

WILDLIFE MANAGEMENT AND RESEARCH NOTES



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2044	Title: Spring Wild Turkey Harvest Results - 2019	7/9/2019

Abstract: Hunters harvested 12,014 wild turkeys in 91 of 92 Indiana counties during the 2019 spring season. The 2019 spring harvest was a 6 % increase from the 2018 spring harvest of 11,306. Spring harvests increased in 61 counties with 24 counties exceeding 200 birds compared to 22 in 2018. Most birds were harvested in the early part of the season and the early morning hours. A total of 988 birds (8% of total harvest) was taken during the youth-only weekend prior to the regular season. The proportion of juveniles in the spring harvest was 18% with 39% 2-year-olds, and 43% ≥ 3 year-olds. All regions had proportional increases in harvests ranging from 1% in West-central to 25% in East-central Indiana. The estimated number of hunters afield was 57,489 in 2019 with an estimated hunter success of 20%.

Project ID/Activity: W36R5/W36R511

Hunters harvested 12,014 wild turkeys during the 50th spring wild turkey season as reported to the “Check-IN-Game” harvest reporting system (99% on-line and 1% tele-check) with at least one wild turkey harvested in 91 of 92 counties. The 2019 harvest was a 6% increase (708) over the 2018 harvest of 11,306. There were 24 counties with harvests ≥ 200 birds compared to 22 in 2018. Overall, 61 counties showed increased harvests, 21 decreased, and 10 experienced no change in turkeys harvested. The top 10 counties were Steuben (330), Harrison (316 birds), Dearborn (306), Kosciusko (289), Perry (285), Greene (285), Switzerland (283), Warrick (282), Jefferson (276), and Noble (275) (Table 1; Figure 1).

A total of 988 (8% of harvest) was taken during the youth-only weekend (4/20 & 4/21/2019) with 59% of the regular season harvest (11,026 birds) occurring during the first five days of the 19-day season and 39% occurring on the three weekends. Approximately 65% of the harvest occurred by 10 am, 75% by noon, 12% from noon to 5 pm, and 13% occurring from 5 pm to sunset. Resident spring turkey licensees harvested 47% of the birds, followed by Lifetime (30%), Youth (12%), license exempt Landowners/Military (7%), and Non-Resident spring turkey licensees (4%). The harvest primarily occurred on private land (92%), followed by State lands (5%), Federal lands (3%), and Military (0.7%).

Male gobblers made up 98.2% (12,014) of the harvest with 1.8% (218) bearded hens. The age structure of the harvest was 18% juvenile gobblers (1 year-old birds; "jakes"), 39% 2-year-olds, and 43% ≥ 3-year-olds (Table 2). The 18% juvenile proportion was a slight improvement of the record low of 13% in 2017 and 15% in 2018. The age structure reflected the variation in brood production from 2014-2018 and the greater vulnerability of adult gobblers to harvest (Wright and Vangilder 2005, Chamberlain et al. 2012). Summer brood production in 2016 was extremely poor in many regions of the state, especially in the south with a slight improvements in 2017 and 2018 (Backs 2018). The shift toward older gobbler age classes in Indiana’s spring harvests began about 10-12 years ago, when summer brood production levels dropped off from the higher mean levels during the wild turkey restoration era (1956-2004 in Indiana) to a “new normal” post restoration characterized by reduced brood productivity and declining or stabilized spring harvests (Casalena et al. 2016, Byrne et al. 2016, Eriksen et al. 2016, Parent et al. 2016). The mean proportion of juveniles in Indiana’s spring harvest from 1988-2005 was 28% and has since declined substantially to a mean of 18% ($F_{1,30} = 19.0$; $P = 0.0001$).

All regions had proportional increases in harvests ranging from 1% in the West-central to 25% in East-central Indiana (Table 3). The overall statewide harvest increased 6% over 2018. As noted, the proportion of juveniles in the statewide harvest increased slightly to 18% statewide (Figures 2 and 3) and is still considered below normal, reflecting the cumulative impacts on 12-14 years of consecutive years of poor production in some regions due to above normal precipitation during the early brood period, generally from Memorial Day through the 4th of July. The lower proportion of juveniles in the recent spring harvests raises some concern for future hunter success and satisfaction (see 3-yr moving average; Figure 3), although there was some improvement in 2019, albeit still below the mean prior to 2005. The lower

production is evident in the lower proportion of 2-year old birds in subsequent harvests; the 39% 2-yr-olds in 2019 is lower proportion than the previous 10-year mean of 48% ($P \geq 0.05$). Two-year-old gobblers are the most active gobbler cohort and generally the most vulnerable to harvest, so the change in the age structure will likely have a negative impact on hunter success and satisfaction subsequent years, unless turkey production improves. The higher harvest rates for adult gobblers may, however, be offset by a greater recruitment of juveniles into adult age classes in subsequent years allowing for a sustainable level of harvest (Deifenbach et al. 2012). More importantly the lower proportion of juveniles in spring harvest age structure also suggests a comparable decrease in the proportion of the more productive adult hen cohort that could influence production and statewide populations levels for several years, even if weather and habitat conditions are conducive to poult survival.

The North region (the largest region) accounted for 33% of the harvest with the Southeast region having the highest harvest/mi² (0.61/mi²). The North region harvests continue to grow while the southern regions, with a generally older populations and higher proportions of forest cover, have leveled off at lower harvest levels but still have higher harvest levels per mi² of hunting range (Figure 4). Annual statewide spring harvests have generally stabilized since the peak harvest in 2010 (13,742) with totals during the previous decade generally ranging from 11,000 to 12,000 birds and 55,000 to 61,000 hunters in the field experiencing success rates from 18 to 22% (Table 4; Figure 5). The 2019 spring harvest appeared to be another up and down oscillation around a new normal mean level following restoration that is lower than previously observed during the accelerated population growth of the restoration years with the 5-year mean trend in harvests and hunter success leveling off around 12,000 birds and 20% respectfully (Figure 6). Relative hunter success and harvest levels, however, may not accurately reflect trends in wild turkey abundance unless hunter effort is taken into account (Parent et al. 2016).

