

Wild Turkey Landowner Brood Survey 2010

By Brian Dhuey

Abstract

In the primary turkey range, the mean (SE) ratio of poults to hens observed averaged 1.53 ± 0.1 in 2010 compared to 1.88 ± 0.1 in 2009 and the long-term (1988-2009) average of 2.72 ± 0.1 . Thirty-seven percent (37%) of hens observed were accompanied by poults during 2010, compared to 46% in 2009. The long-term average is 52.4%.

Methods

Originally, names and addresses for this survey were chosen from a master list compiled in the late 1980's with non-respondents 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 non-respondents are annually culled.

A post-paid card with survey objectives and instructions was mailed in June, July, and August to $\approx 9,500$ 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 2,357 respondents. The response rate was 25%. In the primary turkey range, the mean (SE) poult/hen (P/H) ratio averaged 1.53 ± 0.1 in 2010, compared to 1.88 ± 0.1 in 2009 (Table 1). The long-term P/H ratio averaged 2.76 ± 0.1 between 1988 and 2009 (Figure 2). Thirty-seven percent of hens were accompanied by poults in 2010, compared to 46% in 2009. The long-term average of hens with poults is 52.5%. Survey responses have been falling dramatically in recent years, the number of responses received has fallen 23% in recent years and results could be unduly influenced by just a few respondents. Comparing survey results to previous years may be problematic and should be done cautiously.

Within the 14 other traditional counties, the P/H ratio averaged 1.54 ± 0.1 in 2010, and 40% of hens were accompanied by poults. This is down from 2009 when the P/H ratio averaged 2.0 ± 0.1 , and 51% of hens were accompanied by poults.

