

# Wild Turkey Landowner Brood Survey 2008

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## **Abstract**

In the primary turkey range, the mean (SE) ratio of poults to hens observed averaged  $2.17 \pm 0.1$  in 2008 compared to  $2.58 \pm 0.1$  in 2007 and the long-term (1988-2007) average of  $2.79 \pm 0.1$ . Fifty percent (50%) of hens observed were accompanied by poults during 2008, compared to 55% in 2007. The long-term average is 52.7%.

## **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 2,970 respondents. The response rate was 30%. In the primary turkey range, the mean (SE) poult/hen (P/H) ratio averaged  $2.17 \pm 0.1$  in 2008, compared to  $2.58 \pm 0.1$  in 2007 (Table 1). The long-term P/H ratio averaged  $2.79 \pm 0.1$  between 1988 and 2007 (Figure 2). Fifty percent of hens were accompanied by poults in 2008, compared to 55% in 2007. The long-term average of hens with poults is 52.7%. The southern half of Wisconsin had many large rain events in early June, right at the peak of hatch. It would appear that these events caused a down turn in brood numbers in 2008.

Within the 14 other traditional counties, the P/H ratio averaged  $2.4 \pm 0.1$  in 2008, and 53% of hens were accompanied by poults. This is down from 2007 when the P/H ratio averaged  $2.6 \pm 0.1$ , and 57% of hens were accompanied by poults.

