



**I L L I N O I S**

**UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN**

**PRODUCTION NOTE**

**University of Illinois at  
Urbana-Champaign Library  
Large-scale Digitization Project, 2007.**



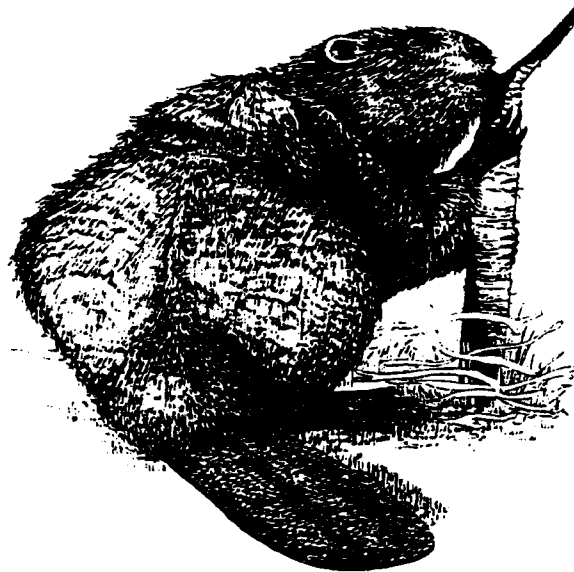
NHX

# WILDLIFE HUNTER HARVEST SURVEY, 1995-96

William L. Anderson, Linda K. Campbell, and Anne E. Zielske

**FEDERAL AID IN WILDLIFE RESTORATION ACT  
PROJECT NUMBER: W-112-R-5**

**JOB COMPLETION REPORT  
ILLINOIS FURBEARER TRAPPING SURVEY, 1995-96  
STUDY 1  
JOB NUMBER 2**



**NATURAL HISTORY SURVEY  
JUL 20 1999  
LIBRARY**

**NATURAL HISTORY SURVEY  
JUL 20 1999  
LIBRARY**

Brent Manning, Director  
Department of Natural Resources

Kirby D. Cottrell, Director  
Office of Resource Conservation

Jeffrey M. Ver Steeg, Chief  
Division of Wildlife Resources

December 13, 1996

**NATURAL HISTORY SURVEY  
JUL 20 1999  
LIBRARY**



## JOB COMPLETION REPORT

### WILDLIFE HARVEST AND HUNTER OPINION SURVEYS

#### STATE OF ILLINOIS

PROJECT NO.: W-112-R-5

STUDY 1: Surveys of Hunters/Trappers Via Mail-Letter  
Questionnaire

JOB NO. 2: Illinois Furbearer Trapping Survey, 1995-96

**ABSTRACT:** A systematic sample of 867 persons who purchased a 1995 Illinois resident trapping license was surveyed after the furbearer trapping season. The licensees were contacted by first class mail in three mailings. Questionnaires were delivered to 833 (96.1%) recipients, from which 680 useable replies were received (81.6% response). Of these, 592 (87.0%) were active trappers--i.e., set  $\geq 1$  traps during the season. Only 5 (0.8%) of the active trappers were ineffective--i.e., caught nothing.

The 1995-96 survey covered 10 furbearer species. Findings are presented: (1) on a statewide basis, (2) for each of the 10 wildlife management units in the state, and (3) for the two furbearer management zones currently in use. Data include estimated number and density of effective trappers, estimated number and density of trapper harvest, and average season catch. Statewide estimates for the number of effective trappers and their catch were: muskrat (Ondatra zibethicus) 1,702 (68,741), mink (Mustela vison) 1,133 (3,984), raccoon (Procyon lotor) 2,139 (68,280), opossum (Didelphis virginiana) 1,487 (17,226), red fox (Vulpes vulpes) 485 (1,710), gray fox (Urocyon cinereoargenteus) 84 (235), beaver (Castor canadensis) 899 (6,776), striped skunk (Mephitis mephitis) 624 (2,469), weasel (Mustela frenata, M. nivalis) 28 (32), coyote (Canis latrans) 596 (4,338), and all species combined 2,334 (173,791). There were an estimated 2,354 active trappers in 1995-96.

Active trappers had traps set for an average of 30.7 days (or nights) and used an average of 30.1 traps during the 1995-96 season. One-half (54.0%) of the effective muskrat trappers caught  $\leq 20$  muskrats. An estimated 45.0% of the effective raccoon trappers caught 1-15 raccoons and 61.5% caught  $\leq 25$ . Furbearers, primarily raccoons, were hunted by 28.8% of the licensed trappers. The harvest of furbearers by hunting trappers was equivalent to 9.2% of the trapped catch. Majorities of the muskrat, beaver, skunk, and weasel catch were taken with Conibear traps. Majorities of the mink, raccoon, red fox, gray fox, and coyote catch were taken with leghold traps. The opossum catch was about equally divided between Conibear and leghold traps. A plurality of the muskrats caught with foothold/leghold traps was taken in "water sets with special drowning pole/tangle stake and with trap attached to long chain or wire". Seventeen trappers reported accidentally catching  $\geq 1$  badgers (Taxidea taxus) in 14 counties, 61 trappers reported seeing river otter (Lutra canadensis) or sign in 32 counties, and 72 trappers reported seeing bobcat (Felis rufus) or sign in 42 counties, during the past 3 years. Pluralities (46.9-42.1%) of the active trappers thought the raccoon and coyote populations had increased from 1994-95 to 1995-96.

## JOB COMPLETION REPORT

### SURVEYS AND INVESTIGATIONS PROGRAM

STATE OF ILLINOIS

PROJECT NO.: W-112-R-5

STUDY 101: Wildlife Harvest and Hunter Opinion Surveys

JOB NO. 101.2: Illinois Furbearer Trapping Survey, 1995-96

OBJECTIVE: To survey furbearer (10 species of mammals) trappers to determine their activities, harvests, characteristics, attitudes, and opinions in Illinois.

PROCEDURES: A stratified random sample of individuals who purchased 1995 trapping licenses was surveyed via mail-letter questionnaire. Name/address cards of license purchasers were filled out by vendors for the first license sold in each book of five resident trapping licenses in the 1995 series (total sales estimated at 2,704 - 1 October 1996) (Fig. 1). At the same time, the person purchasing the license was provided with an information card which requested him to keep a record of his trapping activities (Fig. 2). The name/address cards were returned to the Division of Wildlife Resources via business reply mail and were filed according to the licensee's county of residence. The sample was drawn from these cards. For some strata, it was necessary to supplement the mailing list with names/addresses from the stubs of trapping licenses sold during the current year.

The stratified random sample was based on the distribution of the 1986-1990 trapping license sales. The size of the sample was set at 867 because this quantity would result in 600 to 700 useable replies (about 25% of all licensed trappers) and insure statistically reliable results at the statewide level.

The questionnaire (Fig. 3), a letter of explanation (Fig. 4), and a return envelope (pre-addressed and postage-paid) were mailed to the individuals on the mailing list. Non-respondents were sent 2nd and 3rd copies of the questionnaire, and accompanying letters (Figs. 5 and 6) at approximately monthly intervals. First class postage was used for all mailings.

Data from returned questionnaires were transferred to a computer file (Ashton-Tate dBASE III+) and analyzed using a computer program designed for the survey. Respondents were placed into one of two categories: inactive - those who did not set traps for furbearers, or active - those who did set one or more traps for furbearers. Active trappers were further classified as: effective - those who caught one or more furbearers of the species in question, or ineffective - those who did not catch any furbearers.

Data for each species surveyed were compiled for the 10 wildlife management units in Illinois (Fig. 7). In addition, confidence limits at the 95% level were calculated by species for the number of effective trappers, average season catch, and total trapper harvest on a statewide basis. The formulas used were described by Cochran (1953) and Snedecor and Cochran (1967). These are as follows:

- a. Number of effective trappers for species:

$$\pm 2N \sqrt{\frac{pq}{n}}$$

where N = total license sales

n = number of licensees in sample

p = portion of licensees in sample who effectively trapped species in question

q = 1-p

- b. Average season catch per effective trapper for species in question:

$$\pm 1.96 \frac{s}{\sqrt{n_1}}$$

where s = standard deviation of average catch per effective trapper

n<sub>1</sub> = number of licensees in sample who effectively trapped species in question

- c. Total trapper harvest:

$$\pm 2N \times \frac{s}{\sqrt{n}}$$

All calculations assumed there were no differences between the activities of the licensees who returned the questionnaire and those who did not.

## FINDINGS AND ANALYSIS:

### 1995-95 Trapping Seasons

The 1995-96 fur-bearing mammal trapping seasons varied from 62 to 148 days in length (Table 1). The seasons for all species except beaver lasted 62 days in both the northern and southern management zones (Fig. 7). In the northern zone, opening dates were 5 November for muskrat, mink, raccoon, opossum, beaver, striped skunk, and weasel, and 15 November for red fox, gray fox, and coyote. In the southern zone, opening dates were 15 November for all 10 species. Beaver trapping season was 138 or 148 days in length, depending on zone. Special regulations reduced the length of the beaver season to 62 days along the Mississippi River from Interstate 80 north to the JoDaviess County line as a protective measure for river otter. No bag limits were in effect for any furbearer.

### 1995-96 Trapper Mail Survey

The initial mailing of 867 questionnaires was made on 11 March 1996. The two follow-up mailings to non-respondents were made on 19 April and 22 May, respectively, and the mailings were closed out on 11 July 1996.

A total of 833 (96.08%) licensees in the 1995-96 survey sample was reached by the Postal Service. The 34 remaining questionnaires were returned as undeliverable. There were 680 useable replies received from the licensees contacted, representing an 81.63% response for the number delivered. Of these respondents, 592 (87.06%) reported that they set  $\geq 1$  traps for furbearers during the season and were classified as active. A total of 587 (99.16%) active trappers were effective--i.e. caught  $\geq 1$  furbearers, and the remaining 5 (0.84%) were ineffective--i.e. caught nothing. Based on these data, there were an estimated 2,354 active trappers and 2,334 effective trappers in Illinois in 1995-96.

#### A. Number of Days of Trapping

Active trappers had traps set for an average of 30.7 days (or nights) during the 1995-96 season (Fig. 8). The maximum number of days a trapper could have legally trapped was 148. However, only 19.5% of the respondents stated they had traps set for  $>45$  days, and 36.3% trapped  $>30$  days. The vast majority of trapping activity is concentrated during the initial 15 to 30



days of the muskrat, mink, and raccoon seasons. In comparison, Illinois trappers had traps set for an average of 23.0 days in 1985-86 (108-day season), 20.9 days in 1990-91 (139-day season), 30.4 days in 1993-94 (147 days), and 28.4 days (147-day season) in 1994-95 (Hubert 1986; Anderson and Campbell 1992; Anderson et al. 1995; Anderson et al. 1996).

