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JOB COMPLETION REPORT
RESULTS OF THE 1994 ILLINOIS FIREARM
DEER HUNTER SURVEY

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Prepared by:
William L. Anderson, Paul A. Shelton and John H. Kube



Brent Manning, Director

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

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Mike Sweet
P-R Coordinator

Jeffrey M. Ver Steeg, Chief
Division of Wildlife Resources

Illinois Department of Natural Resources
Division of Wildlife Resources
Administrative Report
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RESULTS OF THE 1994 ILLINOIS FIREARM DEER HUNTER SURVEY
(WITH INPUT FROM ARCHERY HUNTERS)

William L. Anderson, Investigation and Surveys Program

Paul A. Shelton, Forest Wildlife Program

John H. Kube, Forest Wildlife Program

Abstract: Holders of 1994 paid firearm deer hunting permits were surveyed via mail-letter questionnaire to determine characteristics of firearm deer hunters, their hunting activities, and deer harvest. Attitudes/opinions of these permittees, plus those of paid archery deer permit holders, toward firearm deer hunting regulations were also solicited. From a mailing list of 4,064 permit holders, 3,079 (76%) usable responses were received. Sixty-four percent of the firearm permit holders obtained 1 permit, 32% obtained 2 permits, and 4% obtained ≥ 3 permits. Thirty-three percent of the firearm permit holders also had an archery permit, and 36% of the archery permit holders also had a firearm permit. Ninety-six percent of the firearm permit holders spent ≥ 1 day afield hunting deer in 1994; the average was 4.27 days (61% of total available) per hunter. Eighty percent of the hunters were afield on opening day, and 22% were afield on all 7 days of the season. Only 45% of the hunters were afield on the first day (Thursday) of the second 4 days of hunting. There was an average of 0.39 hunters per 100 acres of land area, and 3.25 hunters per 100 acres of forestland, in Illinois in 1994. Statewide, 85% of the hunters were active on private land, but in Administrative Region 5, where the Shawnee National Forest is located, 31% pursued deer on public land. Fifty-four percent of the hunters reported harvesting ≥ 1 deer in 1994. The harvest averaged 0.69 deer per active hunter, 0.61 deer per firearm permit holder, and 0.45 deer per paid firearm permit issued. Sixty-four percent of the deer harvest occurred during the first 3 days of the season. Fifty-two percent of the hunters passed up opportunities to shoot at deer, especially antlerless deer. Hunters in Administrative Region 2 spent less time afield and were less successful in harvesting deer than hunters in the remainder of the state. An estimated 53,000 firearm deer hunters used tree stands without safety belts. Majorities (or pluralities) of firearm-only permit holders, firearm/archery permit holders, and archery-only permit holders approved of the dates used for the 1994 firearm deer season (November 18-20 and December 1-4), rejected changing from a split 7-day season to a single 9-day season, disagreed with legalizing handguns and crossbows during the firearm deer season, thought the special muzzleloader and handgun seasons should be held in January, and

supported a "quality buck" program on selected state-controlled areas. Firearm deer hunters spent an average of \$206 per hunter, and a total of \$27.9 million, to pursue their sport in Illinois in 1994. The management implications of these findings are discussed.

After being decimated in the late 1800s, Illinois' white-tailed deer herd recovered and, in fact, has undergone phenomenal growth in recent decades. The increase in deer abundance apparently began in 1901 when the State legislature extended complete protection to the species (Pietsch 1954). Boosted by transplants and immigration, the whitetail population increased sufficiently to reestablish the species as legal game in 1957. In that year, the Illinois Department of Conservation (largest agency forming the current Illinois Department of Natural Resources [DNR]) issued 12,667 firearm and archery permits, and 1,955 deer were harvested (J.H. Kube, unpubl. data). In comparison, 438,675 firearm and archery permits were issued for the 1994 season, and 123,330 deer were harvested (Table 1; and P.A. Shelton, unpubl. data).

From 1989 through 1993, more hunters spent more days afield hunting deer than any other game species in Illinois (Anderson et al. 1995). A total of 222,832 residents had firearm and/or archery deer hunting permits for the 1994 season. Clearly, the white-tailed deer is currently the most popular game species in the Prairie State. At the same time, the increase in deer abundance "...has generated problems for many farmers, foresters, and motorists. Limited forest cover interlaced with farms, factories, and highways make it difficult for deer to move about

without conflicts with human activities" (Nixon et al. 1991).

To effectively manage the deer herd, the DNR strives to balance the desires of hunters for an abundance of deer with those of farmers and others who wish to control the population. Part of this effort involves the collection of information from both deer hunters and farmers. Thus, the purpose of the present study was to compile information from firearm deer hunters about their activities, deer harvest, and attitudes/opinions of deer hunting regulations and related issues. The attitudes/opinions of archery deer hunters were also solicited. Surveys such as this one improve the DNR's understanding of rank-and-file hunters toward the white-tailed deer resource and the sport of deer hunting.

Previous surveys of Illinois deer hunters were conducted following the 1981 and 1989 seasons for both firearm and archery hunters (Kube 1984; Anderson and Kube 1990), and following the 1992 season for archery hunters (Anderson et al. 1994). The attitudes of Illinois farmers toward deer and deer hunters were assessed in a survey conducted in 1990 (Morgan et al. 1992).

METHODS AND MATERIALS

The DNR Permit Office issued 222,832 residents a total of 438,115 deer hunting permits for the 1994 season (Table 1). There were 140,646 individuals who received ≥ 1 paid firearm permits for the regular deer hunting season (landowner, muzzleloader, and handgun permits excluded) and 83,678 individuals who received ≥ 1 paid archery permits. To develop the

mailing list for the present survey, these two groups of permit holders were randomly sampled at the rate of 2.2% and 1.2%, respectively. The intent was to select $\geq 3,000$ firearm permittees and $\geq 1,000$ archery permittees for sampling.

A 6-page, 37-question questionnaire was developed specifically for the 1994 Illinois Deer Hunter Survey (Fig. 1). This questionnaire and a letter of explanation (Fig. 2) were mailed to 4,064 individuals (3,050 firearm permittees and 1,014 archery permittees) on 13 January 1995. Non-respondents were sent a second copy of the questionnaire and an accompanying letter (Fig. 3) on 1 March. As of 26 May 1995, 3,079 usable questionnaires were returned for a response rate of 76%.

Data obtained from returned questionnaires were transferred to a computer file using a data management program (Ashton-Tate dBASE III+). Descriptive statistics were calculated using SPSS/P+2.0 (SPSS Inc.). The results were tabulated and interpreted relative to type of permit holder and, in some cases, by administrative region (Fig. 4). Data from Iverson et al. (1989) were used to calculate the densities of hunter activity and deer harvest relative to land area and forestland in each administrative region.

HUNTING REGULATIONS IN 1994

The regular firearm deer hunting season took place in 98 of the 102 counties in Illinois (Cook, DuPage, Kane, and Lake excluded) on 18-20 November and 1-4 December 1994. The muzzleloading rifle season occurred in the same 98 counties on 9-

11 December (permittees could also hunt on 1-4 December). The handgun season (13-15 January 1995) took place in 20 counties. Legal shooting hours for these seasons were 1/2 hour before sunrise to sunset.

The archery deer hunting season was 1 October 1994 to 12 January 1995 in Cook, DuPage, Kane, and Lake counties. The same season dates applied to the other 98 counties, except archery hunting was suspended during the firearm deer season. Shooting hours were 1/2 hour before sunrise to 1/2 hour after sunset. For both archery and firearm hunting, one deer was allowed per permit.

FINDINGS

For this report, data from paid firearm permit holders were used to determine characteristics of firearm hunters, their activities, and deer harvest. To elucidate attitudes/opinions of hunters toward deer hunting regulations and related issues, data were used from both paid firearm permit holders and paid archery permit holders. Because many of the firearm permit holders also had archery permits and vice versa (Table 2), attitude/opinion-type information was available for three basic groups of deer permit holders: firearm-only permit holders, firearm/archery permit holders, and archery-only permit holders.

Types and Numbers of Permits

The 2,452 paid firearm permit holders who filled out and returned the questionnaire claimed they purchased an average of

1.44 permits for the regular firearm deer hunting season in Illinois in 1994 (Table 3). This appears to be a slight exaggeration since DNR Permit Office records indicate that paid firearm permit holders purchased an average of 1.36 firearm permits. Although unlikely, sampling bias could also have contributed to the "exaggerated" number of permits reportedly purchased by the permit holders.

Nearly two-thirds (64%) of the firearm permit holders obtained one permit, while one-third (32%) obtained two permits (Table 3). The vast majority (93%) of the permittees successfully obtained at least one full-season, either-sex permit. This compares to 26% who secured a full-season, antlerless-only permit and 14% who obtained a second-season permit (either-sex and antlerless-only combined).

One-third (33%) of the paid firearm permit holders also had a paid archery deer permit (Table 4). In addition, 7% of the paid firearm permit holders also purchased a handgun permit, but only small fractions (1.3-2.4%) also obtained other types of deer hunting permits.

Similarly, 36% of the paid archery permit holders also had a paid firearm deer permit (Table 4). Only small percentages (2.9-4.5%) of the paid archery permit holders secured other types of deer hunting permits.

Firearm Deer Hunting Activities

Almost all (96%) of the paid firearm permit holders spent ≥ 1 days afield hunting deer in Illinois during the 1994 season

(Table 5). Of those who did not hunt, about one-half (49%) said they had to work and/or did not have time. Another 22% indicated that health-related problems prevented them from deer hunting.

