.1	-29.3
Horry	533,336		1,980	1,084	3,064	174.1	3.7	-13.0
Jasper	309,889	484	1,429	2,043	3,472	89.3	7.2	28.5
Kershaw	360,485	563	3,159	2,638	5,797	62.2	10.3	20.7
Lancaster	266,382	416	2,701	2,012	4,713	56.5	11.3	54.6
Laurens	317,916		3,674	2,582	6,256	50.8	12.6	28.8
Lee	220,106		1,505			83.3	7.7	-4.1
Lexington	280,742		2,082	1,366	3,448	81.4	7.7	3.8
McCormick McCormick	212,021	331	741	498	1,239	171.1	3.7	-52.6
Marion	216,907	339	1,182	1,096	2,278	95.2	6.7	122.9
Marlboro	281,271	439	1,182	1,346	2,631	106.9	6.0	38.7
Newberry	317,761	497	3,024	2,512	5,536	57.4	11.2	-2.4
Oconee	284,348		1,571	611	2,182	130.3	4.9	51.3
Orangeburg	504,516		4,656	4,654	9,310	54.2	11.8	-20.9
Pickens	219,926		1,675	1,004	2,679	82.1	7.8	-20.9
Richland	340,121	531	1,675	1,004	3,151	107.9	5.9	-13.1 -5.5
Saluda	192,173		1,587	1,043	2,627	73.2	3.9 8.7	-3.3 -19.9
				3,237	7,360		17.7	
Spartanburg Sumter	265,939		4,123			36.1		12.8
Sumter	338,968		2,428	2,048	4,476	75.7 58.2	8.5	-3.4
Union	258,111	403	2,372	2,063	4,435	58.2	11.0	-12.1
Williamsburg	513,851	803	3,562	4,104	7,666	67.0	9.5	30.0
York	276,650		2,622	2,047	4,669	59.3	10.8	-9.8
Total	14,028,896	21,920 harvest	105,201	87,872 (+ -) 3,781	193,073 (+ -) 5,757	80.6	9.1	-1

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

Table 2. County rankings based on deer harvested per unit area in South Carolina in 2019.

County	Acres*	Square	Buck	Doe	Total	Harvest	Rates	% Change
		Miles	Harvest	Harvest	Harvest	Ac/Deer	Deer/Mi. ²	from 2018
Spartanburg	265,939	416	4,123	3,237	7,360	36.1	17.7	12.8
Anderson	219,068	342	3,435	2,491	5,926	37.0	17.3	1.6
Bamberg	196,573	307	2,137	2,719	4,856	40.5	15.8	-22.4
Laurens	317,916	497	3,674	2,582	6,256	50.8	12.6	28.8
Beaufort	147,441	230	1,588	1,250	2,838	52.0	12.3	19.8
Cherokee	156,664	245	1,645	1,269	2,914	53.8	11.9	18.1
Orangeburg	504,516	788	4,656	4,654	9,310	54.2	11.8	-20.9
Lancaster	266,382	416	2,701	2,012	4,713	56.5	11.3	54.6
Newberry	317,761	497	3,024	2,512	5,536	57.4	11.2	-2.4
Hampton	324,840	508	2,885	2,742	5,627	57.7	11.1	-29.3
Union	258,111	403	2,372	2,063	4,435	58.2	11.0	-12.1
York	276,650	432	2,622	2,047	4,669	59.3	10.8	-9.8
Dorchester	302,717	473	2,942	2,146	5,088	59.5	10.8	0.8
Abbeville	223,113	349	2,092	1,557	3,649	61.1	10.5	-8.0
Kershaw	360,485	563	3,159	2,638	5,797	62.2	10.3	20.7
Allendale	216,455	338	1,741	1,733	3,474	62.3	10.3	-24.6
Chester	300,589	470	3,042	1,772	4,814	62.4	10.3	17.5
Fairfield	384,607	601	3,394	2,588	5,982	64.3	10.0	-9.9
Colleton	502,666	785	4,048	3,677	7,725	65.1	9.8	-1.0
Williamsburg	513,851	803	3,562	4,104	7,666	67.0	9.5	30.0
Charleston	288,732	451	1,853	2,328	4,181	69.1	9.3	7.2
Barnwell	281,764	440	1,991	2,043	4,034	69.8	9.2	-10.6
Greenwood	204,400	319	1,557	1,345	2,902	70.4	9.1	-4.0
Edgefield	246,543	385	1,734	1,700	3,434	71.8	8.9	5.7
Saluda	192,173	300	1,584	1,043	2,627	73.2	8.7	-19.9
Calhoun	190,584	298	1,209	1,362	2,571	74.1	8.6	-33.0
Greenville	294,257	460	2,363	1,580	3,943	74.6	8.6	16.2
Sumter	338,968	530	2,428	2,048	4,476	75.7	8.5	-3.4
Florence	397,888	622	3,265	1,950	5,215	76.3	8.4	11.1
Clarendon	298,087	466	2,012	1,708	3,720	80.1	8.0	19.4
Lexington	280,742	439				81.4	7.9	3.8
Pickens	219,926	344	1,675	1,004	2,679	82.1	7.8	-15.1
Lee	220,106	344	1,505	1,136	2,641	83.3	7.7	-4.1
Jasper	309,889	484	1,429	2,043	3,472	89.3	7.2	28.5
Berkeley	567,530	887	3,231	2,902	6,133	92.5	6.9	17.3
Marion	216,907	339	1,182	1,096	2,278	95.2	6.7	122.9
Darlington	286,228	447	1,350	1,366	2,716	105.4	6.1	11.2
Marlboro	281,271	439	1,285	1,346	2,631	106.9	6.0	38.7
Chesterfield	372,478	582	2,047	1,417	3,464	107.5	6.0	0.3
Richland	340,121	531	1,587	1,564	3,151	107.9	5.9	-5.5
Aiken	500,546	782	2,620	1,614	4,234	118.2	5.4	-15.6
Oconee	284,348	444	1,571	611	2,182	130.3	4.9	51.3
Georgetown	399,638	624	1,245	1,411	2,656	150.5	4.3	-33.9
Dillon	214,069	334	834	514	1,348	158.8	4.0	-16.0
McCormick	212,021	331	741	498	1,239	171.1	3.7	-52.6
Horry	533,336		1,980	1,084	3,064	174.1	3.7	-13.0
Total	14,028,896	21,920	105,201	87,872	193,073	80.6	9.1	-1

