



# SUMMARY OF 2003-2004 ILLINOIS DEER SEASON



Forest Wildlife Information Series #01-02

September 2004

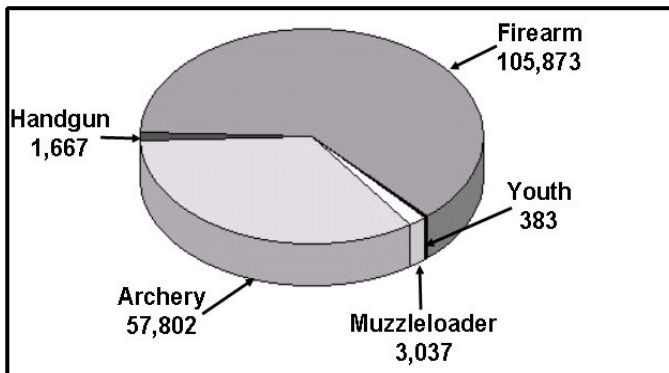
## Introduction



Illinois deer hunters harvested 168,762 whitetails during 2003, surpassing the previous year's harvest of 159,550 by 6%. With an increase in permit availability, the muzzleloader season saw the largest gain in harvest, increasing nearly 135%. The firearm and archery season showed a 1% and 12% increase, respectively, and there was a significant decrease of 22% in the handgun season harvest. This was

due in part to regulatory changes allowing the use of handguns during the regular firearm season. A breakdown of deer harvest by season is provided in Figure 1.

Figure 1. 2003 Illinois deer harvest by season



## Chronic Wasting Disease in Illinois

Prior to the 2003-2004 firearm deer season, 14 CWD-positive deer in two distinct locales were identified by various surveillance methods. The primary area of infection (12 positive animals) was located along the Boone-Winnebago county line northeast of Rockford, while the other infected area (2 positives) was southeast of Woodstock in McHenry County.

During the firearm season, 36 counties were surveyed for CWD, with sampling intensity dependent upon the risk category assigned to each county. A total of 4,439 usable samples were collected, with 17 CWD-positive individuals identified from four counties (Boone [9], DeKalb [3], McHenry [1], and Winnebago [4]). Six additional CWD-positive deer were identified by sampling of the archery harvest; two more by sampling of suspect (sick) animals; and 26 through testing of deer taken by sharpshooters. In all, 51 deer were found to have CWD during the 2003-2004 seasons, and a total of 65 deer have been infected since the disease appeared in the state.

## Season Results

**Firearm:** The 7-day 2003 firearm deer season consisted of one 3-day segment (Friday - Sunday, Nov. 21 - 23) and a second 4-day segment (Thursday - Sunday, Dec. 4 - 7). Statewide corn harvest was more than 95% complete by the onset of firearm season.

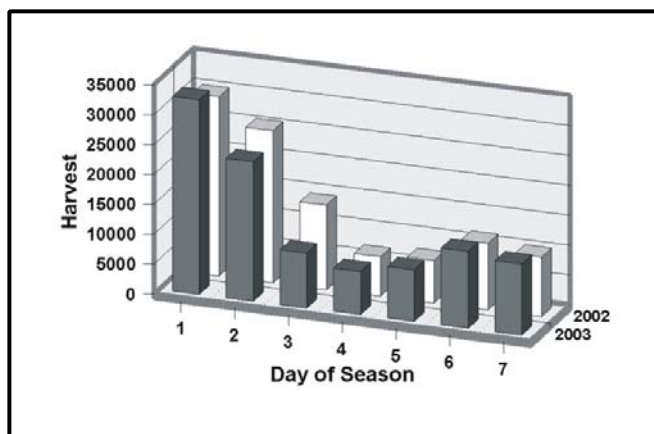
IDNR's Permit Office issued 284,876 county-specific firearm deer permits, resulting in 104,271 deer harvested in the 98 counties open to firearm deer hunting. An additional 3,854 permits (excluding standby permits issued at the sites) were issued for special hunt areas (public lands), with a harvest of 1,602 deer. In comparison, 102,823 deer were harvested using 277,701 county permits in 2002, and special hunt areas accounted for 1,665 deer with 4,037 permits. Hunters with muzzleloading-only permits took 1,417 deer during the second weekend of the 2003 regular firearm deer season. Table 1 presents the number of permits issued and resulting harvest on a statewide basis. Average permit success rates during 2003 decreased by 2 percentage points from 37% to 35% compared to 2002, with the success rate for a full-season either-sex permit dropping to 39%. Daily harvest rates were slightly higher on the first day of the season than the previous year, but dropped significantly (by nearly 5,000) on the third day of the season (Figure 2). Harvest rates remained slightly higher for the remainder of the season.

