

SCDNR News Release - 2010 Wild Turkey Summer Survey

WILD TURKEY REPRODUCTION INCREASES SUBSTANTIALLY THIS SUMMER

After five years of less than desirable production, wild turkey recruitment increased substantially in 2010 based on a S.C. Department of Natural Resources survey.

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 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 population going into the fall.

All indicators were much better in 2010 compared to the last few years, said Ruth. The average brood size of 4.5 poults was up 21 percent and the total recruitment ratio of 2.6 was up 44 percent compared to 2009. Recruitment ratio is a measure of young entering the population based on the number of hens in the population. These increases were driven by a decrease in the percentage of hens that had no poults. In 2009, 55 percent of hens observed during the two month survey had no poults accompanying them, but in 2010 that figure dropped to 41 percent, the lowest figure in 6 years. "At the regional level it appears that reproduction improved in all parts of the state, a positive indicator considering the declining trend that we have seen the last few years.

It is unclear why reproduction in turkeys improved this year. In the Southeast Mother Nature often plays a big role in turkey populations with heavy rainfall coupled with cool temperatures during the spring nesting and brood rearing season leading to poor reproductive success." However, given that we have had consistently poor reproduction over the last 5 to 6 years in spite of variable weather conditions, it is difficult to say that there was anything related to the weather that contributed to the substantial increase in reproductive success this year.

What does better reproduction in 2010 mean for the spring turkey hunter? Ruth indicated, "Harvest trends have followed the trends in reproduction in recent years and we have seen about a 30 percent decline in turkey harvest since 2002. With substantially better reproduction in 2010 the number of turkeys available during the spring of 2011 season should increase. However, most of the increase in 2011 will be in the form of jakes (immature gobblers) and it will be 2012 before this year's reproductive output will show up in the form of mature gobblers (2 year old birds). Another positive note, said Ruth, is the gobbler to hen ratio remained good with a statewide average of 0.69 gobblers to each hen. Many experts believe that when gobbler to hen ratios get below 0.5, the quality of hunting can be impacted because hens are extremely available which affects gobbling and responsiveness to calling by hunters.

"The bottom line," Ruth said, "is this type of reproduction is exactly what we need to overcome less than desirable reproduction the last six years." 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", said Ruth. The survey period is July 1-August 29 annually and folks who participate typically spend some 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. Cooperators are provided with survey forms prior to the survey and a reporting notice and postage paid envelop at the end of the survey period. 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>

For more information on the Summer Turkey Survey, see the following link on the DNR Web site: <http://www.dnr.sc.gov/wildlife/turkey/2010BroodSurvey.html>

Figure 1. Map of physiographic regions for 2009 Summer Turkey Survey.

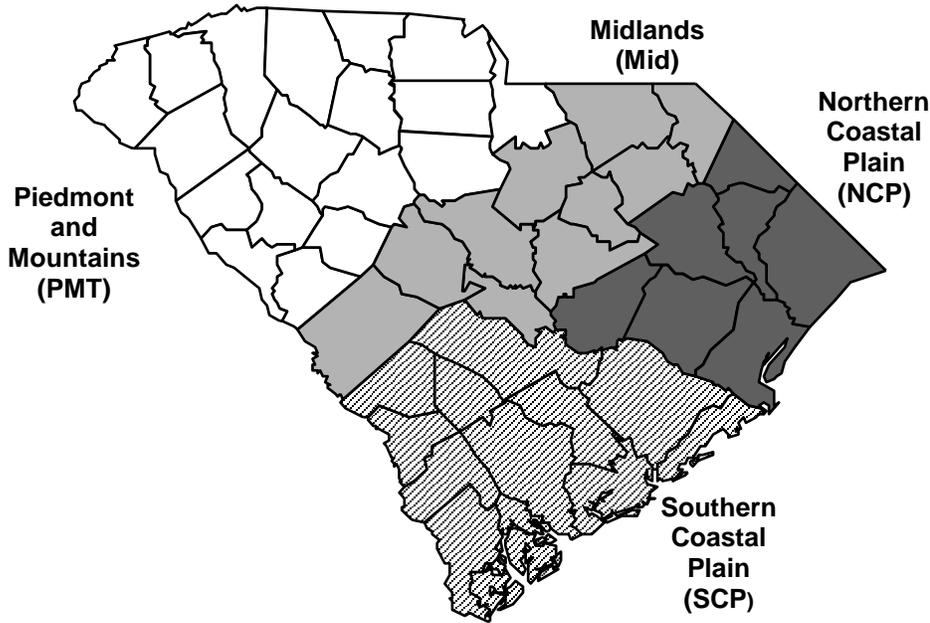


Table 1. Summary of reproductive data for 2010 Summer Turkey Survey by region.

