# 2013 Indiana Deer Season Summary





"I do not hunt for the joy of killing but for the joy of living, and the inexpressible pleasure of mingling my life, however briefly, with that of a wild creature that I respect, admire, and value." --- John Madson, Out Home, 1979

## **2013 Indiana Deer Harvest Summary**

### Contents

Overview4
Bonus Antlerless Permits5
Deer Harvested by Season5
Harvest by Equipment Type10
Harvest by License Status11
Harvest Age and Sex Structure11
Deer License Sales13
Distribution of Harvest13
Disease Monitoring15



Federal Aid in Wildlife Restoration Program This program supports state fish and wildlife agencies to conserve, protect, and enhance fish, wildlife, their habitats, and the hunting, sport fishing and recreational boating opportunities they provide. This program was initiated in 1937 as the Federal Aid in Wildlife Act and created a system where by taxes are paid on firearms, ammunition and archery equipment by the public who hunts. Today this excise tax generates over a hundred million dollars each year that are dedicated to state wildlife restoration and management projects across the United States.



#### **Overview**

The 2013 Indiana deer hunting season comprised four seasons: Archery (Oct. 1 to Jan. 5), Firearms (Nov. 16 to Dec. 1), Muzzleloader (Dec. 7-22), and Late Antlerless (Dec.

26 to Jan. 5) season in selected counties. Additionally, there was a youth-only season (Sept. 28-29) that was open to youths age 17 or younger who were accompanied by an adult at least 18 years old. Youths could take multiple deer during this special season for the second consecutive year.

The statewide archery bag limit was two deer. Hunters could take one deer per license for a total of either two antlerless deer or one antlered and one antlerless deer. A hunter could take only one antlered deer during all statewide seasons combined using archery, firearm, or muzzleloader licenses. This was the second year that a crossbow was eligible for use through the entire archery season with the use of a crossbow license. Any deer taken with a crossbow counted towards the hunter's archery bag limit.



Archers could harvest deer in designated urban zones that did not count towards any other statewide bag limit. Each urban zone deer required a separate urban deer license, and hunters were required to harvest an antlerless deer prior to taking an antlered deer if hunting with an urban deer license. The archery season in urban deer zones opened two weeks prior to the opening of the early archery season on September 15 and continued through January 31. Archers were allowed to harvest up to either four antlerless deer or three antlerless and one antlered deer during this period. Any deer harvested in an urban deer zone with the appropriate license during this period were in addition to all other bag limits.

The bag limit during firearms season was one antlered deer, and the bag limit for the muzzleloader season was one either-sex deer (maximum of one antlered deer harvested per hunter). A single firearms license was required to hunt with any firearm (shotgun, muzzleloader, rifle, or handgun) during the firearms season, and a muzzleloader license (separate from the firearms license) was required to hunt during the muzzleloader season.

The resident deer license fee was \$24 and the nonresident fee was \$150. This was the second year that a deer license bundle was available, with a resident fee of \$65 and a nonresident fee of \$295. The deer license bundle allowed hunters the opportunity to take two antlerless deer and one antlered deer, or three antlerless deer, across all seasons. When an agricultural advantage could be gained, resident landowners who hunted on land they owned were exempt from purchasing deer licenses, as were lessees who farmed the land. Deer could be checked in online or by phone for the second consecutive year in 2013, though traditional check stations remained active.

Special public hunts were held at Muscatatuck and Big Oaks National Wildlife Refuges, Naval Surface Activity Crane, and Camp Atterbury Joint Maneuver Training Center.

#### **Bonus Antlerless Permits**

An unlimited number of bonus antlerless permits were available at every deer license vendor statewide, and each permit could be used in any county. County bag limits ranged from A to 8 (Figure 1). Permits were available to both resident and non-resident hunters.

Each permit was valid for one antlerless deer, and hunters were allowed to take as many bonus antlerless deer as desired, as long as the county antlerless bag limits were observed.

Bonus antlerless permits cost \$24 and \$150 for the first permit for residents and nonresidents, respectively. The second and each additional permit was \$15 for residents and \$24 for nonresidents.

Bonus antlerless permits could be used during all deer hunting seasons except for "A"designated counties, where the license could only be used beginning on November 28<sup>th</sup>.