Table 1. Firearm deer harvest by permit type during 2002

Permit Type <sup>(1)</sup>	Permits Issued	Deer Harvested	Permit Success	% of Harvest
E-S/ Full	145,262	56,915	39%	54%
E-S/1st	410	108	26%	<1%
E-S/2nd	10,319	2,506	24%	2%
A-O/Full	49,102	22,334	45%	21%
A-O/1st	558	114	20%	<1%
A-O/2nd	946	266	28%	<1%
E-S/Free L-T	40,319	10,107	25%	9%
A-O/Free L-T	40,319	10,715	27%	10%
E-S/Paid L-T	6	0	0%	<1%
NRL/E-S	890	332	37%	<1%
NRL/A-O	599	203	34%	<1%
E-S/Muzzle <sup>(2)</sup>	14,498	1,160	N/A	1%
A-O/Muzzle <sup>(2)</sup>	1,689	257	N/A	<1%
Other <sup>(3)</sup>	N/A	856	N/A	<1%
<b>Total</b>	<b>304,917</b>	<b>105,873</b>	<b>35%<sup>(4)</sup></b>	<b>100%</b>

- (1) E-S represents either-sex permits and A-O represents antlerless-only permits. L-T represents landowner-tenant permits.
- (2) Represents permits issued for the muzzleloading-only season that could be used during the second regular firearm season.
- (3) Represents deer tagged with site-specific standby permits or unidentified/incorrectly used permit types.
- (4) Total does not include muzzleloading or "Other" data.

**Figure 2. Daily harvest during the firearm deer seasons - 2002 - 2003**



Weather conditions were somewhat variable across the state during the firearm season. Temperatures were generally warm for the first three days of the season, with mean temperatures in the upper 50s and lower 60s in the central and southern regions, with highs in the southern part of the state reaching near 70. Northern temperatures for the first three days remained in the lower 50s. Temperatures dropped significantly for the second firearm season, with average temperatures in the upper 30s and lower 40s for the central and southern portions, and in the mid 30s in the north. Traces of precipitation were recorded on the second day of the second season in the northern and central regions.

The statewide 2003 firearm harvest is summarized by age and sex in Table 2. *Note:* age or sex data were lacking for 7,593 deer. Concern for traffic safety was the primary reason information was not collected for these deer (i.e., when hunter traffic backed up on major roadways at check stations, checkers only tagged deer and collected hunter permits, but did not age deer). The sex composition of the 2003 firearm harvest was 42% females and 58% males.

**Table 2. Sex and age composition of the 2003 firearm deer harvest\***

Age	Males	% of Males	Females	% of Females	% of Total
Fawn	12,634	22%	8,466	21%	21%
1 ½	18,576	32%	13,593	34%	33%
2 ½	16,667	29%	12,322	30%	29%
3 ½	8,175	14%	4,635	11%	13%
4 ½+	1,817	3%	1,391	3%	3%
<b>Total</b>	<b>57,869</b>	<b>100%</b>	<b>40,407</b>	<b>100%</b>	<b>100%</b>

\* There were an additional 7,597 deer checked through the check stations with no age and/or sex recorded.

IDNR biologists annually monitor the age structure of the antlered buck harvest. This serves as an index of the mortality rate, most of which is accounted for by hunter harvest. Limiting buck mortality at acceptable levels, while controlling population levels through adequate doe harvest, ensures that mature bucks are plentiful in the population, and doe:buck ratios are low. The proportion of yearling bucks (41%) in the antlered harvest during the 2003 firearm season was the lowest in recent years. Age composition of the antlered buck harvest is reported in Table 3.