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

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

County	Acres*	Square	Buck	Doe	Total	Harvest	Rates	% Change
		Miles	Harvest	Harvest	Harvest	Ac/Deer	Deer/Mi. ²	from 2018
Orangeburg	504,516	788	4,656	4,654	9,310	54.2	11.8	-20.9
Colleton	502,666	785	4,048	3,677	7,725	65.1	9.8	-1.0
Williamsburg	513,851	803	3,562	4,104	7,666	67.0	9.5	30.0
Spartanburg	265,939	416	4,123	3,237	7,360	36.1	17.7	12.8
Laurens	317,916	497	3,674	2,582	6,256	50.8	12.6	28.8
Berkeley	567,530	887	3,231	2,902	6,133	92.5	6.9	17.3
Fairfield	384,607	601	3,394	2,588	5,982	64.3	10.0	-9.9
Anderson	219,068	342	3,435	2,491	5,926	37.0	17.3	1.6
Kershaw	360,485	563	3,159	2,638	5,797	62.2	10.3	20.7
Hampton	324,840	508	2,885	2,742	5,627	57.7	11.1	-29.3
Newberry	317,761	497	3,024	2,512	5,536	57.4	11.2	-2.4
Florence	397,888	622	3,265	1,950	5,215	76.3	8.4	11.1
Dorchester	302,717	473	2,942	2,146	5,088	59.5	10.8	0.8
Bamberg	196,573	307	2,137	2,719	4,856	40.5	15.8	-22.4
Chester	300,589	470	3,042	1,772	4,814	62.4	10.3	17.5
Lancaster	266,382	416	2,701	2,012	4,713	56.5	11.3	54.6
York	276,650	432	2,622	2,047	4,669	59.3	10.8	-9.8
Sumter	338,968	530	2,428	2,048	4,476	75.7	8.5	-3.4
Union	258,111	403	2,372	2,063	4,435	58.2	11.0	-12.1
Aiken	500,546	782	2,620	1,614	4,234	118.2	5.4	-15.6
Charleston	288,732	451	1,853	2,328	4,181	69.1	9.3	7.2
Barnwell	281,764	440	1,991	2,043	4,034	69.8	9.2	-10.6
Greenville	294,257	460	2,363	1,580	3,943	74.6	8.6	16.2
Clarendon	298,087	466	2,012	1,708	3,720	80.1	8.0	19.4
Abbeville	223,113	349	2,092	1,557	3,649	61.1	10.5	-8.0
Allendale	216,455	338	1,741	1,733	3,474	62.3	10.3	-24.6
Jasper	309,889	484	1,429	2,043	3,472	89.3	7.2	28.5
Chesterfield	372,478	582	2,047	1,417	3,464	107.5	6.0	0.3
Lexington	280,742	439	2,082	1,366	3,448	81.4	7.9	3.8
Edgefield	246,543	385	1,734	1,700	3,434	71.8	8.9	5.7
Richland	340,121	531	1,587	1,564	3,151	107.9	5.9	-5.5
Horry	533,336	833	1,980	1,084	3,064	174.1	3.7	-13.0
Cherokee	156,664	245	1,645	1,269	2,914	53.8	11.9	18.1
Greenwood	204,400	319	1,557	1,345	2,902	70.4	9.1	-4.0
Beaufort	147,441	230	1,588	1,250	2,838	52.0	12.3	19.8
Darlington	286,228	447	1,350	1,366	2,716	105.4	6.1	11.2
Pickens	219,926	344	1,675	1,004	2,679	82.1	7.8	-15.1
Georgetown	399,638	624	1,245	1,411	2,656	150.5	4.3	-33.9
Lee	220,106	344	1,505	1,136	2,641	83.3	7.7	-4.1
Marlboro	281,271	439	1,285	1,346	2,631	106.9	6.0	38.7
Saluda	192,173	300	1,584	1,043	2,627	73.2	8.7	-19.9
Calhoun	190,584	298	1,209	1,362	2,571	74.1	8.6	-33.0
Marion	216,907	339	1,182	1,096	2,278	95.2	6.7	122.9
Oconee	284,348	444	1,571	611	2,182	130.3	4.9	51.3
Dillon	214,069	334	834	514	1,348	158.8	4.0	-16.0
McCormick	212,021	331	741	498	1,239	171.1	3.7	-52.6
Total	14,028,896	21,920	105,201	87,872	193,073	80.6	9.1	-1

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

Table 4. Estimated deer harvest on Wildlife Management Areas in South Carolina in 2019.

Area	Acreage	Bucks	Does	Total	Deer/Mi. ²
Mountain Hunt Unit	193,566	1,277	657	1,934	6.4
Central Piedmont Hunt Unit	159,793	1,543	1,234	2,777	11.1
Western Piedmont Hunt Unit	119,077	704	567	1,271	6.8
Subtotal for Upstate WMA's	472,436	3,524	2,458	5,982	8.1
Coastal WMA's*					
Bear Island WMA	1,519	2	5	7	2.9
Bonneau Ferry ¹	10,697	34	33	86	5.1
Botany Bay WMA	2,000	12	33	45	14.4
Crackerneck WMA	10,470	37	38	75	4.6
Cross Generating Station WMA	654	8	2	10	9.8
Donnelley WMA	8,048	33	35	68	5.4
Francis Marion WMA	252,578	125	110	235	0.6
Hamilton Ridge	13,281	37	36	73	3.5
Liberty Hill	7,876	11	10	21	1.7
Hickory Top WMA	1,836	5	14	19	6.6
Manchester State Forest WMA	25,505	78	77	155	3.9
Moultrie WMA	9,480	8	6	14	0.9
Oak Lea WMA	2,024	6	27	33	10.4
Palachucola WMA	5,947	21	24	45	4.8
Santee Cooper WMA	2,828	15	26	41	9.3
Wateree River WMA	3,674	11	11	22	3.8
Webb Wildlife Center WMA	5,866	32	33	65	7.1
Subtotal for Coastal WMA's	364,283	475	520	1,014	1.8
Total	836,719	3,999	2,978	6,996	5.4

^{*}Check Station data. ¹ Total includes deer of unknown sex

Table 5. Hunter opinion (percent) regarding the number of deer in the area hunted most often in South Carolina in 2019 compared to previous years.

