



2015 WILD TURKEY SUMMER SURVEY

Wild Turkey Reproduction Remains Low This Summer

Annually since the early 1980's, the S.C. Department of Natural Resources (DNR) conducts a Summer Turkey Survey to estimate reproduction and recruitment of wild turkeys in South Carolina. The survey involves agency wildlife biologists, technicians and conservation officers, as well as many volunteers from other natural resource agencies and the general public.

Although wild turkeys nest primarily in April and May in South Carolina, the survey does not take place until late summer, according to Charles Ruth, DNR Deer and Wild Turkey Program coordinator. Therefore, the survey statistics document poults (young turkeys) that actually survived and entered the fall population.

"Reproduction in turkeys has generally been low for the last decade", said Ruth. "This year, average brood size of 3.6 poults remained good, but the total recruitment ratio of 1.5 was low continuing a less than desirable trend. This low figure was driven by a high percentage of hens (59%) that had no poults at all by late summer. Recruitment ratio has averaged 1.7 over the last 5 years, keep in mind that 2.0 is somewhat of a break even mark. In fact, when turkey populations were expanding during the 1980's recruitment ratio averaged 3.5. Recruitment ratio is a measure of young entering the population based on the number of hens in the population. "At the regional level it appears that reproduction was poor in most of the state."

Unlike deer, wild turkeys are much more susceptible to significant fluctuations in reproduction and recruitment. Lack of reproductive success is often associated with bad weather (cold and wet) during nesting and brood rearing season. However, there are a host of predators that take advantage of turkey nests and broods including; raccoons, opossums, snakes, foxes, bobcats, and numerous avian predators. Coyotes which are not native but are now well established in the state can be added to the list of turkey predators. Turkeys naturally have high reproductive potential and are therefore able to maintain populations in spite of predation and other mortality factors. The problem is that we have not been getting much "bounce back" amid years of poor recruitment.

What does poor reproduction last summer mean for the spring turkey hunter? Ruth indicated, "spring harvest trends have followed trends in reproduction for many years. For example, the harvest in 2015 was down significantly which was not a surprise because reproduction in 2013 was the lowest on record. Two year old gobblers comprise most of the harvest because they are typically more abundant and more responsive to hunters' calls than older more dominant gobblers and there simply were not good numbers of two year old birds last season. On the other hand, the percentage of jakes (juvenile males) harvested in 2015 was substantially higher which is typical when 2 year old birds are not abundant. Finally, the gobbler to hen ratio during last summer's survey was 0.5 which is the lowest since the year 2000, said Ruth. Low gobbler to hen ratios can affect the quality of hunting because hens are extremely available which affects gobbling and responsiveness to calling by hunters."

"The bottom line," Ruth said, "is the state's turkey population is about 35 percent below record levels of around the turn of the century. We need better reproduction for several years to get the population back up. That is the nice thing about turkeys though; given the right conditions they can naturally bounce back in a short period of time."

Anyone interested in participating in the annual Summer Turkey Survey is encouraged to sign-up. The survey period is July 1-August 29 annually and those who participate typically spend a reasonable amount of time outdoors during that time period. Cooperators obviously must be able to identify wild turkeys and must be comfortable in telling the difference between hens, poults, and gobblers. If you would like to participate in the survey, send your name and address to Summer Turkey Survey, P.O. Box 167, Columbia, SC 29202. You will be added to the cooperator list and receive materials at the end of June annually. Those interested in the survey can also download instructions and survey forms at the following website:

<http://www.dnr.sc.gov/wildlife/turkey/volunbroodsurvey.html>

Figure 1. Map of physiographic regions for 2015 Summer Turkey Survey.

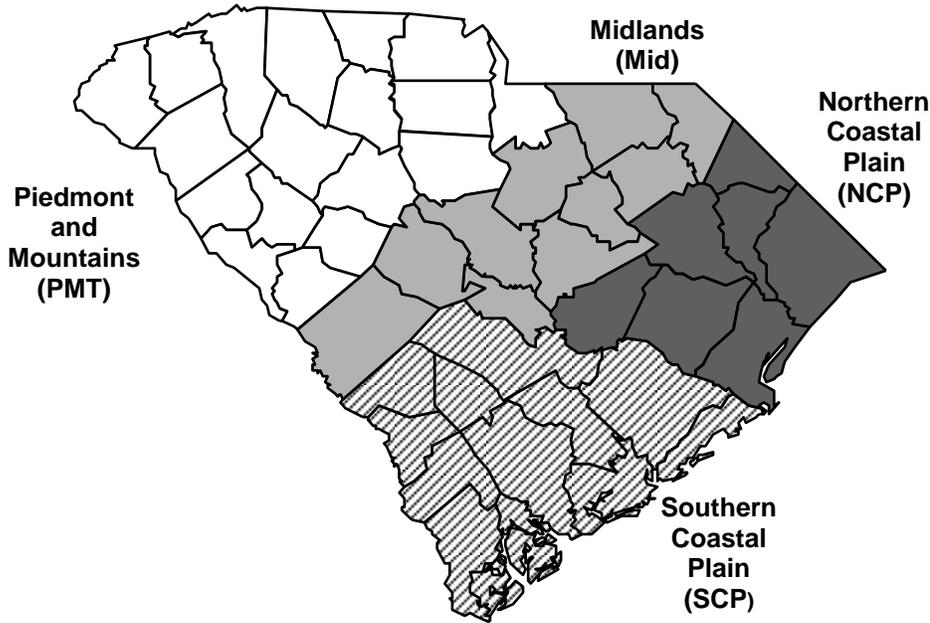


Table 1. Summary of reproductive data for 2015 Summer Turkey Survey by region.