Reasons for the 6% increase in the 2019 spring harvest over the 2018 harvest, is likely the slight uptick in summer production since 2016 even though the lower long term production trends are overall still below the production levels observed earlier in the restoration era (Bucks 2018; Figure 3). Fortunately, Indiana spring harvests appear to have leveled off or stabilized around 12,000 birds over the past 5 years. Whether this is a sustainable harvest level, remains to be seen. The general decline in production that has occurred the last 10-14 years in Indiana has also occurred throughout the eastern United States as wild turkey populations stabilized during the post-restoration era with subsequent declines in harvests to levels below peak years (Porter et al. 2011, Eriksen et al. 2016). The greatest declines in Indiana wild turkey populations have occurred in the southern half of the state where the restoration work was generally completed earlier than the northern half of the state. The apparent increased sensitivity or influence of annual summer production in recent years on subsequent Spring turkey harvests creates a level of uncertainty about sustainable harvest levels and management strategies in the future (Byrne et al. 2016, Stevens et al. 2017). While the higher proportion of adult gobblers in recent spring harvests is likely welcomed by hunters, the continued low proportion of juveniles in the spring harvests raises concerns about future harvest trends and hunter success unless there is a significant upswing in production for several consecutive years.

Special thanks go to Linnea Petercheff and Kyle Smith, who facilitated the harvest data transfer from the Check-IN-Game harvest reporting system.

Literature Cited

- Bucks, S. E. 2018. Wild Turkey Summer Brood Production Indices – 2018. Management and Research Note #1987. Indiana Division of Fish and Wildlife, Indianapolis, Indiana.
- Byrne, M. E., M. J. Chamberlain, and B.A. Collier. 2016. Potential density dependence in wild turkeys productivity in the southeastern United States. Proceedings of the National Wild Turkey Symposium 11:329-351.
- Chamberlain, M.J., B. A. Grisham, J. L. Norris, N. J. Stafford III, F. G. Kimmel, and M.W. Olinde. 2012. Effects of variable spring harvest regimes on annual survival and recovery rates of male wild turkeys in southeastern Louisiana. Journal of Wildlife Management 76:907-910.
- Caselena, M. J., M. V., Schiavone, A. C. Bowling, I. D. Gregg, and J. Brown. 2016. Understanding the new normal: wild turkeys in a changing northeastern landscape. Proceedings of the National Wild Turkey Symposium 11:45-57.

Eriksen, R. E., T. W. Hughes, T. A. Brown, M. D. Akridge, K. B. Scott, and C. S. Penner. 2016. Status and distribution of wild turkeys in the United States: 2014 status. *Proceedings of the National Wild Turkey Symposium* 11:7-18.

Diefenbach, D. R., M. j. Casalena, M. V. Schiavone, M. Reynolds, R. Eriksen, W. C. Vreeland, B. Swift, and R. C. Boyd. 2012. Variation in harvest rates of male wild turkeys in New York, Ohio, and Pennsylvania. *Journal of Wildlife Management* 76:514-522.

Parent, C. J., B. S. Stevens, A. C. Bowling, and W. F. Porter. 2016. Wild turkey harvest trends across the Midwest in the 21st century. *Proceedings of the National Wild turkey symposium* 11:211-223.

Porter, W. F., W. M. Healy, S. E. Backs, B. F. Wakeling, and D. E. Steffen. 2011. Managing wild turkeys in the face of uncertainty. 2011. *Proceedings of the National Wild Turkey Symposium* 10:1-9.

Stevens, B. S., J. R. Bence, W. F. Porter, and C. J. Parent. 2017. Structural uncertainty limits generality of fall harvest strategies for wild turkeys. *Journal of Wildlife Management*. 81:617-628.

Wright, G. A., and L.D. Vangilder. 2005. Survival and dispersal of eastern wild turkey males in western Kentucky. *Proceedings of the National Wild Turkey Symposium* 9:367-373.

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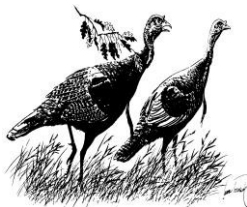


Table 1. Indiana wild turkey harvest by county, spring 2018 and 2019.

County	2018 Reported* Harvest	Percent of Harvest	2019 Reported* Harvest	Percent of Harvest	Difference from prior year	Percent Change
Adams	17	0.2%	13	0.1%	-4	-24%
Allen	119	1.1%	85	0.7%	-34	-29%
Bartholomew	89	0.8%	94	0.8%	5	6%
Benton	10	0.1%	15	0.1%	5	50%
Blackford	9	0.1%	14	0.1%	5	56%
Boone	5	0.0%	8	0.1%	3	60%
Brown	146	1.3%	165	1.4%	19	13%
Carroll	44	0.4%	46	0.4%	2	5%
Cass	75	0.7%	72	0.6%	-3	-4%
Clark	236	2.1%	226	1.9%	-10	-4%
Clay	111	1.0%	129	1.1%	18	16%
Clinton	3	0.0%	10	0.1%	7	233%
Crawford	183	1.6%	223	1.9%	40	22%
Daviess	93	0.8%	106	0.9%	13	14%
Dearborn	257	2.3%	306	2.5%	49	19%
Decatur	42	0.4%	45	0.4%	3	7%
DeKalb	264	2.3%	264	2.2%	0	0%
Delaware	3	0.0%	5	0.0%	2	67%
Dubois	134	1.2%	173	1.4%	39	29%
Elkhart	199	1.8%	221	1.8%	22	11%
Fayette	62	0.5%	69	0.6%	7	11%
Floyd	83	0.7%	83	0.7%	0	0%
Fountain	102	0.9%	106	0.9%	4	4%
Franklin	214	1.9%	271	2.3%	57	27%
Fulton	170	1.5%	165	1.4%	-5	-3%
Gibson	121	1.1%	109	0.9%	-12	-10%
Grant	7	0.1%	9	0.1%	2	29%
Greene	277	2.5%	285	2.4%	8	3%
Hamilton	1	0.0%	1	0.0%	0	0%
Hancock	4	0.0%	7	0.1%	3	75%
Harrison	283	2.5%	316	2.6%	33	12%
Hendricks	35	0.3%	46	0.4%	11	31%
Henry	10	0.1%	14	0.1%	4	40%
Howard	7	0.1%	8	0.1%	1	14%
Huntington	52	0.5%	69	0.6%	17	33%
Jackson	186	1.6%	188	1.6%	2	1%
Jasper	156	1.4%	185	1.5%	29	19%
Jay	43	0.4%	58	0.5%	15	35%
Jefferson	257	2.3%	276	2.3%	19	7%
Jennings	163	1.4%	191	1.6%	28	17%
Johnson	29	0.3%	38	0.3%	9	31%
Knox	83	0.7%	104	0.9%	21	25%
Kosciusko	244	2.2%	289	2.4%	45	18%
Lagrange	240	2.1%	235	2.0%	-5	-2%
Lake	26	0.2%	56	0.5%	30	115%
LaPorte	204	1.8%	184	1.5%	-20	-10%
Lawrence	201	1.8%	222	1.8%	21	10%