	Increasing	About the Same	Decreasing
Residents	20.3	58.7	21
Non-Residents	16.8	59.7	23.5
Overall	19.9	58.8	21.3

Table 6. Resident deer hunter and deer harvest statistics in South Carolina in 2019.

County	Number	Man/Days	Percent	Deer/	Days/	Buck	Doe	Total
County	Hunters	Hunted	Success	Hunter	Deer	Harvest	Harvest	Harvest
A la la a a si 11 a								
Abbeville	3,192	45,015	72	1.1	13.3	1,964	1,412	3,376
Aiken	3,090	54,877	69	1.2	14.7	2,292	1,432	3,724
Allendale	1,084	10,005	72	1.2	8.0	573	675	1,248
Anderson	4,399	71,018	75	1.3	12.1	3,417	2,455	5,872
Bamberg	2,128	24,369	70	1.5	7.5	1,371	1,862	3,233
Barnwell	1,616	25,883	71	1.8	9.0	1,371	1,514	2,885
Beaufort	1,555	18,966	68	1.6	7.7	1,350	1,105	2,455
Berkeley	4,706	67,479	70	1.3	11.1	3,212	2,885	6,097
Calhoun	2,067	27,846	70	1.2	11.2	1,207	1,289	2,496
Charleston	3,315	39,202	65	1.2	9.6	1,780	2,292	4,072
Cherokee	2,067	30,793	67	1.2	12.4	1,371	1,105	2,476
Chester	2,660	41,063	75	1.3	12.2	2,148	1,207	3,355
Chesterfield	1,821	34,763	76	1.6	12.2	1,719	1,125	2,844
Clarendon	2,005	32,082	77	1.7	9.6	1,903	1,453	3,356
Colleton	4,235	72,289	67	1.6	10.6	3,519	3,294	6,813
Darlington	1,535	25,596	71	1.7	9.5	1,350	1,330	2,680
Dillon	1,125	14,322	67	1.0	12.3	798	368	1,166
Dorchester	3,192	57,473	73	1.6	11.4	2,906	2,128	5,034
Edgefield	2,455	39,142	70	1.2	13.5	1,350	1,555	2,905
Fairfield	3,560	49,945	80	1.4	10.3	2,864	2,005	4,870
Florence	3,130	56,984	77	1.6	11.3	3,192	1,841	5,033
Georgetown	2,189	30,650	69	1.2	11.6	1,228	1,412	2,639
Greenville	3,847	45,055	71	1.0	11.6	2,333	1,555	3,888
Greenwood	2,353	35,888	71	1.2	13.2	1,412	1,309	2,721
Hampton	2,312	29,791	70	1.4	9.1	1,371	1,903	3,274
Horry	2,639	44,297	57	1.1	14.6	1,944	1,085	3,028
Jasper	1,289	16,716	79	1.7	7.4	900	1,350	2,251
Kershaw	3,458	46,937	73	1.4	9.4	2,721	2,292	5,013
Lancaster	2,762	43,866	71	1.5	10.7	2,374	1,739	4,113
Laurens	4,645	62,344	72	1.3	10.6	3,437	2,455	5,893
Lee	1,432	25,679	71	1.7	10.3	1,432	1,064	2,496
Lexington	2,987	40,062	66	1.1	11.9	2,046	1,330	3,376
McCormick	1,698	17,514	59	0.6	17.5	614	389	1,002
Marion	1,432	26,968	70	1.5	12.4	1,146	1,023	2,169
Marlboro	839	17,903	84	2.5	8.7	921	1,146	2,067
Newberry	3,990	53,547	73	1.3	10.1	2,824	2,476	5,299
Oconee	2,005	26,436	76	1.1	12.4	1,535	593	2,128
Orangeburg	5,668	80,389	77	1.6	9.1	4,420	4,399	8,819
Pickens	2,537	36,276	67	1.0	13.7	1,657	982	2,639
Richland	2,926	45,646	68	1.0	15.3	1,514	1,473	2,987
Saluda	2,128	27,050	71	1.2	10.7	1,494	1,044	2,537
Spartanburg	5,279	74,822	72	1.4	10.4	4,051	3,110	7,161
Sumter	2,824	50,313	75	1.5	12.2	2,210	1,903	4,113
Union	3,090	42,784	70	1.2	12.0	1,862	1,698	3,560
Williamsburg	3,847	65,227	78	1.9	9.0	3,417	3,867	7,284
York	3,192	42,231	71	1.3	10.5	2,312	1,719	4,031
Total	126,303	1,867,504	69	1.4	11.0	92,829	77,648	170,477
% Change								
from 2018	-3.9	-3.3	0.0	7.6	-6.8	2.0	2.0	3.9

Table 7. Nonresident deer hunter and deer harvest statistics in South Carolina in 2019.

