

Wild Turkey Landowner Brood Survey 2007

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Abstract

In the primary turkey range, the mean (SE) ratio of poults to hens observed averaged 2.58 ± 0.1 in 2007 compared to 2.43 ± 0.1 in 2006 and the long-term (1988-2006) average of 2.89 ± 0.1 . Fifty-five percent (55%) of hens observed were accompanied by poults during 2007, compared to 53% in 2006. The long-term average is 50.9%.

Methods

Originally, names and addresses for this survey were chosen from a master list compiled in the late 1980's with nonrespondents from previous years being systematically culled from the list. As the size of the list became smaller efforts to increase the size were made during the mid 1990's late 1990's and again in 2003. In the 1990's landowners of 40 or more acres were selected from a mailing list from the University of Wisconsin Extension rural landowner list. In 2003 landowners of 40 or more acres were selected from available county tax roles. Names and addresses were randomly drawn in proportion to ownership in each county. Active names from the previous master list were added to this new list, and nonrespondents are annually culled.

A post-paid card with survey objectives and instructions was mailed in June, July, and August to 9,610 landowners, some of whom were surveyed during previous years. Recipients were requested to report the number of turkey broods, poults/brood, and adult hens with or without a brood seen during June, July, and August. Crawford, Grant, Iowa, La Crosse, Monroe, Richland, and Vernon counties have been surveyed annually since 1988 and make up Wisconsin's primary turkey range. Comparative statistics were obtained from Buffalo, Dane, Jackson, Juneau, Lafayette, Sauk, and Trempealeau counties beginning in 1990. Calumet, Columbia, Jefferson, Marinette, Pierce, Waukesha, and Waupaca counties were added for comparison in 1993 (Figure 1). The data were analyzed using the Statistical Analysis System (SAS).

Survey data were tabulated by county to obtain an index of poult/hen ratios and the proportion of hens with poults. Reports that were either not dated or that had observations from a month other than those specified were excluded.

Results

Reports were received from 2,762 respondents. The response rate was 29%. In the primary turkey range, the mean (SE) poult/hen (P/H) ratio averaged 2.58 ± 0.1 in 2007, compared to 2.43 ± 0.1 in 2006 (Table 1). The long-term P/H ratio averaged 2.89 ± 0.1 between 1988 and 2006 (Figure 2). Fifty-five percent of hens were accompanied by poults in 2007, compared to 53% in 2006. The long-term average of hens with poults is 50.9%. It would appear that 2007 was a better brood year than 2006, but still below the long-term mean.

Within the 14 other traditional counties, the P/H ratio averaged 2.6 ± 0.1 in 2007, and 57% of hens were accompanied by poults. This is almost exactly the same as in 2006 when the P/H ratio averaged 2.6 ± 0.1 , and 56% of hens were accompanied by poults.