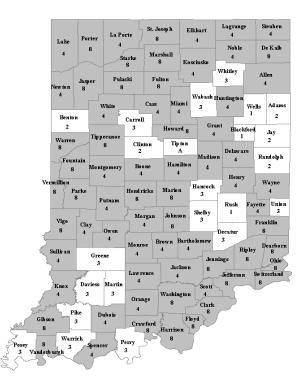


Figure 1. Antlerless deer bag limits in 2013. Shaded counties were eligible for the late antlerless season.

#### **Deer Harvested by Season**

A total of 125,635 deer were reported harvested in Indiana during the 2013 season (Figure 2). This harvest was 8% lower than the 136,248 deer harvested during the 2012 season. The reported antlered deer harvest of 46,240 was nearly identical to the 45,936 reported harvested in 2012. The antlerless harvest of 79,395 was 12% lower than the 90,312 harvested in 2012. In 2013, the reported harvest for total deer ranks sixth all-time, while the total antlerless deer harvest ranks as the fifth highest all-time in Indiana history. The antlered harvest ranks sixteenth all-time.

Of the 125,635 deer reported this year, 64,740 were checked in at check stations, 58,887 were checked in online, and 2,008 were checked in via phone. The phone call-in system cost users \$3/reported animal. Approximately 3.25 million deer have been reported harvested during the past 62 deer hunting seasons in Indiana.

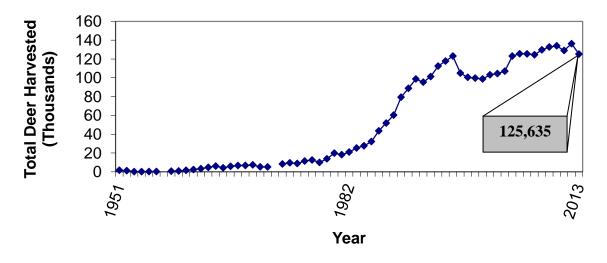


Figure 2. The number of deer harvested in Indiana deer hunting seasons 1951-2013.

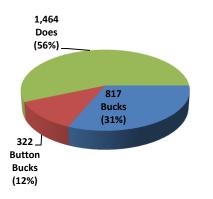


Figure 3. 2013 Youth Season harvest composition

The hunting season began with urban deer zones (Sept. 15) followed by a youth only weekend (Sept. 28-29). This season was created in 2006 and allowed youths 15 years and younger to harvest one antlerless deer. It was changed in 2009 to include all youths 17 years and younger. This year was the 4<sup>th</sup> year youths could harvest an antlered deer during this season, and the 2<sup>nd</sup> year they could harvest more than one deer during the youth season. A total of 2,603 deer were reportedly harvested in 2013 during this season, a decrease of 28% from the 3,597 in 2012. This season resulted in 2% of the total harvest (Table 1). Antlered bucks made up 31% of the harvest, while 12% of the harvest was composed of button bucks (Figure 3).

The archery season harvest (including Urban Deer Zones) of 34,477 deer composed 27% of the total harvest and was 4% less than the 36,033 harvested in 2012 (Table 1). Antlerless deer composed 67% of the total archery harvest, up 1 percentage point from 2012. Bucks made up 33% of the total harvest in archery season.



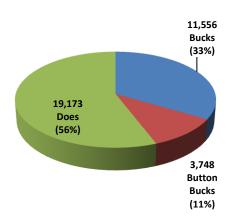


Figure 4. Archery Harvest composition in 2013



Table 1. Number of deer harvested in each segment of the 2013Indiana deer hunting season. Percent of total harvest inparentheses (totals may not be exactly 100 due to rounding).							
Season	Number of deer harvested						
Season	Antlered <sup>#</sup>	Antlerless	Total				
Youth season (28-29 Sept)	817 (2)	1,786 (2)	2,603 (2)				
Archery* (1 Oct - 5 Jan)	11,556 (25)	22,921 (29)	34,477 (27)				
Firearms (16 Nov- 1 Dec)	31,216 (67)	40,556 (51)	71,772 (57)				
Muzzleloader (7 - 22 Dec)	2,483 (5)	7,864 (10)	10,347 (8)				
Late Antlerless** (26 Dec - 5 Jan)	168 (1)	6,268 (8)	6,436 (5)				
Totals	46,240	79,395	125,635				
*Includes Urban Deer Zones **In 69 counties							

