

SCDNR SMALL GAME PROGRAM SUMMER BOBWHITE QUAIL BROOD SURVEY - 2025

A sighting survey for bobwhite quail (*Colinus virginianus*) broods was conducted for the 32nd consecutive year during the summer of 2025. The quail brood survey was again conducted in conjunction with the summer turkey brood survey.

Past survey cooperators and additional potential cooperators were provided with data forms and requested to record sightings of turkeys and quail during the period July 1, 2025, through August 29, 2025. Cooperators included, but were not limited to, SCDNR Conservation Officers and Wildlife Section staff, Natural Resources Conservation Service (NRCS) staff, foresters, and plantation managers.

Several assumptions had to be made in compiling the data due to variations in reporting. These assumptions are: (1) groups of 1-4 birds not identified to sex and age were assumed to be adults, (2) groups of birds of 5 or greater were assumed to be a mated pair of adults with the remainder being juveniles, (3) when a numerical range for number of birds was given, the median was used (e.g.: 8-12=10), (4) if no adult quail were observed with a brood, one adult was assumed present and not seen and, (5) for adult pairs with more than 15 juveniles it was assumed these groups were comprised of adult pairs with 12 or fewer juveniles. Data expressed in this report represents parameters per observation where appropriate.

Results were compiled from 74 observations of quail during the 2025 survey period (Table 1), which is down from the previous year. The Southern Coastal Plain region reported the greatest number of quail observations (38) and the greatest rate of broods sighted per observation (0.53) (Table 1). In addition, the percentage of adults without chicks was lowest in the Southern Coastal Plain region (Table 3). Age ratio (juveniles per adult) increased in the Piedmont & Mountains Region compared to the 2024 survey (Table 2). The Piedmont & Mountain region had the highest age ratio (2.3) of the four regions (Table 3). Statewide, the age ratio of 1.5 juveniles per adult was lower than the age ratio detected in 2024 (2.0). Also, the average brood size (8.2) decreased from 2024 (9.7) (Table 4).

Allendale, Fairfield, and Barnwell Counties had the most observations of quail in 2025 (Figure 2). Newberry County reported the highest age ratio of 4.67 juveniles per adult in 2025 (Figure 3). Sixteen counties (35%) reported at least 1 observation for the year (Figure 2). Chesterfield, Florence, and Horry Counties reported 75% or more of adults seen had juveniles (Figure 4).

Statewide, forty-seven percent of adult quail were observed without chicks, up from forty-three percent in the 2024 survey (Table 4). The average brood size and age ratio per observation decreased from 2024 (Table 4). Total numbers of adults observed per observation (2.54) increased and the total number of chicks observed per observation (3.76) decreased from the 2024 survey (2.37 and 4.75 respectively). Collectively, these indices suggest that the statewide total reproductive output during the survey period was lower in 2025 than in 2024. This suggests that there will be a lower fall population for the 2025-26 hunting season.