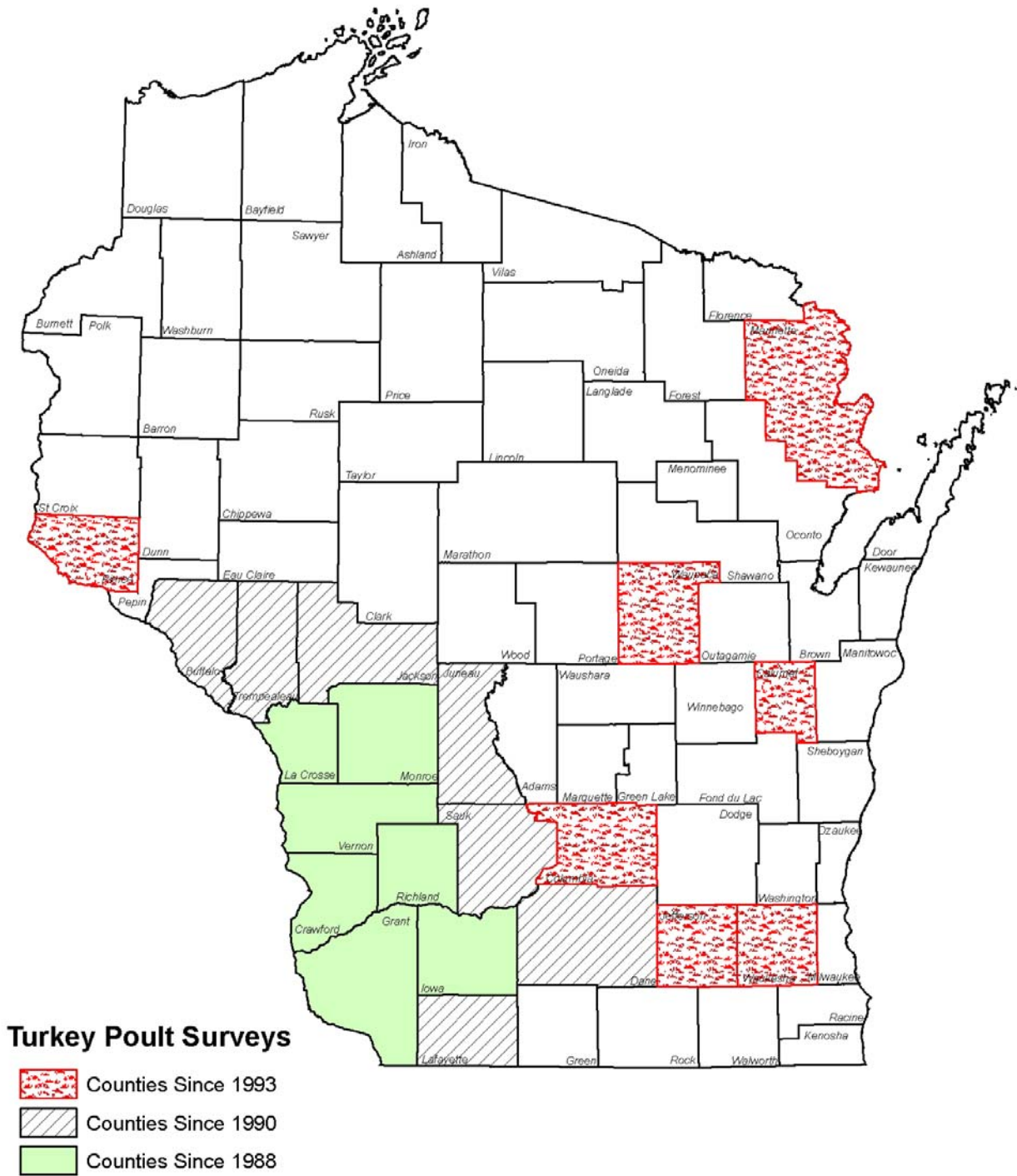
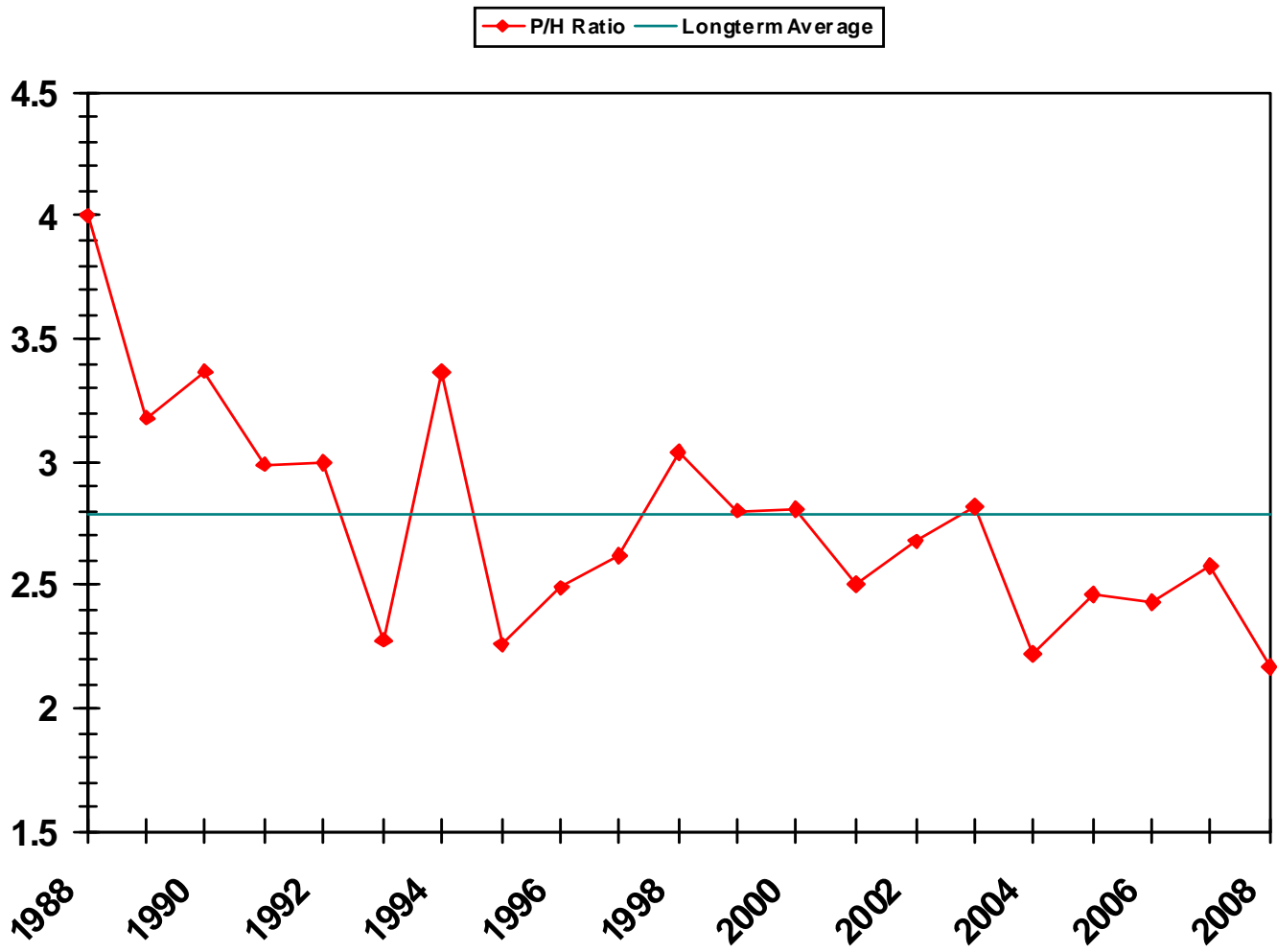