#### B. Number of Traps Set

The average active trapper used 30.1 traps during the 1995-95 season (Fig. 9). In spite of the fact that there were no restrictions on the number of traps that could be set, 87.3% of all active trappers employed  $\leq 50$  traps. Only 2.9% used  $>100$  traps. In comparison, the average Illinois trapper used 31.2 traps in 1987-88, 31.6 traps in 1990-91, 30.9 traps in 1993-94, and 30.8 traps in 1994-95 (Hubert 1988; Anderson and Campbell 1992; Anderson et al. 1995; Anderson et al. 1996). The average Missouri trapper used 32.9 traps in 1972-73 (Sampson 1973).

#### C. Fur Harvest Summary

A statewide summary for the 10 species of furbearers surveyed in 1995-96 is presented in Table 2. The data for each species include the estimated number of effective trappers and their representation (percentage) among all licensed trappers, average season catch per effective trapper, and estimated total trapper harvest. Similar information for each of the 10 species, plus estimated density of effective trappers and furbearer harvest in each of the 10 wildlife management units, is provided in Tables 3 through 12. The original sample sizes from which these data were derived are presented in Table 13, which also provides the percent of effective trappers for each species.

Confidence intervals at the 95% level for number of effective trappers, average season catch per effective trapper, and total harvest for each furbearer statewide are given in Table 14. In most instances, those species with the greater number of effective trappers in the sample have smaller limits of variability which result in greater confidence in the projections. For example, effective raccoon trappers were the most numerous in 1995-96 and their projected number varied by only  $\pm 3.93\%$ . The 95% confidence interval projections for less numerous gray fox trappers varied by  $\pm 42.86\%$  and for uncommon weasel trappers by  $\pm 75.00\%$ .

#### D. Distribution of Harvest Among Effective Trappers

The muskrat and raccoon were the two most important furbearers trapped during the 1995-96 season in terms of number of effective trappers, average season catch, and total harvest

(Table 2). The reported number of muskrats harvested by 428 effective muskrat trappers ranged from 1 to 580 and averaged 40.39 (Fig. 10). During the season, 54.0% of these trappers harvested  $\leq 20$  muskrats and 90.7% caught  $\leq 100$ . The average number of muskrats taken by effective trappers was 5.0% less in 1994-95 than in 1993-94 (Anderson et al. Zielske 1996). Of the effective trappers who responded, 73 (17.1%) stated that their catch averaged  $\geq 1$  muskrats per day for the entire season.

The distribution of harvest among effective raccoon trappers was similar to that for muskrat. The number of raccoons caught by the 538 effective raccoon trappers for whom data were available averaged 31.92 and ranged from 1 to 430 (Fig. 11). Less than the average season catch was taken by 69.5% of these trappers. For the entire season, 45.0% of the trappers harvested  $\leq 15$  raccoons and 61.6% trapped  $\leq 25$ . Only 69 (12.8%) of the effective raccoon trappers reported making an average daily catch of  $\geq 1$  raccoons throughout the season.

The harvest of the other eight open-season furbearers was distributed among effective trappers much like the muskrat and raccoon harvests (Table 15). For three of these species (red fox, gray fox, and weasel),  $\leq 15\%$  of the effective trappers made season catches of  $> 5$  pelts. For the other species, the following percentages of effective trappers took  $> 5$  pelts: mink 18.0%, opossum 56.1%, beaver 36.7%, striped skunk 23.5%, and coyote 35.2%.

The above data emphasize the inapplicability of bag limits (both daily and seasonal) to furbearer trapping in Illinois. Few trappers are successful in making large seasonal catches. The ones who do are active throughout the season over extensive areas. Reductions in season length offer the most potential for reducing the furbearer harvest by highly successful trappers. Bag limits could potentially increase harvest because of their goal-setting implications.

#### E. Management Zone Data Summary

Management zone and statewide data summaries for each of the 10 species of furbearers surveyed in 1995-96 are presented in Tables 16 through 25. The data for each species include estimated number and density of effective trappers, average season catch, estimated total trapper harvest, and trapper harvest per unit area. The northern and southern zones listed for 1995-96 are nearly identical to the zones employed for regulatory management in previous years (1979-80 through 1994-95) (Fig. 7).

#### F. Types of Traps Used by Effective Trappers

The effective trappers reported that majorities of their muskrat (65.0%), beaver (66.9%), skunk (61.2%), and weasel (75.0%) catches were taken with Conibear traps (Table 26). Similarly, majorities of the mink (66.7%), raccoon (54.1%), red fox (93.5%), gray fox (96.4%), and coyote (96.7%) catches were taken with leghold traps. The opossum catch was about equally divided between Conibear (47.6%) and leghold traps (44.5%). It is noteworthy that foxes and coyotes were rarely taken with traps other than the leghold variety. Box/cage traps were credited with small but measurable percentages (5.2-7.9%) of the raccoon, opossum, and skunk catches. Except for beaver, snares were seldom used to catch furbearers in Illinois.

#### G. Types of Traps and Sets Used for Catching Muskrats

Of the effective muskrat trappers in the 1995-96 sample, 80.5% used body-gripping (Conibear) traps, 66.2% used standard foothold/leghold traps, and 10.8% used stop-loss foothold/leghold traps (Table 27). It was rare for muskrat trappers to use cage/box traps (1.5%). The body-gripping (Conibear) devices comprised more than one-half (54.7%) of all traps used for catching muskrats. Foothold/leghold traps, the standard (38.5%) and stop-loss (6.0%) varieties collectively, made up essentially all of the other types of traps used for catching muskrats.

Almost one-third (29.7%) of the muskrat catch with foothold/leghold traps was taken in "water sets with special drowning pole/tangle stake and with trap attached to long chain or wire" (Table 28). An additional 23.0% of the muskrat catch was taken in "water sets with trap attached to drowning slide wire", and 20.4% of the catch was in "water sets without drowning slide wire or special drowning pole/tangle stake but attached to long chain or wire staked in deep water". Most of the remainder of the muskrat catch with foothold/leghold traps was associated with "float sets which allows trap to fall off float and become submerged" (12.8%), "under-ice sets" (4.7%), or "water sets without drowning slide wire or special drowning pole/tangle stake with standard chain or wire staked in shallow water" (6.1%). Only 2.5% of the muskrat catch was taken in "dry land sets".

#### H. Fur Hunting by Trappers

A total of 196 trappers (28.82% of licensees sampled) reported hunting furbearers with gun and/or dogs in 1995-96 (Table 29). Their total hunting harvest was 16,065 pelts or an average of 20.61 per hunting trapper. This is equivalent to 9.24% of the total trapped catch estimated by this survey. The raccoon was hunted by more trappers than any other species. Next in popularity was the coyote. From 1986-87 through 1990-91,

25.91% to 29.47% of the trappers in Illinois also hunted furbearers (Hubert 1987, 1988, 1989; Anderson et al. 1990 and 1991). In 1993-94, 28.30% of Illinois' trappers also hunted furbearers (Anderson et al. 1995). The percentage of trappers who hunted furbearers in 1994-95 was 27.56% (Anderson 1996). Sampson (1973) reported 33.6% of the trappers in Missouri were fur hunters. Obviously, there is much overlap between the user groups designated as fur trappers and fur hunters.

#### I. Observations of Badgers, River Otters, and Bobcats

Trappers participating in the survey were asked whether they accidentally trapped any badgers, saw river otter or sign, and/or saw bobcat or sign, during the past 3 years. Seventeen trappers indicated they caught  $\geq 1$  badgers. These trappers provided 16 reports of trapping badgers in 14 separate counties (Fig. 12). The counties were located primarily in the west-central and northwestern portions of Illinois.

Sixty-one trappers claimed they saw river otter or sign. These trappers provided 60 reports of otter in 32 counties (Fig. 13). The reports came from counties throughout the state. Most of these counties were associated with riverine habitat.

Seventy-two trappers said they saw bobcat or sign. These trappers provided 68 reports of bobcat in 42 counties (Fig. 14). The counties were located throughout the state.

#### J. Changes in Furbearer Populations

When asked to express their opinions of changes in furbearer populations from 1994-94 to 1995-96, pluralities (46.9-42.1%) of the active trappers thought that raccoon and coyote numbers were up (Table 30). Conversely, a plurality (33.5%) of the trappers thought that muskrat numbers were down. For the other two species, pluralities of the trappers who expressed opinions felt that beaver numbers were up, and red fox populations were down.

#### RECOMMENDATIONS:

The present Illinois Furbearer Trapping Survey probably realizes its best use and reliability for furbearer management as an indicator of trends in trapping pressure, success, harvest, and recreation. Until 1990, this survey (formerly called "Trapper Harvest Survey") provided the only regional harvest data available for the trapped portion of the annual furbearer catch. Beginning with the 1990-91 season, another survey, entitled "Illinois Fur Hunter/Trapper Survey", was created. Because the mailing list for this survey was derived from purchasers of the Illinois Furbearer Stamp, it provided data for both fur hunter

and fur trapper activities.

Both the Fur Hunter/Trapper Survey and the Furbearer Trapping Survey were conducted during the 1990-91 season in order to have a year of overlap in the two data sets for trapping activities. Because there was a high level of agreement between the two surveys (Anderson and Campbell 1992), the Furbearer Trapping Survey was discontinued. The Fur Hunter/Trapper Survey was continued through the 1991-92 and 1992-93 seasons.

The creation of the Illinois Habitat Stamp in 1993 was accompanied by a decision to discontinue the Illinois Furbearer Stamp after the 1992 season. The Habitat Stamp is required for most people who take or attempt to take any game species in Illinois except waterfowl. Because of these changes, the Fur Hunter/Trapper Survey was replaced with two separate surveys: (1) the present Furbearer Trapping survey, which will be conducted annually and will sample purchasers of the resident trapping license, and (2) a Furbearer Hunter Survey, which will be conducted every 3-5 years and will sample purchasers of the Habitat Stamp who indicate on the stamp stub that they hunted furbearers during the previous year.

