

SUMMARY OF 2002-2003 ILLINOIS DEER SEASONS



Forest Wildlife Information Series

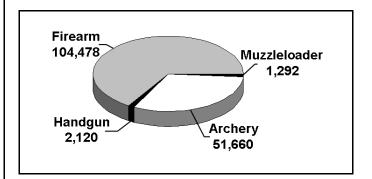
September 2003



Introduction

Illinois deer hunters set a new harvest record during 2002 with 159,550 whitetails, compared to the previous record of 152,756, set in 2001. The firearm and handgun seasons showed a 3% and 1% increase in harvests, respectively, and there was a significant 8% increase in the archery season harvest. However, the muzzleloader season saw a 14% decrease in the whitetail deer harvest. A breakdown of harvest by season is provided in Figure 1.

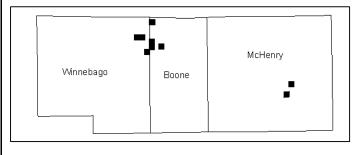
Figure 1. 2002 Illinois deer harvest by season



Chronic Wasting Disease in Illinois

On November 1, 2002, DNR officials received confirmation that a wild Illinois deer had tested positive for chronic wasting disease (CWD). During the ensuing firearm deer season, over 4,000 samples were taken from hunter harvested deer in 36 counties. Six additional CWD-positive deer were identified from these samples. In conjunction with additional surveillance efforts, two clusters of infection were identified - one located along the Boone-Winnebago county line northeast of Rockford, and the other southeast of Woodstock in McHenry County (Figure 2).

Figure 2. CWD-infected Sections



Season Results

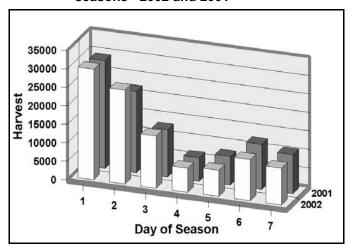
Firearm: The 7-day 2002 firearm deer season consisted of one 3-day segment (Friday - Sunday, Nov. 22 - 24) and a second 4day segment (Thursday - Sunday, Dec. 5 - 8). Statewide corn harvest was more than 95% complete by the onset of firearm season. IDNR's Permit Office issued 277,888 county-specific firearm deer permits, resulting in 102,823 deer harvested in the 98 counties open to firearm hunting. An additional 3,850 permits (excluding standby permits issued at the sites) were issued for special hunt areas (public lands), with a harvest of 1,655 deer. In comparison, 99,906 deer were harvested using 275,435 county permits in 2001, and special hunt areas accounted for 1,398 deer with 3,775 permits. Hunters with muzzleloading-only permits took 624 deer during the second weekend of the 2002 regular firearm deer season. Table 1 presents the number of permits issued and resulting harvest on a statewide basis. Average permit success rates during 2002 increased by 1 percentage point (from 36% to 37%) compared to 2001, with the success rate for a full-season either-sex permit remaining at 40%. Daily harvest rates during the 2002 season were higher than during 2001 on the first four days of the hunting season, with decreases on the last three days (Figure 3). Individual county results are included in Table 7 at the end of this report.

Table 1. Firearm deer harvest by permit type during

| Permit Type ⁽¹⁾ | Permits Issued | Deer <u>Harvested</u> | Permit Success | % of Harvest |
|-------------------------------|-------------------|--------------------------|--------------------|-----------------|
| E-S/ Full | 140,323 | 56,452 | 40% | 54% |
| E-S/1st | 327 | 73 | 22% | <1% |
| E-S/2nd | 14,284 | 3,562 | 25% | 3% |
| A-O/Full | 42,270 | 20,480 | 48% | 20% |
| A-O/1st | 656 | 207 | 32% | <1% |
| A-O/2nd | 3,020 | 902 | 30% | <1% |
| E-S/Free L-T | 39,029 | 9,950 | 25% | 9% |
| A-O/Free L-T | 39,020 | 10,692 | 27% | 10% |
| E-S/Paid L-T | 18 | 6 | 33% | <1% |
| NRL/E-S | 771 | 301 | 39% | <1% |
| NRL/A-O | 508 | 203 | 40% | <1% |
| A-O/Youth | 1,512 | 308 | 20% | <1% |
| E-S/Muzzle ⁽²⁾ | 6,239 | 542 | N/A | <1% |
| A-O/Muzzle ⁽²⁾ | 593 | 82 | N/A | <1% |
| Other (3) | N/A | <u>718</u> | N/A | <1% |
| Total | 288,570 | 104, 478 | 37% ⁽⁴⁾ | 100% |

- E-S represents either-sex permits and A-O represents antlerlessonly 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 3. Daily harvest during the firearm deer seasons - 2002 and 2001



Weather conditions were generally favorable during the firearm season, with temperatures remaining cool, particularly during the fourth and fifth days, when temperatures dropped into the teens and single digits. During the first season, mean temperatures were in the mid to upper 30s, and a trace of snowfall was observed at several locations throughout the state on the first day. During the second season, mean temperatures were generally in the 20s. However, high temperatures reached the upper 40s on the sixth day.

