

Wild Turkey Landowner Brood Survey 2011

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Abstract

In the primary turkey range, the mean (SE) ratio of poults to hens observed averaged 2.08 ± 0.1 in 2011 compared to 1.53 ± 0.1 in 2010 and the long-term (1988-2010) average of 2.67 ± 0.1 . Fifty-one percent (51%) of hens observed were accompanied by poults during 2011, compared to 37% in 2010. The long-term average is 51.2%.

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 2,244 respondents. The response rate was 24%. In the primary turkey range, the mean (SE) poult/hen (P/H) ratio averaged 2.08 ± 0.1 in 2011, compared to 1.53 ± 0.1 in 2010 (Table 1). The long-term P/H ratio averaged 2.67 ± 0.1 between 1988 and 2010 (Figure 2). Fifty-one percent of hens were accompanied by poults in 2011, compared to 37% in 2010. The long-term average of hens with poults is 51.2%. Breeding turkeys in the primary turkey range seem to have increased in 2011 over the previous 2 years. 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 1.29 ± 0.1 in 2011, and 33% of hens were accompanied by poults. In 2010 the P/H ratio averaged 1.54 ± 0.1 , and 40% of hens were accompanied by poults.

Table 1. Comparison of poult/hen ratios within the seven traditional southwestern counties during 2010-2011.

Survey Initiation	County	Year	Reported Sightings	Total Poults	Total Hens	Poult/Hen
1988 - Primary Turkey Range	Crawford	2011	137	684	288	2.38
		2010	95	379	231	1.64
	Grant	2011	116	465	240	1.94
		2010	69	202	155	1.30
	Iowa	2011	185	932	401	2.32
		2010	145	526	331	1.59
	La Crosse	2011	92	359	218	1.65
		2010	85	286	140	2.04
	Monroe	2011	165	673	312	2.16
		2010	153	575	356	1.62
	Richland	2011	106	471	240	1.96
		2010	89	327	232	1.41
	Vernon	2011	65	245	140	1.75
		2010	63	232	132	1.76
7 County Subtotal	2011	866	3,829	1,839	2.08	
	2010	699	2,527	1,646	1.53	
1990	Buffalo	2011	98	293	236	1.24
		2010	88	379	190	1.99
	Dane	2011	105	338	273	1.24
		2010	110	438	224	1.96
	Jackson	2011	115	277	324	0.85
		2010	150	473	379	1.25
	Juneau	2011	229	802	629	1.28
		2010	251	906	654	1.39
	Lafayette	2011	48	163	116	1.41
		2010	59	302	137	2.20
	Sauk	2011	109	428	267	1.60
		2010	93	377	235	1.60
	Trempealeau	2011	90	227	210	1.08
		2010	85	253	202	1.25
7 County Subtotal	2011	794	2,528	2,055	1.23	
	2010	836	3,128	2,021	1.55	
1993	Calumet	2011	48	156	105	1.49
		2010	61	180	153	1.18
	Columbia	2011	207	622	480	1.30
		2010	186	707	476	1.49
	Jefferson	2011	207	769	533	1.44
		2010	276	1,047	630	1.66
	Marinette	2011	283	922	697	1.32
		2010	291	1,091	715	1.53
	Pierce	2011	93	278	273	1.02
		2010	80	350	189	1.85
	Waukesha	2011	72	147	204	0.72
		2010	81	254	210	1.21
	Waupaca	2011	151	655	380	1.72
		2010	133	541	334	1.62
7 County Subtotal	2011	1,061	3,549	2,672	1.33	
	2010	1,108	4,170	2,707	1.54	

Hen/Poult Ratio (7 Counties Since 1988)

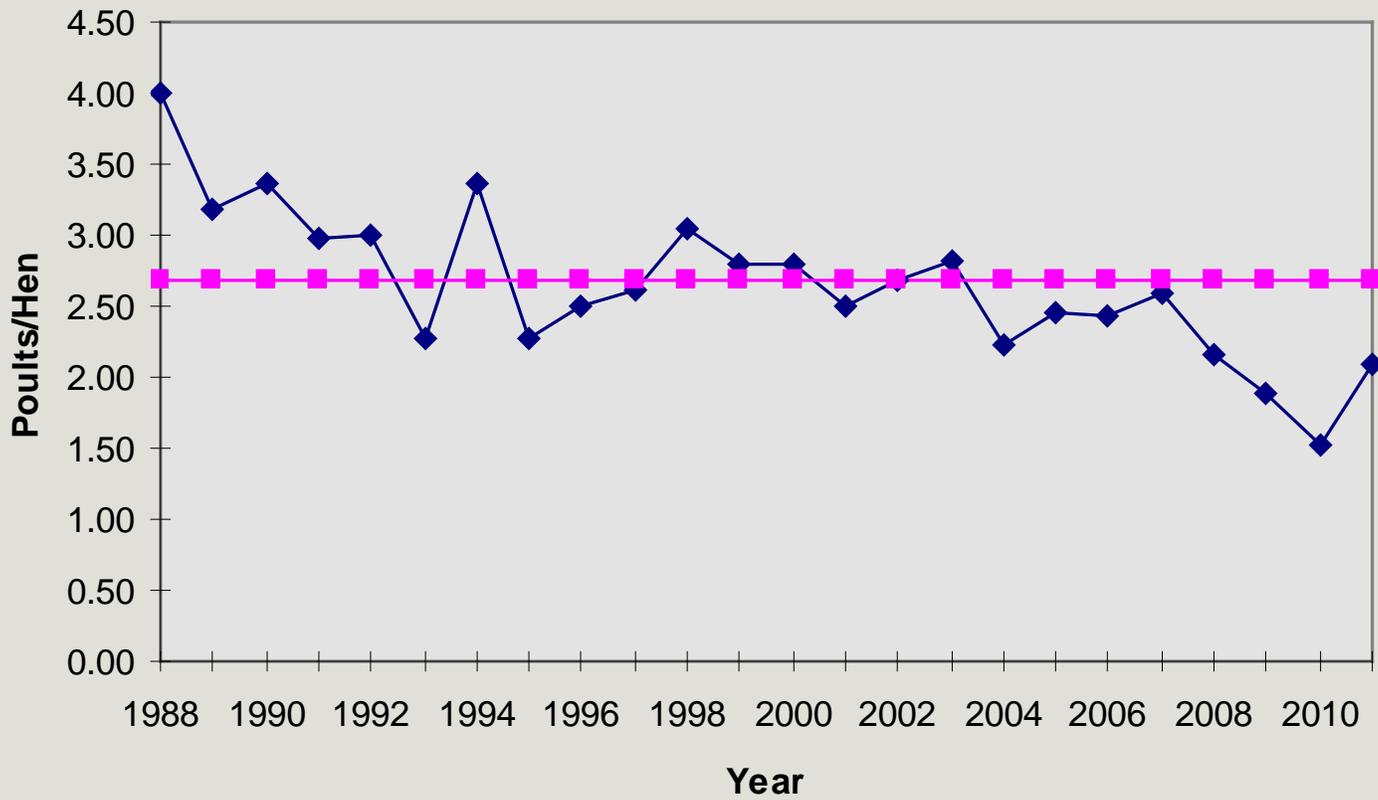


Figure 2. *Poult/Hen ratio within the seven counties comprising the primary turkey range, 1988-2011.*