#### LITERATURE CITED:

- Anderson, W. L., and L. K. Campbell. 1992. Fur hunter/trapper survey, 1990-91. Illinois Dept. of Conserv. P-R Proj. Rep. W-99-R-3 and W-112-R-1, Study 1, Job 2. 66pp+appendix.
- \_\_\_\_\_, \_\_\_\_\_, and K. Benner. 1995. Illinois furbearer trapping survey, 1993-94. Illinois Dept. of Conserv., P-R Proj. Rep. W-112-R, Study 1, Job 2. 52pp.
- \_\_\_\_\_, \_\_\_\_\_, and A. E. Zielske. 1996. Illinois furbearer trapping survey, 1994-95. Illinois Dept. of Nat. Res., P-R Project. Rep. W-112-R, Study 1, Job 2. 55pp.
- \_\_\_\_\_, \_\_\_\_\_, and C. M. Zielske. 1990. Trapper harvest survey, 1989-90. Illinois Dept. of Conserv. P-R Proj. Rep. W-99-R-2, Study XV, Job 3. 47pp.
- \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_. 1991. Trapper harvest survey, 1990-91. Illinois Dept. of Conserv. P-R Proj. Rep. W-99-R-3, Study XV, Job 3. 48pp.
- Cochran, W. G. 1953. Sampling techniques, 2nd ed. Wiley and Sons, New York. 413 pp.

Hubert, G. F., Jr. 1986. Trapper harvest survey, 1985-86. Illinois Dept. of Conserv. P-R Proj. Rep. W-49-R-33, Study XV, Job 3. 48pp.

\_\_\_\_\_. 1987. Trapper harvest survey, 1986-87. Illinois Dept. of Conserv. P-R Proj. Rep. W-49-R-34, Study XV, Job 3. 48pp.

\_\_\_\_\_. 1988. Trapper harvest survey, 1987-88. Illinois Dept. of Conserv. P-R Proj. Rep. W-49-R-35, Study XV, Job 3. 47pp.

\_\_\_\_\_. 1989. Trapper harvest survey, 1988-89. Illinois Dept. of Conserv. P-R Proj. Rep. W-49-R-36, Study XV, Job 3. 47pp.

Sampson, F. W. 1973. Fur harvest survey, 1972-73. Missouri Dept. of Conserv. P-R Proj. Rep. W-13-R-28, Study X, Job 1. 16pp.

Snedecor, G. W., and W. G. Cochran. 1967. Statistical methods, 6th ed. Iowa Stat Univ. Press, Ames. 593pp.


Acknowledgements. Appreciation is extended to R.D. Bluett and G.F. Hubert, Jr. for developing the questionnaire for this survey and for critically reading a preliminary draft of the report. D.M. Witzany, consultant at the Illinois Natural History Survey, did the computer programming and assisted with other aspects of data analysis.

DATA AND REPORTS:

Original data and reports in this investigation are on file in the Investigations and Surveys Program offices, Natural Resources Studies Annex, Champaign, Illinois 61820.

PREPARED BY: William L. Anderson, Linda K. Campbell, and  
Anne E. Zielske  
Investigations and Surveys Program  
Division of Wildlife Resources

DATE: 13 December 1996

APPROVED BY:   
Jeffrey M. Ver Steeg, Chief  
Division of Wildlife Resources

DATE: 17 December 1996

Table 1. Furbearer trapping seasons in Illinois, 1995-96.

Species	Trapping Seasons	
	Northern Zone	Southern Zone
Muskrat, mink, raccoon, opossum, striped skunk, weasel	5 Nov - 5 Jan (62) <sup>a</sup>	15 Nov - 15 Jan (62)
Beaver	5 Nov - 31 Mar (148) <sup>b</sup>	15 Nov - 31 Mar (138)
Red fox, gray fox, coyote	15 Nov - 15 Jan (62)	15 Nov - 15 Jan (62)

<sup>a</sup>Numbers in parentheses are season lengths in days.

<sup>b</sup>Those portions of Carroll, Whiteside, and Rock Island counties lying west of Illinois Rt. 84 from Interstate 80 north to the JoDaviess county line were open to beaver trapping from 5 Nov. 1995 - 5 Jan. 1996 only.

Table 2. Summary of statewide data from post-season mail survey of resident trappers in Illinois, 1995-96 season (n=680).

Species	Estimated Number of Effective Trappers	Percent of Licensed Trappers	Average Season Catch	Estimated Total Trapper Harvest
Muskrat	1702	62.94	40.39	68741
Mink	1133	41.91	3.52	3984
Raccoon	2139	79.12	31.92	68280
Opossum	1487	55.00	11.58	17226
Red fox	485	17.94	3.52	1710
Gray fox	84	3.09	2.81	235
Beaver	899	33.24	7.54	6776
Skunk	624	23.09	3.96	2469
Weasel	28	1.03	1.14	32
Coyote	596	22.06	7.27	4338



Table 3. Summary of muskrat trapper and harvest data by wildlife management units in Illinois, 1995-96 season (n=428).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	247 ( 14.5)	2.62	78.82	19433	206.76
Northeast Moraine	68 ( 4.0)	0.82	33.88	2290	27.69
Mississippi Border-North	103 ( 6.1)	1.32	38.23	3953	50.36
Mississippi Border-South	191 ( 11.2)	1.40	33.69	6430	47.02
Western Prairie/Forest	187 ( 11.0)	1.30	28.15	5261	36.48
Central Sand Prairie	44 ( 2.6)	1.05	59.27	2593	62.52
Grand Prairie	461 ( 27.1)	0.88	40.09	18495	35.14
Southern Plain	310 ( 18.2)	1.31	28.26	8764	36.94
Wabash Border	68 ( 4.0)	1.00	18.94	1280	18.99
Shawnee Hills	24 ( 1.4)	0.46	10.17	243	4.65
Unknown	0 ( 0.0)	..	0.00	0	..
Statewide	1702 (100.0)	1.17	40.39	68741	47.06

Table 4. Summary of mink trapper and harvest data by wildlife management units in Illinois, 1995-96 season (n=285).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	139 ( 12.3)	1.48	2.26	314	3.34
Northeast Moraine	44 ( 3.9)	0.53	3.00	131	1.59
Mississippi Border-North	56 ( 4.9)	0.71	2.93	163	2.08
Mississippi Border-South	123 ( 10.9)	0.90	3.19	394	2.88
Western Prairie/Forest	99 ( 8.8)	0.69	2.56	254	1.76
Central Sand Prairie	32 ( 2.8)	0.77	2.25	72	1.73
Grand Prairie	346 ( 30.5)	0.66	3.85	1332	2.53
Southern Plain	235 ( 20.7)	0.99	4.56	1070	4.51
Wabash Border	48 ( 4.2)	0.71	4.83	231	3.42
Shawnee Hills	12 ( 1.1)	0.23	2.00	24	0.46
Unknown	0 ( 0.0)	..	0.00	0	..
Statewide	1133 (100.0)	0.78	3.52	3984	2.73

Table 5. Summary of raccoon trapper and harvest data by wildlife management units in Illinois, 1995-96 season (n=538).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	270 ( 12.6)	270	2.88	36.26	9806	104.33
Northeast Moraine	84 ( 3.9)	84	1.01	21.48	1793	21.68
Mississippi Border-North	187 ( 8.7)	187	2.38	29.32	5480	69.82
Mississippi Border-South	231 ( 10.8)	231	1.69	30.71	7082	51.79
Western Prairie/Forest	251 ( 11.7)	251	1.74	32.19	8064	55.92
Central Sand Prairie	48 ( 2.2)	48	1.15	23.00	1098	26.47
Grand Prairie	624 ( 29.2)	624	1.19	36.11	22543	42.83
Southern Plain	338 ( 15.8)	338	1.42	25.71	8689	36.62
Wabash Border	80 ( 3.7)	80	1.18	38.50	3062	45.42
Shawnee Hills	28 ( 1.3)	28	0.53	23.86	664	12.73
Unknown	0 ( 0.0)	0	..	0.00	0	..
Statewide	2139 (100.0)	2139	1.46	31.92	68280	46.74

Table 6. Summary of opossum trapper and harvest data by wildlife management units in Illinois, 1995-96 season (n=374).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	163 ( 11.0)	1.73	12.12	1976	21.03
Northeast Moraine	64 ( 4.3)	0.77	8.13	517	6.25
Mississippi Border-North	103 ( 7.0)	1.32	12.15	1257	16.01
Mississippi Border-South	171 ( 11.5)	1.25	13.51	2310	16.89
Western Prairie/Forest	171 ( 11.5)	1.19	8.05	1376	9.54
Central Sand Prairie	36 ( 2.4)	0.86	10.44	374	9.01
Grand Prairie	457 ( 30.7)	0.87	10.38	4748	9.02
Southern Plain	247 ( 16.6)	1.04	13.85	3416	14.40
Wabash Border	52 ( 3.5)	0.77	16.08	831	12.33
Shawnee Hills	24 ( 1.6)	0.46	17.67	422	8.08
Unknown	0 ( 0.0)	..	0.00	0	..
Statewide	1487 (100.0)	1.02	11.58	17226	11.79

Table 7. Summary of red fox trapper and harvest data by wildlife management units in Illinois, 1995-96 season (n=122).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	40 ( 8.2)	0.42	3.40	135	1.44
Northeast Moraine	28 ( 5.7)	0.34	4.43	123	1.49
Mississippi Border-North	36 ( 7.4)	0.46	1.33	48	0.61
Mississippi Border-South	68 ( 13.9)	0.49	5.18	350	2.56
Western Prairie/Forest	24 ( 4.9)	0.17	1.83	44	0.30
Central Sand Prairie	8 ( 1.6)	0.19	6.00	48	1.15
Grand Prairie	171 ( 35.2)	0.32	3.95	676	1.28
Southern Plain	72 ( 14.8)	0.30	2.78	199	0.84
Wabash Border	16 ( 3.3)	0.24	3.75	60	0.88
Shawnee Hills	24 ( 4.9)	0.46	1.17	28	0.53
Unknown	0 ( 0.0)	..	0.00	0	..
Statewide	485 (100.0)	0.33	3.52	1710	1.17

Table 8. Summary of gray fox trapper and harvest data by wildlife management units in Illinois, 1995-96 season (n=21).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	4 ( 4.8)	4	0.04	2.00	8	0.08
Northeast Moraine	0 ( 0.0)	0	0.00	0.00	0	0.00
Mississippi Border-North	0 ( 0.0)	0	0.00	0.00	0	0.00
Mississippi Border-South	20 ( 23.8)	20	0.15	3.00	60	0.44
Western Prairie/Forest	0 ( 0.0)	0	0.00	0.00	0	0.00
Central Sand Prairie	4 ( 4.8)	4	0.10	1.00	4	0.10
Grand Prairie	20 ( 23.8)	20	0.04	2.20	44	0.08
Southern Plain	16 ( 19.0)	16	0.07	3.00	48	0.20
Wabash Border	4 ( 4.8)	4	0.06	3.00	12	0.18
Shawnee Hills	16 ( 19.0)	16	0.30	3.75	60	1.14
Unknown	0 ( 0.0)	0	..	0.00	0	..
Statewide	84 (100.0)	84	0.06	2.81	235	0.16