**Table 3. Age structure of antlered bucks taken during the 2003 firearm season for which age data are available**

Age	Total	Percent of total*
1 ½	18,576	41% (42%)
2 ½	16,667	37% (37%)
3 ½	8,175	18% (18%)
4 ½+	1,817	4% (4%)
	<b>45,235</b>	<b>100%</b>

\* Figures in parentheses represent 2002 percentages.

**Muzzleloading:** The 2003 muzzleloader season was held December 12 - 14. Muzzleloader permit allocation increased significantly, with 14,498 either-sex and 1,689 antlerless-only permits issued. In addition, the muzzleloader harvest of 3,037 represents nearly a 135% increase from the previous year (Table 4). Hunters with muzzleloading-only permits accounted for 70% of the harvest, with the remaining 30% taken primarily by landowners with unfilled property-only permits ("free" landowner permits).

**Table 4. Harvest by permit type during the 2003 muzzleloading deer season**

Permit type <sup>(1)</sup>	Male	Female	Total Harvest	Percent of Harvest
E-S/Muzzle	916	967	1890	62%
A-O/Muzzle	43	202	245	8%
E-S/Free L-T	239	185	425	14%
A-O/Free L-T	74	324	398	13%
NRL/A-O	1	6	7	<1%
NRL/E-S	4	7	11	<1%
Other <sup>(3)</sup>	18	42	61	2%
<b>Totals</b>	<b>1295</b>	<b>1733</b>	<b>3037</b>	<b>100%</b>

(1) E-S represents either-sex permits and A-O represents antlerless-only permits, L-T represents landowner-tenant permits.

(2) Totals for male and female do not include 9 deer for which sex was not identified.

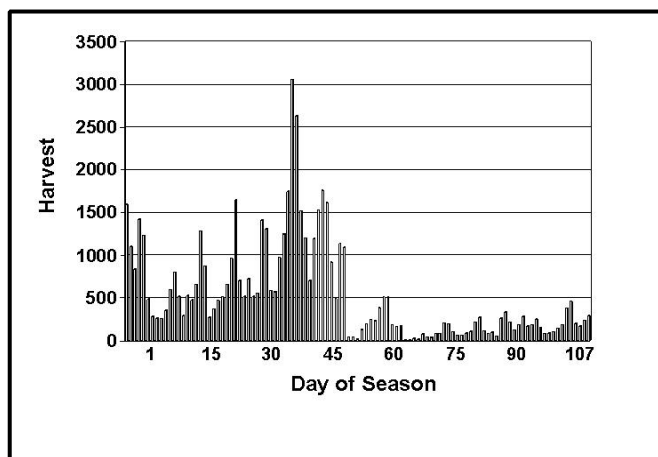
(3) Includes site-specific standby permits and improperly-used permit types

**Archery:** In counties closed to firearm deer hunting, the 2003-2004 archery season consisted of 107 days from October 1, 2003 through January 15, 2004, while in counties open to firearm deer hunting, the season consisted of 100 days. Resident hunters could purchase unlimited numbers of over-the-counter combination permits (each consisting of one either-sex and one antlerless-only tag), but harvest was limited to a maximum of two antlered deer during all seasons (including archery, firearm, and muzzleloader.) Archery harvest increased significantly, from 51,660 in 2002 to 57,802 in 2003 (+11%). The ratio of bucks to does in the harvest was 57:43%. Archery harvest results by county are included in Table 7.

The rate of harvest during the statewide archery season peaked in early to mid-November during the rut, with the weekend of November 8 - 9 having the highest harvest, with over 3,000 deer killed on that Saturday. The opening day of the season on October 1 had the seventh highest harvest, with over 1,500 deer taken.

Daily archery harvest for the 2003-2004 season is shown in Figure 3.

Figure 3. Daily archery harvest during 2003-2004



**Restricted Archery Zone Results:** Special regulations remained in place for the five central Illinois counties in the Restricted Archery Zone (Champaign, DeWitt, Macon, Moultrie, and Piatt). In this zone, only antlered deer were legal during October 1-31, with a maximum harvest of 2 deer (either-sex) per hunter during the archery season. Either-sex hunting resumed November 1 until the close of the season.