County	Number	Man/Days	Percent	Deer/	Days/	Buck	Doe	Total
	Hunters	Hunted	Success	Hunter	Deer	Harvest	Harvest	Harvest
Abbeville	201	2,116	64	1.4	7.7	128	146	274
Aiken	383	3,010	62	1.4	5.9	328	182	511
Allendale	1,441	15,307	70	1.5	6.9	1,168	1,058	2,226
Anderson	91	401	80	0.6	7.3	1,108	36	55
	858	11,586	83	1.9	7.3	766	858	1,624
Bamberg Barnwell	474	6,915	85	2.4	6.0	620	529	1,149
Beaufort	237	2,335	77	1.6	6.1	237	146	383
Berkeley	55	2,333 474	100	0.7	13.0	18	18	36
Calhoun	73	1,003	75	1.5	13.4	2	73	75
Charleston	73	894	100	1.5	8.2	73	36	109
	201	3,339	90	2.2	7.6	274	164	438
Cherokee Chester	1,022	16,384	73	1.4	11.2	894	566	1,460
Chesterfield	529	7,134	48	1.4	11.5	328	292	620
Clarendon	128	1,897	71		5.2			
			71	2.9		109	255	365
Colleton	328	6,185		2.8	6.8	529	383	912
Darlington	109	438	17	0.3	12.0	0	36	36
Dillon	36	930	100	5.0	5.1	36	146	182
Dorchester	91	438	75 75	0.6	8.0	36	18	55
Edgefield	365	4,014	75 75	1.5	7.6	383	146	529
Fairfield	730	8,812	75	1.5	7.9	529	584	1,113
Florence	128	1,040	86	1.4	5.7	73	109	182
Georgetown	73	255	50	0.3	14.0	18	0	18
Greenville	36	201	50	1.5	3.6	30	25	55
Greenwood	91	1,989	100	2.0	10.9	146	36	182
Hampton	1,642	24,867	73	1.4	10.6	1,514	839	2,354
Horry	73	328	67	0.5	9.0	36	0	36
Jasper	693	13,994	74	1.8	11.4	529	693	1,222
Kershaw	474	5,692	81	1.7	7.3	438	347	785
Lancaster	547	5,820	60	1.1	9.7	328	274	602
Laurens	237	3,138	77	1.5	8.6	237	128	365
Lee	146	1,040	75	1.0	7.1	73	73	146
Lexington	91	474	80	0.8	0.0	36	36	73
McCormick	292	3,211	44	0.8	13.5	128	109	237
Marion	109	2,573	50	1.0	0.0	36	73	109
Marlboro	274	6,002	80	2.1	10.6	365	201	566
Newberry	237	3,339	69	1.0	14.1	201	36	237
Oconee	91	1,533	40	0.6	0.0	36	18	55
Orangeburg D: 1	328	4,014	78 50	1.5	8.1	237	255	493
Pickens	36	383	50	1.1	9.5	18	22	40
Richland	109	857	83	1.5	5.2	73	91	164
Saluda	128	1,076	29	0.7	11.8	91	0	91
Spartanburg	128	657	71	1.6	3.3	73	128	201
Sumter	310	2,445	65	1.2	6.7	219	146	365
Union	639	9,250	66	1.4	10.6	511	365	876
Williamsburg	146	1,897	87	2.6	5.0	146	237	383
York	365	4,926	30	1.8	7.7	310	328	639
Total	14,851	194,616	67	1.6	8.6	12,384	10,246	22,630
% Change from 2018	1.2	1.4	-8.0	6.2	-4.5	10.2	1.6	6.2

Table 8. Hunting effort (man/days) by county for successful and unsuccessful resident and nonresident deer hunters in South Carolina in 2019.

County	Resid	dents (man/da	ays)	Total Effort	Nonres	sidents (man/	days)	Total Effort	Total
Hur	Successful	Unsuccessful	Average	Residents	Successful	Unsuccessful	Average	Non-residents	Days
Abbeville	16.4	8.4	14.1	45,015		12.0		2,116	47,131
Aiken	19.8	13.1	17.8	54,877	10.0	4.4	7.9	3,010	57,887
Allendale	9.8	8.0	9.2	10,005	13.1	4.8		15,307	25,312
Anderson	18.6	8.8	16.1	71,018		1.0		401	71,419
Bamberg	13.2	7.4	11.5	24,369	15.6	3.1	13.5	11,586	35,955
Barnwell	21.1	3.7	16.0	25,883	16.6	3.5	14.6	6,915	32,798
Beaufort	14.6	7.0	12.2	18,966		9.7	9.8	2,335	21,302
Berkeley	17.4	7.4	14.3	67,479	8.7	0.0	8.7	474	67,953
Calhoun	16.7	6.3	13.5	27,846		17.0		1,003	28,850
Charleston	15.0	6.2	11.8	39,202	12.3	0.0	12.3	894	40,096
Cherokee	17.6	9.2	14.9	30,793		6.0	16.6	3,339	34,132
Chester	16.7	11.7	15.4	41,063	17.1	13.1	16.0	16,384	57,447
Chesterfield	21.7	11.2	19.1	34,763	18.1	9.1	13.5	7,134	41,897
Clarendon	17.3	12.1	16.0	32,082	19.6	3.0	14.9	1,897	33,980
Colleton	20.3	10.6	17.1	72,289	22.8	5.0		6,185	78,474
Darlington	19.9	9.0	16.7	25,596		3.8		438	26,034
Dillon	15.7	6.6	12.7	14,322	25.5	0.0	25.5	930	15,253
Dorchester	21.7	8.2	18.0	57,473		3.5	4.8	438	57,910
Edgefield	18.3	10.4	15.9	39,142	10.9	11.2	11.0	4,014	43,156
Fairfield	15.2	9.7	14.0	49,945		8.3		8,812	58,758
Florence	20.7	10.2	18.2	56,984		3.0		1,040	58,024
Georgetown	15.0	11.8	14.0	30,650		5.0		255	30,905
Greenville	12.6	9.4	11.7	45,055		10.0	5.5	201	45,256
Greenwood	18.3	7.9	15.3	35,888	21.8	0.0	21.8	1,989	37,876
Hampton	14.9	8.3	12.9	29,791	17.7	8.3	15.1	24,867	54,658
Horry	21.4	10.6	16.8	44,297	3.5	5.5	4.5	328	44,626
Jasper	12.6	14.2	13.0	16,716		11.8		13,994	30,710
Kershaw	16.0	7.2	13.6	46,937	13.4	6.2	12.0	5,692	52,629
Lancaster	19.2	7.9	15.9	43,866		10.3	10.6	5,820	49,686
Laurens	15.4	8.4	13.4	62,344	14.1	10.3	13.2	3,138	65,482
Lee	18.6	16.3	17.9	25,679		7.0	7.1	1,040	26,719
Lexington	15.2								
McCormick	11.8	8.2	10.3			8.4		3,211	20,725
Marion	22.8	10.2	18.8	· · · · · · · · · · · · · · · · · · ·				2,573	29,540
Marlboro	23.2	13.8	21.3	17,903		6.0		6,002	23,905
Newberry	15.1	8.9	13.4	53,547				3,339	56,886
Oconee	14.2	9.9	13.2					1,533	27,968
Orangeburg	16.1	8.3	14.2	80,389				4,014	84,403
Pickens	15.4	12.2	14.3	36,276				383	36,659
Richland	17.6	11.3	15.6	,		4.0		857	46,504
Saluda	13.7	10.4	12.7	27,050		8.0		1,076	28,126
Spartanburg	16.5	8.0	14.2	74,822		3.0		657	75,479
Sumter	19.7	12.0	17.8			7.3		2,445	52,758
Union	16.8	7.3	13.8					9,250	52,034
Williamsburg	19.2	9.0	17.0			3.0		1,897	67,124
York	14.8	9.4	13.2	42,231		10.3		4,926	47,158
Total	17.0	9.2	14.8	1,867,504	15.1	8.3	13.1	194,616	2,062,120
% Change				, ,				,	, ,
from 2018	0.0	0.0	0.0	-3.3	2.0	-6.7	0.0	1.3	-1.0