Table 9. Summary of beaver trapper and harvest data by wildlife management units in Illinois, 1995-96 season (n=226).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	76 ( 8.4)	0.80	7.42	561	5.97
Northeast Moraine	52 ( 5.8)	0.62	7.08	366	4.42
Mississippi Border-North	64 ( 7.1)	0.81	11.13	708	9.02
Mississippi Border-South	72 ( 8.0)	0.52	7.83	561	4.10
Western Prairie/Forest	115 ( 12.8)	0.80	4.38	505	3.50
Central Sand Prairie	36 ( 4.0)	0.86	8.11	290	7.00
Grand Prairie	318 ( 35.4)	0.60	7.29	2318	4.40
Southern Plain	115 ( 12.8)	0.49	9.34	1078	4.54
Wabash Border	40 ( 4.4)	0.59	7.40	294	4.36
Shawnee Hills	12 ( 1.3)	0.23	8.00	95	1.83
Unknown	0 ( 0.0)	..	0.00	0	..
Statewide	899 (100.0)	0.62	7.54	6776	4.64

Table 10. Summary of skunk trapper and harvest data by wildlife management units in Illinois, 1995-96 season (n=157).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	91 ( 14.6)	0.97	3.83	350	3.72
Northeast Moraine	36 ( 5.7)	0.43	3.44	123	1.49
Mississippi Border-North	40 ( 6.4)	0.51	2.40	95	1.22
Mississippi Border-South	56 ( 8.9)	0.41	2.64	147	1.08
Western Prairie/Forest	48 ( 7.6)	0.33	5.25	251	1.74
Central Sand Prairie	20 ( 3.2)	0.48	1.80	36	0.86
Grand Prairie	262 ( 42.0)	0.50	4.77	1253	2.38
Southern Plain	56 ( 8.9)	0.23	2.21	123	0.52
Wabash Border	8 ( 1.3)	0.12	1.50	12	0.18
Shawnee Hills	8 ( 1.3)	0.15	10.00	80	1.52
Unknown	0 ( 0.0)	..	0.00	0	..
Statewide	624 (100.0)	0.43	3.96	2469	1.69



Table 11. Summary of weasel trapper and harvest data by wildlife management units in Illinois, 1995-96 season (n=7).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	0 ( 0.0)	0.00	0.00	0	0.00
Northeast Moraine	0 ( 0.0)	0.00	0.00	0	0.00
Mississippi Border-North	4 ( 14.3)	0.05	1.00	4	0.05
Mississippi Border-South	4 ( 14.3)	0.03	1.00	4	0.03
Western Prairie/Forest	8 ( 28.6)	0.06	1.00	8	0.06
Central Sand Prairie	0 ( 0.0)	0.00	0.00	0	0.00
Grand Prairie	4 ( 14.3)	0.01	1.00	4	0.01
Southern Plain	8 ( 28.6)	0.03	1.50	12	0.05
Wabash Border	0 ( 0.0)	0.00	0.00	0	0.00
Shawnee Hills	0 ( 0.0)	0.00	0.00	0	0.00
Unknown	0 ( 0.0)	..	0.00	0	..
Statewide	28 (100.0)	0.02	1.14	32	0.02

Table 12. Summary of coyote trapper and harvest data by wildlife management units in Illinois, 1995-96 season (n=150).

Wildlife Management Unit	Estimated Number of Effective Trappers	Estimated Number of Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
Northwest Hills	68 ( 11.3)	0.72	6.82	461	4.91
Northeast Moraine	16 ( 2.7)	0.19	5.25	84	1.01
Mississippi Border-North	48 ( 8.0)	0.61	9.42	449	5.73
Mississippi Border-South	68 ( 11.3)	0.49	4.76	322	2.36
Western Prairie/Forest	56 ( 9.3)	0.39	9.36	521	3.61
Central Sand Prairie	4 ( 0.7)	0.10	13.00	52	1.25
Grand Prairie	203 ( 34.0)	0.39	8.47	1718	3.26
Southern Plain	99 ( 16.7)	0.42	4.64	461	1.94
Wabash Border	20 ( 3.3)	0.29	10.60	211	3.13
Shawnee Hills	16 ( 2.7)	0.30	3.75	60	1.14
Unknown	0 ( 0.0)	..	0.00	0	..
Statewide	596 (100.0)	0.41	7.27	4338	2.97

Table 13. Statewide sample sizes for post-season mail survey of resident fur trappers in Illinois, 1995-96 season (n=680).

Species	Number of Effective Trappers In Sample	Percent Effective Trappers	Season Harvest by Effective Trappers in Sample
Muskrat	428	62.94	17287
Mink	285	41.91	1002
Raccoon	538	79.12	17171
Opossum	374	55.00	4332
Red fox	122	17.94	430
Gray fox	21	3.09	59
Beaver	226	33.24	1704
Skunk	157	23.09	621
Weasel	7	1.03	8
Coyote	150	22.06	1091

Table 14. Confidence intervals (95%) for estimated number of effective trappers, average season harvest, and total trapper harvest by species in Illinois, 1995-96 season (n=680).

Species	Estimated Number of Effective Trappers	Estimated Average Season Catch	Estimated Total Harvest
Muskrat	1702 +/- 100	40.39 +/- 6.33	68741 +/- 11586
Mink	1133 +/- 102	3.52 +/- 0.45	3984 +/- 684
Raccoon	2139 +/- 84	31.92 +/- 3.48	68280 +/- 7844
Opossum	1487 +/- 103	11.58 +/- 1.51	17226 +/- 2588
Red fox	485 +/- 80	3.52 +/- 0.97	1710 +/- 596
Gray fox	84 +/- 36	2.81 +/- 0.82	235 +/- 153
Beaver	899 +/- 98	7.54 +/- 1.24	6776 +/- 1390
Skunk	624 +/- 87	3.96 +/- 0.72	2469 +/- 622
Weasel	28 +/- 21	1.14 +/- 0.28	32 +/- 45
Coyote	596 +/- 86	7.27 +/- 1.89	4338 +/- 1341

Table 15. Distribution of furbearer harvest among effective trappers in Illinois, 1995-96 season. Sample sizes are in parentheses.

Percentage of Effective Trappers

Total Season Catch	Muskrat ( 428)	Mink ( 285)	Raccoon ( 538)	Opossum ( 374)	Red Fox ( 122)	Gray Fox ( 21)	Beaver ( 226)	Striped Skunk ( 157)	Weasel ( 7)	Coyote ( 150)
1	5.1	35.1	3.5	7.5	47.5	33.3	22.1	35.7	85.7	34.0
2	2.8	24.2	4.5	11.0	22.1	19.0	13.3	21.7	14.3	14.0
3	4.2	10.2	3.0	10.7	4.9	14.3	10.2	9.6	0.0	5.3
4	4.9	8.8	3.0	7.8	6.6	19.0	9.7	3.8	0.0	6.7
5	2.6	4.2	3.7	7.0	4.1	4.8	8.0	5.7	0.0	4.7
6	4.9	4.2	3.3	7.2	0.8	4.8	3.5	5.7	0.0	5.3
7	1.9	1.1	2.6	4.5	1.6	0.0	3.5	2.5	0.0	2.7
8	3.5	2.5	1.9	3.7	1.6	4.8	3.5	5.1	0.0	5.3
9	1.4	1.4	1.5	1.6	2.5	0.0	0.9	0.0	0.0	2.0
10	4.7	2.5	4.8	7.2	1.6	0.0	3.5	4.5	0.0	3.3
11	0.7	1.1	1.9	1.1	1.6	0.0	0.9	0.0	0.0	2.0
12	3.3	1.4	4.6	4.3	0.8	0.0	2.7	1.3	0.0	1.3
13	1.2	0.4	1.3	1.3	0.0	0.0	1.8	0.0	0.0	1.3
14	0.9	0.4	2.2	0.8	0.0	0.0	0.9	0.0	0.0	1.3
15	3.0	1.1	3.2	3.5	0.0	0.0	1.8	0.6	0.0	0.7
16-20	8.9	1.1	9.7	7.8	1.6	0.0	4.9	3.2	0.0	1.3
21-25	6.5	0.4	6.9	2.1	0.8	0.0	4.4	0.0	0.0	2.0
>25	39.5	0.4	38.5	11.0	1.6	0.0	4.4	0.6	0.0	6.7

Table 16. Summary of muskrat trapper and harvest data by furbearer management zones in Illinois, 1995-96 season (n=428).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	1010 ( 59.3)	1.23	49.63 +/- 10.10	50123 ( 72.9)	61.25
South Zone	692 ( 40.7)	1.08	26.91 +/- 4.32	18618 ( 27.1)	28.98
Unknown	0 ( 0.0)	::	::	0	::
Statewide	1702 (100.0)	1.17	40.39 +/- 6.46	68741	47.06

Table 17. Summary of mink trapper and harvest data by furbearer management zones in Illinois, 1995-96 season (n=285).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	648 ( 57.2)	0.79	3.18 +/- 0.59	2064 ( 51.8)	2.52
South Zone	485 ( 42.8)	0.76	3.96 +/- 0.71	1921 ( 48.2)	2.99
Unknown	0 ( 0.0)	::	::	0	::
Statewide	1133 (100.0)	0.78	3.52 +/- 0.46	3984	2.73

Table 18. Summary of raccoon trapper and harvest data by furbearer management zones in Illinois, 1995-96 season (n=538).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	1340 ( 62.6)	1.64	34.54 +/- 5.00	46282 ( 67.8)	56.55
South Zone	799 ( 37.4)	1.24	27.52 +/- 3.99	21998 ( 32.2)	34.24
Unknown	0 ( 0.0)	::	::	0	::
Statewide	2139 (100.0)	1.46	31.92 +/- 3.50	68280	46.74



Table 19. Summary of opossum trapper and harvest data by furbearer management zones in Illinois, 1995-96 season (n=374).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	911 ( 61.2)	1.11	10.69 +/- 1.70	9734 ( 56.5)	11.89
South Zone	577 ( 38.8)	0.90	12.99 +/- 2.82	7492 ( 43.5)	11.66
Unknown	0 ( 0.0)	..	..	0	..
Statewide	1487 (100.0)	1.02	11.58 +/- 1.52	7226	11.79

Table 20. Summary of red fox trapper and harvest data by furbearer management zones in Illinois, 1995-96 season (n=122).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	274 ( 56.6)	0.34	3.58 +/- 1.43	982 ( 57.4)	1.20
South Zone	211 ( 43.4)	0.33	3.45 +/- 1.24	728 ( 42.6)	1.13
Unknown	0 ( 0.0)	::	::	0	::
Statewide	485 (100.0)	0.33	3.52 +/- 0.97	1710	1.17