Table 1. continued on next page.

Table 1. Indiana wild turkey harvest by county, spring 2018 and 2019. *Continued.*

County	2018 Reported* Harvest	Percent of Harvest	2019 Reported* Harvest	Percent of Harvest	Difference from prior year	Percent Change
Madison	3	0.0%	3	0.0%	0	0%
Marion	1	0.0%	1	0.0%	0	0%
Marshall	267	2.4%	270	2.2%	3	1%
Martin	162	1.4%	216	1.8%	54	33%
Miami	68	0.6%	79	0.7%	11	16%
Monroe	128	1.1%	151	1.3%	23	18%
Montgomery	68	0.6%	64	0.5%	-4	-6%
Morgan	79	0.7%	130	1.1%	51	65%
Newton	133	1.2%	138	1.1%	5	4%
Noble	240	2.1%	275	2.3%	35	15%
Ohio	121	1.1%	112	0.9%	-9	-7%
Orange	176	1.6%	209	1.7%	33	19%
Owen	201	1.8%	201	1.7%	0	0%
Parke	191	1.7%	192	1.6%	1	1%
Perry	253	2.2%	285	2.4%	32	13%
Pike	200	1.8%	195	1.6%	-5	-3%
Porter	74	0.7%	75	0.6%	1	1%
Posey	127	1.1%	132	1.1%	5	4%
Pulaski	174	1.5%	190	1.6%	16	9%
Putnam	183	1.6%	179	1.5%	-4	-2%
Randolph	13	0.1%	13	0.1%	0	0%
Ripley	219	1.9%	216	1.8%	-3	-1%
Rush	6	0.1%	4	0.0%	-2	-33%
Saint Joseph	190	1.7%	167	1.4%	-23	-12%
Scott	122	1.1%	128	1.1%	6	5%
Shelby	14	0.1%	14	0.1%	0	0%
Spencer	160	1.4%	184	1.5%	24	15%
Starke	249	2.2%	212	1.8%	-37	-15%
Steuben	338	3.0%	330	2.7%	-8	-2%
Sullivan	220	1.9%	220	1.8%	0	0%
Switzerland	312	2.8%	283	2.4%	-29	-9%
Tippecanoe	62	0.5%	67	0.6%	5	8%
Tipton	1	0.0%	0	0.0%	-1	---
Union	72	0.6%	62	0.5%	-10	-14%
Vanderburg	45	0.4%	60	0.5%	15	33%
Vermillion	90	0.8%	73	0.6%	-17	-19%
Vigo	146	1.3%	151	1.3%	5	3%
Wabash	117	1.0%	86	0.7%	-31	-26%
Warren	105	0.9%	108	0.9%	3	3%
Warrick	267	2.4%	282	2.3%	15	6%
Washington	164	1.5%	166	1.4%	2	1%
Wayne	65	0.6%	74	0.6%	9	14%
Wells	9	0.1%	10	0.1%	1	11%
White	81	0.7%	94	0.8%	13	16%
Whitley	91	0.8%	109	0.9%	18	20%
Totals	11,306		12,014		708	6%

* Harvest data collected from hunter reports to "Check-IN-Game" (web-based and telephone).