Days Afield. Firearm deer hunters spent an average of 4.27 days afield during the 1994 season (Table 6). This represents a 61% utilization of the total number of days available to hunt during the regular firearm deer hunting season. Not surprising, unsuccessful hunters spent more days afield (average = 4.62 days) than successful hunters (average = 3.97 days). Firearm deer hunters in Administrative Region 2 spent the least number of days in the field (average = 3.77 days), whereas hunters in Administrative Region 4 spent the most (average = 4.50 days).

Data on the temporal distribution of days spent afield by firearm deer hunters in Illinois during the 1994 season are summarized in Tables 7 and 8. Statewide, 80% of the hunters were afield on opening day. Successful hunters (89%) were more likely to be afield on opening day than unsuccessful hunters (71%). Only 61% of the hunters in Administrative Region 2 were afield on opening day. In contrast, 84% and 83% of the hunters in Administrative Regions 4 and 5, respectively, were afield on the first day (Table 8).

Statewide, slightly more than one-half (53%) of the hunters were afield each day during the first 3 days of hunting (Table 7). Only 36% of the hunters in Administrative Region 2 were afield all 3 days, whereas 57% and 55% of the hunters in Administrative Regions 4 and 5 were afield all 3 days (Table 8).

Statewide, 45% of the hunters were afield on the first day

(Thursday) of the second 4 days of hunting (Table 7). One-fourth (27%) of the hunters were afield each day during this 4-day period. At the other extreme, 28% of the hunters did not hunt during these 4 days. Almost one-fourth (22%) of the hunters were afield on each of the 7 days that were open to firearm deer hunting in Illinois in 1994. However, only 10% of the hunters in Administrative Region 2 were in the field all 7 days (Table 8).

Geographical Distribution and Density of Hunting Activities.

One-third (32%) of the firearm deer hunters were active in Administrative Region 5 (Table 9, Fig. 4). Administrative Region 1 accounted for 28% of the hunters, Administrative Region 4 accounted for 26%, and Administrative Region 3 accounted for 11%. Administrative Region 2 accommodated only 3% of the hunters, probably because 4 of the 9 counties in this region were closed to firearm deer hunting. The distribution of days afield reflects that of hunters (Table 9).

In terms of density per total land area, there was an average of 0.39 firearm deer hunters per 100 acres of land area in Illinois during the 1994 season (Table 9). All hunters collectively expended an average of 1.67 days afield per 100 acres of land area. Densities of hunters and days afield were relatively high in Administrative Region 5 (0.59 and 2.51 per 100 acres). They were relatively low in Administrative Region 3 (0.21 and 0.92 per 100 acres) and Administrative Region 2 (0.25 and 0.94 per 100 acres).

When viewed relative to forestland, statewide densities of hunters and their collective days afield averaged 3.25 and 13.89

per 100 acres, respectively (Table 9). Hunter densities were relatively high in Administrative Region 2 (4.67 per 100 acres) and Administrative Region 1 (4.65 per 100 acres). Conversely, hunter densities were relatively low in Administrative Region 4 (2.67 per 100 acres) and Administrative Region 5 (2.72 per 100 acres). Days afield were relatively high in Administrative Regions 1, 2, and 3 (≥ 17.60 per 100 acres) and relatively low in Administrative Regions 4 and 5 (≤ 11.39 per 100 acres).

Time of Day When Afield. Seventy-seven percent of the hunters were afield both in the morning and in the afternoon during the firearm deer season in 1994 (Table 10). The remaining hunters were much more apt to be in the field in the morning (20%) than in the afternoon (3%).

Statewide, firearm deer hunters were in the field an average of 6.5 hours per day (Table 10). Hunters in Administrative Region 2 spent an average of 6.0 hours per day in the field, whereas hunters in the other administrative regions spent 6.3-6.6 hours.

Ownership of Land Where Hunted. The vast majority (85%) of the hunters were active on private land during the 1994 firearm deer season (Table 10). Only 6-9% of the hunters in Administrative Regions 1-4 were active (partially or mostly) on public land. However, 31% of the hunters in Administrative Region 5, where the Shawnee National Forest is located, utilized public land to pursue deer.

Almost three-fourths (73%) of the hunters statewide had no or little difficulty in finding a place to firearm deer hunt in

Illinois in 1994 (Table 11). Conversely, 27% of the hunters experienced moderate or much difficulty in finding a place to hunt. Deer hunters in Administrative Region 2 were more likely to have difficulty finding a place to hunt than hunters in the other regions, especially Administrative Regions 4 and 5.

Organized Deer Drives. Almost one-third (31%) of the hunters said they participated in an organized deer drive during the 1994 firearm season (Table 12). Hunters were most apt to participate in a deer drive in Administrative Region 1 (42%) and least likely in Administrative Region 5 (22%).

Deer Harvested. About one-half (54%) of the firearm hunters reported harvesting ≥ 1 deer in Illinois during the 1994 season (Table 13). Among these successful hunters, 76% took 1 deer, 21% took 2 deer, and 3% took ≥ 3 deer. A greater percentage of the hunters harvested ≥ 1 bucks (29%) than ≥ 1 does (26%) or ≥ 1 young (both sexes) deer (9%). Overall, the harvest averaged 0.69 deer per active hunter, 0.61 deer per firearm permit holder, and 0.45 deer per paid firearm permit issued for the 1994 season.

Only 38% of the hunters in Administrative Region 2 reported harvesting ≥ 1 deer in 1994 (Table 14). In Administrative Region 3, 45% of the hunters reported taking ≥ 1 deer. In the other administrative regions, 54-59% of the hunters successfully harvested at least one deer.

Almost one-third (30%) of the firearm deer harvest took place on the first day of the season and 64% of the harvest had occurred by the end of the third day (Table 15). About three-fourths (73%) of the buck harvest occurred during the first 3

days, which compares to 56% for does and 61% young deer. Interestingly, 37% of the buck harvest occurred on the first day and 63% had occurred by the end of the second day.

From a geographical perspective, a higher percentage of the deer (sex/age classes combined) harvest took place during the first 3 days in Administrative Region 2 (73%) than in the other administrative regions (59-66%) (Table 16).

Administrative Regions 1, 4 and 5 accounted for 89% of the deer harvest (Table 9). The remaining 11% took place in Administrative Regions 2 and 3. Statewide, the harvest averaged 0.27 deer per 100 acres of land area and 2.24 deer per 100 acres of forestland (Table 9). In terms of land area, deer harvest densities were relatively high in Administrative Region 5 (0.41 per 100 acres) and relatively low in Administrative Region 3 (.12 per 100 acres) and Administrative Region 2 (0.13 per 100 acres). In terms of forestland, deer harvest densities were relatively high in Administrative Region 1 (3.11 per 100 acres) and relatively low in Administrative Region 5 (1.88 per 100 acres). The presence of the Shawnee National Forest accounts for the fact that Administrative Region 5 had the highest density of deer harvest per 100 acres of land area and the lowest density per 100 acres of forestland.

Deer Passed Up. One-half (52%) of the firearm deer hunters reported passing up ≥ 1 opportunities to shoot at deer during the 1994 season (Table 17). Of these hunters, 80% said they had 2 or more opportunities to shoot at deer. The hunters who passed up opportunities to shoot at deer did so more frequently for

does/young deer (average = 5.69) than for bucks (average = 2.10). The propensity to pass up opportunities to shoot at deer was prevalent in all 5 administrative regions (Table 18).

Deer Hit (Injured). One hunter in 10 (10%) reported hitting ≥ 1 deer that he/she was unsuccessful in retrieving during the firearm season in Illinois in 1994 (Table 19). The injury rate averaged 0.12 deer per hunter. The rate was lowest in Administrative Region 2 (0.04 deer per hunter) and highest in Administrative Region 4 (0.15 deer per hunter). Relative to harvest, an average of 17 deer were injured per 100 deer harvested. Or, for all deer hit, 85% were recovered and 15% were not recovered. Some injured deer survive because deer with old (healed) wounds are observed at check stations.

Illegal Activities. About one hunter in seven (15%) reported that they saw ≥ 1 illegal deer hunting activities during the firearm season in Illinois in 1994 (Table 20). The most frequently observed activities were the acts of hunting from an automobile or ATV (6% of hunters) and shooting at deer before or after legal hours (6% of hunters). Close behind were the practices of tagging deer that were harvested by another hunter and continuing to hunt after filling their deer tag. Illegal hunting activities were most frequently observed in Administrative Region 5 (17% of hunters) and least frequently observed in Administrative Region 2 (9% of hunters) (Table 21).

Equipment Used. Shotgun slug was the weapon of choice by nearly 98% of the firearm deer hunters in Illinois during the 1994 season (Table 22). Only 2.4% of the hunters used

muzzleloading rifles. Types of barrels used on the shotguns were divided into three basic categories: 38% of the hunters used regular shotgun barrels, 31% used smooth-bore slug barrels, and 29% used rifled slug barrels. One-fourth (23%) of the hunters claimed they used sabot-type slugs.

Two-thirds (67%) of the firearm hunters used tree stands (Table 22). Curiously, only 28% of these hunters took the precaution of using safety belts. In other words, only 42% of the tree stand users also used safety belts. Other equipment used included binoculars (30% of hunters), ground blinds (29%), rifle/shotgun scopes (20%), and ATVs (11%).

Out-of-State Firearm Deer Hunting

About 5% of the paid firearm permit holders ventured to another state or country to firearm deer hunt during the 1994 season (Table 5). The states most frequently visited were Wisconsin and Missouri, which were followed at a distance by Michigan, Kentucky, Colorado, and Wyoming.