Table 21. Summary of gray fox trapper and harvest data by furbearer management zones in Illinois, 1995-96 season (n=21).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	24 ( 28.6)	0.03	1.67 +/- 0.97	40 ( 16.9)	0.05
South Zone	60 ( 71.4)	0.09	3.27 +/- 1.00	195 ( 83.1)	0.30
Unknown	0 ( 0.0)	::	::	0	::
Statewide	84 (100.0)	0.06	2.81 +/- 0.84	235	0.16

Table 22. Summary of beaver trapper and harvest data by furbearer management zones in Illinois, 1995-96 season (n=226).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	624 ( 69.5)	0.76	7.38 +/- 1.50	4605 ( 68.0)	5.63
South Zone	274 ( 30.5)	0.43	7.91 +/- 2.20	2171 ( 32.0)	3.38
Unknown	0 ( 0.0)	..	..	0	..
Statewide	899 (100.0)	0.62	7.54 +/- 1.24	6776	4.64

Table 23. Summary of striped skunk trapper and harvest data by furbearer management zones in Illinois, 1995-96 season (n=157).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	489 ( 78.3)	0.60	4.29 +/- 0.87	2100 ( 85.0)	2.57
South Zone	135 ( 21.7)	0.21	2.74 +/- 0.84	370 ( 15.0)	0.58
Unknown	0 ( 0.0)	::	::	0	::
Statewide	624 (100.0)	0.43	3.96 +/- 0.74	2469	1.69

Table 24. Summary of weasel trapper and harvest data by furbearer management zones in Illinois, 1995-96 season (n=7).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	16 ( 57.1)	0.02	1.00 +/- 0.00	16 ( 50.0)	0.02
South Zone	12 ( 42.9)	0.02	1.33 +/- 0.65	16 ( 50.0)	0.02
Unknown	0 ( 0.0)	::	::	0	::
Statewide	28 (100.0)	0.02	1.14 +/- 0.32	32	0.02

Table 25. Summary of coyote trapper and harvest data by furbearer management zones in Illinois, 1995-96 season (n=150).

Area	Estimated Number of Effective Trappers	Estimated Number of Effective Trappers/100km <sup>2</sup>	Average Season Catch	Estimated Total Trapper Harvest	Estimated Trapper Harvest/100km <sup>2</sup>
North Zone	350 ( 58.7)	0.43	7.95 +/- 2.50	2784 ( 64.2)	3.40
South Zone	247 ( 41.3)	0.38	6.31 +/- 2.88	1555 ( 35.8)	2.42
Unknown	0 ( 0.0)	::	::	0	::
Statewide	596 (100.0)	0.41	7.27 +/- 1.89	4338	2.97

Table 26. Types of traps used by effective furbearer trappers in Illinois, 1995-96 season.

Species	n <sup>a</sup>	Percentage of Catch			
		Conibear Traps	Leghold Traps	Box/cage Traps	Snares
Muskrat	428/17,242	65.0	34.7	0.3	0.0
Mink	285/998	32.9	66.7	0.4	0.0
Raccoon	538/16,953	39.7	54.1	6.2	<0.1
Opossum	374/4,204	47.6	44.5	7.9	0.0
Red fox	122/413	6.3	93.5	0.2	0.0
Gray fox	21/54	1.8	96.4	1.8	0.0
Beaver	226/1,702	66.9	26.5	0.1	6.5
Striped skunk	157/611	61.2	33.1	5.2	0.5
Weasel	7/8	75.0	25.0	0.0	0.0
Coyote	150/1,081	3.3	96.7	0.0	0.0

<sup>a</sup>Number of effective trappers/number of furbearers.



Table 27. Types and numbers of traps set for muskrats in Illinois, 1995-96 season. Sample sizes are in parentheses.

Type of Trap	Trappers <sup>a</sup>		Traps	
	Number	Percentage	Mean Per Owner	Percentage of Total
		(390)		(10,205)
Standard foothold/leghold	258	66.2	15.2	38.5
Stop-loss foothold/leghold	42	10.8	14.6	6.0
Body-gripping (Conibear)	314	80.5	17.8	54.7
Cage/box	6	1.5	13.3	0.8
Others	0	0.0	0.0	0.0

<sup>a</sup>Muskrat trappers who answered the question.

Table 28. Percentages of muskrat catch taken with foothold/leghold traps that were caught in different types of sets in Illinois, 1995-96 season. Sample size is in parentheses.

Type of Set	Percentage of Muskrat Catch
	(249) <sup>a</sup>
Dry land set . . . . .	2.5
Float set which allows trap to fall off float and become submerged (Muskrat is almost always dead)	12.8
Under-ice set (Muskrat is almost always dead) . . .	4.7
Water set with trap attached to drowning slide wire (Muskrat is almost always dead) . . . .	23.0
Water set with special drowning pole/tangle stake and trap attached to long chain or wire (Muskrat is usually dead) . . . . .	29.7
Water set without drowning slide wire or special drowning pole/tangle stake but attached to long chain or wire staked in deep water (Muskrat is usually dead) . . . . .	20.4
Water set without drowning slide wire or special drowning pole/tangle stake with standard chain or wire staked in shallow water (Muskrat is sometimes dead) . . . . .	6.1
Don't know . . . . .	0.8
Total . . . . .	100

<sup>a</sup>Muskrat trappers who answered the question.

Table 29. Summary of fur hunting activities by trappers<sup>a</sup> in Illinois, 1995-96 season (n=680).

Species	Number of Trappers in Sample Hunting Species	Number of Furbearers Harvested by Hunting	Average Number Harvested by Hunting	Estimated Percent of All Trappers Effectively Hunting Species	Estimated Total Harvest by All Trappers Effectively Hunting Species
Raccoon	143	2,987	20.89	21.03	11,878
Opossum	38	232	6.11	5.59	923
Red fox	22	49	2.23	3.24	195
Gray fox	2	4	2.00	0.29	16
Striped skunk	13	29	2.23	1.91	115
Coyote	78	739	9.47	11.47	2,938
All species	196 <sup>b</sup>	4,040	20.61	28.82	16,065

<sup>a</sup>Active and inactive trappers.


<sup>b</sup>Total for all species is less than the sum of the above values because many trappers hunted >1 species.

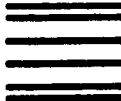
Table 30. Assessments by fur trappers<sup>a</sup> as to changes in furbearer populations from 1994-95 season to 1995-96 season. Sample sizes are in parentheses.

Species		Percentage of Active Trappers			
		Up	Unchanged	Down	Don't Know
Muskrat	(519)	16.8	29.5	33.5	20.2
Raccoon	(542)	46.9	33.0	9.2	10.9
Red fox	(445)	15.5	19.8	24.9	39.8
Beaver	(464)	29.5	28.2	11.4	30.9
Coyote	(458)	42.1	22.9	5.2	29.8

<sup>a</sup>Active trappers.

No Postage  
Necessary  
If Mailed in the  
United States






**BUSINESS REPLY MAIL**  
FIRST CLASS PERMIT NO. 2032 • SPRINGFIELD, IL.

Postage Will Be Paid By Addressee

**DEPARTMENT OF NATURAL RESOURCES**  
Wildlife Resources Division  
Furbearer Section  
P.O. BOX 19225  
SPRINGFIELD, ILLINOIS 62794-9961



**TO ISSUING CLERK:**

**COMPLETE THIS FORM AND MAIL  
IMMEDIATELY UPON SALE OF  
FIRST LICENSE IN BOOK**

The Department of Natural Resources is conducting a survey to estimate the fur harvest in Illinois. To effect this, we need the names and addresses of part of our licensed trappers. Please print at the bottom of this page, in the space provided, name, mailing address including zip code, and county of residence of the person who purchases the first license in this book. Please detach the next page and give to license purchaser.

Thank you for your cooperation. **Please note** reverse side is Business Reply postal card, perforated at binding for removing.

**MAIL IMMEDIATELY UPON SALE OF LICENSE  
TRAPPING (1996 SERIES)**  
Please Print Plainly

Name	TRAPPER JOHN
Street Address, R.R. and Box Number	RR 1, BOX 23
City and State	HOMETOWN
Zip Code	61234
County of Residence	SANGAMON

Figure 1. The name/address card that was issued to license vendors for conducting the 1995-96 post-season Illinois Furbearer Trapping Survey.

DETACH THIS PAGE AND GIVE TO  
PERSON WHO PURCHASES FIRST  
LICENSE IN BOOK

Dear Trapper:

Please keep an accurate record of the number of days you had traps set, the average number and kinds of traps you used during the season, the number of furbearers you caught in traps, what county you trapped in most, and the number and kinds of pelts you sold in Illinois and Out of State.

You may be one of the selected trappers contacted at the close of the trapping season and provided a form to return to the Illinois Department of Conservation.

Thanks for your cooperation.

THE BACK SIDE OF THIS CARD MAY BE USED FOR RECORD KEEPING.

Number of TRAPS I had set: \_\_\_\_\_

Number of DAYS I had traps set: \_\_\_\_\_

FURBEARERS CAUGHT IN TRAPS: \_\_\_\_\_

Species	Total Number Caught	Number Sold	
		In Illinois	Out-of- State
Muskrat			
Mink			
Raccoon			
Opossum			
Beaver			
Red Fox			
Gray Fox			
Coyote			
Striped Skunk			
Weasel			

Other Animals Caught: \_\_\_\_\_

Figure 2. Information/activity record card that was issued to trappers for conducting the 1995-96 post-season Illinois Furbearer Trapping Survey.

# FURBEARER TRAPPING SURVEY

## 1995-96 SEASON



### PART 1 - TRAPPING ACTIVITY

1. Did you SET ANY TRAPS for furbearers in Illinois during the 1995-96 season? (*Circle number for appropriate answer*)

Yes ... 1

No ... 2

If YES, continue with Question #2. If NO, go to Question #6.

2. In which COUNTY did you do MOST of your trapping? \_\_\_\_\_ County, Illinois
3. How many days (or nights) did you have traps set? \_\_\_\_\_ days (or nights)
4. What was the AVERAGE number of traps you had set on your trapline during the 1995-96 season?  
\_\_\_\_\_ traps

### PART 2 - HARVEST (TRAPPING ONLY)

5. Fill in ALL FIVE BLANKS for each kind of furbearer you TRAPPED in Illinois during the 1995-96 season. REPORT ONLY YOUR PERSONAL CATCH. If you trapped in partnership with another person, list only your half of the catch.