Biologists have been closely monitoring the Restricted Zone. While deer harvest has been increasing since implementation of the special regulations, so have population estimates. As a result, for the upcoming 2004 archery season, regulations have been relaxed. The 2-deer bag limit has been removed, and the period of time in which archery hunters can take only antlered deer will be reduced from the original period (October 1 - 31) to October 1 - 15. A comparison of archery harvest in the Restricted Zone counties during the past 5 years is presented in Table 5.

Table 5. Results of regulations (enacted in 1999) in the 5-County Restricted Archery Zone, 2003

County	1998	1999	2000	2001	2002	2003
Champaign	274	161	188	229	211	237
DeWitt	215	163	172	201	254	293
Macon	290	223	200	255	261	296
Moultrie	159	104	120	130	155	167
Piatt	177	122	104	97	123	134
<b>Total</b>	<b>1,115</b>	<b>773</b>	<b>784</b>	<b>912</b>	<b>1004</b>	<b>1,127</b>
<b>Rest of State</b>	<b>35,213</b>	<b>40,573</b>	<b>42,116</b>	<b>46,947</b>	<b>50,656</b>	<b>56,675</b>

**Handgun:** A special handgun hunting season (January 16-18, 2004) was held in 26 counties as authorized by 520 ILCS 5/2.25. A total of 10,632 antlerless-only permits was issued through a randomized lottery drawing. Hunter success averaged 16%, with a harvest of 1,667 deer (Table 6).

Table 6. Handgun harvest results by county - January 2004

County	Permits Issued	Total Harvest	Hunter Success	Antlerless Males <sup>(1)</sup>	Female
Adams	544	63	12%	15	48
Brown	379	76	20%	24	52
Calhoun	306	59	19%	16	43
Clark	259	34	13%	11	23
Crawford	226	41	18%	8	33
Fayette	625	72	11%	22	50
Fulton	503	55	11%	17	37
Greene	298	47	16%	15	30
Jasper	377	56	15%	18	38
Jefferson	663	114	17%	34	80
JoDaviess	737	106	14%	26	79
Lawrence	119	20	17%	5	15
Macoupin	456	42	9%	6	35
McLean	259	25	10%	6	19
Morgan	236	36	15%	13	23
Ogle	380	43	11%	10	33
Perry	508	89	17%	30	57
Pike	895	254	28%	49	200
Randolph	523	73	14%	14	57
Richland	181	40	22%	10	30
Schuyler	369	62	17%	9	53
St. Clair	323	27	8%	8	19
Wayne	566	128	23%	23	104
White	206	52	25%	9	43
Whiteside	149	21	14%	5	16
<u>Williamson</u>	<u>545</u>	<u>32</u>	<u>6%</u>	<u>9</u>	<u>23</u>
<b>Total</b>	<b>10,632</b>	<b>1667</b>	<b>16%</b>	<b>412</b>	<b>1240</b>

(1) Totals for male and female do not include 13 for which sex was not identified.

**Recent Harvest Trends**

Recent trends in the Illinois whitetail harvest have shown a steady increase over the past four years, culminating with record harvests for the 2003 season. While the firearm harvests held steady for several years following the then-record 1995 season, this past years' harvest surpassed that of the previous record. In addition, the archery season also set a new harvest record, surpassing the previous one set in 2002. This continues the pattern of steady annual gains for Illinois bowhunters.