Figure 1. Distribution of 2019 Spring Turkey Harvest

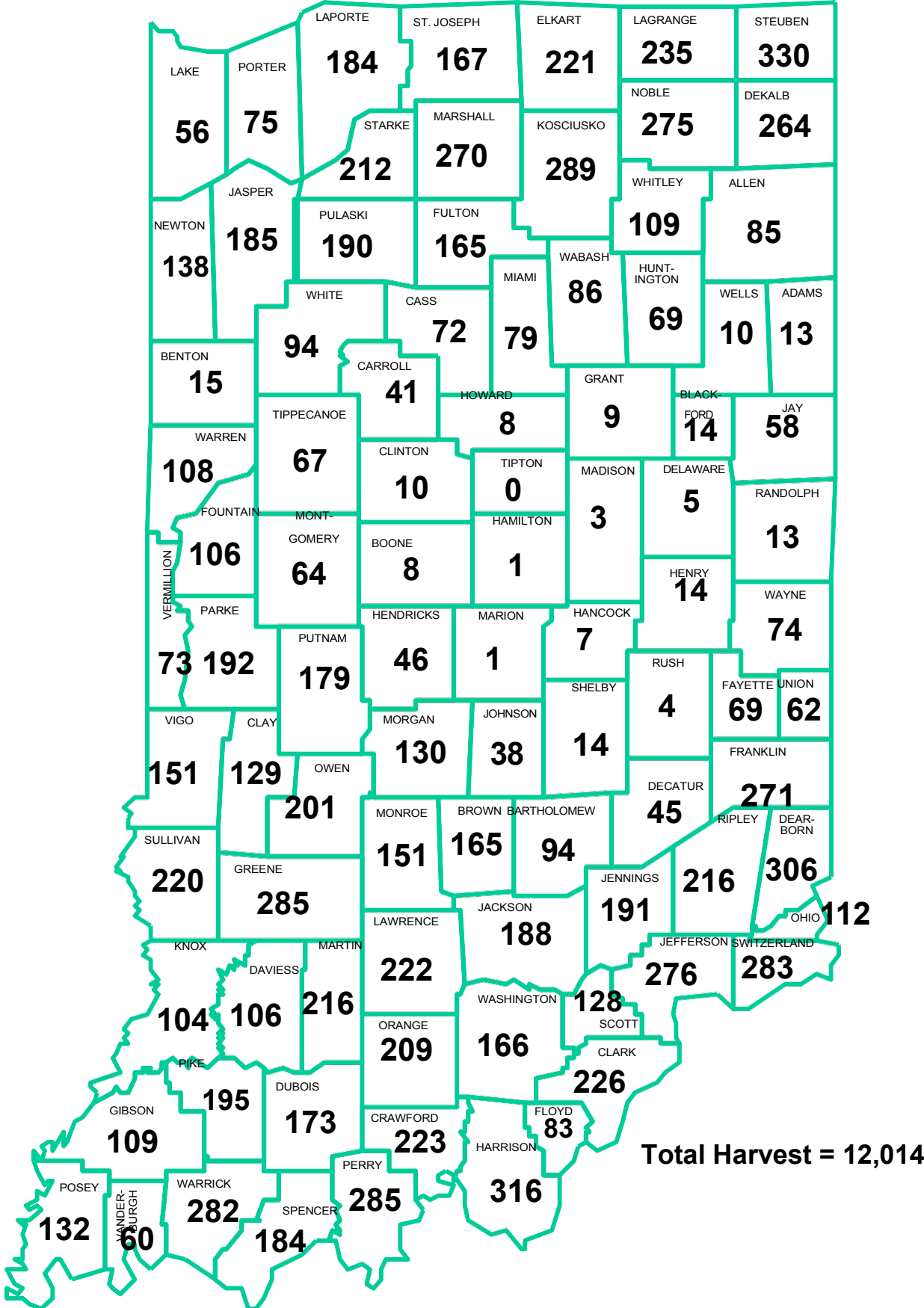


Table 2. Age structure of Indiana's spring gobbler harvests, 1988-2019.

Year	Reported Harvest	Age Class Percentages and Mean Weights (lbs) *					
		1Yr	Wt.	2Yr	Wt	3+Yr	Wt
1988	905	45%	15.4	39%	20.7	16%	21.8
1989	1,359	20%	15.5	63%	20.7	17%	22.2
1990	1,505	31%	15.2	41%	21.0	28%	21.9
1991	2,318	25%	15.5	53%	21.1	22%	22.2
1992	2,531	38%	15.1	43%	20.8	19%	22.2
1993	3,500	18%	15.9	60%	20.9	22%	22.4
1994	3,741	41%	15.2	37%	21.2	22%	22.4
1995	4,706	28%	15.6	55%	20.6	18%	22.1
1996	4,859	24%	15.6	53%	21.6	23%	22.7
1997	5,790	21%	15.7	56%	21.5	24%	22.7
1998	6,384	22%	15.5	51%	21.1	28%	22.5
1999	6,548	25%	15.5	49%	21.1	26%	22.6
2000	7,822	27%	15.2	44%	20.7	28%	21.9
2001	9,975	26%	15.7	50%	20.1	24%	22.1
2002	10,575	27%	15.7	47%	21.3	27%	22.5
2003	10,366	24%	15.3	49%	21.3	28%	22.4
2004	10,765	24%	15.8	49%	21.4	27%	22.8
2005	11,159	33%	14.9	44%	20.9	23%	22.3
2006	13,193	14%	14.5	67%	20.7	19%	22.1
2007	11,163	22%	15.5	42%	21.5	26%	22.6
2008	12,204	22%	16.0	52%	21.7	26%	22.9
2009	12,993	19%	16.0	51%	21.7	30%	22.9
2010	13,742	18%	15.6	54%	21.4	28%	22.6
2011	11,669	21%	15.6	48%	21.3	31%	22.4
2012	12,655	14%	15.9	52%	21.1	34%	22.3
2013	11,374	24%	16.1	38%	21.8	38%	23.2
2014	10,872	17%	15.4	53%	21.7	30%	24.4
2015	11,853	21%	16.6	46%	22.0	33%	23.4
2016	12,081	19%	---	42%	---	39%	---
2017	13,069	13%	---	39%	---	48%	---
2018	11,306	15%	---	38%	---	47%	---
Previous 10 Year Means	12,239	18%		46%		36%	
2019	12,014	18%	---	39%	---	43%	---

* Starting in 2016, age determination based primarily on spur length with secondary verification, if needed, using beard length class. Weights collected at check stations 1988-2015 were discontinued with implementation of web/telephone based "Check-IN-Game" system in 2016. Age class percentages based on harvested male turkeys only; legally harvested female turkeys generally make up <2% (range 1.3 to 2.0%) of harvest.

Table 3. Regional spring turkey harvest parameters and age structure in Indiana, 2008-2019.