Table 9. Estimated deer harvest by weapon type in South Carolina in 2019.

	Rifle	Bow & Arrow	Shotgun	Muzzle- loader	Crossbow	Handgun	Total
Number of Deer Harvested	155,617	11,391	17,956	3,282	4,634	193	193,073
Percent Total Deer Harvest	80.6	5.9	9.3	1.7	2.4	0.1	100.0
Percent Hunter Success With Weapon	67.4	27.9	37.2	21.4	23.0	11.9	NA*

^{*} Total is not applicable because individual hunters take deer with multiple weapons.

Table 10. Number of hunters using each type of weapon in South Carolina in 2019.

		Bow &		Muzzle-		
	Rifle	Arrow	Shotgun	loader	Crossbow	Handgun
Residents	118,601	26,025	26,543	12,948	15,667	3,366
Nonresidents	15,111	1,891	945	2,096	1,387	252
Total	133,712	27,916	27,488	15,043	17,053	3,619

Total across weapons not given because hunters use multiple weapons. Total hunters = 141,116.

Table 11. Weapons utilization (percent) among deer hunters in South Carolina in 2019.

	Rifle	Bow & Arrow	Shotgun	Muzzle- loader	Crossbow	Handgun
Residents	91.6*	20.1*	20.5*	10*	12.1*	2.6
Nonresidents	95.9	12.0	6.0	13.3	8.8	1.6
Total	92.2	19.0	18.5	10.4	11.6	2.5

^{*} Significant difference in weapons use category based on residency.

Table 12. Weapons preference (percent) among deer hunters in South Carolina in 2019.

	Rifle	Bow & Arrow	Shotgun	Muzzle- loader	Crossbow	Handgun	Total
Residents	78.9*	11.4*	6.6*	0.6*	2.3	0.2	100.0
Nonresidents	86.7	7.0	2.1	2.3	1.8	0.1	100.0
Total	79.9	10.9	6.0	0.8	2.2	0.2	100.0

Table 13. Estimated wild hog and coyote harvest by deer hunters in South Carolina in 2019. Rank is by per unit area harvested.

