



NORTH CAROLINA WILDLIFE RESOURCES COMMISSION

2008 WILD TURKEY SUMMER BROOD SURVEY REPORT

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A wild turkey brood survey is conducted each summer to gain insight into wild turkey productivity across the various regions of the state. The 2008 survey was mailed to approximately 1,175 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.

Observations made during the course of routine daily activities were recorded during the July 1 through August 31 period. This information was compiled and analyzed to determine a productivity index from poult per hen ratios. The following tables summarize the data received for 2008.

Table 1. 2008 Wild Turkey Summer Brood Survey Data.

Region	Observations	Hens W/O Poults	Hens W/ Poults	Total Hens	Total Poults	Total Gobblers	Total Unk.
Coastal	624	453	750	1,203	2,520	668	823
Piedmont	737	513	787	1,300	2,941	570	673
Mountains	741	506	992	1,498	3,492	566	481
State	2,102	1,472	2,529	4,001	8,953	1,804	1,977

Table 2. 2008 Wild Turkey Summer Brood Survey Results.

Region*	% Hens W/ Poults	Poults / Hens W/Poults	Poults/Hen Ratio	Gobbler/Hen Ratio
Coastal	62%	3.4	2.1	0.56
Piedmont	61%	3.7	2.3	0.44
Mountains	66%	3.5	2.3	0.38
State**	62%	3.6	2.2	0.46

**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 – 26%, Piedmont – 46%, & Mountains – 28%).*

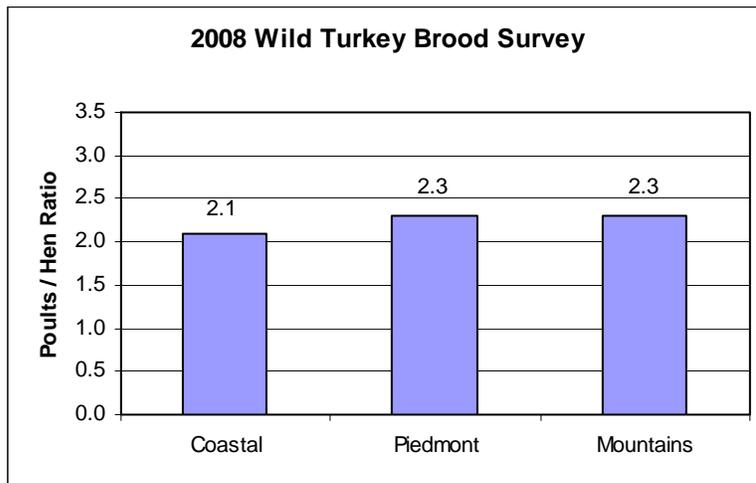


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The percentage of hens observed with poults is an indication of nesting success, while the ratio of poults to hens observed with poults (previously called poults/brood) is an indication of poult survival. Overall productivity is determined by the ratio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

A total of 16,735 wild turkeys was observed during this summer's brood survey. Statewide, the percentage of hens with poults (62%) indicates fair to good nesting success; the ratio of poults/hens observed with poults (3.6) indicates fair poult survival; and the ratio of poults/hen (2.2) indicates fair overall productivity. Wild turkey productivity was similar among the three geographical regions. The Coastal Region experienced fair to good nesting success (62% of the hens were with poults), fair poult survival (3.4 poults/hen with poults) and fair overall productivity (2.1 poults/hen). The Piedmont Region experienced fair to good nesting success (61% of the hens were with poults), fair poult survival (3.7 poults/hen with poults) and fair overall productivity (2.3 poults/hen). The Mountain Region experienced fair to good nesting success (66% of the hens were with poults), fair poult survival (3.5 poults/hen with poults), and fair overall productivity (2.3 poults/hen).

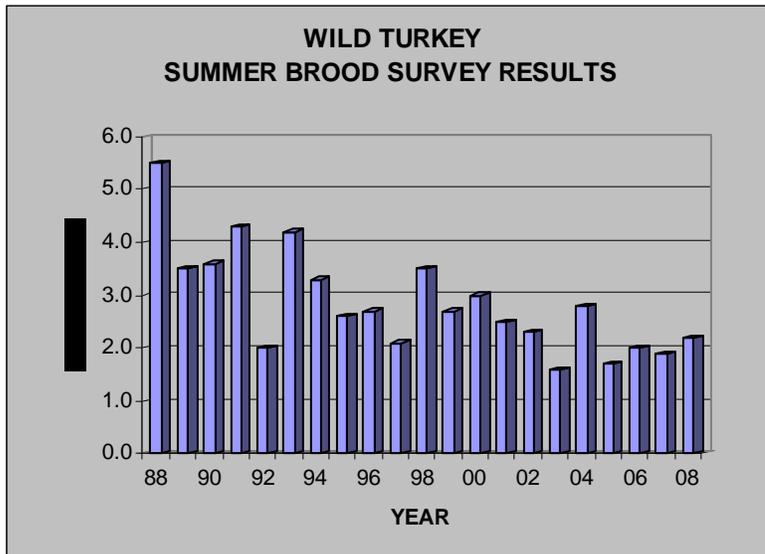
Figure 1. 2008 Wild Turkey Summer Brood Survey Results.





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Figure 2. Wild Turkey Summer Brood Survey Results, 1988-2008.



The observed ratio of gobblers/hen indicates the level of carryover of gobblers from the previous spring gobbler 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 2008 was 0.46 (regional ratios are provided in Table 2). The average ratio for the last ten years is 0.47 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.



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Figure 3. Carryover of Gobblers.