Opinions and Attitudes of Firearm and Archery Permit Holders

For this section, recall that the term "firearm-only permit holders" refers to those individuals who obtained firearm deer permits only. Similarly, the term "firearm/archery permit holders" refers to people who obtained both firearm and archery permits, and the term "archery-only permit holders" refers to those who obtained archery permits only.

Number of Firearm Deer Permits. Majorities of firearm-only permit holders and firearm/archery permit holders (56% and 56%, respectively) thought that a maximum of two firearm deer permits should be allowed per hunter for the first segment (first 3 days) of the regular firearm season in Illinois (Table 23). Archery-only permit holders expressed more restrictive views: 41% preferred a maximum of two firearm deer permits and another 40% opted for allowing only one permit. Relatively small proportions (15-25%) of all three groups of permit holders were in favor of issuing ≥ 3 permits per person.

Dates for Regular Firearm Deer Season. Overwhelming majorities (67-84%) of firearm-only permit holders, firearm/archery permit holders, and archery-only permit holders, approved of the dates used for the 1994 regular firearm deer season (Table 24). When asked how they felt about changing the regular firearm deer season from a split 7-day season to a single 9-day season, majorities (60-65%) of all three groups of permit holders disagreed (Table 24).

Dates for Muzzleloader and Handgun Seasons. Pluralities (26-38%) of the three groups of permit holders thought the special 3-day muzzleloader deer season should take place in January (Table 25). However, 21-29% of these permit holders preferred December for the muzzleloader season. In other words, a consensus did not emerge on this issue.

A plurality (40%) of the firearm-only permit holders, and majorities (56% and 54%) of the firearm/archery permit holders and archery-only permit holders, thought the special 3-day

handgun deer season should be scheduled in January (Table 25).

Handguns and Crossbows During Firearm Deer Season.

Majorities (56-72%) of firearm-only permit holders, firearm/archery permit holders, and archery-only permit holders thought that handguns and crossbows should not be allowed during the regular firearm deer season in Illinois (Table 25).

Eliminating Special Weapons Seasons. Majorities (52-71%) of all three groups of permit holders disliked the idea of allowing shotguns, muzzleloaders, and handguns during the regular firearm season and eliminating the special weapons seasons (Table 25).

Quality Buck Management. The respondents were asked if they would like or dislike a regulation that prohibits the harvest of small bucks on selected state-controlled areas in an effort to increase the number of quality bucks. A plurality (48%) of firearm-only permit holders, and majorities (55% and 63%) of firearm/archery permit holders and archery-only permit holders, would like such a regulation (Table 26). However, when this idea was expanded to entire counties, a plurality (49%) of firearm-only permit holders and a majority (50%) of firearm/archery permit holders expressed disapproval (Table 26). A majority (53%) of archery-only permit holders was supportive.

Number of Deer and Deer Hunters. One-third (34%) of firearm hunters statewide thought the number of deer in the county where they hunted most was unchanged from 1993 to 1994 (Table 27). The remaining hunters who expressed an opinion were more or less equally divided as to whether the number of deer had increased or decreased. Hunters in Administrative Region 2 were more likely

to think the number of deer had increased (29%) than decreased (18%). Hunters in Administrative Region 3 had the opposite impression, with 20% reporting a increase and 33% reporting a decrease.

A majority (60%) of the firearm hunters statewide expressed the opinion that the number of deer in the county where they hunted most was about right (Table 27). This view prevailed in all five administrative regions. The remaining hunters were more apt to think the number of deer was too low (22%) than too high (11%).

A majority (62%) of the firearm hunters also thought the number of deer hunters in the county where they hunted most was about right (Table 27). Again, this attitude was evident across all five administrative regions. The remaining hunters were much more likely to believe the number of hunters was too high (27%) than too low (3%).

Paying To Hunt. About one hunter in 20 (4.5%) paid someone for the right to deer hunt in Illinois in 1994 (Table 28). Hunters in Administrative Regions 1 and 2 were more than twice as likely as hunters in Administrative Regions 3-5 to have paid someone to hunt.

When asked if they would be willing to pay someone for the right to deer hunt, 40% of the hunters statewide said "yes" (Table 28) . Hunters were most willing to pay to hunt in Administrative Region 2 (62%) and least willing in Administrative Region 5 (35%). The amount they would be willing to pay averaged \$37 per day statewide. Hunters in Administrative Region 2 would

be willing to pay more (\$43 per day) than hunters in the other Administrative Regions (\$34-39 per day).

Characteristics of Hunters

The vast majority (79%) of Illinois' firearm deer hunters reside in small towns or rural environments (Table 29). A higher percentage of the hunters in Administrative Region 2 (33%) than in the other Administrative Regions (17-23%) reside in urban areas.

Statewide, almost 97% of the firearm deer hunters were males, and they averaged 39 years of age (Table 29). One-half (50%) of the hunters were between 31 and 50 years old.

Hunters throughout the state had firearm deer hunted an average of 12 years (Table 29). Hunters in Administrative Region 2 (10 years) appeared to have slightly less experience than hunters in the other Administrative Regions (11-13 years).

Economics of Firearm Deer Hunting

The hunters indicated that they paid an average of \$206 to firearm deer hunt in Illinois in 1994 (Table 30). A plurality (39%) of the hunters spent between \$101 and \$250. Total expenditures by the estimated 135,583 paid firearm deer permit holders who hunted was calculated at \$27.9 million.

DISCUSSION

Because all deer hunters were required to have a permit and all permits were issued through the DNR Permit Office in

Springfield, there were complete records of all deer hunters in the state for the 1994 season. Thus, the target population for the present Firearm Deer Hunter Survey was totally known and could be sampled at random. Randomization combined with a high return rate (76%) suggests that sampling bias was minimal.

We emphasize the extensive overlap that exists between firearm deer hunters and archery deer hunters (Table 4). Because of this overlap, and the fact that firearm and archery deer hunting are dependent on a common resource, the firearm hunters and the archery hunters have vested interests in each other's hunting regulations.

The findings of this survey demonstrate that firearm deer permit holders make extensive use of the opportunity to hunt in Illinois: 80% were afield on opening day, 96% were afield for ≥ 1 days, and they utilized 61% of the days available to hunt (Tables 5-8). In contrast, upland game hunters, with much longer seasons, take advantage of only 11-13% of the days available to pursue their sport (Anderson and David 1991, 1992a, 1992b). One-half (53%) of the firearm deer hunters were afield on each of the first 3 days of the 1994 season and 22% were afield all 7 days. The lowest hunter participation (45%) occurred on the first day (Thursday) of the second 4 days of hunting.

In addition, 77% of the hunters were afield both in the morning and in the afternoon (Table 10), and they spent an average of 6.5 hours afield per day (Table 10). The latter suggests that, for each day afield, the hunters utilized about 65% of the time available. Deer hunters compress a relatively

large amount of hunting activities into Illinois' relatively short (7-day) firearm deer season.

More than 90% of the firearm deer hunters in Administrative Regions 1-4 pursued their sport on private land (Table 10). Similarly, hunters in Administrative Regions 1-3 were more apt to experience difficulty in finding a place to hunt than hunters in Administrative Regions 4 and 5 (Table 11). Almost one-third (31%) of the hunters in Administrative Region 5 were active on public land, primarily the Shawnee National Forest. Hunters in Administrative Region 4 were unique in that more than 90% of them hunted on private land, but in so doing, experienced relatively low levels of difficulty in obtaining a place to hunt.

The firearm deer harvest was skewed toward the first part of the 1994 hunting season, with 30% of the harvest occurring on the first day and 64% having occurred by the end of the third day (Table 15). For bucks, 37% of the harvest took place on the first day and 63% had occurred after only 2 days of hunting. This relatively high rate of deer harvest occurred in spite of the fact that 52% of the hunters passed up opportunities to shoot at deer (Table 17). Unfortunately, hunters were much more apt to pass up opportunities for taking does and young deer than for taking bucks.

Compared to firearm deer hunters elsewhere, hunters in Administrative Region 2 were afield fewer days (Table 6), were less apt to be afield on opening day (Table 8), spent fewer hours afield per day (Table 10), had more difficulty in finding a place to hunt (Table 11), and were less likely to harvest a deer (Table

14). Administrative Region 2 hunters were also more willing to pay someone for the right to hunt, and would pay more per day to hunt, than hunters in the other regions (Table 28). Although hunters in Administrative Region 2 were more urbanized (Table 29) and were slightly less experienced at deer hunting than other hunters (Table 28), they injured relatively few deer (Table 19) and observed relatively low levels of illegal deer hunting activities (Table 21). These differences in firearm deer hunters, Administrative Region 2 versus the other administrative regions, are thought to be related to the heavily populated metropolitan environment that characterizes the counties in northeastern Illinois.

Although 67% of the firearm deer hunters reported using tree stands, only 28% of them said they also used safety belts (Table 22). These data suggest that about 53,000 Illinois hunters elevated themselves in tree stands without the security of safety belts during the 1994 season. This is obviously an unsafe practice that contributes to unnecessary injuries to deer hunters. We recommend initiating an awareness campaign to alert hunters to the dangers of tree stands and the need for taking precautions--especially the use of safety belts--when aloft.

Majorities of the firearm-only permit holders, firearm/archery permit holders, and archery-only permit holders thought the dates used for the 1994 regular firearm season (November 18-20 and December 1-4) were about right (Table 24). Majorities of all three groups of permit holders also preferred a split 7-day season to a single 9-day season (Table 24), were against

legalizing handguns and crossbows during the firearm season (Table 25), and disliked the idea of replacing the special weapons seasons with the legalization of muzzleloaders and handguns during the firearm deer season (Table 25).