	Region (% Forest Cover)						
	N (11%)	EC (6%)	WC (23%)	SC (47%)	SE (32%)	SW (19%)	State (19%)
2007							
Harvest	1,758	51	2,104	2,919	2,831	1,500	11,163
% of Total Harvest	16%	0.5%	19%	26%	25%	13%	---
Juvenile %	32%	38%	23%	18%	18%	22%	22%
Hunt Range (SqMi)*	9,625	5,793	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.18	0.01	0.43	0.58	0.76	0.44	0.34
2008							
Harvest	2,166	60	2,233	3,172	3,057	1,516	12,204
% of Total Harvest	18%	0.5%	18%	26%	25%	12%	---
Juvenile %	34%	25%	22%	19%	18%	18%	22%
Hunt Range (SqMi)	9,625	5,793	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.23	0.01	0.46	0.64	0.83	0.45	0.37
2009							
Harvest	2,561	61	2,072	3,314	3,233	1,752	12,993
% of Total Harvest	20%	0.5%	16%	26%	25%	14%	---
Juvenile %	27%	22%	16%	25%	25%	14%	19%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.27	0.01	0.43	0.66	0.87	0.52	0.40
2010							
Harvest	3,088	94	2,021	3,406	3,340	1,793	13,742
% of Total Harvest	23%	0.7%	15%	25%	24%	13%	---
Juvenile %	25%	28%	20%	15%	14%	17%	18%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.32	0.02	0.42	0.68	0.90	0.53	0.42
2011							
Harvest	2,589	77	1,739	2,902	2,800	1,562	11,669
% of Total Harvest	22%	0.7%	15%	25%	24%	13%	---
Juvenile %	25%	27%	24%	20%	19%	16%	21%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.27	0.01	0.36	0.58	0.76	0.46	0.36
2012							
Harvest	3,007	110	2,008	3,069	2,868	1,593	12,655
% of Total Harvest	24%	0.9%	16%	24%	23%	13%	---
Juvenile %	22%	20%	15%	11%	11%	12%	14%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.31	0.02	0.41	0.61	0.77	0.47	0.39
2013							
Harvest	2,834	106	1,742	2,669	2,592	1,431	11,374
% of Total Harvest	25%	1%	15%	24%	23%	13%	---
Juvenile %	25%	31%	29%	22%	22%	24%	24%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.29	0.02	0.36	0.53	0.70	0.42	0.35
2014							
Harvest	2,733	142	1,658	2,510	2,517	1,312	10,872
% of Total Harvest	25%	1%	15%	23%	23%	12%	---
Juvenile %	22%	28%	18%	14%	15%	15%	17%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.28	0.02	0.34	0.50	0.68	0.39	0.33
2015							
Harvest	3,297	167	1,742	2,712	2,485	1,450	11,853
% of Total Harvest	28%	1%	15%	23%	21%	12%	---
Juvenile %	28%	24%	24%	18%	18%	17%	21%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.34	0.03	0.36	0.54	0.67	0.43	0.36
2016							
Harvest	3,727	215	1,855	2,574	2,390	1,320	12,081
% of Total Harvest	31%	2%	15%	21%	20%	11%	---
Juvenile %	20%	22%	18%	18%	18%	19%	19%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.39	0.03	0.38	0.52	0.65	0.39	0.37
2017							
Harvest	4,068	216	1,974	2,901	2,486	1,424	13,069
% of Total Harvest	31%	2%	15%	22%	19%	11%	---
Juvenile %	17%	21%	12%	8%	12%	10%	13%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.42	0.03	0.41	0.58	0.67	0.42	0.40
2018							
Harvest	3,825	191	1,756	2,162	2,142	1,230	11,306
% of Total Harvest	34%	2%	16%	19%	19%	11%	---
Juvenile %	15%	20%	17%	15%	16%	15%	15%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.40	0.03	0.36	0.43	0.58	0.36	0.35
Previous 10-Year (2009-18) Means							
Harvest	3,173	138	1,857	2,822	2,685	1,487	12,161
% of Total Harvest	26%	1%	15%	23%	22%	12%	---
Juvenile %	22%	24%	19%	17%	17%	16%	18%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.33	0.02	0.38	0.57	0.72	0.44	0.37
2019							
Harvest	3,911	238	1,775	2,486	2,259	1,345	12,014
% of Total Harvest	33%	2%	15%	21%	19%	11%	---
Juvenile %	18%	27%	22%	15%	16%	16%	18%
Hunt Range (SqMi)	9,625	6,178	4,854	4,994	3,705	3,380	32,738
Harvest/SqMI	0.41	0.04	0.37	0.50	0.61	0.40	0.37
2018 to 2019 Differences							
Change in Harvest	86	47	19	324	117	115	708
Percent change in Harvest	2%	25%	1%	15%	5%	9%	6%

* Square miles of open hunting range; does not include closed areas (e.g., Henry County in 2007-2008) or large unhuntable parks and municipal areas.

Figure 2. 2019 Spring wild turkey harvest and age structure by region.