#Includes shed buck harvest

The firearms season harvest of 71,772 deer was a decrease of nearly 4% from the 74,487 deer harvested in 2012 and composed 57% of the total harvest (Table 1). The antlerless harvest of 40,558 was nearly 10% less than the 2012 antlerless harvest of 44,835, while the antlered harvest of 31,212 was 5% more than the antlered deer harvest in 2012 (29,652). Antlered deer made up at least half of the total harvest only on opening weekend of firearm season (Nov. 16 and 17), while the harvest of antlerless deer outnumbered antlered deer during the remaining 15 days of the season (Table 2). During the opening weekend of firearms season, only 32% of the total firearm season harvest occurred, down from 50% in 2012. This was likely primarily due to a severe storm that came through the entire state on Sunday afternoon. Opening weekend contributed to 19% of the statewide total harvest for all seasons, which was 8 percentage points less than the opening weekend harvest from 2012. Antlerless deer composed 57% (81% of which were does) of the firearm season harvest (Figure 5).

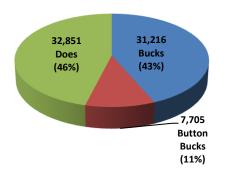


Figure 5. 2013 Firearms season harvest composition



Table 2. Number of deer harvested on each day of the 2013 Indiana firearm season (includes deer taken	
by bow, shotgun, pistol, rifle, and muzzleloader).	

		Antlered		Antlerless		Total	
Date	Day	Ν	Daily %	Ν	Daily %	Ν	Total %
16 November	Sat	11,399	55	9,291	45	20,690	28
17 November	Sun	1,707	51	1,654	49	3,361	5
18 November	Mon	2,421	48	2,591	52	5,012	7
19 November	Tue	2,046	43	2,658	57	4,704	6
20 November	Wed	1,522	42	2,069	58	3,591	5
21 November	Thu	753	44	940	56	1,693	2
22 November	Fri	995	42	1,401	58	2,396	3
23 November	Sat	2,805	39	4,457	61	7,262	10
24 November	Sun	1,613	38	2,615	62	4,228	6
25 November	Mon	492	31	1,118	69	1,610	2
26 November	Tue	475	26	1,368	74	1,843	2
27 November	Wed	485	26	1,409	74	1,894	3
28 November	Thu	818	25	2,435	75	3,253	4
29 November	Fri	1,193	27	3,295	73	4,488	6
30 November	Sat	1,377	27	3,655	73	5,032	7
1 December	Sun	919	28	2,379	72	3,298	4
Totals*		31,020		43,335		74,355	100

\* Totals differ from those in previous table because date of harvest is not known for some registered deer. This table includes deer from both the firearms season and the archery season during this time period.

The muzzleloader season harvest of 10,347 composed 8% of the total harvest, down 1 percentage point from last year (Table 1). This year's reported muzzleloader season harvest was 14% lower than the 2012 muzzleloader harvest (12,040). As in years past, a large percentage of the deer harvested during the muzzleloader season were antlerless (75%) (Figure 6).

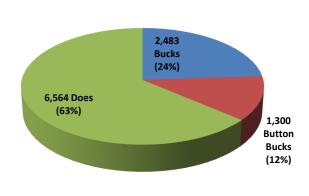




Figure 6. 2013 Muzzleloader season harvest composition

The late antlerless season in counties with a bonus county designation of 4 or more (Figure 1) was held for the second year. A total of 69 counties met this criterion in 2013, down from 74 in 2012. The reported harvest during this season was 6,436, with 81% of the harvest reported as does (Figure 7). Nearly 3% of the harvest was reported as adult males who had already shed their antlers.