The three groups of permit holders did not express a consensus about the month in which the 3-day muzzleloader deer season should be held (Table 25). However, there was more support for having this season in January than in December, as has been the case in recent years. The December dates appear to be unpopular among both firearm permit holders and archery permit holders.

A plurality of firearm-only permit holders and a majority of the firearm/archery permit holders said they would like a regulation that prohibits the harvest of small bucks on selected state-controlled areas in an effort to increase the number of quality bucks (Table 26). However, when this concept was proposed for entire counties, these two groups of permit holders reacted negatively. The archery-only permit holders would support a "quality buck" management program, whether on selected state-controlled areas or for entire counties.

Majorities of the firearm deer hunters in all administrative regions thought the numbers of deer and deer hunters in the county where they hunted most were about right (Table 27). However, they did not agree as to whether the number of deer had increased, decreased, or remained unchanged from 1993 to 1994.

We make the following recommendations for managing firearm deer hunting in Illinois. First, the split 7-day season is

popular among deer hunters and should be continued for the next several years. From a management perspective, the short duration of the current season acts to curtail hunter selectivity for bucks, at least to a degree. Second, the dates for this season should remain unchanged--i.e., the first 3 days should occur on the Friday, Saturday, and Sunday before Thanksgiving, and the second 4 days should take place 2 weeks later on Thursday through Sunday. Third, firearm hunters should be dissuaded from their habit of passing up opportunities to harvest antlerless deer--i.e., they should be encouraged to shoot more does and young deer.

Fourth, in view of the ambivalence exhibited by the hunters toward the month preferred for having the muzzleloader season, we see no compelling reason for changing the dates for this special deer season. Thus, the muzzleloader deer season should continue to be scheduled for the 2nd Friday-Saturday-Sunday period following Thanksgiving weekend for the foreseeable future.

Finally, the practice of implementing "quality deer" regulations on selected state-controlled areas should continue to be examined. There are currently five sites using such regulations for all deer hunting, and two sites which attempt to encourage doe harvest during the firearm season through these same regulations. The impact of these regulations on deer harvest should be monitored for a minimum of 5 years to determine their feasibility for producing quality bucks, in order to judge whether similar regulations should be implemented at additional sites.

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Table 1. The types and numbers of resident deer hunting permits issued in Illinois for the 1994-95 season and the number of persons who received these permits (DNR Permit Office records). An additional 428 firearm and 132 archery permits were issued to 286 and 87 non-residents, respectively.

Type of Resident Deer Hunting Permit	Number	
	Permits	Permit Holders
Paid Full-season either-sex firearm	127,405	124,835
Paid Full-season antlerless-only firearm	35,262	34,708
Paid Second-season either-sex firearm	24,226	17,897
Paid Second-season antlerless-only firearm	3,790	3,405
Paid landowner firearm	7,507	5,790
Paid muzzleloader	4,165	3,589
Paid handgun	10,204	10,204
Paid archery	134,948	83,678
Free landowner firearm	62,838	31,419
Free landowner archery	27,770	13,622
Total resident permits	438,115	222,832

Table 2. The number of resident paid firearm permit holders and the number of resident paid archery permit holders who participated in the 1994 Illinois Deer Hunter Survey.

Mailing List	Type of Permits Held			Total	Percentage of Total
	Firearm Only	Firearm and Archery	Archery Only		
Paid firearm permit holders ^a	1,639	813		2,452	79.6
Paid archery permit holders		228	399	627	20.4
Both mailing lists	1,639	1,041	399	3,079	100

^aDoes not include paid landowner firearm permit holders.

Table 3. The types and numbers of resident paid firearm deer permits held by firearm deer permit holders who participated in the 1994 Illinois Deer Hunter Survey. Sample sizes are in parentheses.

Type of Paid Firearm Deer Permit	Proportion of Permit Holders	Mean Number of Permits per Holder	Distribution Among Hunters			
			1	2	3	≥4 Permits
Full-season either-sex	93.1% (2,452)	1.08 (2,283)	93.6%	5.3%	0.7%	0.4% (2,283)
Full-season antlerless-only	26.3 (2,452)	1.03 (645)	98.0	1.1	0.8	0.1 (645)
Second-season either-sex	12.4 (2,452)	1.12 (304)	89.5	9.5	0.7	0.3 (304)
Second-season antlerless-only	1.9 (2,452)	1.06 (47)	95.7	2.1	2.1	0.1 (47)
≥1 of the above permits	100 (2,452)	1.44 (2,452)	63.9	31.6	2.7	1.8 (2,452)

Table 4. Types of other resident deer permits held by paid firearm and paid archery deer permit holders who participated in the 1994 Illinois Deer Hunter Survey. Sample sizes are in parentheses.

Type of Deer Permit	Permit Holders	
	Paid Firearm	Paid Archery
	(2,452)	(627)
Paid firearm	---	36.4%
Paid landowner firearm	2.4%	4.0
Paid muzzleloader	2.1	2.9
Paid handgun	6.8	3.5
Paid archery	33.2	---
Free landowner firearm	2.0	4.5
Free landowner archery	1.3	3.0
≥1 of the above permits ^a	40.7	38.3

^aExcluding the targeted permit holder in each column.

Table 5. Percentage of resident paid firearm deer permit holders who firearm deer hunted in Illinois and/or in other states/countries during the 1994-95 season. Sample sizes are in parentheses.

In Illinois

Hunted	96.1%	(2,452)
Reason for not hunting:		
Had to work/no time	48.8%	(82)
Health-related problems	22.0	
Could not get preferred permit	7.3	
Participated in other hunting/recreation	6.1	
No place to hunt	6.1	
Death in family	3.7	
Could not afford to hunt	2.4	
Did not want to hunt	2.4	
FOID expired	1.2	

In other states/countries

Hunted	4.6%	(2,452)
States/countries visited:		
Wisconsin	27.1%	(118)
Missouri	22.9	
Michigan	8.5	
Kentucky	6.8	
Colorado	6.8	
Wyoming	5.9	
Indiana	3.4	
Montana	2.5	
Others ^a	16.1	

^aIncludes Alabama, Arkansas, Georgia, Idaho, Iowa, Louisiana, Minnesota, Mississippi, North Carolina, South Dakota, Tennessee, Texas, West Virginia, and Canada.

Table 6. Mean number of days that resident hunters in each administrative region spent afield during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Date	Administrative Region					Statewide		
	1	2	3	4	5	Successful ^a Hunters	Unsuccessful Hunters	All Hunters
	(668)	(79)	(248)	(605)	(739)	(1,266)	(1,090)	(2,356)
First 3 days (Nov. 18-20)	2.14	1.82	2.12	2.31	2.25	2.21	2.20	2.21
Second 4 days (Dec. 1-4)	2.04	1.95	2.26	2.19	1.94	1.76	2.42	2.06
Entire season	4.18	3.77	4.38	4.50	4.19	3.97	4.62	4.27

^aReported harvesting ≥ 1 deer.

Table 7. Temporal distribution of days afield by successful and unsuccessful resident hunters during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Dates and Days Afield	Successful Hunters ^a	Unsuccessful Hunters	All Hunters
	(1,266)	(1,090)	(2,356)
First 3 days			
Nov. 18 (Friday)	88.5%	71.0%	80.4%
Nov. 19 (Saturday)	74.9	79.3	76.9
Nov. 20 (Sunday)	57.3	69.7	63.0
Days Afield:			
0	5.1	14.4	9.3
1	20.3	7.0	14.1
2	23.7	22.8	23.3
3	51.0	55.8	53.2
Second 4 days			
Dec. 1 (Thursday)	43.6	47.2	45.3
Dec. 2 (Friday)	45.1	60.0	52.0
Dec. 3 (Saturday)	47.9	71.9	59.0
Dec. 4 (Sunday)	38.6	61.9	49.4
Days Afield:			
0	38.7	8.4	28.4
1	8.8	8.3	8.5
2	14.7	23.9	18.9
3	13.9	21.1	17.2
4	23.9	30.6	27.0
Entire season			
Days Afield:			
1	18.1	3.4	11.2
2	16.6	11.1	14.0
3	11.6	16.9	14.0
4	10.3	17.0	13.4
5	11.8	15.7	13.6
6	11.9	12.5	12.2
7	19.7	23.4	21.6

^aReported harvesting ≥ 1 deer.

Table 8. Temporal distribution of days afield by resident hunters in each administrative region during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Dates and Days Afield	Administrative Region					State-wide
	1	2	3	4	5	
	(668)	(79)	(248)	(605)	(739)	(2,356)
First 3 days						
Nov. 18 (Friday)	78.9%	60.8%	73.8%	84.1%	83.2%	80.4%
Nov. 19 (Saturday)	74.0	67.1	74.2	81.2	78.3	76.9
Nov. 20 (Sunday)	61.4	54.4	63.7	65.0	63.9	63.0
Days Afield:						
0	10.9	17.7	11.3	7.6	7.6	9.4
1	15.4	17.7	14.9	11.2	14.7	14.1
2	22.2	29.1	24.6	24.5	22.3	23.3
3	51.5	35.5	49.2	56.7	55.4	53.2
Second 4 days						
Dec. 1 (Thursday)	43.0	34.2	51.6	48.9	43.8	45.3
Dec. 2 (Friday)	50.0	48.1	56.0	54.2	51.2	52.0
Dec. 3 (Saturday)	58.8	64.6	63.7	62.1	54.7	59.0
Dec. 4 (Sunday)	51.5	48.1	54.4	51.9	44.0	49.4
Days Afield:						
0	28.7	25.2	20.2	25.1	33.2	28.4
1	7.8	12.7	10.5	8.9	7.8	8.5
2	19.6	24.1	22.2	18.7	17.1	18.9
3	18.6	17.7	17.7	16.9	16.1	17.2
4	25.3	20.3	29.4	30.4	25.2	27.0
Entire season						
Days Afield:						
1	12.0	13.9	12.5	9.3	11.4	11.2
2	15.6	19.0	12.5	13.1	13.3	14.0
3	13.8	12.7	8.1	12.9	17.1	14.0
4	12.7	17.7	15.7	12.7	13.5	13.4
5	13.5	13.9	17.7	13.7	12.4	13.6
6	12.0	12.7	10.1	13.7	11.8	12.2
7	20.4	10.1	23.4	24.6	20.5	21.6

Table 9. Geographical distribution of density of resident firearm hunters, days afield, and deer (sex/age classes combined) harvested in Illinois in 1994. Sample sizes are in parentheses.