The statewide 2002 firearm harvest is summarized by age and sex in Table 2. *Note:* age or sex data were lacking for 7,455 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 2002 firearm harvest was 42% females and 58% males.

Table 2. Sex and age composition of the 2002 firearm deer harvest *

| Age | Males | % of Males | Females | % of Females | % of Total |
|--------|--------|------------|---------|--------------|---------------|
| Fawn | 14,308 | 25% | 10,054 | 25% | 25% |
| 1 ½ | 18,476 | 33% | 12,668 | 31% | 32% |
| 2 ½ | 15,026 | 27% | 12,000 | 30% | 28% |
| 3 ½ | 7,208 | 13% | 4,293 | 11% | 12% |
| 4 1/2+ | 1,523 | 3% | 1,467 | <u>4%</u> | 3% |
| Total | 56.541 | 100% | 40.482 | 100% | 100% |

^{*} There were an additional 7,455 deer checked through the check stations with no age 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 (42%) in the antlered harvest during the 2002 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 antiered bucks taken during the 2002 firearm season for which age data are available

| Age | _Total_ | Percent of Total* |
|--------|---------|-------------------|
| 1 ½ | 16,871 | 42% (45%) |
| 2 ½ | 14,851 | 37% (36%) |
| 3 ½ | 7,149 | 18% (15%) |
| 4 1/2+ | 1,494 | 4% (3%) |
| | 40,365 | 100% |

^{*} Figures in parentheses represent 2001 percentages.

Muzzleloading: The 2002 muzzleloader season was held December 13-15. Muzzleloader permit allocation decreased slightly overall, with 6,239 either-sex and 593 antlerless-only permits issued. In addition, the muzzleloader harvest of 1,292 deer represents a 14% decrease from the previous year (Table 4). Hunters with muzzleloading-only permits accounted for 56% of the harvest, with the remaining 44% taken primarily by landowners with unfilled property-only permits ("free" landowner permits).

Table 4. Harvest by permit type during the 2002 muzzleloading deer season

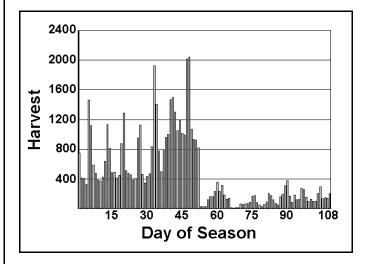
| Permit Type ⁽¹⁾ | Male ⁽²⁾ | <u>Female</u> | Total <u>Harvest</u> | Percent of Harvest |
|----------------------------|---------------------|---------------|-------------------------|-----------------------|
| E-S/Muzzle | 325 | 322 | 649 | 50% |
| A-O/Muzzle | 15 | 57 | 72 | 6% |
| E-S/Free L-T | 169 | 102 | 272 | 21% |
| A-O/Free L-T | 54 | 202 | 257 | 20% |
| Other ⁽³⁾ | 12 | 30 | 42 | <u>3%</u> |
| Totals | 575 | 713 | 1292 | 100% |

- 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 4 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 2002 - 2003 archery season consisted of 108 days from October 1, 2002 through January 16, 2003, while in counties open to firearm deer hunting the season consisted of 101 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 47,858 in 2001 to 51,660 in 2002 (+8%). The ratio of bucks to does in the harvest was 55:45%. 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 16-17 having the highest harvests. The harvest on the first complete weekend of the season was almost as high as during mid November. Daily archery harvest for the 2002-2003 season is shown in Figure 4.

Figure 4. Daily archery harvest during 2002-2003



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' goal for the Restricted Zone was to reduce archery harvest by more than 20% from 1998 levels, with a heavy emphasis on reduction of the doe kill. 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, 2002

| | | | | | | Average % |
|------------------|------------|------------|------------|-----------|------------|-------------|
| County | 1998 | 1999 | 2000 | 2001 | 2002 | Reduction |
| Champaign | 274 | 161 | 188 | 229 | 211 | -28% |
| DeWitt | 215 | 163 | 172 | 201 | 254 | -8% |
| Macon | 290 | 223 | 200 | 255 | 261 | -19% |
| Moultrie | 159 | 104 | 120 | 130 | 155 | -20% |
| <u>Piatt</u> | <u>177</u> | <u>122</u> | <u>104</u> | <u>97</u> | <u>123</u> | <u>-37%</u> |
| Total | 1,115 | 773 | 784 | 912 | 1004 | -22% |
| Rest of State | 35,213 | 40,573 | 42,116 | 46,947 | 50,656 | +28% |

Handgun: A special handgun hunting season (January 17-19, 2003) was held in 26 counties as authorized by 520 ILCS 5/2.25. A total of 11,713 antlerless-only permits was issued through a randomized lottery drawing. Hunter success averaged 18%, with a harvest of 2,120 deer (Table 6). Although interest in this season continues to grow, and support for expansion into new counties is strong, it is unlikely that IDNR will be able to increase the number of open counties in the absence of legislation to liberalize handgun deer hunting.