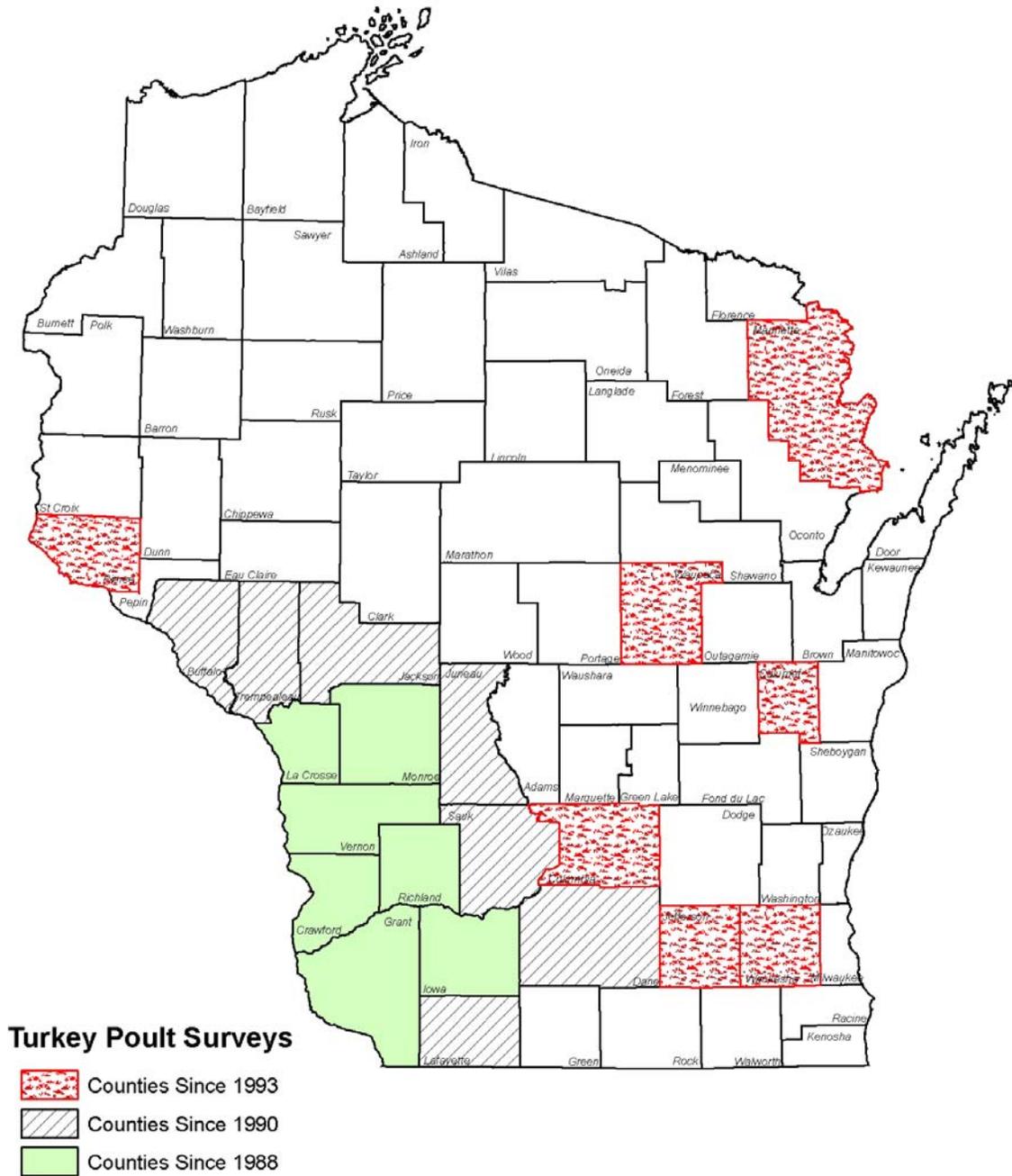


Figure 1. Counties surveyed in 2010.

Table 1. Comparison of poult/hen ratios within the seven traditional southwestern counties during 2009-2010.

Survey Initiation	County	Year	Reported Sightings	Total Poults	Total Hens	Poult/Hen
1988 - Primary Turkey Range	Crawford	2010	95	379	231	1.64
		2009	116	607	298	2.04
	Grant	2010	69	202	155	1.30
		2009	134	744	348	2.14
	Iowa	2010	145	526	331	1.59
		2009	182	881	491	1.79
	La Crosse	2010	85	286	140	2.04
		2009	169	752	460	1.63
	Monroe	2010	153	575	356	1.62
		2009	191	1,023	482	2.12
	Richland	2010	89	327	232	1.41
		2009	139	577	332	1.74
	Vernon	2010	63	232	132	1.76
		2009	130	560	319	1.76
7 County Subtotal		2010	699	2,527	1,646	1.53
		2009	1,061	5,144	2,730	1.88
1990	Buffalo	2010	88	379	190	1.99
		2009	186	1,008	469	2.15
	Dane	2010	110	438	224	1.96
		2009	79	400	188	2.13
	Jackson	2010	150	473	379	1.25
		2009	268	1,168	687	1.70
	Juneau	2010	251	906	654	1.39
		2009	307	1,488	869	1.71
	Lafayette	2010	59	302	137	2.20
		2009	70	316	162	1.95
	Sauk	2010	93	377	235	1.60
		2009	159	1,167	384	3.04
	Trempealea	2010	85	253	202	1.25
		2009	121	585	286	2.05
7 County Subtotal		2010	836	3,128	2,021	1.55
		2009	1,190	6,132	3,045	2.01
1993	Calumet	2010	61	180	153	1.18
		2009	50	190	145	1.31
	Columbia	2010	186	707	476	1.49
		2009	226	1,424	569	2.50
	Jefferson	2010	276	1,047	630	1.66
		2009	292	1,530	830	1.84
	Marinette	2010	291	1,091	715	1.53
		2009	326	1,432	837	1.71
	Pierce	2010	80	350	189	1.85
		2009	124	706	345	2.05
	Waukesha	2010	81	254	210	1.21
		2009	129	625	298	2.10
	Waupaca	2010	133	541	334	1.62
		2009	207	1,255	562	2.23
7 County Subtotal		2010	1,108	4,170	2,707	1.54
		2009	1,354	7,162	3,586	2.00