County	Hog	Harv./	% Change	2019	2018	Coyote	Harv./	% Change	2019	2018
	Harv.	Mile ²	from 2018	Rank	Rank	Harv.	Mile ²	from 2018	Rank	Rank
Abbeville	1,294	3.71	-12.5	2	5	323	0.93	-59.7	23	2
Aiken	739	0.95	-4.9	27	30	693	0.89	-48.8	24	5
Allendale	1,224	3.62	-48.6	3	1	277	0.82	-38.6	27	11
Anderson	1,594	4.66	9.7	1	4	670	1.96	-43.1	3	1
Bamberg	601	1.96	-45.5	13	6	416	1.35	38.3	9	24
Barnwell	554	1.26	-18.1	20	23	300	0.68	-45.5	34	16
Beaufort	46	0.20	-63.1	43	38	115	0.50	360.9	37	46
Berkeley	2,726	3.07	-10.1	6	9	647	0.73	-21.8	30	27
Calhoun	300	1.01	-77.0	24	3	485	1.63	38.3	5	19
Charleston	1,155	2.56	48.7	9	21	139	0.31	10.6	45	43
Cherokee	46	0.19	-7.8	44	45	231	0.94	-29.1	21	11
Chester	370	0.79	-41.0	30		832	1.77	22.9	4	9
Chesterfield	300	0.52	-58.7	37	26		1.43	84.3	7	32
Clarendon	231	0.50	-81.2	38	11	323	0.69	-32.1	33	22
Colleton	947	1.21	-12.1	21	24	254	0.32	-53.9	44	36
Darlington	439	0.98	-12.4	25	28	601	1.34	379.3	10	43
Dillon	647	1.93	115.1	14	33	115	0.35	-42.4	43	37
Dorchester	647	1.37	-33.8	19	17	300	0.63	33.1	35	38
Edgefield	208	0.54	-40.7	36	_	300	0.78	-55.6	28	
Fairfield	554	0.92	-41.8	28	22	439	0.73	-43.5	30	
Florence	1,063	1.71	-1.4	15	19	485	0.78	-7.8	28	31
Georgetown	716	1.15	-33.6	22	19	231	0.37	-48.8	42	35
Greenville	115	0.25	-23.2	41	43		0.85	123.8	25	39
Greenwood	208	0.65	-71.4	33	14	300	0.94	-29.5	21	11
Hampton	1,594	3.14	-30.1	5	2	277	0.55	-53.9	36	18
Horry	808	0.97	-19.3	26	27	323	0.39	29.0	41	42
Jasper	993	2.05	-3.3	11	16		0.43	18.5	39	41
Kershaw	878	1.56	59.2	17	31	647	1.15	-21.8	13	8
Lancaster	92	0.22	-66.5	42	34	554	1.33	30.1	12	22
Laurens	347	0.70	-68.6	32	15		2.23	92.4	2	20
Lee	208	0.60		34				6.4	18	
Lexington	46	0.11	240.0	45			0.84	-13.3	26	
McCormick	993	3.00		8	10		0.98	29.0	20	
Marion	693	2.04	-41.2	12	8		0.07	-53.9	46	
Marlboro	462	1.05	-56.1	23	13		0.42	-43.3	40	
Newberry	300	0.60		34		716	1.44	-13.4	6	
Oconee	693	1.56		17		485	1.09	21.0	16	
Orangeburg	208	0.26		40			0.70	-21.0	32	30
Pickens	554	1.61	216.0	16		370	1.08	-22.4	17	10
Richland	1,756	3.30		4		254	0.48	-53.9	38	21
Saluda	92	0.31	22.9	39	44	416	1.38	50.8	8	
		0.78		30			3.22	57.2	1	3
	323		0			531	1.00	165.0	19	
Spartanburg	323 1.617		-14.0	7	7	. , , , , , ,		1 (1.7.0)	19	191
Spartanburg Sumter	1,617	3.05	-14.0 43.4	7 29	7 37					
Spartanburg Sumter Union	1,617 323	3.05 0.80	43.4	29	37	462	1.15	-12.2	13	14
Spartanburg Sumter Union Williamsburg	1,617	3.05 0.80 2.22	43.4 24.5	29 10	37 18	462 901	1.15 1.12	-12.2 -10.1		14 16
Spartanburg Sumter Union	1,617 323 1,779	3.05 0.80	43.4	29	37 18 46	462 901 577	1.15	-12.2	13 15 10	14 16

95% Confidence Interval for harvest Ranking is based on harvest per square mile

Table 14. Number of deer-vehicle collisions reported by the South Carolina Department of Public Safety 2015-2019.

		1			
County	2015	2016	2017	2018*	2019*
Abbeville	4	8	7	7	8
Aiken	62	88	79	78	93
Allendale	8	10	12	7	20
Anderson	88	81	63	100	96
Bamberg	10	13	16	24	27
Barnwell	14	15	16	22	15
Beaufort	101	114	106	110	130
Berkeley	73	63	77	90	115
Calhoun	34	46	41	27	31
Charleston	179	215	216	252	248
Cherokee	24	15	19	22	41
Chester	15	33	24	36	48
Chesterfield	14	33	27	36	37
Clarendon	25	19	20	13	19
Colleton	64	53	73	60	51
Darlington	56	86	100	86	133
Dillon	62	53	71	63	71
Dorchester	71	60	55	63	60
Edgefield	4	10	4	8	11
Fairfield	25	29	24	28	33
Florence	119	107	137	186	176
Georgetown	36	31	61	29	31
Greenville	104	108	138	149	162
Greenwood	19	21	13	15	19
Hampton	15	12	18	14	17
Horry	185	196	251	313	340
Jasper	55	52	64	60	64
Kershaw	42	32	24	40	37
Lancaster	29	33	37	45	40
Laurens	21	16	20	18	14
Lee	20	19	18	32	16
Lexington	35	36	30	34	32
McCormick	3	2	3	2	63
Marion	39	43	62	68	85
Marlboro	21	50	80	73	13
Newberry	8	8	14	16	26
Oconee	16	4	13	17	148
Orangeburg	134	140	145	130	49
Pickens	38	28	37	28	55
Richland	61	79	69	55	5
Saluda	7	6	7	8	169
Spartanburg	131	156	145	151	25
Sumter	43	23	26	18	20
Union	11	19	13	14	85
Williamsburg	59	85	102	75	107
York	84	110	119	117	
Total	2,268	2,460	2,696	2,839	3,085

^{*} Preliminary figures

Table 15. Average live body weights of deer from South Carolina counties, based on historic data

