



No.	Author Steven E. Backs, Wildlife Research Biologist	Date
2000	Title 2015 Spring Wild Turkey Gobbling Counts	5/11/2015

**Abstract:** The number of male wild turkeys heard gobbling along the traditional 10 control roadside routes during 30 March to 21 April, 2015 was 0.59 gobblers heard per stop (GI), 14% less than the 0.69 heard in 2014. Four new routes re-established in 2012 showed a 13% decrease in 2015. The 5-yr moving average shows a general increase from 1987-2006, followed by a general decrease since the 2006 peak. The 2015 statewide gobbling index of 0.59 was not statistically different than the 5 yr-mean of 0.74 ( $P > 0.05$ ) but was the lowest GI since 1998.

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Gobbler counts are conducted annually during late March to April to determine the relative population trends of wild turkeys in the areas surveyed. In 2015, 10 traditional routes were surveyed in portions of 14 counties and 4 new routes covering portions of 5 more counties. The new routes were re-established in 2012 to expand the statewide coverage and will be incorporated into the statewide index in 2016 after 5 years of accumulated data. Roadside gobbler trend routes were conducted in conjunction with roadside trend routes for drumming male ruffed grouse. Each route has 15 predetermined listening stops along 10-20 miles of rural roadways. Routes are conducted at least twice, in opposite directions, and the highest gobbler count per stop is used for determining the Gobbling Index (GI). The average number of gobblers heard on the traditional 10 roadside trend routes in 2015 ranged from 0.27 to 1.00 gobblers heard per stop (**Table 1**). The statewide GI of 0.59 gobblers heard per stop was 14% less than the 0.69 GI in 2014. The GI for the 4 new routes decreased 13% from 0.95 in 2014 to 0.83 in 2015. Frequent, inclement weather during the latter half of the survey period may have influenced this year's results.

While roadside routes are not accurate indicators of annual trends in wild turkey populations, they provide some long-term ( $\geq 5$  yrs) trends and information to compare areas relative to each other (**Table 2**). Weather conditions during the survey period can contribute to the variability of annual trends. Annual variations may also reflect the proportion of vocal 2-year-old gobblers in the population rather than actual population trends over the long term. The substantial increase in the 2006 gobbling index is a prime example of where the record high summer brood production in 2004 (Backs 2006) became quite evident with a large cohort of very vocal 2-yr-old gobblers (**Figure 1**). The long-term trend, based on a 5-yr moving average, shows a general increase from 1987-2006, followed by a general decrease since the 2006 peak. The 2015 gobbling index of 0.59 was not statistically different ( $P > 0.05$ ) from the 5 yr-mean of 0.74, however it was the lowest GI since 1998.

#### Literature Cited

Backs, S. E. 2006. Wild turkey brood production – Summer 2005. Wildlife Management and Research Note No. 910. Indiana Division of Fish and Wildlife, Indianapolis. 5pp.

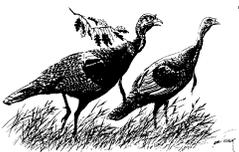


Table 1. Wild turkeys heard on roadside counts in Indiana between 30 March to 21 April 2015.

County/Area	No. of Routes/ Stops	No. of Repetitions (for/rev)	Total Turkeys Heard	Total Seen	Highest Number Heard/Rt.	Turkeys Heard <sup>1/</sup> Per Stop	
						2014	2015
<hr/> <b>Traditional Routes</b> <hr/>							
Jackson, Brown, Monroe (Hickory Ridge, USFS-HNF)	1/15	3	9	2	4	0.47	0.27
Owen-Putnam	1/15	1	4	4	4	0.53	0.27
Perry (Oriole-St.Croix-USFS-HNF)	1/15	2	12	0	6	0.67	0.40
Washington (Jackson-Washington SF)	1/15	2	11	1	10	0.87	0.67
Lawrence & Orange (Lost River - E, USFS-HNF)	1/15	2	12	0	8	0.53	0.53
Martin & Orange (Lost River - W, USFS)	1/15	2	24	0	15	1.07	1.00
Morgan-Monroe (M-M SF)	1/15	2	11	2	6	0.73	0.40
Greene	1/15	2	15	9	9	0.27	0.60
Orange (Lick Fork, USFS HNF)	1/15	2	16	0	12	0.40	0.80
Jefferson	1/15	2	18	2	15	1.33	1.00
					SubMean	0.69	0.59
<hr/> <b>New Routes <sup>2/</sup></b> <hr/>							
Marshall-Starke	1/15	2	31	10	16	1.53	1.07
Parke	1/15	2	16	0	8	1.07	0.53
Lagrange/Steuben Co (Pigeon River FWA)	1/15	2	18	12	15	0.73	1.00
Brown (Yellowwood SF)	1/15	2	17	9	11	0.47	0.73
					SubMean	0.95	0.83
					Grand Mean	0.76	0.66