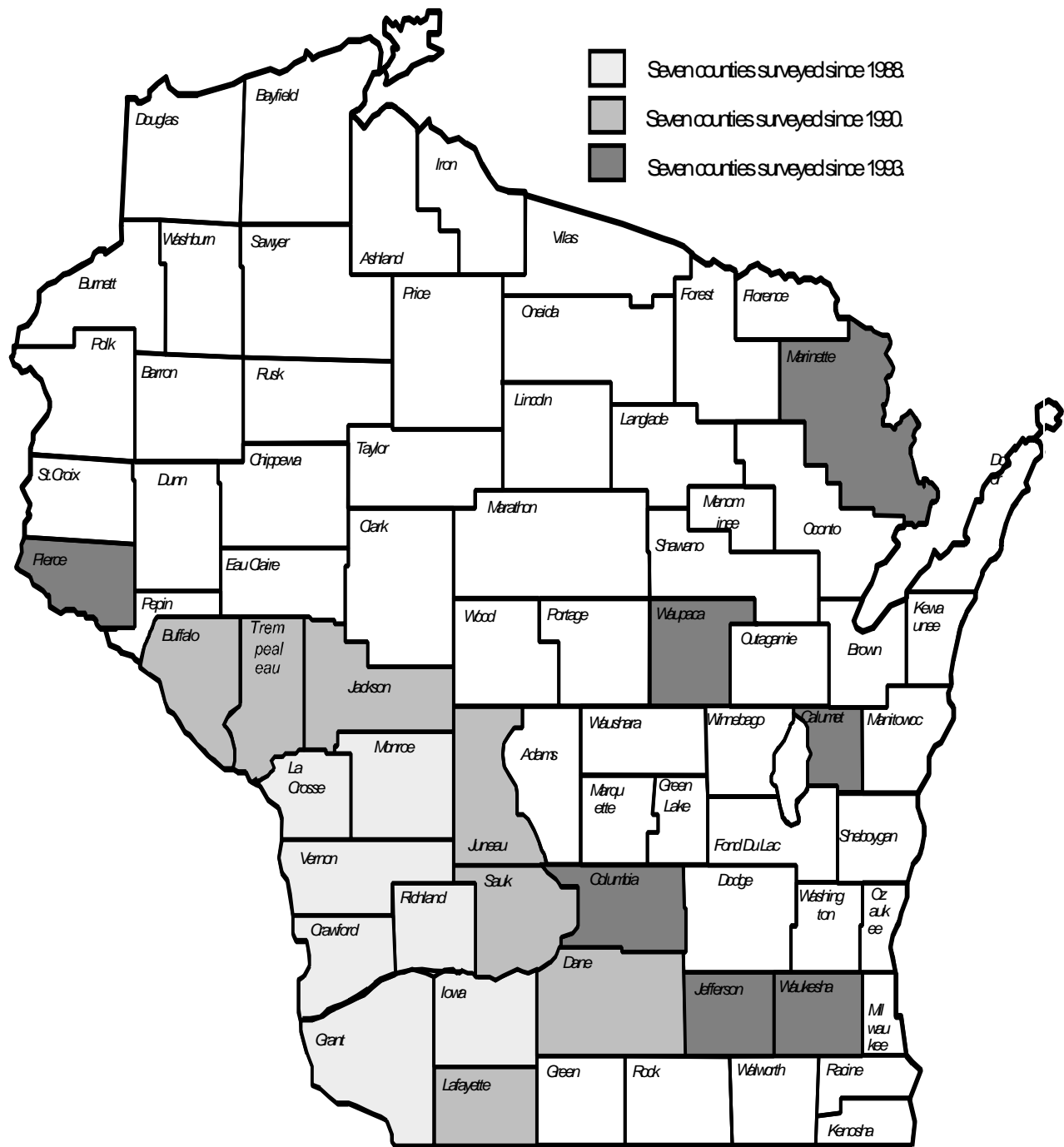


Figure 1. Counties surveyed in 2007.

Table 1. Comparison of poult/hen ratios within the seven traditional southwestern counties during 2006-2007.

| Survey Initiation | County | Year | Reported Sightings | Total Poults | Total Hens | Poult/Hen |
|--------------------------------------|--------------------------|-------------|--------------------|---------------|--------------|-------------|
| 1988 - Primary Turkey Range | Crawford | 2007 | 147 | 892 | 312 | 2.86 |
| | | 2006 | 168 | 858 | 342 | 2.51 |
| | Grant | 2007 | 170 | 1,017 | 352 | 2.89 |
| | | 2006 | 139 | 666 | 307 | 2.17 |
| | Iowa | 2007 | 249 | 1,342 | 547 | 2.45 |
| | | 2006 | 210 | 1,075 | 460 | 2.34 |
| | La Crosse | 2007 | 220 | 1,277 | 514 | 2.48 |
| | | 2006 | 286 | 1,484 | 594 | 2.50 |
| | Monroe | 2007 | 249 | 1,415 | 523 | 2.71 |
| | | 2006 | 256 | 1,486 | 534 | 2.78 |
| | Richland | 2007 | 225 | 1,177 | 488 | 2.41 |
| | | 2006 | 191 | 828 | 384 | 2.16 |
| | Vernon | 2007 | 109 | 464 | 198 | 2.34 |
| | | 2006 | 101 | 506 | 218 | 2.32 |
| | 7 County Subtotal | 2007 | 1,396 | 7,584 | 2,934 | 2.58 |
| | | 2006 | 1,351 | 6,903 | 2,839 | 2.43 |
| 1990 | Buffalo | 2007 | 198 | 1,451 | 398 | 3.65 |
| | | 2006 | 209 | 1,318 | 392 | 3.36 |
| | Dane | 2007 | 158 | 847 | 338 | 2.51 |
| | | 2006 | 142 | 680 | 311 | 2.19 |
| | Jackson | 2007 | 375 | 2,032 | 825 | 2.46 |
| | | 2006 | 357 | 2,016 | 768 | 2.63 |
| | Juneau | 2007 | 450 | 2,503 | 1,074 | 2.33 |
| | | 2006 | 485 | 2,712 | 1,138 | 2.38 |
| | Lafayette | 2007 | 126 | 675 | 262 | 2.58 |
| | | 2006 | 132 | 601 | 278 | 2.16 |
| | Sauk | 2007 | 215 | 1,180 | 505 | 2.34 |
| | | 2006 | 212 | 910 | 466 | 1.95 |
| | Trempealeau | 2007 | 172 | 958 | 353 | 2.71 |
| | | 2006 | 237 | 1,337 | 467 | 2.86 |
| | 7 County Subtotal | 2007 | 1,694 | 9,646 | 3,755 | 2.57 |
| | | 2006 | 1,774 | 9,574 | 3,820 | 2.51 |
| 1993 | Calumet | 2007 | 120 | 655 | 260 | 2.52 |
| | | 2006 | 110 | 590 | 213 | 2.77 |
| | Columbia | 2007 | 326 | 1,989 | 755 | 2.63 |
| | | 2006 | 289 | 1,653 | 606 | 2.73 |
| | Jefferson | 2007 | 405 | 2,298 | 890 | 2.58 |
| | | 2006 | 379 | 1,798 | 857 | 2.10 |
| | Marinette | 2007 | 510 | 2,895 | 1,116 | 2.48 |
| | | 2006 | 481 | 2,844 | 1,055 | 2.70 |
| | Pierce | 2007 | 143 | 1,079 | 328 | 3.29 |
| | | 2006 | 126 | 940 | 297 | 3.16 |
| | Waukesha | 2007 | 157 | 881 | 369 | 2.39 |
| | | 2006 | 134 | 635 | 288 | 2.20 |
| | Waupaca | 2007 | 262 | 1,570 | 609 | 2.58 |
| | | 2006 | 329 | 2,555 | 745 | 3.43 |
| | 7 County Subtotal | 2007 | 1,923 | 11,367 | 4,377 | 2.60 |
| | | 2006 | 1,848 | 11,015 | 4,061 | 2.71 |