	Administrative Regions					State-wide ^a
	1	2 ^a	3	4	5	
	(668)	(79)	(248)	(605)	(739)	(2,338)
Land area ^b						
Number acres (x 100)	95,725	18,598	68,461	90,944	72,557	346,285
Percentage in forestland	8.7	5.3	5.1	14.5	21.7	12.0
Percentage of:						
Hunters	28.5	3.4	10.6	25.9	31.6	100
Days afield	28.0	3.0	10.8	27.2	31.0	100
Deer harvested	27.7	2.5	8.6	29.5	31.7	100
Per 100 acres of land area						
Hunters	0.40	0.25	0.21	0.39	0.59	0.39
Days afield	1.69	0.94	0.92	1.74	2.51	1.67
Deer harvested	0.27	0.13	0.12	0.30	0.41	0.27
Per 100 acres of forestland						
Hunters	4.65	4.67	4.10	2.67	2.72	3.25
Days afield	19.43	17.60	17.94	12.01	11.39	13.89
Deer harvested	3.11	2.36	2.30	2.10	1.88	2.24

^aExcluding Cook, DuPage, Kane, and Lake counties.

^bData from Iverson et. al. (1989).

Table 10. Time of day when afield, number of hours afield per day, and ownership of land where hunted by resident hunters in each administrative region during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Category	Administrative Region					State-wide
	1	2	3	4	5	
Time of day	(663)	(79)	(246)	(604)	(730)	(2,339)
Mostly in morning	22.5%	21.5%	19.9%	20.7%	16.0%	19.8%
Mostly in afternoon	3.3	3.8	3.7	2.3	3.2	3.0
Mornings and evenings	74.2	74.7	76.4	77.0	80.8	77.2
Hours afield	(663)	(79)	(246)	(603)	(731)	(2,339)
Mean	6.6	6.0	6.3	6.5	6.5	6.5
Distribution:						
<1 hour	0.9%	1.3%	2.0%	1.2%	2.5%	1.6%
1-2 hours	5.3	6.3	4.9	5.1	3.3	4.6
3-4 hours	16.3	25.3	18.7	12.9	13.5	15.0
5-6 hours	26.4	25.3	28.9	31.3	31.1	29.5
7-8 hours	16.7	17.7	19.1	20.6	21.8	19.6
All day	34.4	24.1	26.4	28.9	27.8	29.7
Ownership of land	(668)	(79)	(248)	(605)	(739)	(2,355)
Mostly private	93.4%	93.7%	92.3%	91.2%	68.7%	84.9%
Mostly public	4.6	5.1	4.8	6.0	23.5	11.1
Private and Public	2.0	1.2	2.9	2.8	7.8	4.0

Table 11. The level of difficulty that resident hunters in each administrative region experienced in finding a place to hunt during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Level of Difficulty	Administrative Region					State-wide
	1	2	3	4	5	
	(663)	(79)	(246)	(604)	(730)	(2,339)
None	51.0%	43.0%	50.4%	58.6%	58.1%	54.7%
Little	17.2	19.0	17.1	17.1	19.6	17.9
Moderate	20.1	20.3	18.3	14.2	15.3	16.9
Much	11.7	17.7	14.2	10.1	7.0	10.5

Table 12. Percentage of resident hunters in each administrative region who participated in an organized deer drive during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Participated In Organized Deer Drive	Administrative Region					State- wide
	1	2	3	4	5	
	(662)	(79)	(244)	(604)	(729)	(2,337)
Yes	42.1%	29.1%	26.0%	31.1%	21.8%	30.9%
No	57.9	70.9	74.0	68.9	78.2	69.1

Table 13. Number of bucks, does, and young (both sexes) deer reported harvested by resident hunters during the regular firearm deer hunting season in Illinois in 1994 (n=2,356).

Category	Type of Deer			All Deer
	Bucks	Does	Young	
Mean deer harvested per hunter	0.31	0.28	0.10	0.69
Distribution of deer harvest among hunters	Percentage of Hunters			
0 deer	71.4	74.4	90.6	46.3
1 deer	27.0	23.4	8.7	41.0
2 deer	1.5	2.0	0.6	11.0
3 deer	0.1	0.2	0.1	1.4
≥4 deer	0.0	<0.1	0.0	0.3
Total	100	100	100	100

Table 14. Number of deer (sex/age classes combined) reported harvested by resident hunters in each administrative region during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Category	Administrative Region					State-wide
	1	2	3	4	5	
	(668)	(79)	(248)	(605)	(739)	(2,356)
	Deer per Hunter					
Mean deer harvested per hunter	0.67	0.51	0.56	0.79	0.69	0.69
	Percentage of Hunters					
Distribution of deer harvest among hunters						
0 deer	46.3	62.0	55.2	41.3	44.8	46.3
1 deer	42.4	26.6	35.9	42.0	42.8	41.0
2 deer	10.2	10.1	7.3	14.2	10.7	11.0
3 deer	1.0	1.3	1.2	2.0	1.4	1.4
≥4 deer	0.1	0.0	0.4	0.5	0.3	0.3
Total	100	100	100	100	100	100

Table 15. Temporal distribution of bucks, does, and young deer reported harvested by resident hunters during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Date	Type of Deer			All Deer
	Bucks	Does	Young	
	(672)	(613)	(222)	(1,507)
First 3 days				
Nov. 18	37.2%	22.8%	30.9%	30.4%
19	26.2	21.2	17.7	23.0
20	9.8	11.7	12.7	11.0
Total	73.2	55.7	61.3	64.4
Second 4 days				
Dec. 1	6.9%	8.8%	6.4%	7.6%
2	5.5	9.8	6.8	7.4
3	7.7	13.1	15.9	11.1
4	6.7	12.6	9.6	9.5
Total	26.8	44.3	38.7	35.6

Table 16. Temporal distribution of deer (sex/age classes combined) reported harvested by resident hunters in each administrative region during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Date	Administrative Region					State-wide
	1	2	3	4	5	
First 3 days	(421)	(40)	(133)	(434)	(475)	(1,507)
Nov. 18	34.7%	32.5%	32.3%	28.5%	27.8%	30.4%
19	22.3	27.5	18.8	24.2	23.2	23.0
20	8.6	12.5	8.3	10.1	14.7	11.0
Total	65.6	72.5	59.4	62.8	65.7	64.4
Second 4 days						
Dec. 1	6.9%	2.5%	11.3%	7.4%	7.8%	7.6%
2	6.2	5.0	7.5	8.1	8.2	7.4
3	11.6	20.0	9.8	11.3	10.1	11.1
4	9.7	0.0	12.0	10.4	8.2	9.5
Total	34.4	27.5	40.6	37.2	34.3	35.6

Table 17. Percentage of resident hunters who passed up opportunities to shoot at deer during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Category	Type of Deer		
	Bucks	Does and Young	All Deer
Passed up ≥ 1 Opportunities			(2,336)
Yes			52.4%
No			47.6
	(617)	(1,081)	(1,203)
Mean opportunities passed up per hunter ^a	2.10	5.69	5.62
Distribution of opportunities passed up among hunters ^a			
1 opportunity	46.4%	18.3%	19.5%
2 opportunities	32.9	20.3	16.1
3 "	7.9	13.2	12.5
4 "	6.0	10.5	9.3
5 "	2.4	7.0	8.0
6 "	1.3	6.0	6.7
7 "	0.5	4.3	4.8
8 "	1.0	3.6	3.7
9 "	0.0	1.8	2.3
10 "	0.8	4.4	3.6
≥ 11 "	0.8	10.6	13.5

^aFor those hunters who passed up ≥ 1 opportunities to shoot at deer.

