

2012 WILD TURKEY SUMMER OBSERVATION SURVEY REPORT

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A wild turkey observation survey is conducted each summer to gain insight into wild turkey productivity and carryover of gobblers from the previous spring turkey season across the various regions of the state. The 2012 survey participant list included participants from the 2011 survey and new survey participants. The majority of new survey participants consisted of individuals in North Carolina that joined the National Wild Turkey Federation (NWTF) within the past year. Contact information for these individuals was provided by the North Carolina State Chapter of the NWTF. Personnel from the North Carolina Wildlife Resources Commission, the North Carolina Forest Service, the US Forest Service, the US Fish and Wildlife Service, several military bases, NWTF members, numerous sportsmen, and other individuals interested in the management of our state's wild turkey resource participated in the survey. The 2012 survey was mailed to 3,655 participants, which was a decrease of 20% from the number of participants in the 2011 survey. This decrease was mostly attributable to individuals being removed from the survey participant list after having not responded to the survey in the past.

Observations made during the course of routine daily activities were recorded from July 1 through August 31. A total of 619 participants responded to the 2012 survey. Data collected were compiled and analyzed to determine a productivity index from poult per hen ratios and to evaluate carryover of gobblers from gobbler per hen ratios. The following tables summarize the data received for 2012.

Table 1. 2012 Wild Turkey Summer Observation Survey Data.

Region	Observations	Hens W/O Poults	Hens W/ Poults	Total Hens	Total Poults	Total Gobblers	Total Unk.
Coastal	1,739	1,442	1,921	3,363	6,207	2,159	2,071
Piedmont	1,969	1,790	1,684	3,474	5,610	1,702	1,923
Mountains	956	991	865	1,856	2,332	967	730
State	4,664	4,223	4,470	8,693	14,149	4,828	4,724

Table 2. 2012 Wild Turkey Summer Observation Survey Results.

Region*	% Hens W/ Poults	Poults/Hens W/ Poults	Poults/Hen Ratio	Gobbler/Hen Ratio
Coastal	57%	3.2	1.8	0.64
Piedmont	48%	3.3	1.6	0.49
Mountains	47%	2.7	1.3	0.52
State**	51%	3.1	1.6	0.55

*Geographical regions, not NCWRC regions.

**The State percentages and averages in Table 2 were calculated by weighting the regional data by the percentage of the total wild turkey population within each region (Coast – 33%, Piedmont – 43%, Mountains – 24%).

The percentage of hens observed with poults is an indication of nesting success, while the ratio of poults to hens observed with poults (previously called poults/brood) is an indication of poult survival. Overall productivity is determined by the ratio of poults/hen. A ratio of 2.5 poults/hen is considered good productivity.

Survey responders reported observing a total of 32,394 wild turkeys during this summer's survey. Statewide, the percentage of hens with poults (51%) indicates poor nesting success; the ratio of poults/hens observed with poults (3.1) indicates poor to fair poult survival; and the ratio of poults/hen (1.6) indicates poor overall productivity. The statewide productivity index tied the previous record low value set in 2003. Wild turkey productivity was down in all three regions of the state when compared to 2011, with a record low productivity index being recorded for both the Coastal Region and the Mountain Region. The Coastal Region experienced fair nesting success (57% of the hens were with poults), fair poult survival (3.2 poults/hens with poults), and poor overall productivity (1.8 poults/hen). The Piedmont Region experienced poor nesting success (48% of the hens were with poults), fair poult survival (3.3 poults/hens with poults), and poor overall productivity (1.6 poults/hen). The Mountain Region experienced poor nesting success (47% of the hens were with poults), poor poult survival (2.7 poults/hens with poults), and poor overall productivity (1.3 poults/hen).

Figure 1. 2012 Wild Turkey Summer Observation Survey Productivity Results by Region.

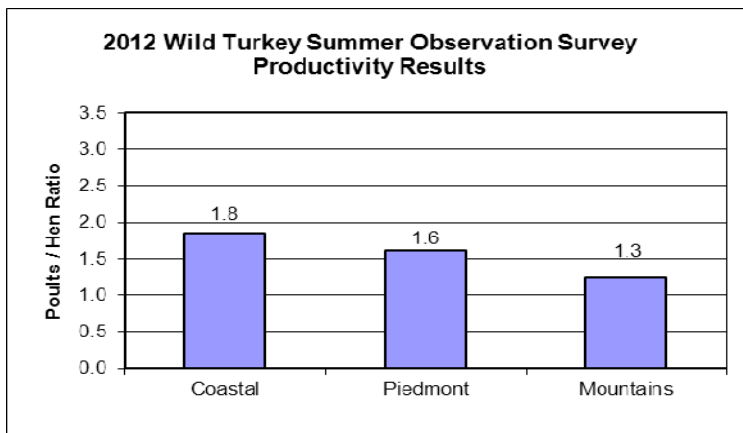
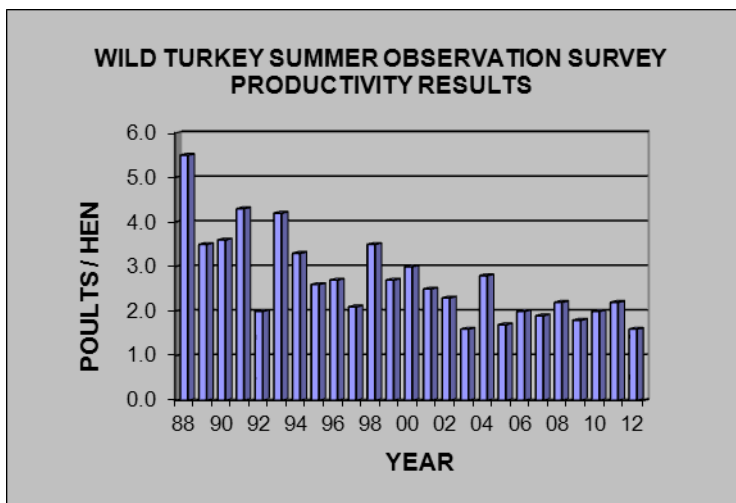


Figure 2. Wild Turkey Summer Observation Survey Statewide Productivity Results, 1988-2012.



The observed ratio of gobblers/hen indicates the level of carryover of gobblers from the previous spring turkey season. Some states use a minimum benchmark of 0.50 gobblers/hen. A ratio of less than 0.50 gobblers/hen may be an indication of over-harvest of the male segment of the turkey population if quality spring gobbler hunting is the management goal.

Statewide, the ratio of gobblers/hen for 2012 was 0.55 (regional ratios are provided in Table 2). The average ratio for the last ten years is 0.50 gobblers/hen, while the average ratio for the last five years is 0.51. These data indicate that, if quality spring gobbler hunting is to be maintained, additional pressure should not be placed on the male segment of the wild turkey population by increasing the season length, opening the spring season earlier, or increasing the bag limit.

Figure 3. Carryover of Gobblers, 1997-2012.