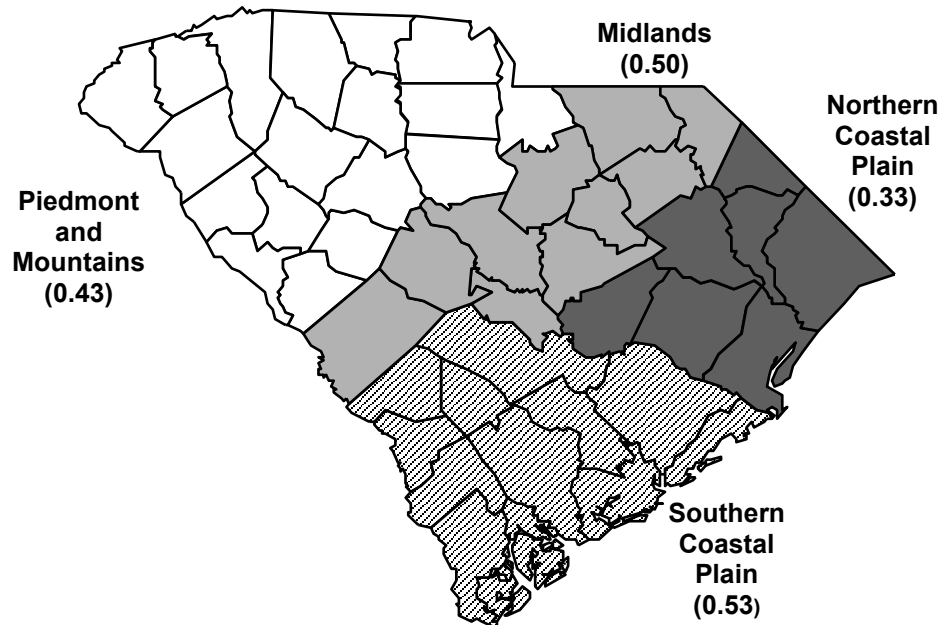


Figure 1. Physiographic regions used in the South Carolina Summer Bobwhite Quail Brood Survey, 2025. Number of broods sighted per observation is in parentheses.

Table 1. Results of the South Carolina Summer Bobwhite Quail Brood Survey per observation by Region, 2025.

Physiographic Region	Observations	Broods Sighted	Chicks	Adults	Total Quail
Piedmont & Mountains	14	0.43	4.29	1.86	6.14
Midlands	4	0.50	3.50	1.75	5.25
Northern Coastal Plain	18	0.33	1.72	2.22	3.94
Southern Coastal Plain	38	0.53	4.55	3.03	7.58
2025 Totals	74	0.46	3.76	2.54	6.30

Table 2. Bobwhite quail recruitment data from South Carolina Summer Bobwhite Quail Brood Survey, 2021 – 2025.

<u>Region</u>	<u>Year</u>	<u>Age Ratio</u>	
		<u>Average Brood Size (Juveniles / Adults)</u>	
Piedmont & Mountains	2021	8.8	2.26
	2022	8.4	2.43
	2023	7.5	1.91
	2024	8.2	2.26
	2025	10.0	2.31
Midlands	2021	7.7	1.54
	2022	8.2	2.24
	2023	8.8	1.91
	2024	7.0	1.26
	2025	7.0	2.00
Northern Coastal Plain	2021	6.0	0.86
	2022	5.0	0.43
	2023	5.5	0.77
	2024	5.2	0.87
	2025	5.2	0.78
Southern Coastal Plain	2021	13.7	2.61
	2022	7.4	0.71
	2023	8.6	2.31
	2024	12.7	2.32
	2025	8.7	1.50
Statewide	2021	9.6	1.98
	2022	8.1	1.74
	2023	8.0	1.82
	2024	9.7	2.00
	2025	8.2	1.48

Table 3. Summary of reproductive data per observation for 2025 South Carolina Summer Bobwhite Quail Brood Survey by region.

Region	% Adults w/Chicks	% Adults w/o Chicks	No. Chicks	Avg. Brood Size	Age Ratio
Piedmont and Mountains	50	50	4.29	10.0	2.31
Midlands	57	43	3.50	7.0	2.00
Northern Coastal	30	70	1.72	5.2	0.78
Southern Coastal	59	41	4.55	8.7	1.50
Statewide	53	47	3.76	8.2	1.48

Table 4. South Carolina Summer Bobwhite Quail Brood Survey reproductive data per observation for 2016 - 2025.

Year	% Adults w/Chicks	% Adults w/o Chicks	No. Chicks	Avg. Brood Size	Age Ratio
2016	49	51	3.9	5.8	2.1
2017	48	52	4.0	5.9	2.1
2018	51	49	5.1	7.9	2.5
2019	43	57	4.0	6.3	1.7
2020	39	61	3.2	8.3	1.8
2021	45	55	4.3	9.6	2.0
2022	41	59	3.2	8.1	1.7
2023	52	48	3.7	8.0	1.8
2024	57	43	4.7	9.7	2.0
2025	53	47	3.8	8.2	1.5
10 -Year Average	47.8	52.2	4.0	7.8	1.9