Table 18. Percentage of resident hunters in each administrative region who passed up ≥ 1 opportunities to shoot at deer (sex/age classes combined) during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Passed up ≥ 1 Opportunities	Administrative Region					State- wide
	1	2	3	4	5	
	(663)	(77)	(245)	(604)	(730)	(2,336)
Yes	51.0%	50.6%	46.5%	52.3%	55.6%	52.4%
No	49.0	49.4	53.4	47.7	44.4	47.6

Table 19. Number of deer (sex/age classes combined) reported hit (injured) but not retrieved by resident hunters in each administrative region during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Category	Administrative Region					State-wide
	1	2	3	4	5	
	(668)	(79)	(248)	(605)	(739)	(2,356)
	Deer per Hunter					
Mean deer hit per hunter	0.10	0.04	0.11	0.15	0.13	0.12
Distribution of deer hit among hunters	Percentage of Hunters					
0 deer	91.2	97.4	89.9	87.6	89.0	89.6
1 deer	8.1	1.3	8.9	11.1	10.0	9.3
2 deer	0.7	1.3	1.2	0.8	0.5	0.8
3 deer	0.0	0.0	0.0	0.3	0.4	0.2
≥4 deer	0.0	0.0	0.0	0.2	0.1	0.1
Total	100	100	100	100	100	100

Table 20. Percentage of resident hunters who reported observing someone engage in selected illegal activities during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Type of Illegal Activity	<u>Observed Illegal Activity</u>		
	Yes	No	
Tagged deer that were harvested by another hunter	4.9%	95.1%	(2,181)
Continued to hunt after filling their own tag	4.8	95.2	(2,181)
Did not take deer to check station	2.4	97.6	(2,161)
Shot at deer before or after legal hours	5.7	94.3	(2,176)
Hunted from an automobile or ATV	5.8	94.2	(2,181)
Hunted at night with a spot light	1.3	98.7	(2,153)
≥1 of the above	14.8	85.2	(2,236)

Table 21. Percentage of resident hunters in each administrative region who reported observing someone engage in ≥ 1 illegal activities (listed in Table 20) during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Observed Illegal Activity	Administrative Region					State- wide
	1	2	3	4	5	
	(635)	(76)	(239)	(584)	(686)	(2,236)
Yes	14.0%	9.2%	15.9%	13.4%	16.8%	14.8%
No	86.0	90.8	84.1	86.6	83.2	85.2

Table 22. Types of firearms and other equipment used by resident hunters during the regular firearm deer hunting season in Illinois in 1994. Sample sizes are in parentheses.

Equipment	Percentage of Hunters
Firearm	(2,334)
Shotgun slug	97.6
Muzzleloading rifle	2.4
Other equipment	(2,356)
Tree stand	66.9
Safety belt	27.9
Ground blind	28.7
ATV	11.3
Binoculars	30.1
Rifle/shotgun scope	19.7
Regular shotgun barrel	37.5
Smooth-bore slug barrel	31.2
Rifled slug barrel	28.6
Sabot-type slugs	22.6

Table 23. Attitudes of resident paid firearm deer permit holders and paid archery deer permit holders toward the number of firearm deer permits an individual should be allowed to have in Illinois. Sample sizes are in parentheses.

Options for Responding	Firearm-Only Permit Holders	Firearm/Archery Permit Holders	Archery-Only Permit Holders
Responses to the question:			
*In your opinion, what is the maximum number of firearm deer permits an individual hunter should be allowed to have for the 1st segment of the regular firearm deer season in Illinois?			
	(1,559)	(999)	(370)
1 permit	19.2%	19.5%	39.5%
2 permits	56.1	55.6	41.4
3 "	10.2	12.4	7.0
4 "	3.0	3.1	1.4
≥5 "	3.3	4.0	1.1
No opinion	8.2	5.4	9.6

Table 24. Attitudes of resident paid firearm deer permit holders and paid archery deer permit holders toward the dates for the regular firearm deer hunting season in Illinois. Sample sizes are in parentheses.

Options for Responding	Firearm-Only Permit Holders	Firearm/Archery Permit Holders	Archery-Only Permit Holders
------------------------	-----------------------------	--------------------------------	-----------------------------

Responses to the questions:

*The dates for the regular firearm deer season in Illinois in 1994 were November 18-20 for the first segment and December 1-4 (2 weeks later) for the second segment. How do you feel about using similar dates for the regular firearm deer season in 1995?

Nov. 18-20 segment	(1,555)	(988)	(360)
Too early	5.7%	5.4%	14.4%
About right	81.7	83.5	67.2
Too late	8.0	8.5	4.7
No opinion	4.6	2.6	13.7
Dec. 1-4 segment	(1,522)	(972)	(342)
Too early	17.8%	24.3%	17.0%
About right	67.5	64.7	63.2
Too late	8.5	7.4	5.6
No opinion	6.2	3.6	14.2

*Do you agree or disagree with the idea of changing the regular firearm deer season in Illinois from a split 7-day season (3 days in November and 4 days in December) to a single 9-day season in mid-November?

Agree	(1,573)	(999)	(376)
Disagree	29.2%	28.8%	26.9%
No opinion	61.8	64.7	60.4
	9.0	6.5	12.7

Table 25. Attitudes of resident paid firearm deer permit holders and paid archery deer permit holders toward the dates for the muzzleloader and handgun seasons, and whether handguns and crossbows should be legalized for the regular firearm deer season in Illinois. Sample sizes are in parentheses.

Options for Responding	Firearm-Only Permit Holders	Firearm/Archery Permit Holders	Archery-Only Permit Holders
------------------------	-----------------------------	--------------------------------	-----------------------------

Responses to the questions:

*In your opinion, should the special 3-day muzzleloader season take place in October, December, or January?

	(1,576)	(997)	(374)
October	14.6%	15.9%	11.8%
December	21.1	27.7	29.1
January	26.4	35.4	38.2
No opinion	37.9	21.0	20.9

*In your opinion, should the special 3-day handgun season take place in October, December, or January?

	(1,560)	(988)	(374)
October	12.9%	10.6%	12.0%
December	13.8	14.6	15.5
January	39.6	55.8	53.5
No opinion	33.7	19.0	19.0

*Do you think that handguns should or should not be allowed during the regular firearm deer season in Illinois?

	(1,561)	(999)	(382)
Should	22.7%	23.5%	34.0%
Should not	68.4	69.7	57.9
No opinion	8.9	6.8	8.1

*Do you think that crossbows should or should not be allowed during the regular firearm deer season in Illinois?

	(1,554)	(999)	(383)
Should	16.9%	19.9%	34.5%
Should not	71.6	71.2	55.9
No opinion	11.5	8.9	9.6

Table 25 - continued.

Table 25. Continued - page 2.

*Do you like or dislike the idea of allowing shotguns, muzzleloaders, and handguns during the regular firearm deer season and eliminating the special weapons seasons (December muzzleloader and January handgun)?

	(1,555)	(995)	(380)
Like	16.7%	18.8%	35.0%
Dislike	68.9	71.1	51.6
No opinion	14.4	10.1	13.4

Table 26. Attitudes of resident paid firearm deer permit holders and paid archery deer permit holders toward regulations that would prohibit the harvest of small bucks in an effort to increase the number of quality bucks in Illinois. Sample sizes are in parentheses.

Options for Responding	Firearm-Only Permit Holders	Firearm/Archery Permit Holders	Archery-Only Permit Holders
------------------------	-----------------------------	--------------------------------	-----------------------------

Responses to the questions:

*Would you like or dislike a regulation that prohibits the harvest of small bucks on selected state-controlled areas in an effort to increase the number of quality bucks?

	(1,548)	(995)	(381)
Like	47.9%	54.9%	62.5%
Dislike	28.4	27.4	25.5
No opinion	23.7	17.7	12.0

*Would you like or dislike a regulation that prohibits the harvest of small bucks throughout the county where you hunt most in an effort to increase the number of quality bucks?

	(1,560)	(997)	(385)
Like	34.2%	37.8%	52.7%
Dislike	48.7	50.4	35.8
No opinion	17.1	11.8	11.5

Table 27. Opinions of resident firearm deer hunters in each administrative region as to the number of deer and deer hunters in Illinois. Sample sizes are in parentheses.

Options for Responding	Administrative Region					State-wide
	1	2	3	4	5	

Responses to the questions:

*In your opinion, did the number of deer in the county where you hunt most increase, decrease, or remain unchanged from 1993 to 1994?

	(649)	(77)	(239)	(585)	(696)	(2,262)
Increased	25.0%	28.6%	20.1%	25.3%	21.3%	23.5%
Decreased	25.7	18.2	33.0	26.0	28.9	27.2
Unchanged	33.7	41.5	31.8	32.6	34.4	33.8
Don't know	15.6	11.7	15.1	16.1	15.4	15.5

*In your opinion, is the number of deer in the county where you hunt most too low, about right, or too high?

	(647)	(76)	(238)	(584)	(694)	(2,255)
Too low	18.4%	18.4%	27.7%	23.3%	23.6%	22.2%
About right	65.7	65.9	57.2	56.7	59.5	60.4
Too high	9.9	11.8	10.1	13.5	10.1	11.1
No opinion	6.0	3.9	5.0	6.5	6.8	6.3

*In your opinion, is the number of deer hunters in the county where you hunt most too low, about right, or too high?

	(647)	(77)	(238)	(585)	(697)	(2,260)
Too low	3.6%	5.2%	1.7%	1.9%	3.3%	2.9%
About right	64.1	64.9	62.6	60.5	60.8	62.1
Too high	23.2	24.7	28.6	28.0	28.4	26.5
No opinion	9.1	5.2	7.1	9.6	7.5	8.5

Table 28. Attitudes of resident firearm deer hunters in each administrative region toward paying someone for the right to deer hunt in Illinois. Sample sizes are in parentheses.

Category	Administrative Region					State-wide
	1	2	3	4	5	
Paid someone to hunt	(653)	(78)	(247)	(599)	(732)	(2,325)
Yes	7.8%	7.7%	3.2%	3.3%	2.3%	4.5%
No	92.2	92.3	96.8	96.7	97.7	95.5
Willing to pay to hunt	(653)	(79)	(245)	(597)	(730)	(2,321)
Yes	45.9%	62.0%	38.4%	36.9%	35.1%	40.0%
No	54.1	38.0	61.6	63.1	64.9	60.0
Amount willing to pay per day	(299)	(49)	(93)	(220)	(255)	(925)
\$10-\$25	61.5%	53.1%	54.8%	60.0%	66.7%	61.3%
\$26-\$50	22.1	16.3	30.1	25.0	19.6	22.8
\$51-\$100	10.0	26.5	10.8	10.5	9.8	11.0
>\$100	6.4	4.1	4.3	4.5	3.9	4.9
Mean	\$39	\$43	\$34	\$37	\$34	\$37

Table 29. Some personal characteristics of resident firearm deer hunters in each administrative region in Illinois in 1994. Sample sizes are in parentheses.