		Males	S			Females		
	1.5 Ye	ars Old	2.5+ Ye	ears Old	1.5 Yea	ars Old	2.5+ Ye	ears Old
COUNTY	N	Avg. Wt.	N	Avg. Wt.	N	Avg. Wt.	N	Avg. Wt.
Abbeville	1,390	111.7	484	145.9	466	90.4	747	102.7
Aiken	2,667	121.6	1,485	162.6	808	94.9	1,522	109.6
Allendale	6,175	108.9	3,333	146.0	2,503	87.7	5,606	100.8
Anderson	30	121.9	17	148.1	4	92.5	8	113.0
Bamberg	2,414	111.9	1,113	142.4	884	91.4	1,721	103.9
Barnwell	1,478	119.1	695	156.6	601	94.3	1,071	106.9
Beaufort	952	101.6	1,236	135.2	690	86.7	1,818	99.8
Berkeley	3,162	100.6	4,198	127.3	1,086	83.4	3,991	97.2
Calhoun	1,588	110.2	633	144.1	312	91.4	943	104.6
Charleston	1,256	97.9	2,088	123.3	422	83.3	1,581	95.8
Cherokee	1	80.0	1	139.0	9	77.8	26	89.6
Chester	1,445	105.9	963	140.1	470	87.4	1,091	99.4
Chesterfield	79	119.4	140	152.5	27	93.5	1,128	99.8
Clarendon	13	101.3	29	152.5	42	89.6	87	103.0
Colleton	5,822	105.6	6,908	135.5	3,279	87.9	8,920	100.4
Darlington	334	113.6	273	153.3	216	92.8	573	105.2
Dillon	74	112.8	46	138.5	13	92.8	50	103.9
Dorchester	1,868	107.2	2,205	137.0	653	88.0	2,055	103.0
Edgefield	556	100.9	334	133.4	159	84.6	306	96.9
Fairfield	2,048	102.1	1,444	136.5	761	86.3	2,021	99.2
Florence	696	110.8	459	139.2	198	89.6	621	102.8
Georgetown	1,881	98.7	2,281	126.1	668	85.6	1,961	97.6
Greenville	7	122.1	9	149.9	7	79.3	16	98.4
Greenwood	1,158	111.4	537	145.1	313	90.2	629	103.0
Hampton	6,103	106.7	4,710	140.0	3,034	87.2	7,236	100.5
Horry	302	96.1	311	126.1	129	79.2	301	91.3
Jasper	3,385	101.8	4,691	135.4	2,142	84.6	5,948	96.9
Kershaw	603	108.9	588	144.6	251	89.6	758	102.9
Lancaster	472	113.1	246	153.3	213	91.4	441	105.2
Laurens	240	104.7	181	132.9	107	87.3	238	96.9
Lee	472	119.6	187	151.3	162	96.6	330	108.5
Lexington	20	120.8	9	164.8	6	101.3	15	115.8
McCormick	2,354	101.5	1,056	134.5	877	85.3	1,745	97.3
Marion	690	108.5	501	138.7	256	88.6	630	98.7
Marlboro	106	115.0	62	149.8	30	95.0	70	107.8
Newberry	143	97.1	100	135.6	85	86.0	171	92.7
Oconee	74	113.1	58	152.6	33	85.3	39	99.6
Orangeburg	2,293	112.5	1,375	145.0	686	90.8	1,684	103.4
Pickens	47	109.1	41	145.4	18	79.9	48	100.5
Richland	1,320	109.1	1,274	145.4	651	92.7	1,879	106.3
Saluda	1,320	115.8	40	143.2	25	93.6	34	105.2
Spartanburg	34	109.3	22	142.2	13	95.0	31	98.8
Sumter	666	111.3	353	142.2	188	93.0	509	105.3
Union	958	101.7	608	135.8	439	87.9	761	97.8
Williamsburg	469	112.5	559	143.3	150	91.4	478	106.0
York	13		339	143.3	20	78.7	4/8	93.9
		96.9						
Total	57,958	107.3	47,913	137.9	24,106	88.0	61,879	100.6

Table 16. Antler characteristics of male deer from South Carolina counties, based on historic data

	1.5	Years Old M	Iales	2.	5+ Years Ol	ld Males	
	Number	Percent	Outside	Number	Percent	Outside	% 1.5 Bucks in
COUNTY	Points	Spikes	Spread	Points	Spikes	Spread	Antlered Harvest
Abbeville	4.2	32		7.2	2		74
Aiken	4.4	28	8.7	7.4	1	14.7	64
Allendale	4.0	36	7.7	7.2	3	13.7	65
Anderson	4.7	28		6.8	0		63
Bamberg	4.0	34	7.6	6.7	4	12.5	68
Barnwell	4.6	21	8.7	7.1	2	13.9	68
Beaufort	3.1	58	7.4	6.4	9	13.0	44
Berkeley	3.0	62	6.6	5.8	12	11.5	43
Calhoun	4.0	33	7.4	7.0	3	13.2	72
Charleston	2.8	69	6.2	5.4	15	10.6	38
Cherokee				7.0	0	10.0	50
Chester	3.4	47	8.7	6.7	4	13.9	61
Chesterfield	4.5	21	8.6	7.2		13.7	61
Clarendon	2.8	58	6.2	7.7	3	12.9	31
Colleton	3.3	50	6.9	6.4	7	11.7	46
Darlington	3.1	57	7.4	6.7	5	13.7	55
Dillon	3.2	54	8.1	5.7	9	11.6	62
Dorchester	3.3	53	6.6	6.0	9	11.1	46
Edgefield	3.3	50	0.0	6.6	5	11.1	63
Fairfield	3.1	55	7.5	6.4	6	13.8	59
Florence	3.4	47	7.3	6.1	9	12.1	60
	2.8	65	6.6	5.6	13	11.0	45
Georgetown Greenville	4.7	14	0.0	7.6	0	11.0	43
	3.9	34		6.7	3		68
Greenwood	3.9		7.7	6.9	<u> </u>	13.0	56
Hampton		39		6.2			
Horry	3.0	58	6.8		8	12.1	49
Jasper	3.3	52	7.0	6.6	6	12.8	42
Kershaw	3.6	47	7.7	6.9	7	12.3	51
Lancaster	4.3	27	6.7	7.4	0	15.0	66
Laurens	3.2	53	6.7	6.0	10	13.7	57
Lee	4.3	25	8.4	6.7	2	12.9	72
Lexington	4.1	30	9.1	7.3	0	15.7	69
McCormick	3.5	47		6.8	4		69
Marion	3.3	52	7.3	6.2	10	12.4	58
Marlboro	3.1	53	7.0	6.4	10	12.6	63
Newberry	2.8	54		6.3	8	13.3	59
Oconee	3.4	52		7.3	3		56
Orangeburg	3.8	38	7.6	6.8	5	12.6	63
Pickens	4.0	43		7.2	2		53
Richland	3.3	52	7.3	6.8	5	13.5	51
Saluda	4.0	32	9.0	6.9	0	10.8	71
Spartanburg	4.0	33	6.1	7.1	0		61
Sumter	3.7	41	7.7	6.6	5	12.5	65
Union	3.3	51	7.2	6.6	5	13.6	61
Williamsburg	3.6	43	7.6	6.8	5	12.6	46
York	3.1	60	5.3	7.4	0	13.3	30
Total	3.6	44	7.4	6.5	7	12.4	55

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

2019 South Carolina Deer Hunter Survey

1.	Did you hunt deer in SC this past season (2019)? If you answered No to this question please go to question #9.	1. Yes	2. N
2.	Did you harvest any deer in SC this past season?	1. Yes	2. N

3. Even if you did not harvest any deer, please record the SC counties you deer hunted and the number of days hunted in each county this past season (2019). Please begin with the county you hunted the most. If you harvested deer please record the number of bucks and does 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 hunt club members.