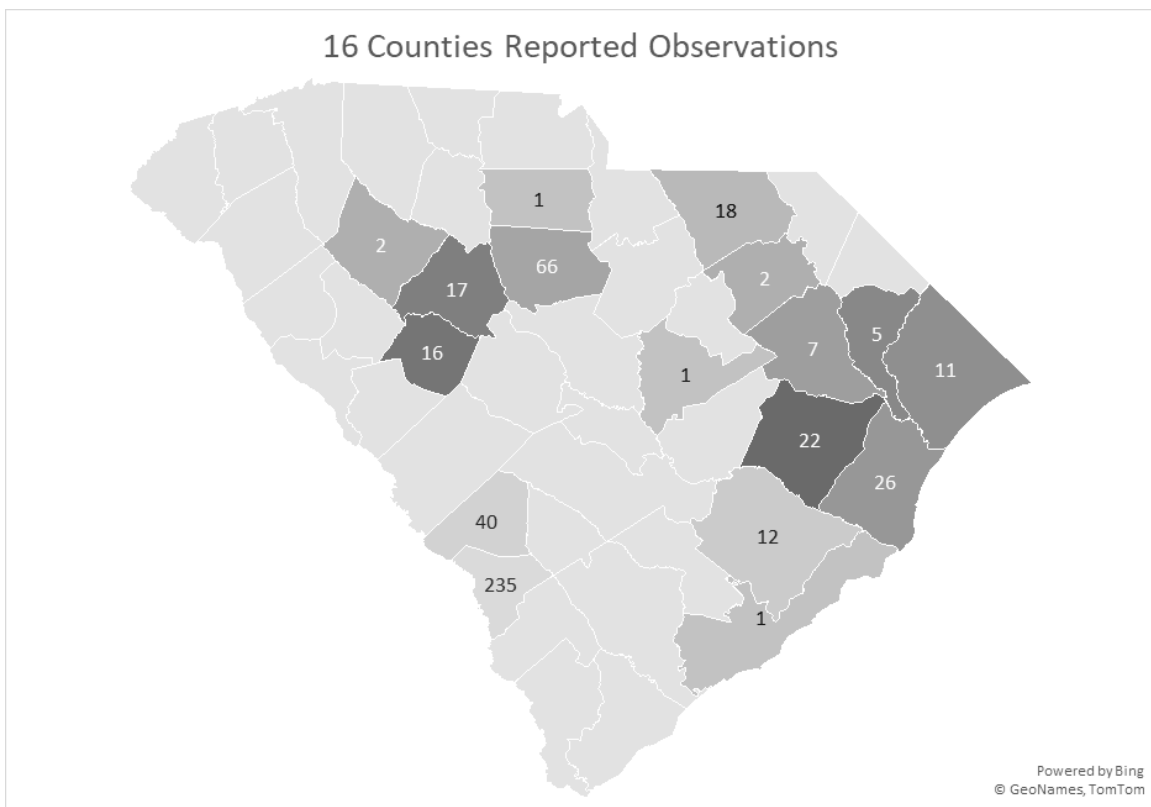


Figure 2: Total quail observations by county for 2025

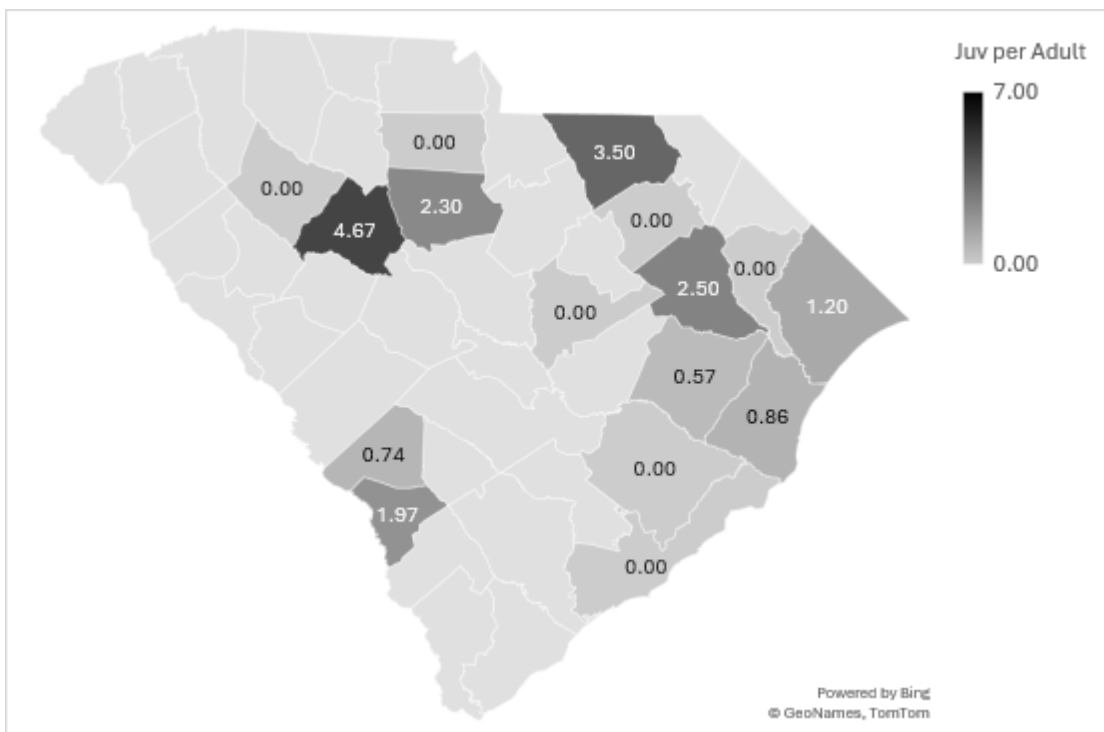
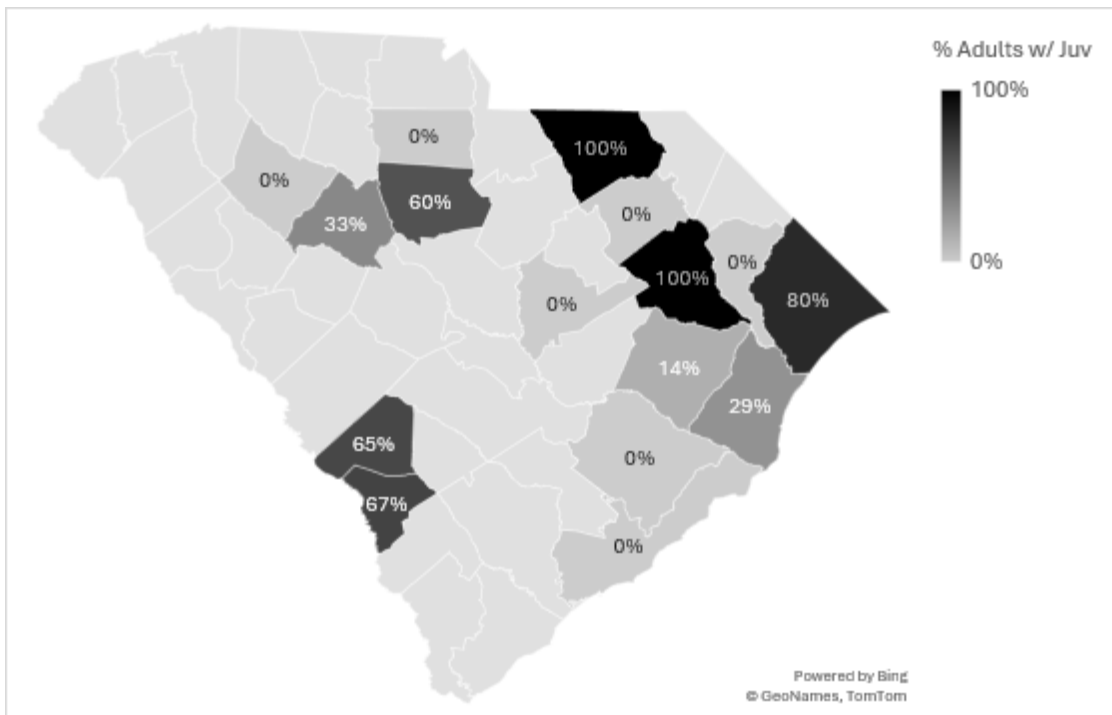


Figure 3: Age ratio by county for 2025.



If you are interested in improving quail and upland habitat on your property (owned or leased), SCDNR has partnered with other government and non-government organizations to provide landowners and managers with the latest information and improvements to upland management. This collective group of wildlife biologists and quail enthusiasts can also guide you through the process of requesting cost share assistance through various government and non-government sources. For more information about assistance and cost share please visit <http://scbobwhites.org/>. If you would like to participate in the annual turkey and quail brood survey, please visit <https://www.dnr.sc.gov/wildlife/turkey/volunbroodsurvey.html>.