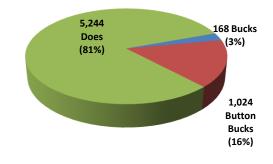


Figure 7. 2013 Late antlerless season harvest composition

#### Harvest by Equipment Type

Six types of equipment were legal for hunting deer during 2013: archery, shotguns, muzzleloaders, handguns, crossbows, and rifles. Rifle cartridges were restricted to .357 diameter or larger bullet, and case length must be between 1.16 and 1.8 inches. Harvest by equipment type is illustrated in Figure 8. Shotgun harvest decreased nearly 11% from 2012, while muzzleloader decreased 16%. Harvest by archery and handguns also decreased (12% and 14%

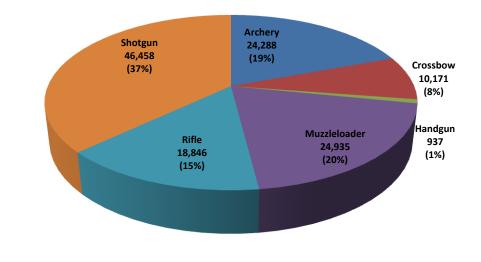


Figure 8. 2013 harvest by equipment type in Indiana

respectively), while reported harvest by crossbow and rifle continued to increase, up 20% and 5% from 2012, respectively (Table 3). This was the second year that crossbows were allowed to be used throughout the archery season without restriction, facilitating the rapid increase in use since 2012.

Equipment type	2008	2009	2010	2011	2012	2013
Bow	26,369 (20)	28,497 (21)	27,186 (20)	26,715 (21)	27,580 (20)	24,288 (19)
Shotgun	68,520 (53)	65,839 (50)	61,920 (46)	54,683 (42)	51,815 (38)	46,458 (37)
Muzzleloader	30,295 (23)	32,745 (25)	33,527 (25)	33,571 (26)	29,488 (22)	24,935 (20)
Handgun	1,949 (2)	1,932 (1)	1,318 (1)	1,028 (1)	1,086 (1)	937 (1)
Rifle	1,788 (1)	2,809 (2)	9,125 (7)	11,930 (9)	17,827 (13)	18,846 (15)
Crossbow	827 (1)	930 (1)	928 (1)	1,091 (1)	8,452 (6)	10,171 (8)
Totals	129,748	132,752	134,004	129,018	136,248	125,635

\*Values within this table do not exactly equal those tallied by season (page 7, Table 1) due to the fact that multiple equipment types can be used during the firearm season. Additionally, differences arise due to the different methods required to analyze data when either the equipment or the season is unknown.



#### Harvest by License Status

Licensed resident hunters (lifetime, resident, and youth license holders) accounted for over 82% of the total deer harvest (Table 4). Licensed nonresident hunters harvested over 3% of the total harvest. Hunters with a regular yearly deer hunting license (resident plus non-resident) took only ~52% of the total deer harvest; hunters not paying the full yearly price (i.e. lifetime license holders, youth license holders, landowners/tenants, and military personnel) took nearly 50% of the total harvest. Landowners and lessees who hunted on their own land without a license and military personnel on official leave status accounted for

Table 4. Harvest distribution of deerby license type during 2013 huntingseason.						
		Percent				
License	Deer	of				
Status	Harvested	Harvest				
Resident	61,471	48.93				
Lifetime	30,593	24.35				
Land Owner	17,414	13.86				
Youth	12,039	9.58				
Nonresident	3,887	3.09				
Military	231	0.18				
Total	125,635	100.0				

 $\sim$ 14% of the total deer harvest. Of the deer harvested by license-exempt hunters, nearly 99% were taken by landowners/tenants while only 1% were taken by military personnel on leave.

#### Harvest Age and Sex Structure

The age and sex structure of the 2013 deer harvest was 37% adult males (antlered bucks), 37% adult females, 11% male fawns (button bucks), and 15% female fawns (Table 5). The proportion of reported antlered deer in the harvest is the second lowest in Indiana's history. About 39% of the antlered bucks and 35% of the adult does harvested during 2013 were yearlings (1.5 years old) (Figure 9). The percentage of harvested yearling bucks decreased by 2 percentage points in 2013 from 2012.