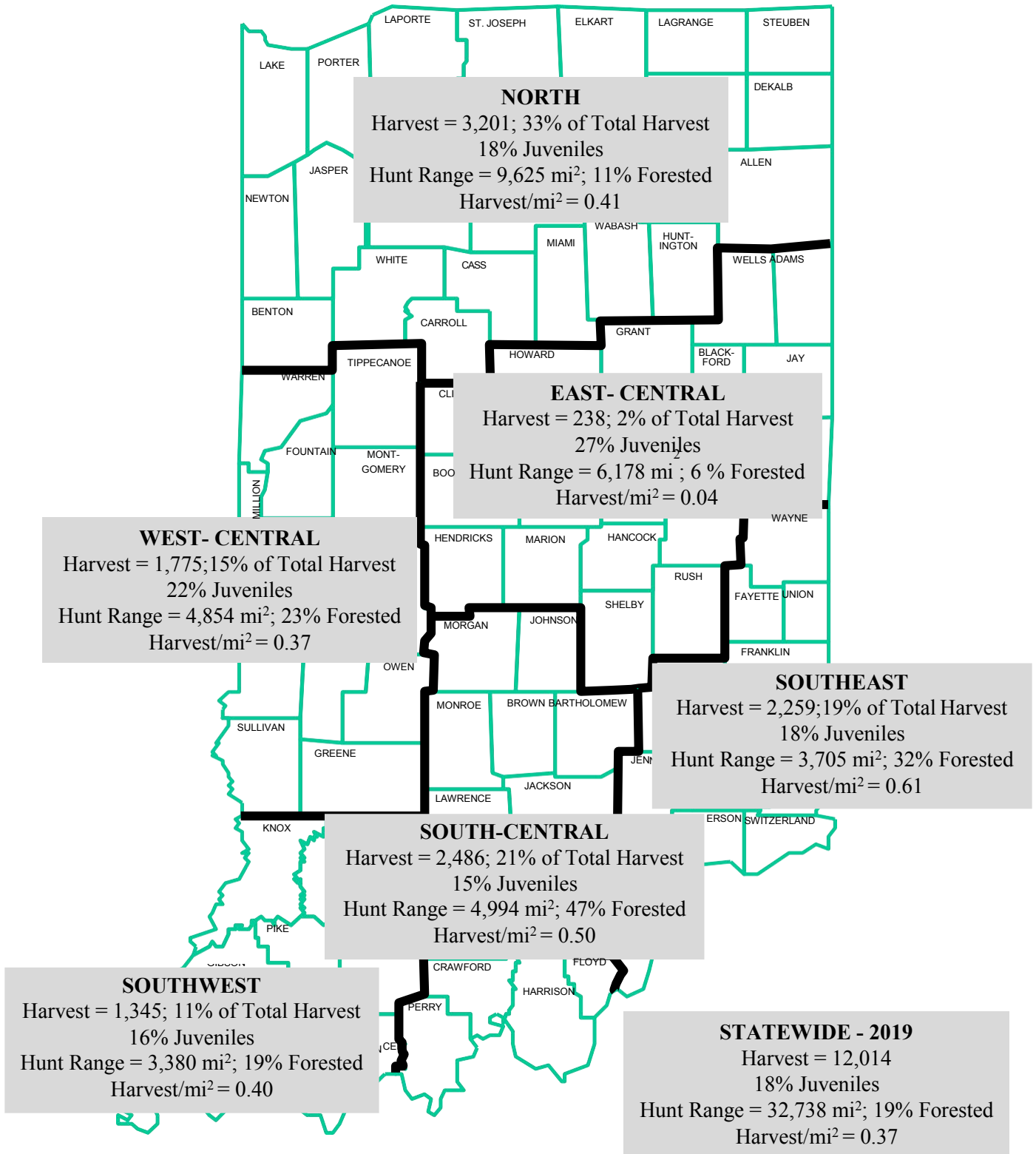


Figure 3. Percent juvenile gobblers in Indiana spring wild turkey harvests, 2007-2019

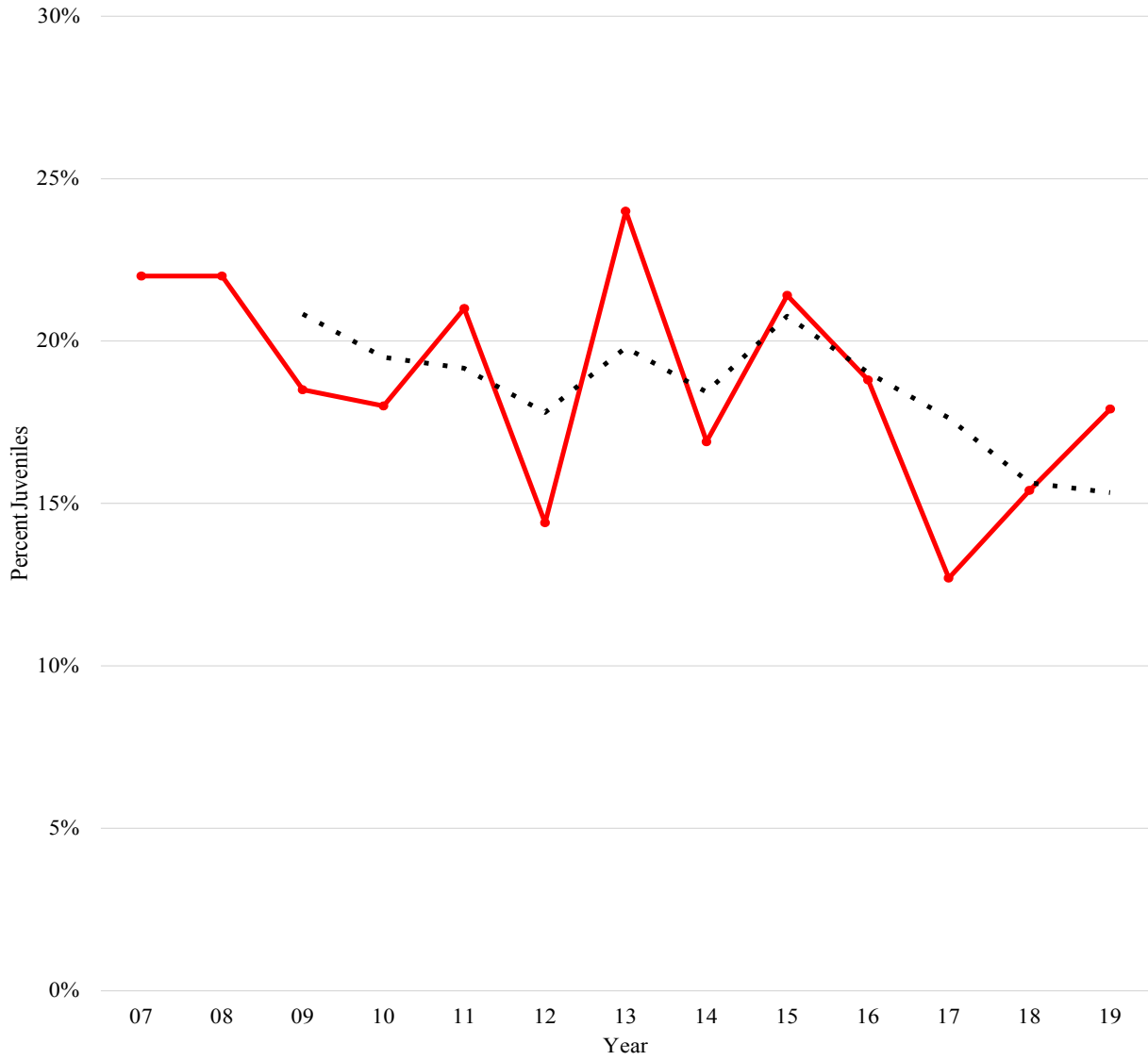


Figure 4. Indiana Regional Spring Wild Turkey Harvests Per Square Mile, 2007 to 2019