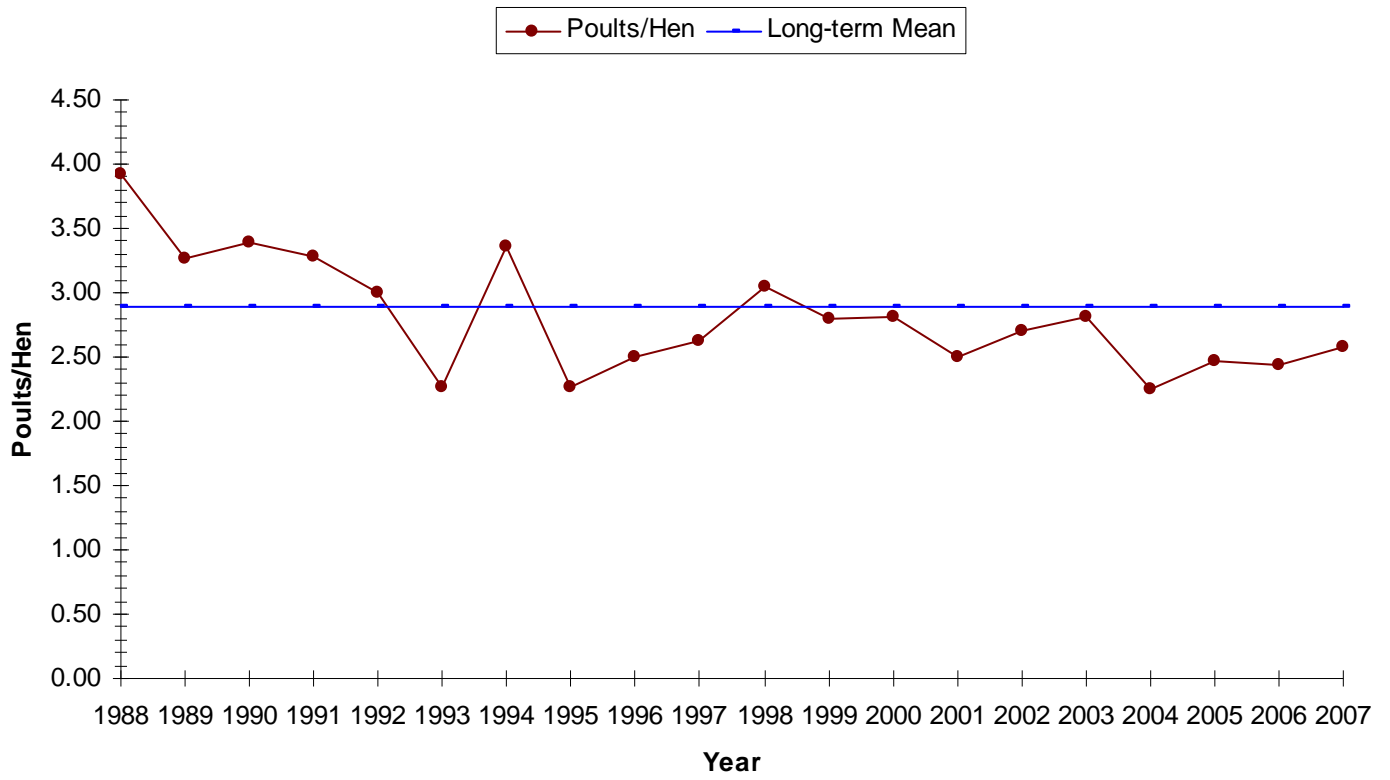


Figure 2. Trends in the poults/hen ratio within the seven primary turkey range counties surveyed from 1988-2007.