Region	Gobbler Hen Ratio	No. Hens w/Poults	No. Hens w/o Poults (%)	No. Poults	Avg. Brood Size	Total Recruitment Ratio
Piedmont	0.37	496	606 (55)	1,720	3.5	1.3
Midlands	0.85	77	161 (68)	314	4.1	1.9
Northern Coastal	0.44	142	348 (71)	533	3.8	1.4
Southern Coastal	0.60	362	428 (54)	1,262	3.5	2.1
Statewide	0.49	1,077	1,543 (59)	3,829	3.6	1.5

Table 2. Statewide Summer Turkey Survey reproductive data 2011-2015.

Year	Gobbler Hen Ratio	No. Hens w/Poults	No. Hens w/o Poults (%)	No. Poults	Avg. Brood Size	Total Recruitment Ratio
2011	0.76	1,442	1,223 (46)	5,987	4.2	2.3
2012	0.78	1,208	1,472 (55)	5,085	4.2	1.9
2013	0.70	810	1,588 (66)	3,169	3.9	1.3
2014	0.60	983	1,403 (59)	3,834	3.8	1.6
2015	0.49	1,077	1,543 (59)	3,829	3.6	1.5
Average	0.67	1,104	1,446 (57)	4,381	4.0	1.7

Table 3. 2015 Summer Turkey Survey Results by County.

County	No. Observ.	No. Poults	No. Hens w/ Poults	No. Hens w/o	No. Hens	% Hens w/o Poults	No. Gobblers	No. Unid.	Total Turkeys Observed
Abbeville	21	16	6	22	28	79	13	13	70
Aiken	43	51	16	29	45	64	54	3	153
Allendale	30	23	14	28	42	67	53	31	149
Anderson	0	0	0	0	0		0	0	0
Bamberg	1	2	1	0	1	0	0	0	3
Barnwell	58	38	12	45	57	79	9	0	104
Beaufort	50	250	77	54	131	41	4	9	394
Berkeley	91	230	72	68	140	49	95	36	501
Calhoun	3	5	1	2	3	67	3	0	11
Charleston	53	149	47	55	102	54	55	15	321
Cherokee	3	22	6	2	8	25	0	0	30
Chester	51	170	51	42	93	45	30	20	313
Chesterfield	21	90	18	17	35	49	5	9	139
Clarendon	13	14	4	7	11	64	12	7	44
Colleton	29	138	43	46	89	52	69	0	296
Darlington	14	34	11	25	36	69	50	0	120
Dillon	9	19	7	11	18	61	15	3	55
Dorchester	8	9	3	8	11	73	17	1	38
Edgefield	14	38	17	29	46	63	3	0	87
Fairfield	77	270	77	100	177	56	56	39	542
Florence	52	128	35	98	133	74	89	42	392
Georgetown	44	118	35	76	111	68	13	13	255
Greenville	3	8	2	2	4	50	5	8	25
Greenwood	33	28	18	44	62	71	17	0	107
Hampton	104	356	75	77	152	51	144	39	691
Horry	10	19	7	9	16	56	7	14	56
Jasper	4	1	3	16	19	84	1	0	21
Kershaw	6	5	1	3	4	75	5	0	14
Lancaster	11	44	9	6	15	40	6	0	65
Laurens	16	33	8	14	22	64	1	12	68
Lee	2	6	2	6	8	75	3	0	17
Lexington	6	13	3	5	8	63	2	0	23
McCormick	33	86	33	30	63	48	2	5	156
Marion	32	50	17	51	68	75	24	1	143
Marlboro	5	0	0	3	3	100	11	5	19
Newberry	52	157	36	44	80	55	83	7	327
Oconee	13	31	8	3	11	27	4	10	56
Orangeburg	22	66	15	31	46	67	25	18	155
Pickens	45	126	34	37	71	52	37	1	235
Richland	31	92	22	22	44	50	38	0	174
Saluda	12	30	8	20	28	71	9	0	67
Spartanburg	35	98	24	43	67	64	24	0	189
Sumter	29	18	3	49	52	94	32	0	102
Union	147	506	144	150	294	51	95	43	938
Williamsburg	74	185	37	96	133	72	56	57	431
York	30	57	15	18	33	55	18	22	130
State Total	1,440	3,829	1,077	1,543	2,620	59	1,294	483	8,226