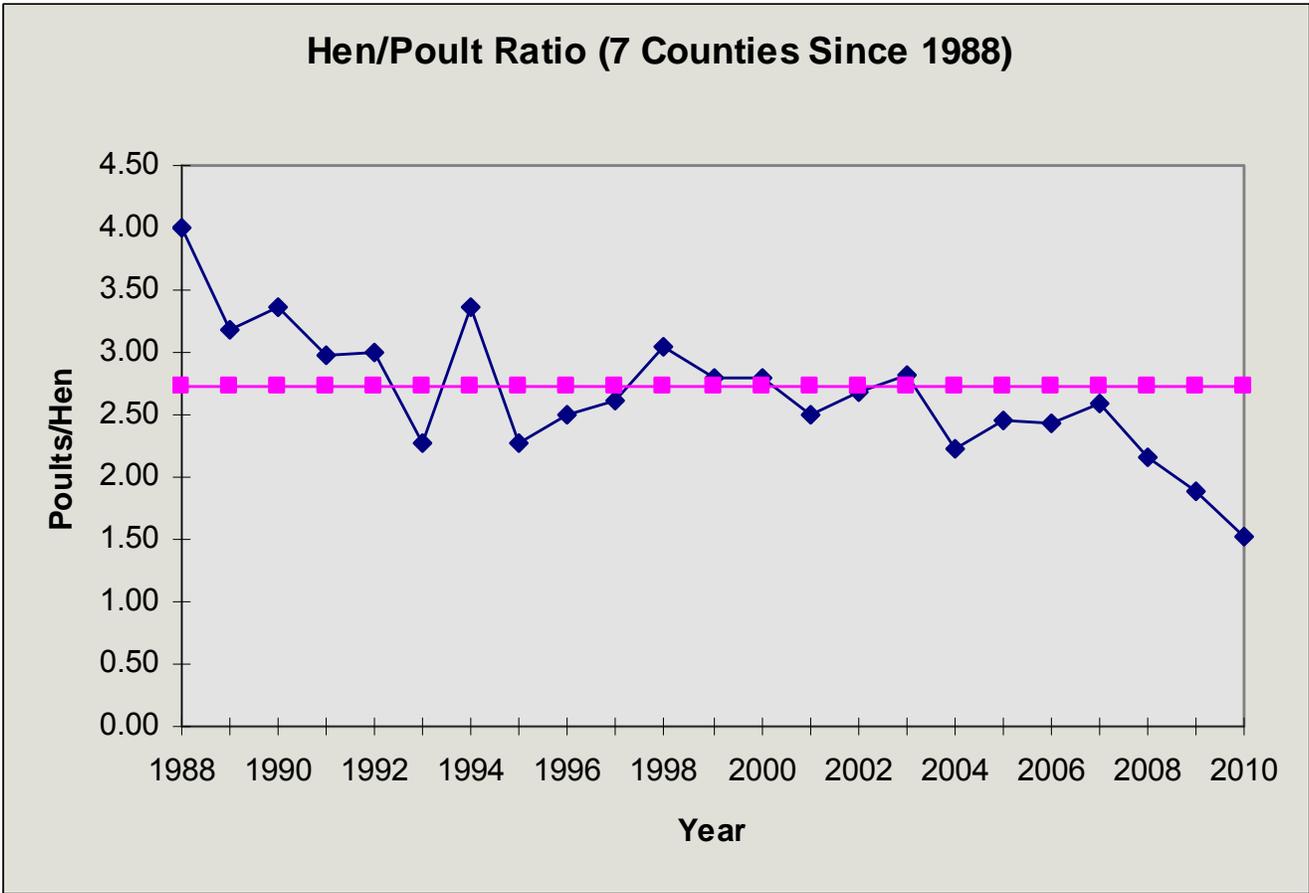


Figure 2. *Poult/Hen ratio within the seven counties comprising the primary turkey range, 1988-2010.*