<sup>1/</sup> Gobbling Index (gobblers heard per stop) calculated using route with highest count.

<sup>2/</sup> Routes re-established in 2012 to expand statewide coverage.

Table 2. Wild turkey roadside gobbling counts during April in Indiana from 1987 to 2015.

Year	Gobblers Heard Per Stop *												SE	MARSTRK	PARKE	LAGSTEU	BROWN
	HICKORY	OWPUT	PERRY	WASH	LR-EAST	LR-WEST	MORGAN	GREENE	LICKFK	JEFFERSON	ROW	MEAN					
1987	1.10	0.07	0.00	0.20	0.53	NR	0.27	0.00	0.00	1.00	<b>0.35</b>	<b>0.144</b>	-	-	-	-	
1988	0.73	0.13	0.13	0.00	0.47	NR	0.20	0.07	0.00	1.13	<b>0.32</b>	<b>0.129</b>	-	-	-	-	
1989	1.13	0.00	0.21	0.00	0.87	NR	0.20	0.00	0.47	0.73	<b>0.40</b>	<b>0.141</b>	-	-	-	-	
1990	0.80	0.13	0.20	0.00	1.00	1.27	0.27	0.07	0.73	0.53	<b>0.50</b>	<b>0.137</b>	-	-	-	-	
1991	0.33	0.20	0.40	0.00	0.87	0.53	0.33	0.07	0.87	1.07	<b>0.47</b>	<b>0.115</b>	-	-	-	-	
1992	0.73	0.07	0.20	0.00	0.80	1.87	0.00	0.07	0.67	0.53	<b>0.49</b>	<b>0.183</b>	-	-	-	-	
1993	0.47	0.00	0.47	0.00	0.27	0.53	0.07	0.20	0.47	1.20	<b>0.37</b>	<b>0.113</b>	-	-	-	-	
1994	0.53	0.13	0.47	0.00	0.73	0.27	0.13	0.27	0.80	0.80	<b>0.41</b>	<b>0.094</b>	-	-	-	-	
1995	0.67	0.00	0.80	0.00	0.93	0.73	0.00	0.13	0.80	1.53	<b>0.56</b>	<b>0.162</b>	-	-	-	-	
1996	1.13	0.33	0.80	0.07	0.60	1.47	0.27	0.13	0.53	0.80	<b>0.61</b>	<b>0.142</b>	-	-	-	-	
1997	0.67	0.20	0.87	0.07	0.73	0.47	0.47	0.00	0.60	0.93	<b>0.50</b>	<b>0.102</b>	-	-	-	-	
1998	1.40	0.27	0.47	0.40	0.60	0.53	0.33	0.67	0.27	0.80	<b>0.57</b>	<b>0.107</b>	-	-	-	-	
1999	0.80	0.60	0.47	0.27	1.27	0.53	0.67	0.40	0.87	1.20	<b>0.71</b>	<b>0.104</b>	-	-	-	-	
2000	0.60	0.20	0.53	0.67	1.27	0.47	0.27	0.67	1.20	1.33	<b>0.72</b>	<b>0.129</b>	-	-	-	-	
2001	0.73	0.53	0.60	0.60	0.67	0.73	0.33	0.33	0.93	1.73	<b>0.72</b>	<b>0.126</b>	-	-	-	-	
2002	0.33	0.60	0.53	0.80	1.27	0.93	0.53	0.20	1.13	1.33	<b>0.77</b>	<b>0.124</b>	-	-	-	-	
2003	0.53	0.20	0.60	1.47	1.07	0.67	0.80	0.60	1.00	2.13	<b>0.91</b>	<b>0.175</b>	-	-	-	-	
2004	0.80	0.20	1.07	1.33	0.87	0.73	1.33	0.60	1.00	1.87	<b>0.98</b>	<b>0.145</b>	-	-	-	-	
2005	0.93	0.27	0.87	1.20	1.07	1.47	0.33	0.60	0.80	1.47	<b>0.90</b>	<b>0.133</b>	-	-	-	-	
2006	2.67	0.60	0.93	0.73	1.60	2.27	0.53	1.53	1.47	2.20	<b>1.45</b>	<b>0.238</b>	-	-	-	-	
2007	1.07	0.20	1.00	0.80	0.60	1.07	0.73	0.27	0.73	1.53	<b>0.80</b>	<b>0.125</b>	-	-	-	-	
2008	2.33	0.33	0.67	0.40	0.53	0.67	0.67	0.07	0.67	1.20	<b>0.75</b>	<b>0.199</b>	-	-	-	-	
2009	2.13	0.33	0.60	0.27	0.53	1.20	0.80	0.20	1.20	0.60	<b>0.79</b>	<b>0.186</b>	-	-	-	-	
2010	0.80	0.67	0.53	0.47	0.40	0.93	0.73	0.20	1.27	1.07	<b>0.71</b>	<b>0.125</b>	-	-	-	-	
2011	1.20	0.33	0.53	0.67	0.53	1.33	0.80	0.07	0.87	1.07	<b>0.74</b>	<b>0.125</b>	-	-	-	-	
2012	1.60	0.47	0.60	0.60	0.93	0.67	0.93	0.60	0.87	1.33	<b>0.86</b>	<b>0.114</b>	0.73	1.27	1.40	0.60	
2013	0.40	0.47	0.73	0.53	0.47	1.00	0.53	0.60	0.67	1.47	<b>0.69</b>	<b>0.102</b>	0.67	1.13	0.93	0.67	
2014	0.47	0.53	0.67	0.87	0.53	1.07	0.73	0.27	0.40	1.33	<b>0.69</b>	<b>0.103</b>	1.53	1.07	0.73	0.47	
<b>5 Yr Mean</b>	<b>0.89</b>	<b>0.49</b>	<b>0.61</b>	<b>0.63</b>	<b>0.57</b>	<b>1.00</b>	<b>0.75</b>	<b>0.35</b>	<b>0.81</b>	<b>1.25</b>	<b>0.74</b>	<b>0.084</b>	-	-	-	-	
2015	0.27	0.27	0.4	0.67	0.53	1.00	0.40	0.60	0.80	1.00	<b>0.59</b>	<b>0.086</b>	1.07	0.53	1.00	0.73	