Counties You Deer Hunted	# Days Hunted	Number De	er Harvested
1		# Bucks	#Does
2		# Bucks	#Does
3		# Bucks	#Does
4		# Bucks	#Does

If you did not harvest any deer in SC in 2019 please go to question # 6.

4. Please record the number of deer taken by month of season in SC last season (2019).

[August	September	October	November	December	January

5. Please record the number of deer taken with each weapon in SC last season (2019).

Rifle	Bow	Shotgun	Muzzleloader	Crossbow	Handgun

- 6. Please circle all the weapons that you hunted deer with in 2019.
 - 1. Rifle 2. Bow 3. Shotgun
- 4. Muzzleloader 5. Crossbow
- 6. Handgun
- 7. Please circle the one weapon that you prefer to hunt deer with.
 - 1. Rifle 2. Bow
- 3. Shotgun
- 4. Muzzleloader 5. Crossbow
- 6. Handgun
- 8. Compared to past years, how would you describe the number of deer in the area that you hunt most often? Circle one
- 2. About the same
- 9. If you <u>harvested</u> any wild hogs or coyotes while hunting in SC in 2019, please complete the box

If you did not harvest any hogs or coyotes please go to question # 10.

County	# Hogs	County	# Coyotes
1		1	
2		2	
3		3	

10. Are you a resident of SC?

2. No

11. If yes, which county

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



COMPLETE YOUR HUNTER SURVEY



January, 2019

Dear Sportsman:

White-tailed deer 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 deer harvests to aid in successfully managing this important natural resource and to optimize future hunting potential. To obtain this needed data, the Department of Natural Resources (DNR) is conducting a survey of licensed Big Game Permit holders.

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 deer last season please indicate this by answering the appropriate questions and moving on to the next set of questions.

In addition to the questions concerning your deer hunting activities, there are questions concerning the weapons that you used to harvest deer and questions concerning the number of wild hogs and coyotes that you may have harvested. Not only is this data important to DNR game biologists, many hunters are interested in this type of information so it is important that you answer these questions too.

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 primary purpose of the survey is to determine the deer harvest in South Carolina and not to determine whether game laws are observed. By accurately answering the survey questions you will enable DNR biologists to better manage the white-tailed deer resource for you and other citizens of the state.

Please keep in mind that in order to reduce costs, this is the only 2019 Deer Hunter Survey form you will receive. There will be no reminders or second surveys sent to individuals that do not respond to this initial survey. 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 DNR web site once completed (hopefully by June). The results from the 2018 survey can be found at www.dnr.sc.gov/wildlife/deer/2018/DeerHarvestReport.html

Thank you for your assistance.

Charles Ruth Wildlife Biologist

Big Game Program Coordinator

Charles Buth

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 Deer 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, gender, national origin, disability, religion or age. Direct all inquiries to the Office of Human Resources, P.O. Box 167, Columbia, SC 29202

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Figure 2. Percent of deer harvested by month of season in South Carolina in 2019. Note that December includes January 1 which is the last day of deer season.

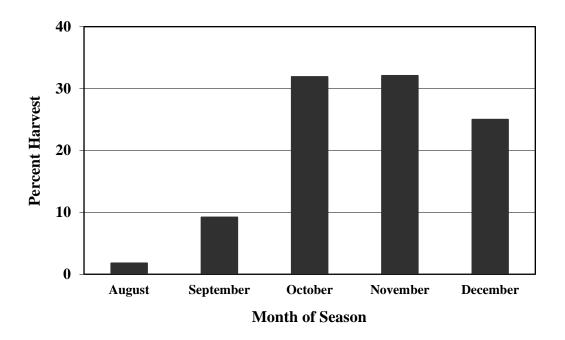


Figure 3. Percent of female deer conceiving by week in South Carolina, based on historic data.

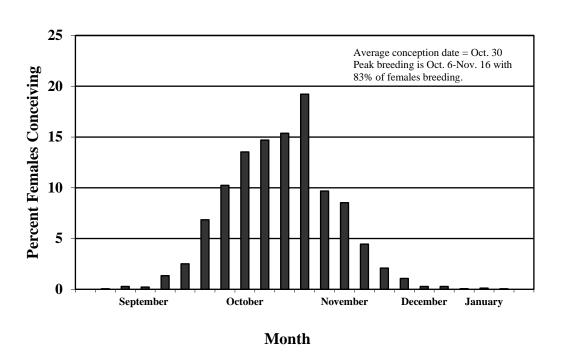


Figure 4. Estimated deer harvest in South Carolina 1972-2019.

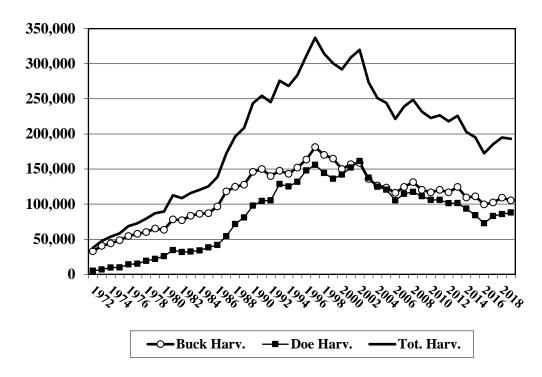


Figure 5. Estimated South Carolina deer population 1972-2019 based on population reconstruction modeling. Note that antlerless deer includes male fawns (button bucks).