Table 6. Handgun harvest results by county - January 2003⁽¹⁾

| | Permits | Total | Hunter | Antlerless | |
|---------------|---------------|----------------|------------|------------|---------------|
| <u>County</u> | <u>Issued</u> | <u>Harvest</u> | Success | Males(2) | <u>Female</u> |
| Adams | 514 | 81 | 16% | 22 | 59 |
| Brown | 406 | 93 | 23% | 28 | 65 |
| Calhoun | 327 | 93 86 | 26% | 16 | 69 |
| Clark | 276 | 51 | 18% | 7 | 44 |
| Crawford | 235 | 55 | 23% | 9 | 41 |
| Fayette | 660 | 92 | 23% 14% | 28 | 64 |
| Fulton | 597 | 92 86 | 14% | 26 26 | 60 |
| | 317 | | 21% | 18 | |
| Greene | | 68 05 | | | 50 |
| Jasper | 410 | 85 | 21% | 23 | 62 |
| Jefferson | 682 | 145 | 21% | 33 | 111 |
| JoDaviess | 782 | 128 | 16% | 33 | 95 |
| Lawrence | 133 | 31 | 23% | 9 | 21 |
| Macoupin | 532 | 59 | 11% | 3 | 53 |
| McLean | 290 | 44 | 15% | 15 | 29 |
| Morgan | 243 | 47 | 19% | 18 | 29 |
| Ogle | 416 | 44 | 11% | 7 | 36 |
| Perry | 487 | 89 | 18% | 21 | 68 |
| Pike | 954 | 273 | 29% | 61 | 211 |
| Randolph | 540 | 91 | 17% | 25 | 66 |
| Richland | 197 | 49 | 25% | 13 | 36 |
| Schuyler | 416 | 70 | 17% | 19 | 51 |
| St. Clair | 343 | 43 | 12% | 11 | 31 |
| Wayne | 603 | 150 | 25% | 42 | 108 |
| White | 221 | 63 | 28% | 6 | 56 |
| Whiteside | 195 | 16 | 8% | 4 | 12 |
| Williamson | 650 | 67 | 10% | 18 | 49 |
| Total | 11,613 | 2,106 | 18% | 515 | 1576 |
| | | | | | |

- Number of permits issued and deer harvested do not include special hunt areas. Grand totals including these areas are 11,713 permits and 2.120 deer harvested.
- (2) Totals for male and female do not include 15 for which sex was not identified.

Recent Harvest Trends

Following the then-record harvest in 1995, deer harvests were relatively stable through 1999, with an increasing trend becoming evident over the last three years. Firearm harvest jumped significantly in 2000 but has since stabilized, while archery continues a long trend of steady annual gains.