<i>Species</i>	<i>TOTAL Number Caught in traps</i>	<i>Number Caught in CONIBEAR TRAPS</i>	<i>Number Caught in LEGHOLD TRAPS</i>	<i>Number Caught in BOX/CAGE TRAPS</i>	<i>Number Caught in SNARES</i>
Muskrat	_____	_____	_____	_____	_____
Mink	_____	_____	_____	_____	_____
Raccoon	_____	_____	_____	_____	_____
Opossum	_____	_____	_____	_____	_____
Red fox	_____	_____	_____	_____	_____
Gray fox	_____	_____	_____	_____	_____
Beaver	_____	_____	_____	_____	_____
Skunk	_____	_____	_____	_____	_____
Weasel	_____	_____	_____	_____	_____
Coyote	_____	_____	_____	_____	_____

(Over)

Figure 3. The questionnaire used to conduct the 1995-96 post-season Illinois Furbearer Trapping Survey.

**PART 3 - FURBEARER POPULATIONS**

6. Compared to 1994-95 (last season), were the populations of the following furbearers up, unchanged, or down during 1995-96 (this season)? (*Express your opinion by circling the appropriate number for each species*)

Species	Up	Unchanged	Down	Don't Know
Muskrat .....	1 .....	2 .....	3 .....	4
Raccoon .....	1 .....	2 .....	3 .....	4
Red fox .....	1 .....	2 .....	3 .....	4
Beaver .....	1 .....	2 .....	3 .....	4
Coyote .....	1 .....	2 .....	3 .....	4

7. Did you accidentally trap any badgers in Illinois during the past three years (1993-1995)?

Yes ... 1                      No ... 2                      If yes, list county: \_\_\_\_\_

8. Have you seen a river otter or observed river otter sign in Illinois during the past three years?

Yes ... 1                      No ... 2                      If yes, list county: \_\_\_\_\_

9. Have you seen a bobcat or observed bobcat sign in Illinois during the past three years?

Yes ... 1                      No ... 2                      If yes, list county: \_\_\_\_\_

**PART 4 - FURBEARER HUNTING**

9. Did you also HUNT furbearers with a gun and/or dogs during the 1995-96 season?

Yes ... 1                      No ... 2

If yes, please give the number of each kind taken:

\_\_\_\_\_ Raccoon      \_\_\_\_\_ Red Fox      \_\_\_\_\_ Skunk

\_\_\_\_\_ Opossum      \_\_\_\_\_ Gray Fox      \_\_\_\_\_ Coyote



**PART 5 - OTHER TOPICS**

10. Did you trap for MUSKRATS during the 1995-96 season?

Yes ... 1                      No ... 2

If yes, continue with question #11. If no, return completed questionnaire.

11. Please indicate the types and numbers of traps you actually set for MUSKRATS during the 1995-96 season. Fill in all blanks that apply.

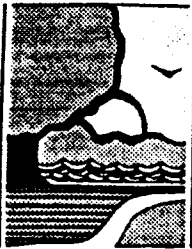
<u>Trap type</u>	<u>Maximum number set at any time</u>
Standard foothold (leghold) traps	_____ traps
STOP-LOSS foothold (leghold) traps	_____ traps
Body-gripping (Conibear) traps	_____ traps
Other (list) _____	_____ traps
_____	_____ traps

If you used foothold (leghold) traps for muskrats during the 1995-96 season, continue with question # 12. If you did not use foothold (leghold) traps for muskrats, return the completed questionnaire.

12. Please indicate the PERCENTAGE of your 1995-96 MUSKRAT catch taken with FOOZHOLD/LEGHOLD traps that was caught in each type of set listed below. Fill in all blanks that apply.

<u>Set type</u>	<u>Percentage of Muskrats caught in FOOZHOLD traps in this type of set</u>
Dry land set .....	_____ %
Float set which allows trap to fall off float and become submerged (Muskrat is almost always dead) .....	_____ %
Under-ice set (Muskrat is almost always dead) .....	_____ %
Water set with trap attached to drowning slide wire (Muskrat is almost always dead) .....	_____ %
Water set with special drowning pole/tangle stake and trap attached to long chain or wire (Muskrat is usually dead) .....	_____ %
Water set without drowning slide wire or special drowning pole/tangle stake but attached to long chain or wire staked in deep water (Muskrat is usually dead) .....	_____ %
Water set without drowning slide wire or special drowning pole/tangle stake with standard chain or wire staked in shallow water (Muskrat is sometimes dead) .....	_____ %
Don't know .....	_____ %
Total .....	<u>100</u> %

**THANKS FOR YOUR COOPERATION!!!  
NO POSTAGE REQUIRED**



ILLINOIS  
DEPARTMENT OF  
**NATURAL RESOURCES**

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor ● Brent Manning, Director

March 1996

Dear Illinois Trapper:

The Department of Natural Resources conducts an annual survey of trappers to collect information about harvests, trapping success, and trapping pressure. We also ask for your opinions about furbearer populations in your area.

Results of the survey allow us to estimate the number of pelts taken by trappers, value of pelts taken by trappers, and distribution of harvest pressure. Estimates of trapping success, your opinions about furbearer populations, and observations of closed-season furbearers are used with other sources of information to track changes in furbearer numbers.

You can make an important contribution to management of Illinois' fur resources by completing the enclosed questionnaire. The questionnaire is short and self-explanatory. Your participation is important because you are part of a small, random sample of people who purchased a 1995-96 trapping license. Please reply even if you did not trap this season or were not successful.

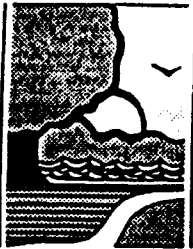
If you do not remember exact figures, please give your best estimate. Also, if you trapped in partnership with another person, list only your half of the catch. Drop the completed questionnaire in the mail; no postage is required.

Thank you for participating in Illinois' furbearer management program. If you have comments on topics that are not addressed by this questionnaire, please write them on a separate sheet of paper to receive proper attention.

Sincerely,

Bob Bluett  
Furbearer Program Manager

BB:bb



ILLINOIS  
DEPARTMENT OF  
**NATURAL RESOURCES**

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor ● Brent Manning, Director

Dear Illinois Trapper:

We recently mailed you a Trapper Harvest Survey questionnaire and requested that you fill out and return the completed form. We have not received your form at this time - perhaps because you have misplaced the questionnaire or haven't found the time to complete it and return it to us.

We are enclosing another questionnaire which we hope you will complete and return to us as soon as possible. If you have already returned the questionnaire, please destroy this one. The information supplied by you and other trappers being sampled will be of great value to the Department of Conservation in better directing the management of Illinois' fur resources.

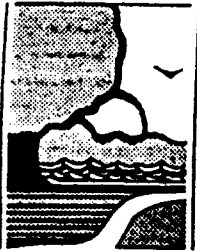
Please fill out the questionnaire and return it **even if you did not trap or were not successful**. If you trapped in partnership with another person, please list only your half of the catch. No postage is required to return the completed questionnaire. Simply fill it out and drop it in the mail.

Your prompt attention will be greatly appreciated. Thank you for your help.

Sincerely,

Bob Bluett  
Furbearer Program Manager

BB:bb



ILLINOIS  
DEPARTMENT OF  
**NATURAL RESOURCES**

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor ● Brent Manning, Director

Dear Illinois Trapper:

This is to remind you that we would still like to receive your completed questionnaire regarding your trapping activities this past season. We don't like to keep bothering you, but this is very important information which only you can supply.

Another copy of the questionnaire is enclosed. We hope that you will complete and return it as soon as possible. If you have already returned a questionnaire, simply destroy this one.

We are making a final effort to obtain your responses so that we may compile the information received from all cooperating trappers and prepare a report of our findings. Remember, your response is needed, even if you did not trap or had an unsuccessful season. Results of the survey allow us to estimate the number of pelts taken by trappers, value of pelts taken by trappers, and distribution of harvest pressure. Estimates of trapping success, your opinions about furbearer populations, and observations of closed-season furbearers are used with other sources of information to track changes in furbearer numbers.

No postage is required to return the questionnaire. Just fill it out and drop it in the mail. Please help us complete this survey by sending your responses now.

Sincerely,

Bob Bluett  
Furbearer Program Manager

BB:bb

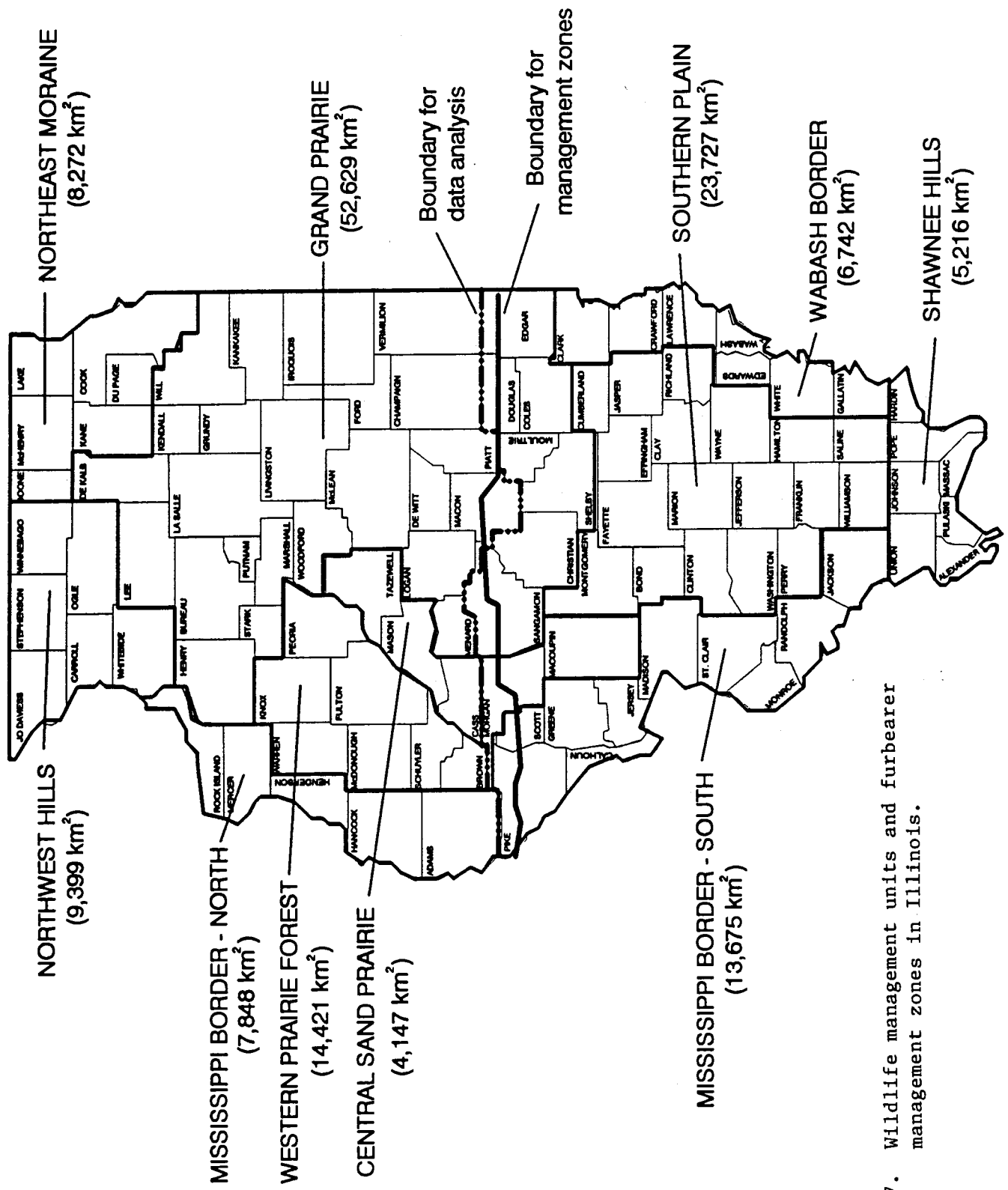


Figure 7. Wildlife management units and furbearer management zones in Illinois.