Figure 1. Counties surveyed in 2008.

**Table 1.** Comparison of poult/hen ratios within the seven traditional southwestern counties during 2007-2008.

Survey Initiation	County	Year	Reported Sightings	Total Poults	Total Hens	Poult/Hen
1988 - Primary Turkey Range	Crawford	2008	173	987	430	2.30
		2007	147	892	312	2.86
	Grant	2008	130	432	270	1.60
		2007	170	1,017	352	2.89
	Iowa	2008	253	1,029	536	1.92
		2007	249	1,342	547	2.45
	La Crosse	2008	211	1,092	499	2.19
		2007	220	1,277	514	2.48
	Monroe	2008	305	1,588	654	2.43
		2007	249	1,415	523	2.71
	Richland	2008	207	994	408	2.44
		2007	225	1,177	488	2.41
	Vernon	2008	124	455	238	1.91
		2007	109	464	198	2.34
	<b>7 County Subtotal</b>	<b>2008</b>	<b>1,403</b>	<b>6,577</b>	<b>3,035</b>	<b>2.17</b>
		<b>2007</b>	<b>1,396</b>	<b>7,584</b>	<b>2,934</b>	<b>2.58</b>
1990	Buffalo	2008	277	1,569	546	2.87
		2007	198	1,451	398	3.65
	Dane	2008	162	830	367	2.26
		2007	158	847	338	2.51
	Jackson	2008	435	2,601	981	2.65
		2007	375	2,032	825	2.46
	Juneau	2008	433	2,313	1,055	2.19
		2007	450	2,503	1,074	2.33
	Lafayette	2008	139	626	246	2.54
		2007	126	675	262	2.58
	Sauk	2008	209	1,132	492	2.30
		2007	215	1,180	505	2.34
	Trempealeau	2008	184	1,026	399	2.57
		2007	172	958	353	2.71
	<b>7 County Subtotal</b>	<b>2008</b>	<b>1,839</b>	<b>10,097</b>	<b>4,086</b>	<b>2.47</b>
		<b>2007</b>	<b>1,694</b>	<b>9,646</b>	<b>3,755</b>	<b>2.57</b>
1993	Calumet	2008	87	340	194	1.75
		2007	120	655	260	2.52
	Columbia	2008	352	1,868	785	2.38
		2007	326	1,989	755	2.63
	Jefferson	2008	407	2,017	890	2.27
		2007	405	2,298	890	2.58
	Marinette	2008	572	3,148	1,257	2.50
		2007	510	2,895	1,116	2.48
	Pierce	2008	183	965	438	2.20
		2007	143	1,079	328	3.29
	Waukesha	2008	144	580	330	1.76
		2007	157	881	369	2.39
	Waupaca	2008	256	1,510	574	2.63
		2007	262	1,570	609	2.58
	<b>7 County Subtotal</b>	<b>2008</b>	<b>2,001</b>	<b>10,428</b>	<b>4,468</b>	<b>2.33</b>
		<b>2007</b>	<b>1,923</b>	<b>11,367</b>	<b>4,377</b>	<b>2.60</b>



**Figure 2.** *Poult/Hen ratio within the seven counties comprising the primary turkey range, 1988-2008.*