\*

= Gobbling Index (mean gobblers heard per stop) calculated using route with highest count.

HICKORY = Hickory Ridge (USFS), Lawrence and Jackson Counties

OWPUT = General area of Owen-Putnam St. Forest

PERRY = northern portion of Perry Co.(USFS)

WASH = general area of Jackson-Washington St. Forest in Washington County

LR-EAST = Lost River Unit - East, USFS, Lawrence and Orange Counties.

MORGMON = general area of Morgan-Monore St. Forest in Morgan County.

GREENE = eastern Greene County

**YEAR MEAN** = Arithmetic average value for all routes for a respective year (row).

**SE** = standard error of annual (row) mean

*5 Yr Mean* = mean for 5 years previous to survey year (2008-2012)and does not include values for routes initiated in 2012; MARSTRK, PARKE, LAGSTEU, OR BROWN.

LICKFK = Lick Fork Creek Area, USFS, in Orange County.

JEFFERSON = Jefferson County

LR-WEST = Lost River Unit - West, USFS, Orange and Martin Counties.

MARSTRK = Marshall-Starke counties.

PARKE = Parke County.

LAGSTEU = Lagrange-Steuven counties (Pigeon River Fish & Wildlife Area.

BROWN = Yellowood State Forest in Brown County.

= "new" routes re-established in 2012; data will not be incorporated into statewide GI until 2016 (5 yrs)

**Figure 1. Roadside Gobbling Indices**