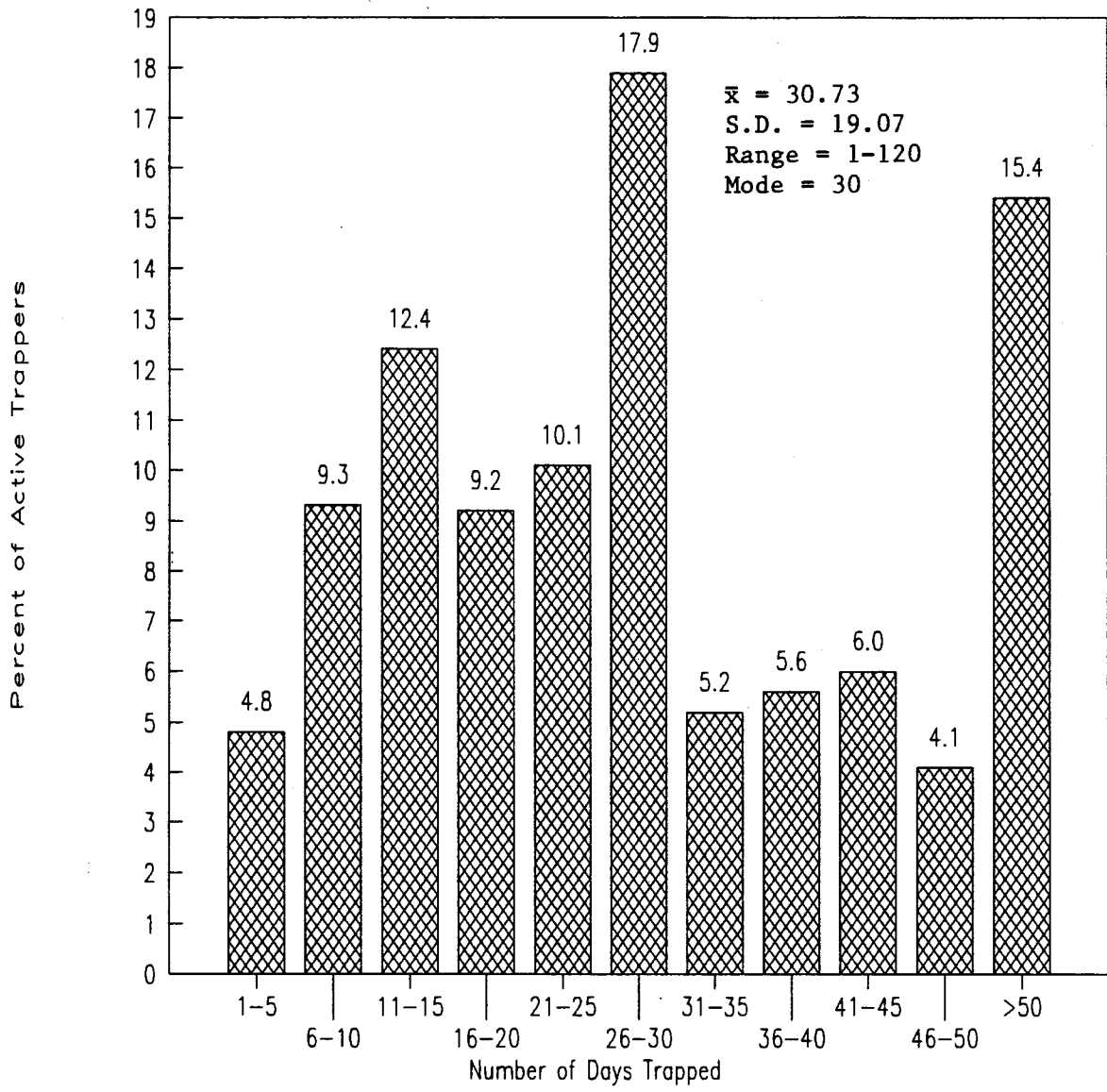


Figure 8. Distribution of days of trapping by active trappers in Illinois, 1995-96 season (n=589).

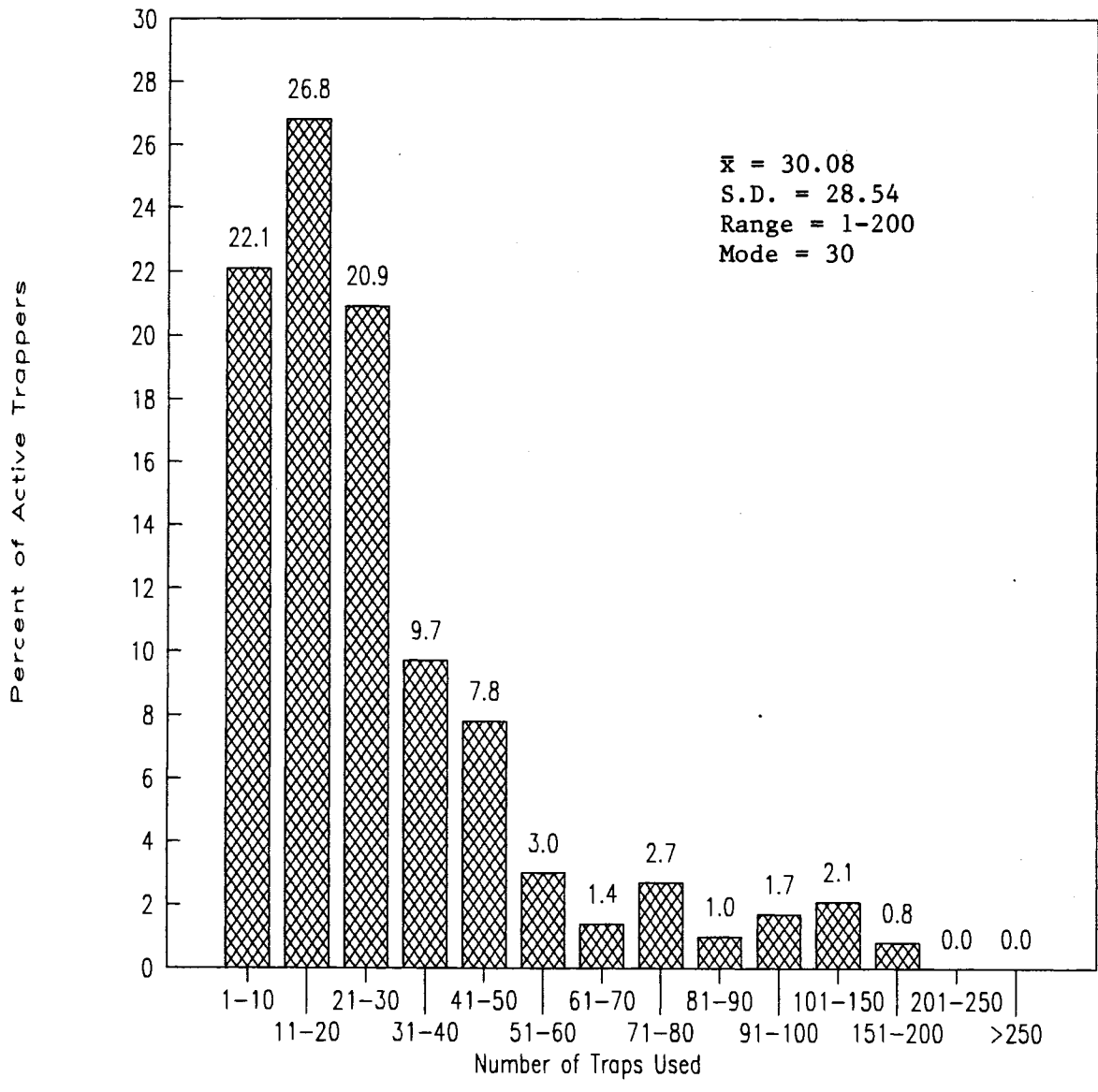


Figure 9. Distribution of the number of traps used by active trappers in Illinois, 1995-96 season (n=589).