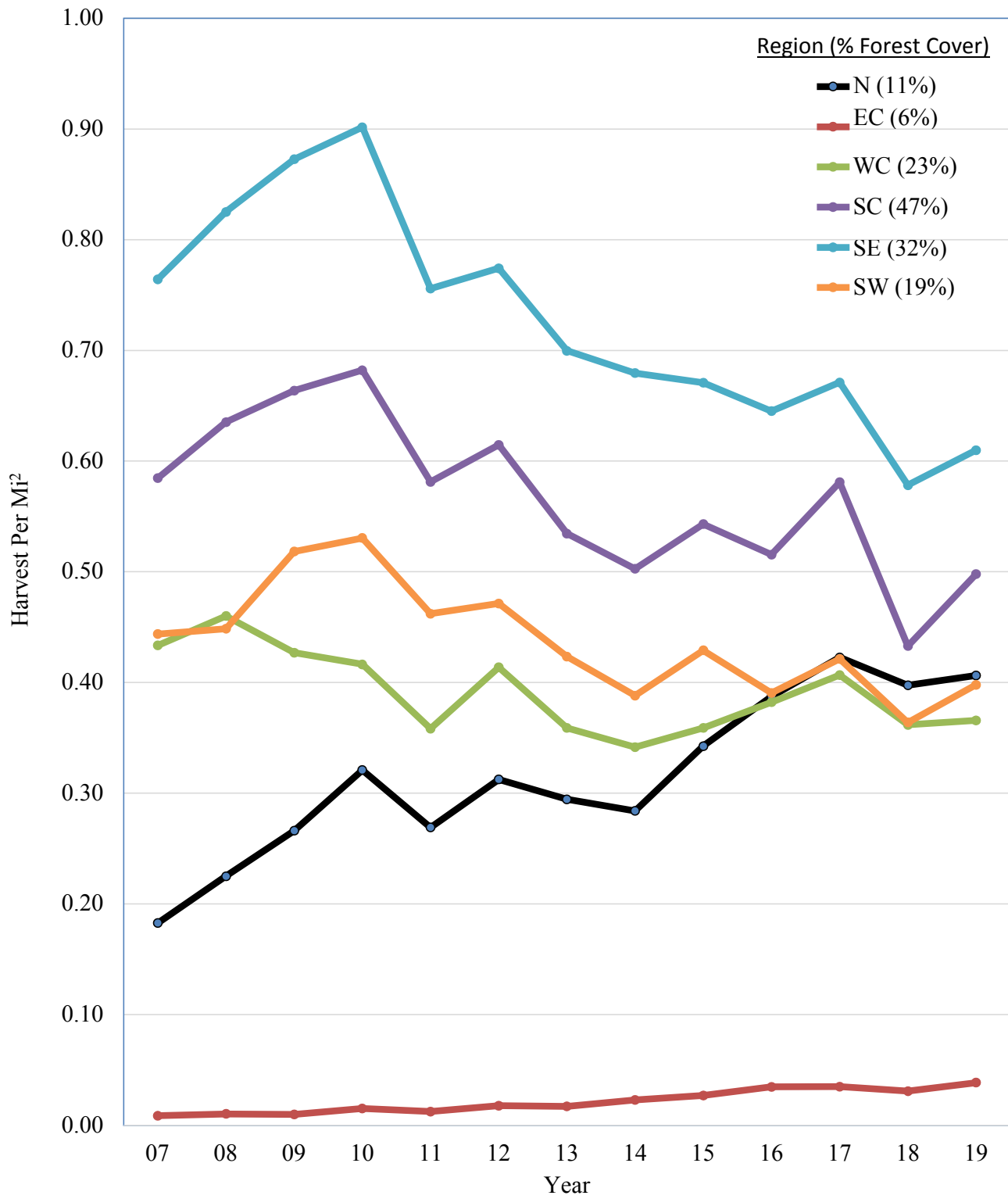


Table 4. Indiana's spring wild turkey hunting seasons, 1970 to 2019 (50 years).

Year	Regular Season Dates	Season Length (Days)	No. of Counties	No. of Permits Sold*	Est. No. of Hunters**	Reported Harvest	Hunter Success
1970	5/2-5/5	4	3	75	62	6	9.7%
1971	5/1-5/5	5	9	298	224	11	4.9%
1972	4/26-4/30	5	9	585	422	12	2.8%
1973	4/25-4/29	5	11	625	503	27	5.4%
1974	4/24-4/28	5	11	665	496	26	5.2%
1975	4/29-5/5	7	11	722	501	15	3.0%
1976	4/29-5/5	7	13	666	500	32	6.4%
1977	4/28-5/5	8	16	668	520	46	8.8%
1978	4/26-5/7	12	18	852	619	33	5.3%
1979	4/25-5/6	12	19	932	860	48	5.6%
1980	4/23-5/4	12	17	706	670	54	8.1%
1981	4/22-5/3	12	18	922	814	90	11.1%
1982	4/21-5/2	12	18	1,125	696	73	10.5%
1983	4/20-5/1	12	18	1,218	984	93	9.5%
1984	4/25-5/6	12	18	1,320	1,205	104	8.6%
1985	4/24-5/5	12	25	1,882	1,302	255	19.6%
1986	4/23-5/4	12	25	2,523	1,648	293	17.8%
1987	4/22-5/6	15	33	3,348	2,619	741	28.3%
1988	4/27-5/11	15	33	10,894	4,677	905	19.4%
1989	4/26-5/10	15	39	11,442	6,068	1,359	22.4%
1990	4/25-5/9	15	39	14,379	7,860	1,505	19.1%
1991	4/24-5/8	15	43	16,387	9,643	2,318	24.0%
1992	4/22-5/6	15	43	18,735	13,110	2,531	19.3%
1993	4/28-5/16	19	48	21,078	15,673	3,500	22.3%
1994	4/27-5/15	19	48	23,357	18,622	3,741	20.1%
1995	4/26-5/14	19	52	28,858	20,861	4,706	22.6%
1996	4/24-5/12	19	52	28,733	21,442	4,859	22.6%
1997	4/23-5/11	19	74	32,703	23,085	5,790	25.1%
1998	4/22-5/10	19	74	32,889	22,876	6,384	27.9%
1999	4/21-5/9	19	74	38,730	27,285	6,548	24.0%
2000	4/26-5/14	19	74	40,801	28,615	7,822	27%
2001	4/25-5/13	19	74	43,815	36,103	9,975	28%
2002	4/24-5/12 [†]	19	90	44,333	37,919	10,575	28%
2003	4/23-5/11	19	90	48,857	40,110	10,366	26%
2004	4/21-5/9	19	90	50,839	41,996	10,765	26%
2005	4/27-5/15	19	88	50,839	49,684	11,159	22%
2006	4/26-5/14	19	88	67,290	50,880	13,193	26%
2007	4/25-5/13 ^{††}	19	91	69,861	53,402	11,163	21%
2008	4/23-5/11	19	91	71,052	55,022	12,204	22%
2009	4/22-5/10	19	92	75,161	59,000	12,993	22%
2010	4/21-5/9	19	92	73,089	56,891	13,742	24%
2011	4/27-5/15	19	92	72,323	56,220	11,669	21%
2012	4/25-5/13	19	92	71,836	60,561	12,655	21%
2013	4/24-5/12	19	92	74,966	60,889	11,374	19%
2014	4/23-5/11	19	92	73,279	59,237	10,872	18%
2015	4/22-5/10	19	92	69,192	55,531	11,853	21%
2016	4/27-5/15	19	92	72,484	56,561	12,081	21%
2017	4/26-5/14	19	92	72,775	58,980	13,069	22%
2018	4/25-5/13	19	92	72,120	60,267	11,306	19%
2019	4/24-5/12	19	92	71,623	59,789	12,014	20%
2020	4/22-5/10	19	92				