Region	Gobbler Hen Ratio	No. Hens w/Poults	No. Hens w/o Poults (%)	No. Poults	Avg. Brood Size	Total Recruitment Ratio
Piedmont	0.46	856	533 (38)	3,599	4.2	2.6
Midlands	0.70	79	100 (55)	357	4.5	2.0
Northern Coastal	1.15	140	113 (45)	667	4.8	2.6
Southern Coastal	0.88	612	405 (40)	2,885	4.7	2.8
Statewide	0.69	1,687	1,151 (41)	7,508	4.5	2.6

Table 2. Statewide Summer Turkey Survey reproductive data 2005-2010.

Year	Gobbler Hen Ratio	No. Hens w/Poults	No. Hens w/o Poults (%)	No. Poults	Avg. Brood Size	Total Recruitment Ratio
2005	0.77	936	989 (51)	3,066	3.3	1.6
2006	0.61	1,078	1,078 (50)	3,659	3.4	1.7
2007	0.77	904	1,269 (58)	3,240	3.6	1.5
2008	0.71	1,504	1,446 (49)	6,336	4.2	2.1
2009	0.66	1,296	1,499 (54)	4,889	3.7	1.8
2010	0.69	1,687	1,151 (41)	7,508	4.5	2.6
Average	0.70	1,236	1,238 (50)	4,783	3.8	1.9

Table 3. 2010 Summer Turkey Survey Results.

County	No. Observ.	No. Poults	No. Hens w/ Poults	No. Hens w/o Poults	No. Hens	% Hens w/o Poults	No. Gobblers	No. Unid.	Total Turkeys Observed
Abbeville	35	173	34	16	50	32	38	57	318
Aiken	62	141	34	60	94	64	43	25	303
Allendale	17	79	11	15	26	58	21	7	133
Anderson	15	28	7	19	26	73	19	17	90
Bamberg	54	379	66	15	81	19	80	38	578
Barnwell	120	220	49	78	127	61	173	18	538
Beaufort	58	366	66	29	95	31	43	35	539
Berkeley	224	1115	229	133	362	37	321	51	1849
Calhoun	2	20	6	3	9	33	2	0	31
Charleston	73	230	62	51	113	45	70	12	425
Cherokee	11	38	8	8	16	50	9	0	63
Chester	52	207	51	40	91	44	30	8	336
Chesterfield	11	31	8	4	12	33	10	2	55
Clarendon	25	39	7	8	15	53	50	55	159
Colleton	42	160	42	12	54	22	61	4	279
Darlington	10	21	5	6	11	55	31	0	63
Dillon	5	11	3	2	5	40	10	0	26
Dorchester	7	0	0	0	1	0	7	13	21
Edgefield	23	98	20	13	33	39	11	0	142
Fairfield	51	291	97	66	163	40	109	68	631
Florence	8	11	3	6	9	67	16	0	36
Georgetown	51	131	43	53	96	55	111	6	344
Greenville	11	64	15	9	24	38	4	6	98
Greenwood	30	200	38	10	48	21	14	0	262
Hampton	76	317	81	71	152	47	120	30	619
Horry	6	23	6	6	12	50	8	0	43
Jasper	5	28	5	1	6	17	5	0	39
Kershaw	0	0	0	0	0		0	0	0
Lancaster	8	21	3	3	6	50	1	5	33
Laurens	24	88	20	12	32	38	24	0	144
Lee	0	0	0	0	0		0	0	0
Lexington	10	21	8	8	16	50	1	0	38
McCormick	52	217	52	27	79	34	20	28	344
Marion	0	0	0	0	0		0	0	0
Marlboro	0	0	0	0	0		0	0	0
Newberry	70	368	81	41	122	34	46	60	596
Oconee	21	115	22	13	35	37	15	13	178
Orangeburg	5	19	6	0	6	0	0	3	28
Pickens	24	90	23	9	32	28	69	10	201
Richland	5	6	2	5	7	71	16	14	43
Saluda	23	83	22	12	34	35	8	5	130
Spartanburg	52	243	57	35	92	38	33	39	407
Sumter	31	138	21	20	41	49	54	3	236
Union	238	1197	282	191	473	40	186	79	1935
Williamsburg	35	403	68	31	99	31	61	19	582
York	27	78	24	9	33	27	9	33	153
State Total	1,709	7,508	1687	1,150	2,838	41	1959	763	13,068