Characteristic	Administrative Region					State-wide
	1	2	3	4	5	
Residence	(654)	(78)	(247)	(599)	(730)	(2,324)
Rural	34.3%	19.2%	32.8%	34.1%	37.8%	34.6%
Small town	43.4	47.5	45.3	43.2	44.8	44.1
Urban	22.3	33.3	21.9	22.7	17.4	21.3
Sex	(668)	(77)	(239)	(585)	(695)	(2,261)
Male	96.6%	97.5%	97.9%	96.2%	96.4%	96.7%
Female	3.4	2.5	2.1	3.8	3.6	3.3
Age in years	(649)	(77)	(239)	(585)	(696)	(2,262)
Mean \pm SE	39.4	38.1	38.6	38.2	38.9	38.8 \pm 0.3
Distribution:						
≤ 15 years	3.9%	5.2%	5.0%	7.9%	5.7%	5.7%
16-20 years	5.7	6.5	7.6	4.9	7.2	6.1
21-30 "	16.9	27.3	14.6	18.1	15.3	16.8
31-40 "	30.2	27.2	31.0	28.4	28.0	29.1
41-50 "	21.7	9.1	23.4	19.8	21.5	20.9
51-60 "	13.4	15.6	10.0	12.7	14.7	13.3
61-70 "	6.5	5.2	6.3	6.7	6.3	6.4
≥ 71 "	1.7	3.9	2.1	1.5	1.3	1.7
Years of firearm deer hunting	(647)	(77)	(239)	(583)	(695)	(2,257)
Mean \pm SE	12.5	10.0	11.1	12.2	12.5	12.2 \pm 0.2
Distribution:						
1 year(s)	7.0%	9.1%	8.8%	6.7%	5.8%	6.8%
2 "	5.7	11.7	6.3	6.7	7.5	6.8
3 "	7.9	6.5	11.6	6.7	9.5	8.9
4 "	6.6	5.2	6.3	7.2	6.0	6.5
5 "	7.4	10.4	6.3	6.5	7.2	7.0
6-10 "	19.0	24.6	21.4	18.4	18.7	19.3
11-20 "	27.5	22.1	25.9	28.1	26.0	26.9
21-30 "	13.6	6.5	8.4	14.4	13.7	13.1
≥ 31 "	5.3	3.9	5.0	3.3	5.6	4.7

Table 30. Expenditures of resident firearm deer hunters^a (paid firearm permit holders who hunted ≥ 1 days) in Illinois in 1994 (n=2,323).

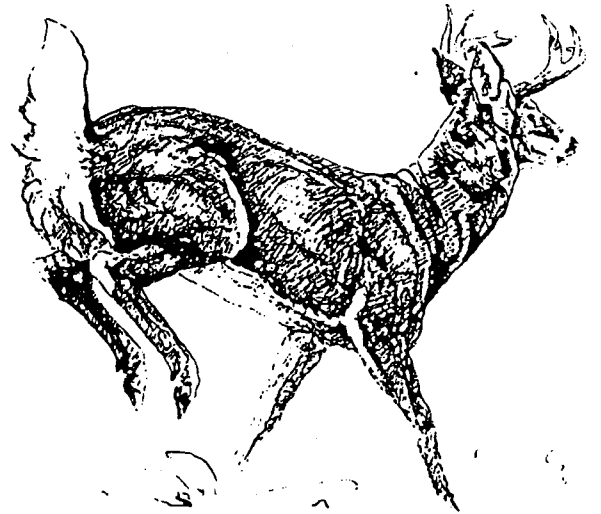
Expenditure	Proportion of Hunters
<\$100	38.0%
\$101-\$250	38.8
\$251-\$500	17.6
\$501-\$1,000	4.7
\$1,001-\$2,000	0.6
>\$2,000	0.3
Mean	\$206 ^b
Total	\$27.9 million ^c

^aExcludes paid firearm landowner permit holders.

^bThe sum of the products of the median dollar value for each category in the left column multiplied by the corresponding percentage in the right column.

^cBased on an estimated 135,583 paid firearm deer permit holders who were active during the regular firearm deer hunting season in Illinois in 1994.

1994 ILLINOIS DEER HUNTER SURVEY



INSTRUCTIONS

To properly manage the Illinois white-tailed deer population, the Department of Conservation needs information about firearm deer hunters, their hunting experiences, and their opinions of hunting regulations and other issues. The opinions of archery deer hunters are also needed.

Please answer all questions beginning with PART A (Permits and General Information) below. If you archery deer hunted only, answer the questions in PART A and PART C (Your Opinions) and return this questionnaire.

Your responses are strictly confidential and will never be associated with your name. Since you are a part of a small, randomly selected group, your participation is very important.

When completed, insert questionnaire into the self-addressed envelope and mail. POSTAGE IS PREPAID.

YOUR COMMENTS ARE WELCOME BUT PLEASE WRITE THEM ON A SEPARATE SHEET OF PAPER TO RECEIVE PROPER ATTENTION.

PART A: Permits and General Information

1. How many paid permits did you have for the regular firearm deer hunting season in Illinois in 1994? (DO NOT include landowner permits)

- *Full-season either-sex firearm deer permits..... _____
- *Full-season antlerless-only firearm deer permits.. _____
- *Second-season either-sex firearm deer permits..... _____
- *Second-season antlerless-only firearm deer permits _____

2. Did you also have any of the following types of permits for deer hunting in Illinois during the 1994 season? (circle appropriate answer for each type of permit)

	<u>Yes</u>	<u>No</u>
*Paid landowner firearm deer permit.....	1.....	2
*Paid muzzleloader deer permit.....	1.....	2
*Paid handgun deer permit.....	1.....	2
*Paid archery deer permit.....	1.....	2
*Free landowner firearm deer permit.....	1.....	2
*Free landowner archery deer permit.....	1.....	2

Figure 1. The questionnaire used for the 1994 Illinois Deer Hunter Survey.

Figure 1 - continued.

6. Please rate the level of difficulty you experienced in finding a place to hunt during the regular firearm deer season in Illinois in 1994.
- No difficulty.....1 Moderate difficulty....3
 Little difficulty....2 Much difficulty.....4
7. When hunting during the regular firearm deer season, were you afield mostly in the morning, mostly in the afternoon, or split your time about evenly between mornings and afternoons?
- Mostly in morning.....1
 Mostly in afternoon.....2
 About evenly between mornings and afternoons....3
8. About how many hours did you hunt on a typical day during the regular firearm deer season in Illinois in 1994?
- Less than 1 hour..1 3-4 hours..3 7-8 hours..5
 1-2 hours.....2 5-6 hours..4 All day....6
9. Did you pass up any opportunities to shoot at deer (i.e., had unobstructed, in-range shot at deer) during the regular firearm deer season in Illinois in 1994?
- Yes.....1 No.....2
- 9a. If "Yes", how many antlered bucks?.....
 9b. how many does or young-of-the-year?.....
10. Was your primary weapon a shotgun slug or muzzleloading rifle during the regular firearm deer season in Illinois in 1994?
- Shotgun slug...1 Muzzleloading rifle...2
11. Which of the following items did you usually use when hunting during the regular firearm deer season in Illinois in 1994? (check [✓] the items you usually used)
- a. Tree stand..... f. Rifle/shotgun scope.....
 b. Safety belt..... g. Regular shotgun barrel....
 c. Ground blind.... h. Smooth-bore slug barrel...
 d. ATV..... h. Rifled slug barrel.....
 e. Binoculars..... i. Sabot-type slugs.....
12. Did you join other hunters in participating in an organized deer drive during the firearm deer season in Illinois in 1994?
- Yes.....1 No.....2

Figure 1. Continued - page 3.

13. Did you observe someone engaging in any of the following illegal activities during the regular firearm deer season in Illinois in 1994?

	<u>Yes</u>	<u>No</u>
*Tagged deer harvested by another hunter.....	1.....	2
*Continued to hunt after filling their own tag..	1.....	2
*Did not take deer to check station.....	1.....	2
*Shot at deer before or after legal hours.....	1.....	2
*Hunted from an automobile or ATV.....	1.....	2
*Hunted at night with a spotlight.....	1.....	2

PART C: Your Opinions

1. In your opinion, what is the maximum number of firearm deer permits an individual hunter should be allowed to have for the 1st segment of the regular firearm deer season in Illinois? (circle number for appropriate answer)

1 2 3 4 5 or more No opinion..6

2. The dates for the regular firearm deer season in Illinois in 1994 were November 18-20 for the first segment and December 1-4 (2 weeks later) for the second segment. How do you feel about using similar dates for the regular firearm deer season in 1995?

	<u>November 18-20</u> <u>Segment</u>	<u>December 1-4</u> <u>Segment</u>
Too early.....	1.....	1
About right.....	2.....	2
Too late.....	3.....	3
No opinion.....	4.....	4

3. Do you agree or disagree with the idea of changing the regular firearm deer season in Illinois from a split 7-day season (3 days in November and 4 days in December) to a single 9-day season in mid-November?