Figure 4. Recent trends in Illinois deer harvest

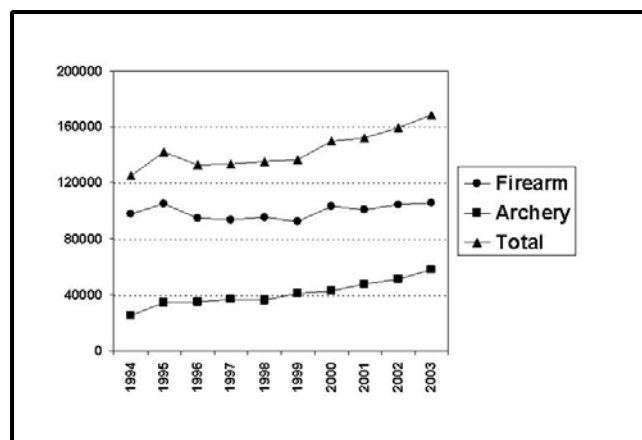


Table 7. Firearm and archery harvest by county, 2003-2004 season

<u>County</u>	<u>Firearm Permits</u>	<u>Firearm Harvest</u>	<u>Archery Harvest</u>	<u>County</u>	<u>Firearm Permits</u>	<u>Firearm Harvest</u>	<u>Archery Harvest</u>
Adams	7810	2802	1015	Macoupin	6294	2111	976
Alexander	1208	358	167	Madison	3605	1068	1006
Bond	2865	950	398	Marion	4780	1922	1155
Boone	1167	301	215	Marshall	1686	724	297
Brown	4160	1368	801	Mason	1512	585	504
Bureau	3351	1526	736	Massac	1872	619	353
Calhoun	4137	1553	1043	McDonough	2450	975	460
Carroll	3068	1137	455	McHenry	2712	621	646
Cass	2287	865	565	McLean	2207	737	568
Champaign	656	270	237	Menard	1531	588	390
Christian	1884	610	401	Mercer	2524	989	149
Clark	3038	1238	529	Monroe	3022	1070	326
Clay	3427	1403	624	Montgomery	3814	1337	616
Clinton	2673	933	460	Morgan	3195	1278	537
Coles	1698	650	478	Moultrie	481	182	167
Cook	0	0	147	Ogle	3695	1220	759
Crawford	2977	1203	674	Peoria	3976	1422	1008
Cumberland	2185	776	318	Perry	4339	1668	713
DeKalb	1112	303	279	Piatt	426	164	134
DeWitt	867	341	293	Pike	9037	3686	3219
Douglas	606	185	186	Pope	6575	2047	808
DuPage	0	0	113	Pulaski	1916	716	309
Edgar	1715	681	332	Putnam	1142	523	235
Edwards	1533	649	199	Randolph	6071	2347	910
Effingham	2980	1008	463	Richland	2320	961	446
Fayette	5701	2164	749	Rock Island	2396	884	485
Ford	397	140	73	Saline	2418	845	481
Franklin	3260	1133	876	Sangamon	2510	809	725
Fulton	6975	2444	1370	Schuyler	4732	1643	613
Gallatin	1770	650	261	Scott	1539	673	260
Greene	3963	1737	695	Shelby	3564	1132	706
Grundy	1154	446	363	St.Clair	3464	1132	762
Hamilton	3239	1398	553	Stark	640	299	149
Hancock	4719	2049	669	Stephenson	2879	1096	457
Hardin	2679	965	337	Tazewell	2343	723	694
Henderson	1889	795	281	Union	5427	1708	623
Henry	2160	831	471	Vermilion	2331	747	1039
Iroquois	1840	684	444	Wabash	901	383	255
Jackson	7282	2204	796	Warren	1497	639	274
Jasper	2942	1172	592	Washington	3851	1529	516
Jefferson	5251	2238	1510	Wayne	3990	1764	843
Jersey	3080	1060	631	White	2525	1126	645
JoDaviess	6658	2356	635	Whiteside	2274	839	442
Johnson	5462	1675	524	Will	1163	272	934
Kane	0	0	491	Williamson	5217	1735	645
Kankakee	963	199	260	Winnebago	2323	593	547
Kendall	470	132	202	Woodford	2318	943	556
Knox	3724	1485	810	<b>Totals<sup>1</sup></b>	<b>284,876</b>	<b>104,271</b>	<b>57,802</b>
Lake	0	0	582				
LaSalle	3387	1264	1223				
Lawrence	1801	815	503				
Lee	2137	840	589				
Livingston	1423	534	292				
Logan	967	413	254				
Macon	695	264	296				

<sup>1</sup> Firearm totals do not include permits issued for, or deer harvested on, special hunt areas.