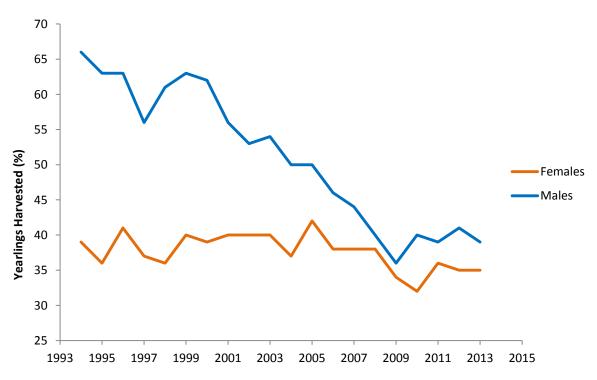


Figure 9. Proportion of male and female yearlings in the harvest (1.5 years old), as determined by aging during the first weekend of the firearms season, for years 1994-2013.

Table 5. Sex and age structure of the Indiana deer harvest between 1987-2013, as determined from	
check stations and online registration.	

		dults		vns	
Year	Males (%)	Females (%)	Males (%)	Females (%)	Total
1987	29,530 (57)	11,139 (21)	6,164 (12)	4,945 (10)	51,778
1988	34,358 (57)	13,170 (22)	7,050 (12)	5,656 (10)	60,234
1989	40,503 (51)	19,464 (24)	10,737 (14)	8,614 (11)	79,318
1990	43,080 (48)	23,680 (27)	12,373 (14)	9,630 (11)	88,763
1991	41,593 (42)	31,211 (32)	14,626 (15)	11,253 (11)	98,683
1992	43,508 (46)	25,387 (27)	14,262 (15)	12,157 (13)*	95,314
1993	44,424 (44)	27,704 (27)	14,751 (15)	14,335 (14)*	101,214
1994	50,812 (45)	32,466 (29)	15,487 (14)	13,651 (12)*	112,416
1995	47,098 (40)	40,946 (35)	16,398 (14)	13,287 (11)*	117,729
1996	47,315 (38)	39,913 (32)	17,307 (14)	18,551 (15)*	123,086
1997	42,537 (41)	35,163 (34)	14,039 (13)	13,198 (12)*	104,937
1998	44,955 (45)	30,711 (31)	12,257 (12)	12,538 (12)*	100,461
1999	46,371 (46)	30,474 (31)	11,645 (12)	11,129 (11)*	99,618
2000	44,621 (45)	31,986 (32)	11,072 (11)	11,046 (11)*	98,725
2001	48,357 (47)	31,806 (31)	11,230 (11)	11,770 (11)*	103,163
2002	47,177 (45)	35,357 (34)	11,291 (11)	10,603 (10)*	104,428
2003	49,533 (46)	36,303 (34)	10,262 (10)	10,887 (10)*	106,986
2004	54,743 (44)	41,749 (34)	12,501 (10)	14,065 (11)*	123,058
2005	52,488 (42)	44,286 (35)	13,030 (10)	15,722 (13)*	125,526
2006	49,097 (39)	45,257 (36)	13,688 (11)	17,339 (14)*	125,381
2007	49,375 (40)	44,514 (36)	13,313 (11)	17,225 (14)*	124,427
2008	50,845 (39)	46,666 (36)	13,083 (11)	19,154 (15)*	129,748
2009	52,878 (40)	48,222 (36)	13,040 (10)	18,291 (14)*	132,431
2010	53,007 (40)	49,911 (37)	13,367 (10)	17,719 (13)*	134,004
2011	50,717 (39)	45,931 (36)	13,058 (10)	19,312 (15)*	129,018
2012	45,936 <sup>#</sup> (34)	54,983 (40)	15,911 (12)	19,418 (14)*	136,248
2013	46,240 <sup>#</sup> (37)	46,229 (37)	14,100 (11)	19,066 (15)*	125,635

\* Number of adult and fawn females is projected from the % fawns of all females aged at the biological check stations (<u>not</u> from the ratio of fawn doe to fawn bucks in the total deer harvest). # Includes shed antlered bucks



#### **Deer License Sales**

Deer license sales decreased this year from 2012 by 4.5% (Table 6), but the number of privileges (number of deer legally allowed to be harvested) only decreased slightly (<1%) due to the increase in license bundle purchases, which allows for the taking of up to 3 deer per license bundle sold.