Agree...1 Disagree...2 no opinion...3

4. In your opinion, should the special 3-day muzzleloader season take place in October, December, or January?

October..1 December..2 January..3 No opinion..4

5. In your opinion, should the special 3-day handgun season take place in October, December, or January?

October..1 December..2 January..3 No opinion..4

6. Do you think that handguns should or should not be allowed during the regular firearm deer season in Illinois?
Should.....1 Should not.....2 No opinion.....3
7. Do you think that crossbows should or should not be allowed during the regular firearm deer season in Illinois?
Should.....1 Should not.....2 No opinion.....3
8. Do you like or dislike the idea of allowing shotguns, muzzleloaders, and handguns during the regular firearm deer season and eliminating the special weapons seasons (December muzzleloader and January handgun)?
Like.....1 Dislike.....2 No opinion.....3
9. Would you like or dislike a regulation that prohibits the harvest of small bucks on selected state-controlled areas in an effort to increase the number of quality bucks?
Like.....1 Dislike.....2 No opinion.....3
10. Would you like or dislike a regulation that prohibits the harvest of small bucks throughout the county where you hunt most in an effort to increase the number of quality bucks?
Like.....1 Dislike.....2 No opinion.....3
11. In your opinion, did the number of deer in the county where you hunt most increase, decrease, or remain unchanged from 1993 to 1994?
Increased..1 Decreased..2 Unchanged..3 Don't know..4
12. In your opinion, is the number of deer in the county where you hunt most too low, about right, or too high?
Too low..1 About right..2 Too high..3 No opinion..4
13. In your opinion, is the number of deer hunters in the county where you hunt most too low, about right, or too high?
Too low..1 About right..2 Too high..3 No opinion..4

PART D: Background Information

1. How old were you on your last birthday?....._____years
2. Are you (circle one): Male.....1 Female.....2
3. How many years have you firearm deer hunted?..._____years

4. In what type of community do you now live? (circle number for appropriate answer)
- Rural (country, farm, town less than 500 residents)....1
 Small town (500 to 20,000 residents).....2
 Urban (over 20,000 residents, suburban, city).....3
5. How much money do you think you spent for deer hunting during the regular firearm deer hunting seasons in Illinois in 1994?
- Less than \$100.....1 \$501 - \$1,000.....4
 \$101 - \$250.....2 \$1,001 - \$2,000.....5
 \$251 - \$500.....3 More than \$2,000.....6
6. Did you pay someone for the right to firearm deer hunt on their land in Illinois in 1994?
- Yes.....1 No.....2
7. Would you be willing to pay someone for the right to firearm deer hunt on their land in Illinois?
- Yes.....1 No.....2
- 7a. If "Yes", about how much would you be willing to pay per day?
- \$10-\$25..1 \$26-\$50..2 \$50-\$100..3 Over \$100...4

Thank you for your cooperation

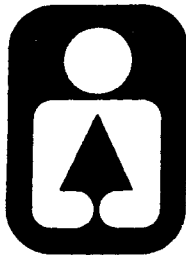
POSTAGE IS PREPAID

Brent Manning
Director

John W. Comerio
Deputy Director

Bruce F. Clay
Assistant Director

Illinois



Department of Conservation

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LINCOLN TOWER PLAZA • 524 SOUTH SECOND STREET • SPRINGFIELD 62701-1787
CHICAGO OFFICE • ROOM 4-300 • 100 WEST RANDOLPH 60601

Dear Fellow Sportsman:

You are one of a select group of Illinoisans asked to provide information about your deer hunting activities during the past hunting season.

The information supplied by you and other selected hunters is vital to the management of white-tailed deer in Illinois. Our goals are to safeguard deer populations, to grant maximum deer hunting opportunities to license holders, and to maintain an attractive level of hunter success.

The information you provide is used to better understand the characteristics of our deer population and deer hunters. It will also help us understand how deer hunters view their sport.

Your reply is very important, even if you did not hunt deer or you were not successful. Only a limited number of deer hunters can be contacted, therefore, your response is urgently needed.

Please take a few minutes to fill out the parts of the enclosed questionnaire that apply to you. If you do not remember exact figures, please give your best estimates.

Drop the completed questionnaire in the mail. Postage is prepaid.

Sincerely,

Jeffrey M. Ver Steeg
Chief, Wildlife Resources

JMV:WLA
Enclosure
D1

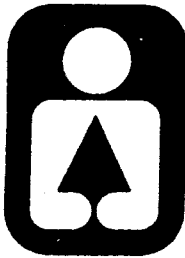
Figure 2. The letter that accompanied the first mailing of the questionnaire.

Brent Manning
Director

John W. Comerio
Deputy Director

Bruce F. Clay
Assistant Director

Illinois



Department of Conservation
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LINCOLN TOWER PLAZA • 524 SOUTH SECOND STREET • SPRINGFIELD 62701-1787
CHICAGO OFFICE • ROOM 4-300 • 100 WEST RANDOLPH 60601

Dear Fellow Sportsman:

Recently, we mailed you a Deer Hunter Questionnaire and requested that you fill it out and return it as soon as possible. We have not received your form at this time. Perhaps you have misplaced the questionnaire or you have not found time to complete it and return it to us.


We are providing another questionnaire which we hope you will complete and return as soon as possible. If you have already returned the first questionnaire, please throw this one away. The information supplied by you and other deer hunters being sampled will be of great value to the Conservation Department in better directing the management of our white-tailed deer resources.

Please fill out the questionnaire completely and return it even if you did not hunt deer or you were unsuccessful.

Please drop the completed questionnaire in the mail. Postage is prepaid. Your prompt attention will be sincerely appreciated.

Thank you.

Sincerely,


Jeffrey M. Ver Steeg
Chief, Wildlife Resources

JMV:WLA
Enclosure
D2

Figure 3. The letter that accompanied the second mailing of the questionnaire.

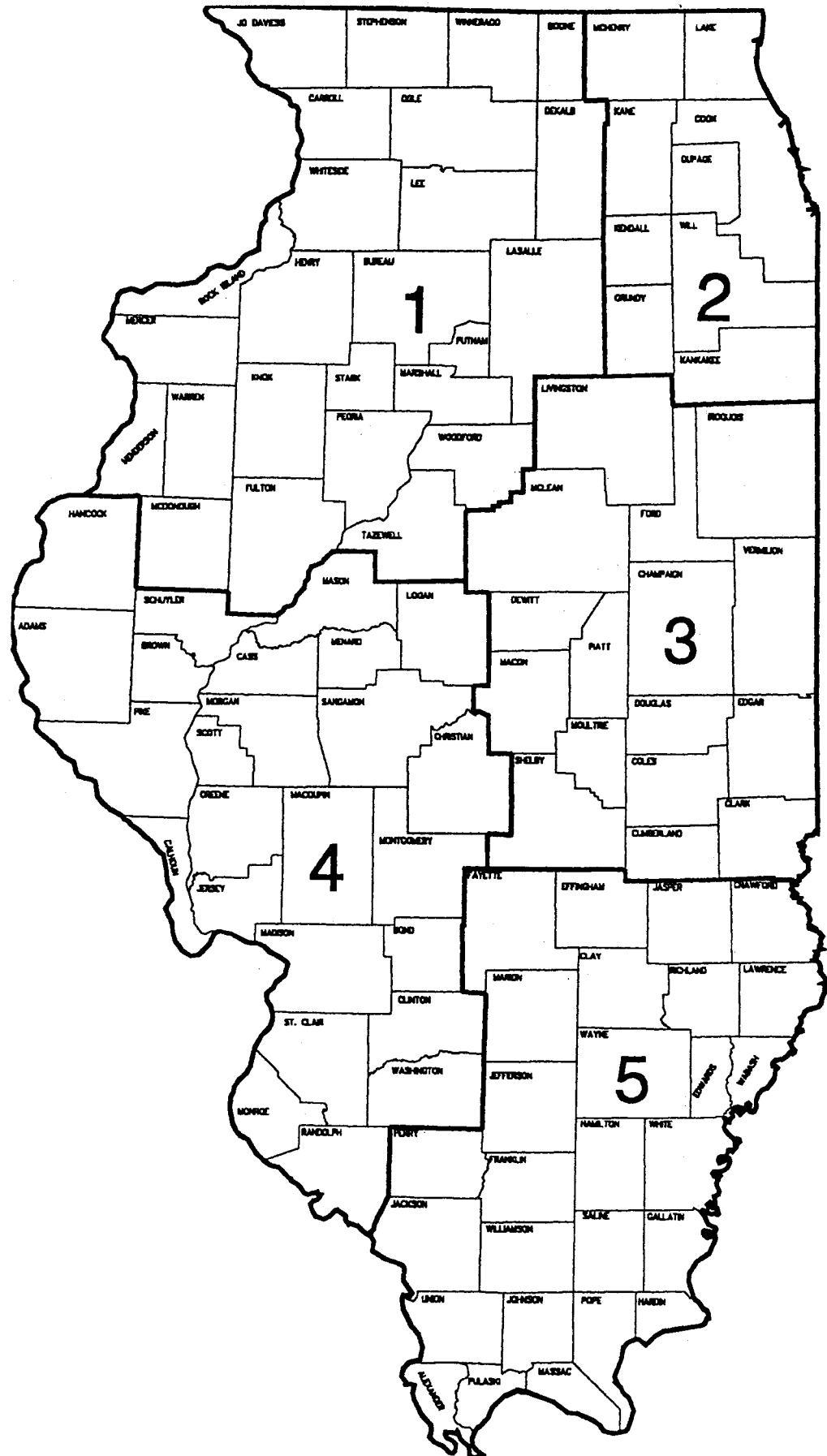


Figure 4. Administrative Regions in Illinois.