* Includes all allowable license types (e.g., lifetime, youth licenses sold by May, non-residnets, and apprentice).

license exempt landowners or military hunters on active leave participating in the spring season.

[†] "All-day" turkey hunting initiated; 1/2 hr prior to sunrise to sunset.

^{††} Beginning with the spring 2007 season, a special 2-day youth-only season is held the weekend prior to the regular season opening.

Bold italics = preliminary estimates based on projecting previous years' trends or means

Figure 5. Indiana Spring Turkey Seasons

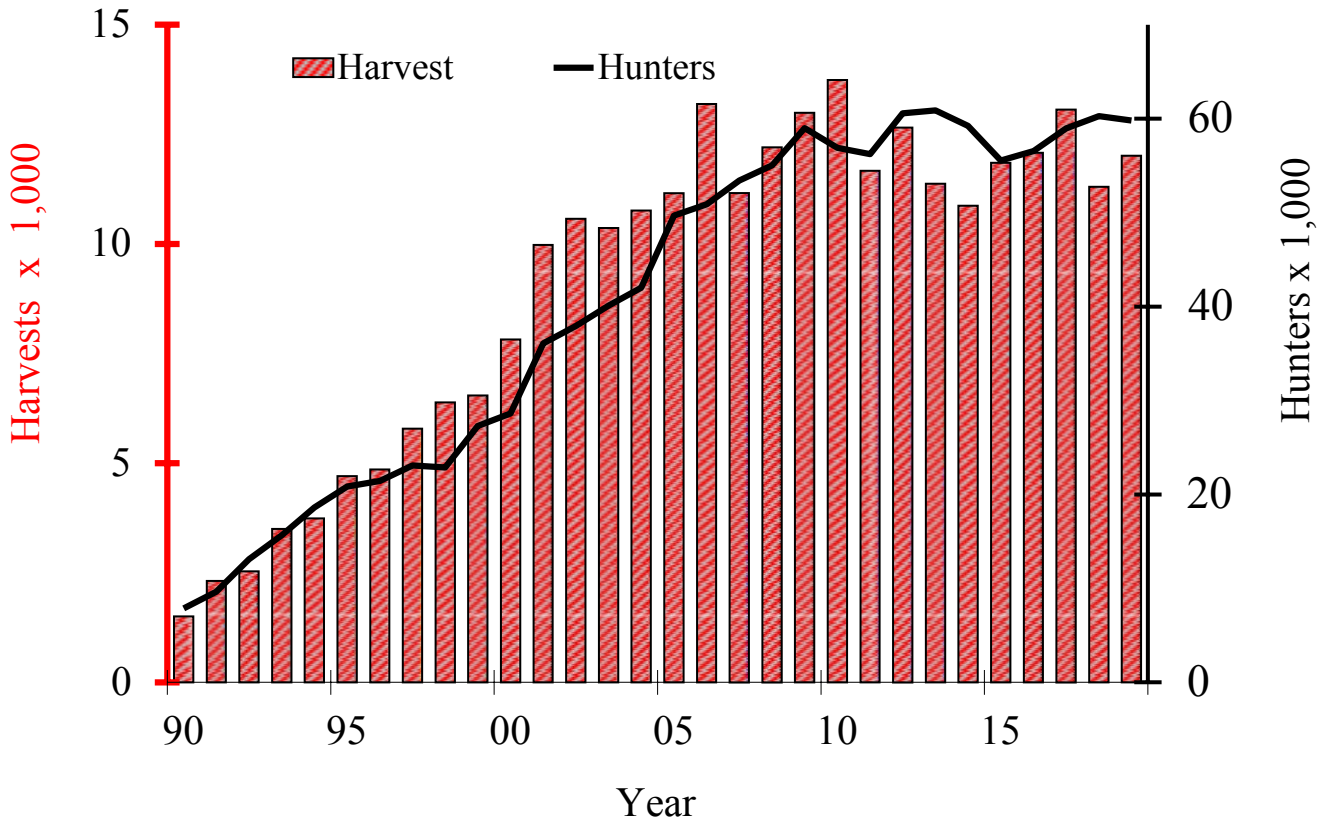


Figure 5. Estimated Indiana Spring Turkey Hunter Success