Figure 5. Recent trends in Illinois deer harvest

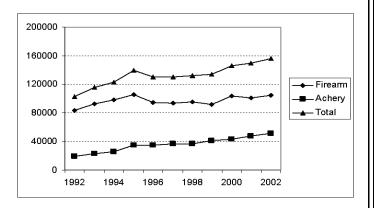


Table 7. Firearm and archery harvest by county, 2002-2003 season

| | Firearm | Firearm | Archery | | Firearm | Firearm | Archery |
|------------------|----------------|----------------|------------------------|-------------------------|--------------------------|-------------------------|-------------------------|
| <u>County</u> | <u>Permits</u> | <u>Harvest</u> | <u>Harvest</u> | County | <u>Permits</u> | <u>Harvest</u> | <u>Harvest</u> |
| Adams | 7627 | 2737 | 839 | Macoupin | 6205 | 2105 | 755 |
| Alexander | 1188 | 366 | 191 | Madison | 3403 | 1115 | 915 |
| Bond | 2816 | 1013 | 364 | Marion | 4503 | 1970 | 1067 |
| Boone | 1055 | 259 | 196 | Marshall | 1604 | 586 | 266 |
| Brown | 4169 | 1623 | 694 | Mason | 1455 | 567 | 485 |
| Bureau | 3306 | 1287 | 584 | Massac | 1767 | 594 | 378 |
| Calhoun | 3927 | 1524 | 911 | McDonough | 2364 | 929 | 390 |
| Carroll | 2975 | 977 | 380 | McHenry | 2844 | 570 74.0 | 603 |
| Cass | 2191 | 786 | 480 | McLean | 2215 | 716 | 462 |
| Champaign | 608 | 227 | 211 | Menard | 1481 | 539 | 332 |
| Christian | 1791 | 568 | 362 | Mercer | 2497 | 873 | 289 |
| Clark | 2948 | 1190 | 489 | Monroe | 2831 | 1195 | 280 |
| Clay | 3276 | 1424 | 560 | Montgomery | 3745 | 1337 | 513 |
| Clinton | 2373 | 917 | 481 | Morgan | 3116 | 1221 | 495 |
| Coles | 1678 | 639 | 466 | Moultrie | 440 | 172 | 155 |
| Cook | 0 | 0 | 128 | Ogle | 3776 | 1186 | 600 |
| Crawford | 2830 | 1236 | 564 | Peoria | 3906 | 1292 | 889 |
| Cumberland | 2021 1145 | 741 | 252 | Perry | 4381 | 1819 | 709 |
| DeKalb DeWitt | 830 | 306 314 | 242 254 | Piatt Pike | 403 9024 | 180 3691 | 123 2874 |
| | 585 | 214 214 | 25 4 137 | | 902 4 6520 | 2130 | 713 |
| Douglas | 0 | 0 | 106 | Pope Pulaski | 1815 | 738 | 7 13 325 |
| DuPage | 1639 | 679 | 302 | | 1111 | 736 440 | 325 175 |
| Edgar | 1459 | 596 | 302 168 | Putnam | 6070 | 2534 | 843 |
| Edwards | 2719 | 982 | 375 | Randolph Richland | 2286 | 253 4 932 | 6 4 3 441 |
| Effingham | 5612 | 2134 | 653 | | 2357 | 932 726 | 44 i 418 |
| Fayette Ford | 376 | 116 | 61 | Rock Island Saline | 2376 | 726 889 | 416 426 |
| Franklin | 3004 | 1171 | 840 | | 2376 2476 | 790 | 624 |
| Fulton | 6926 | 2298 | 1193 | Sangamon Schuyler | 4686 | 790 1710 | 558 |
| Gallatin | 1736 | 678 | 254 | Scott | 1488 | 682 | 229 |
| Greene | 3860 | 1789 | 608 | Shelby | 3515 | 1129 | 631 |
| Grundy | 1166 | 378 | 346 | St.Clair | 3432 | 1270 | 683 |
| Hamilton | 3037 | 1402 | 468 | Stark | 617 | 232 | 162 |
| Hancock | 4630 | 1910 | 546 | Stephenson | 2902 | 1024 | 396 |
| Hardin | 2623 | 1025 | 356 | Tazewell | 2321 | 758 | 654 |
| Henderson | 1864 | 713 | 227 | Union | 5248 | 1880 | 570 |
| Henry | 2166 | 713 789 | 388 | Vermilion | 2273 | 772 | 915 |
| Iroquois | 1700 | 606 | 339 | Wabash | 845 | 397 | 251 |
| Jackson | 7159 | 2608 | 737 | Warren | 1532 | 612 | 225 |
| Jasper | 2941 | 1209 | 552 | Washington | 3725 | 1504 | 524 |
| Jefferson | 5201 | 2333 | 1389 | Wayne | 3841 | 1689 | 722 |
| Jersey | 2804 | 1006 | 536 | White | 2421 | 1117 | 552 |
| JoDaviess | 6679 | 2148 | 520 | Whiteside | 2313 | 767 | 368 |
| Johnson | 5148 | 1760 | 537 | Will | 1041 | 260 | 805 |
| Kane | 0 | 0 | 412 | Williamson | 5175 | 1696 | 797 |
| Kankakee | 953 | 218 | 233 | Winnebago | 2279 | 575 | 469 |
| Kendall | 467 | 130 | 166 | Woodford | 2269 | <u>838</u> | 539 |
| Knox | 3690 | 1277 | 592 | Totals ¹ | 277,888 | 102,823 | 51,660 |
| Lake | 0 | 0 | 535 | iotais | 211,000 | 102,020 | 31,000 |
| LaSalle | 3294 | 1149 | 1068 | | | | |
| Lawrence | 1746 | 812 | 492 | ¹ Firearm to | tals do not inc | clude permits issu | ued for, or deer |
| Lee | 2103 | 725 | 535 | | | nt areas. Grand | |
| Livingston | 1389 | 460 | 259 | | | ermits and 104,478 | |
| Logan | 947 | 367 | 226 | | · | | |
| Macon | 617 | 259 | 261 | | | | |
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