Table 6. Deer license sales in Indiana by type, 2010-2013.								
	2010	2011	2012	2013*				
Resident Deer License Bundle	n/a	n/a	56,606	59,546				
Resident Archery/Crossbow/Urban	59,473	60,844	33,428	32,669				
Resident Firearm	102,626	103,284	57,092	52,175				
Resident Muzzleloader	21,975	23,956	7,883	6,450				
Resident Military/Refuge	2,541	3,138	1,413	1,116				
Resident Bonus Antlerless	70,673	73,287	32,403	27,993				
Nonresident	11,197	11,889	10,717	10,626				
Youth	38,330	39,030	39,389	41,137				
Total (excluding Youth)	268,485	276,398	199,542	190,575				

\*Total numbers subject to change slightly via refunds or voids

#### **Distribution of the Harvest**

The number of deer harvested in individual counties ranged from 91 in Tipton County to 3,454 in Harrison County (Table 7). Harvest exceeded 1,000 deer in 57 counties; 2,000 deer in 19 counties; and 3,000 deer in three counties. The antlered buck harvest exceeded 1,000 in three counties, while the antlerless harvest exceeded 1,000 deer in 31 counties compared with 42 in 2011. Antlerless deer composed at least 50% of the total harvest in 90 of the state's 92 counties in 2013, similar to 2012. The counties with the highest harvests were Harrison, Washington, Switzerland, Franklin, Steuben, Noble, Parke, Jefferson, Lawrence, and Orange. The counties with the lowest harvests were Tipton, Benton, Blackford, Hancock, Rush, Clinton, Wells, Howard, Shelby, and Marion.



Table 7. Number of deer harvested in each Indiana county during 2013 (after adjustment fo	r
unknowns).	

	Number Harvested			Number Harvested			
				_	#		
County	Antlered <sup>#</sup>	Antlerless	Total	County	Antlered <sup>#</sup>	Antlerless	Total
Adams	213	304	517	Lawrence	882	1,512	2,394
Allen	636	1,031	1,667	Madison	178	369	547
Bartholomew	482	830	1,312	Marion	120	337	457
Benton	59	55	114	Marshall	728	1,470	2,198
Blackford	114	149	263	Martin	626	956	1,582
Boone	179	291	470	Miami	431	742	1,173
Brown	678	1,281	1,959	Monroe	705	1,065	1,770
Carroll	280	491	771	Montgomery	425	695	1,120
Cass	448	728	1,176	Morgan	560	784	1,344
Clark	643	1,287	1,930	Newton	340	457	797
Clay	420	631	1,051	Noble	872	1,762	2,634
Clinton	160	226	386	Ohio	295	611	906
Crawford	864	1,478	2,342	Orange	859	1,501	2,360
Daviess	381	702	1,082	Owen	768	944	1,712
Dearborn	742	1,483	2,225	Parke	907	1,538	2,445
Decatur	324	466	790	Perry	790	1,093	1,883
DeKalb	769	1,316	2,085	Pike	604	815	1,419
Delaware	258	449	707	Porter	417	1,096	1,513
Dubois	661	1,319	1,980	Posey	536	735	1,271
Elkhart	496	850	1,346	Pulaski	641	1,135	1,776
Fayette	291	626	917	Putnam	787	985	1,772
Floyd	292	486	778	Randolph	240	327	567
Fountain	498	919	1,417	Ripley	697	1,268	1,965
Franklin	877	1,864	2,741	Rush	165	186	351
Fulton	537	988	1,525	St. Joseph	416	818	1,234
Gibson	506	969	1,475	Scott	435	725	1,160
Grant	281	437	718	Shelby	183	268	451
Greene	928	1,306	2,234	Spencer	598	790	1,388
Hamilton	162	324	486	Starke	540	1,101	1,641
Hancock	128	192	320	Steuben	1,006	1,646	2,652
Harrison	1,216	2,238	3,454	Sullivan	702	1,025	1,727
Hendricks	253	386	639	Switzerland	931	2,160	3,091
Henry	232	351	583	Tippecanoe	428	849	1,277
Howard	125	278	403	Tipton	54	37	, 91
Huntington	370	515	885	Union	198	316	514
Jackson	820	1,443	2,263	Vanderburgh	279	678	957
Jasper	558	853	1,411	Vermillion	380	608	988
Jay	306	585	, 891	Vigo	617	815	1,432
Jefferson	780	1,630	2,410	Wabash	454	731	1,185
Jennings	805	1,373	2,178	Warren	415	836	1,251
Johnson	235	393	628	Warrick	721	817	1,538
Knox	364	513	877	Washington	1,085	2,044	3,129
Kosciusko	805	1,472	2,277	Wayne	366	633	999
Lagrange	669	1,348	2,017	Wells	178	218	396
Lake	432	856	1,288	White	352	604	956
La Porte	633	1,032	1,665	Whitley	416	551	967
	000	1,002	1,000	wind y	410	551	501

