

2010 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 2010 survey participant list included respondents from the 2009 survey and new survey participants. 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, numerous sportsmen, and key private individuals around restoration areas participated in the survey. The 2010 survey was mailed to 931 participants.

Observations made during the course of routine daily activities were recorded from July 1 through August 31. A total of 342 participants responded to the 2010 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 2010.

Table 1. 2010 Wild Turkey Summer Observation Survey Data.

Region	Observations	Hens W/O Poults	Hens W/ Poults	Total Hens	Total Poults	Total Gobblers	Total Unk.
Coastal	745	464	810	1,274	2,772	702	619
Piedmont	686	501	538	1,039	1,809	577	517
Mountains	685	412	736	1,148	2,654	556	390
State	2,116	1,377	2,084	3,461	7,235	1,835	1,526

Table 2. 2010 Wild Turkey Summer Observation Survey Results.

Region*	% Hens W/ Poults	Poults/Hens W/ Poults	Poults/Hen Ratio	Gobbler/Hen Ratio
Coastal	64%	3.4	2.2	0.55
Piedmont	52%	3.4	1.7	0.56
Mountains	64%	3.6	2.3	0.48
State**	58%	3.4	2.0	0.54

*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 in that 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 poults survival. Overall productivity is determined by the ratio of poults/hen. A ratio of 2.5 poults/hen is considered good productivity.

A total of 14,057 wild turkeys was observed during this summer's survey. Statewide, the percentage of hens with poults (58%) indicates fair nesting success; the ratio of poults/hens observed with poults (3.4) indicates fair poults survival; and the ratio of poults/hen (2.0) indicates poor to fair overall productivity. Wild turkey productivity was somewhat better in the Coastal and Mountain Regions than in the Piedmont Region. The Coastal Region experienced fair to good nesting success (64% of the hens were with poults), fair poults survival (3.4 poults/hens with poults), and fair overall productivity (2.2 poults/hen). The Piedmont Region experienced poor nesting success (52% of the hens were with poults), fair poults survival (3.4 poults/hens with poults), and poor overall productivity (1.7 poults/hen). The Mountain Region experienced fair to good nesting success (64% of the hens were with poults), fair poults survival (3.6 poults/hens with poults), and fair overall productivity (2.3 poults/hen).

Figure 1. 2010 Wild Turkey Summer Observation Survey Productivity Results by Region.

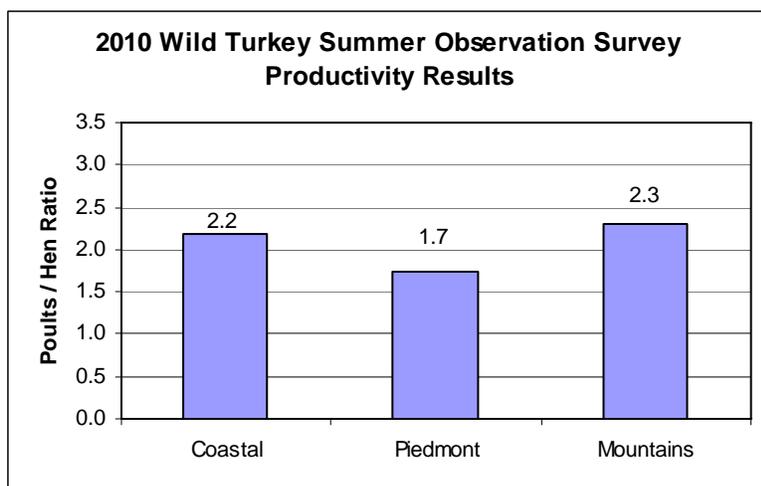
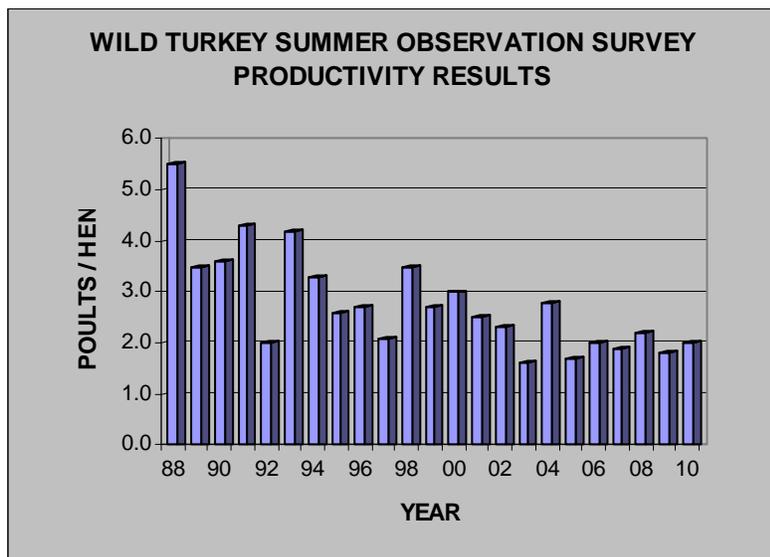


Figure 2. Wild Turkey Summer Observation Survey Statewide Productivity Results, 1988-2010.



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 2010 was 0.54 (regional ratios are provided in Table 2). The average ratio for the last ten years is 0.49 gobblers/hen, while the average ratio for the last five years is 0.48. 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, 1997-2010.