\* Totals may be off ±1 due to rounding during partitioning of harvested deer of unknown sex or county. # Includes shed antiered bucks

#### **Disease Monitoring**

#### Epizootic Hemorrhagic Disease

Thirteen counties were confirmed to have outbreaks of Epizootic Hemorrhagic Disease (EHD) in Indiana in 2013, with 23 other counties reporting its occurrence (Figure 10). EHD was confirmed through laboratory testing in Huntington, Delaware, and Daviess County, with both EHDV-1 and EHDV-2 strains detected. Overall impact from this outbreak was significant in localized areas, but was far less impactful than the EHD outbreak that occurred in 2012.

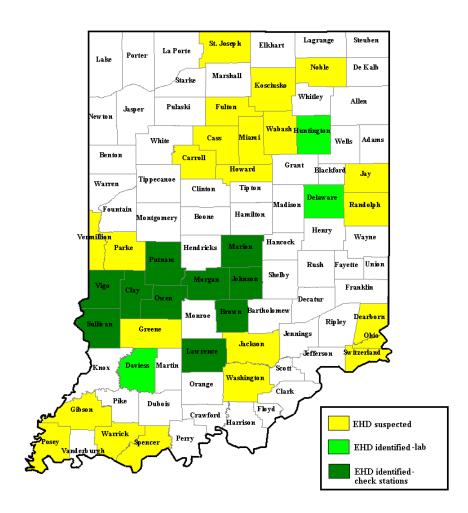


Figure 10. Counties in Indiana with reports or confirmations of EHD in 2013.

#### Chronic Wasting Disease

Chronic Wasting Disease (CWD) is one of a group of diseases called Transmissible Spongiform Encepalopathies, which is a variant of scrapie in sheep and Creutzfeldt-Jakob disease in humans. The agents of CWD are called prions which are abnormal, proteaseresistant forms of cellular proteins normally synthesized in the central nervous system and lymphoid tissues. Prions that cause CWD are highly resistant to heat or disinfectant. No study has ever proven that CWD is transmissible to humans.

CWD has been reported in Wisconsin, Illinois, West Virginia, among other states. In 2002, Indiana created a monitoring program to detect the presence of CWD, which focused on removing the obex or the retropharyngeal gland from random hunter harvested deer throughout the state (active surveillance). Reports of outwardly noticeable sick deer are also tested (targeted surveillance). This monitoring continues today, as well as testing random samples of road killed deer which was instituted in 2007.

The Division of Fish and Wildlife's 2013 CWD sampling effort collected 1,026 deer from hunter harvested and road killed deer. Lab results failed to detect CWD in any samples in 2013. CWD has not been detected in over 13,200 deer during this monitoring period (2002-present).

#### **Bovine Tuberculosis**

The Indiana Division of Fish and Wildlife, along with the Indiana Board of Animal Health and the United States Department of Agriculture, participated in the collection and testing of free ranging white-tailed deer for Bovine Tuberculosis (TB) in 2013. A total of 102 deer were sampled from Franklin, Fayette, and Dearborn County, and analysis from Purdue Animal Disease Diagnostic Lab and the National Veterinary Services Laboratory is complete and failed to detect the presence of TB in any free ranging deer this year. Indiana has tested over 1,200 deer for TB during the past four years and has failed to detect the presence of TB in the free ranging deer herd.

For more information on deer health, visit www.in.gov/dnr/fishwild.