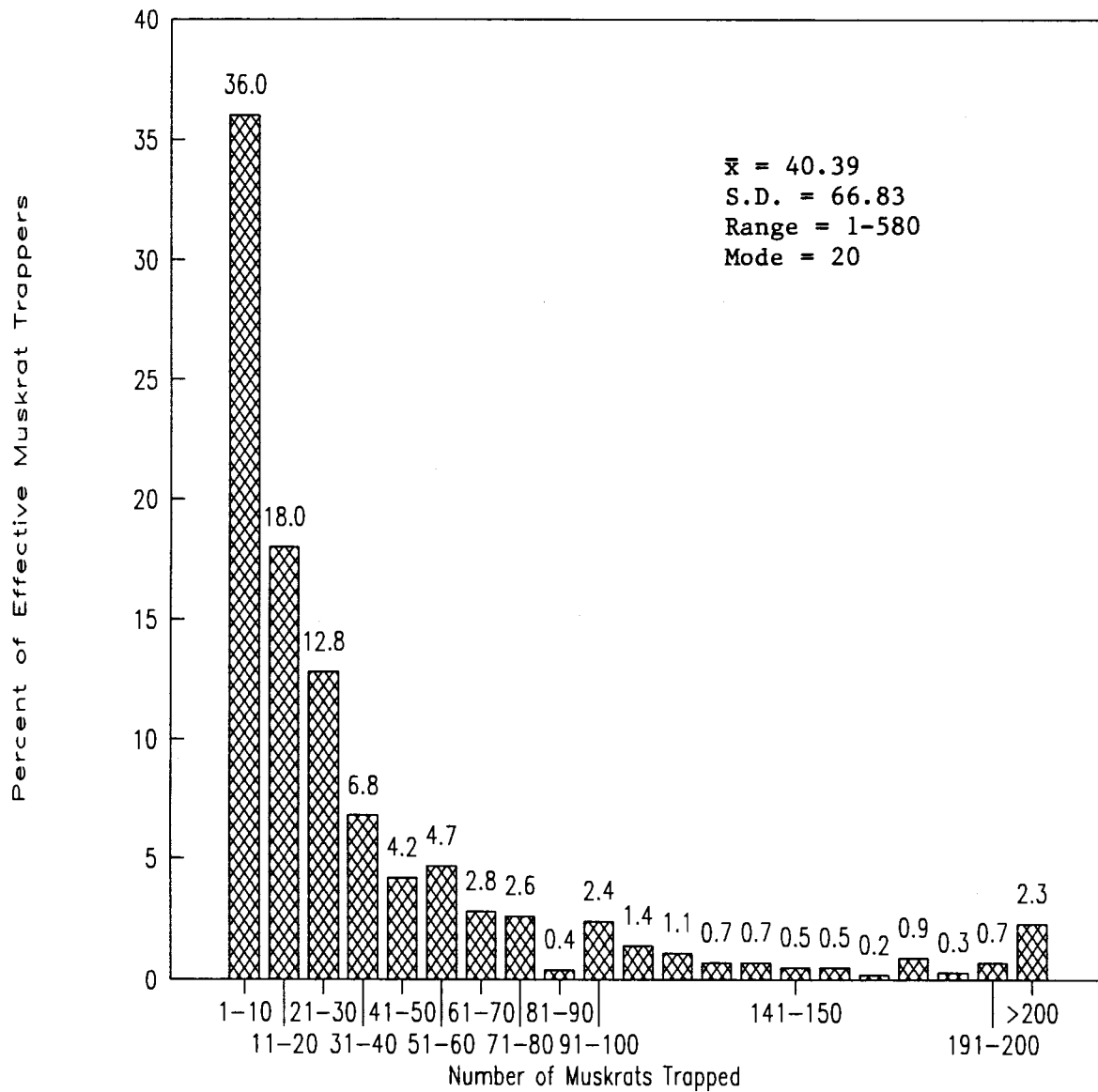


Figure 10. Distribution of the number of muskrats trapped per effective muskrat trapper in Illinois, 1995-96 season (n=428).



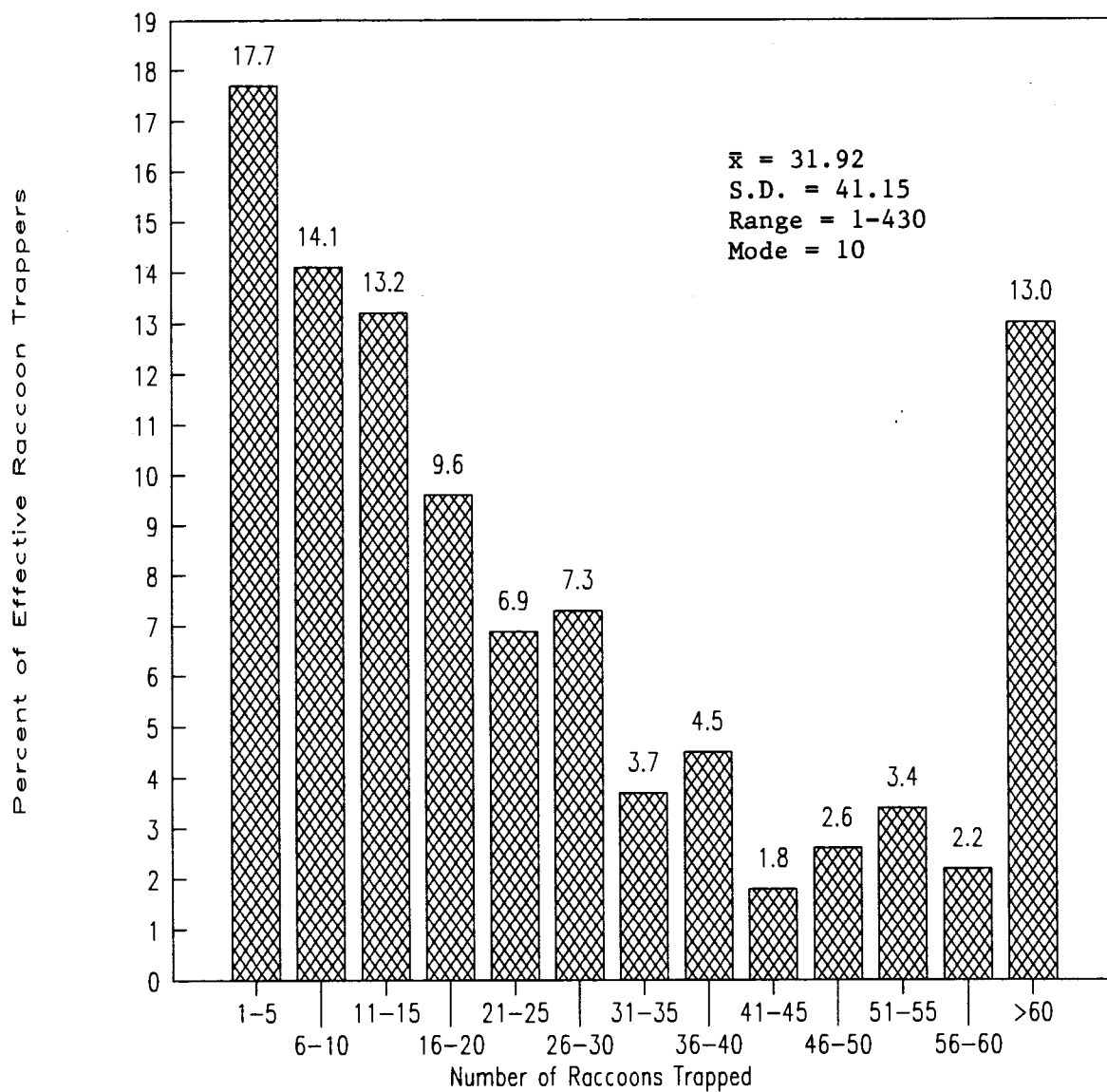


Figure 11. Distribution of the number of raccoons trapped per effective raccoon trapper in Illinois, 1995-96 season (n=538).

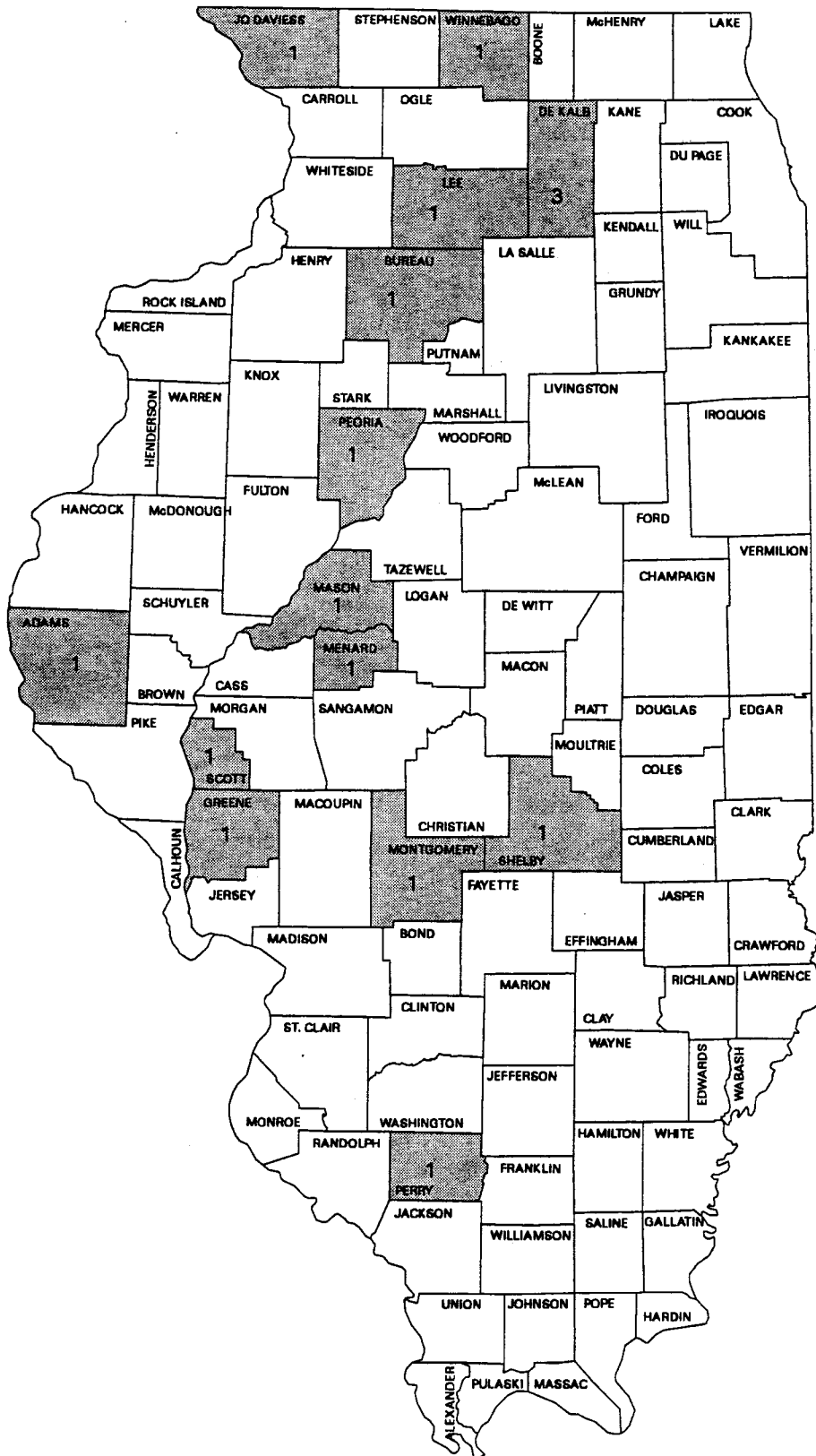


Figure 12. Illinois counties in which trappers reported accidentally catching badgers during the past three years (1993-94, 1994-95, and 1995-96 seasons). The number of reports is listed for each county.



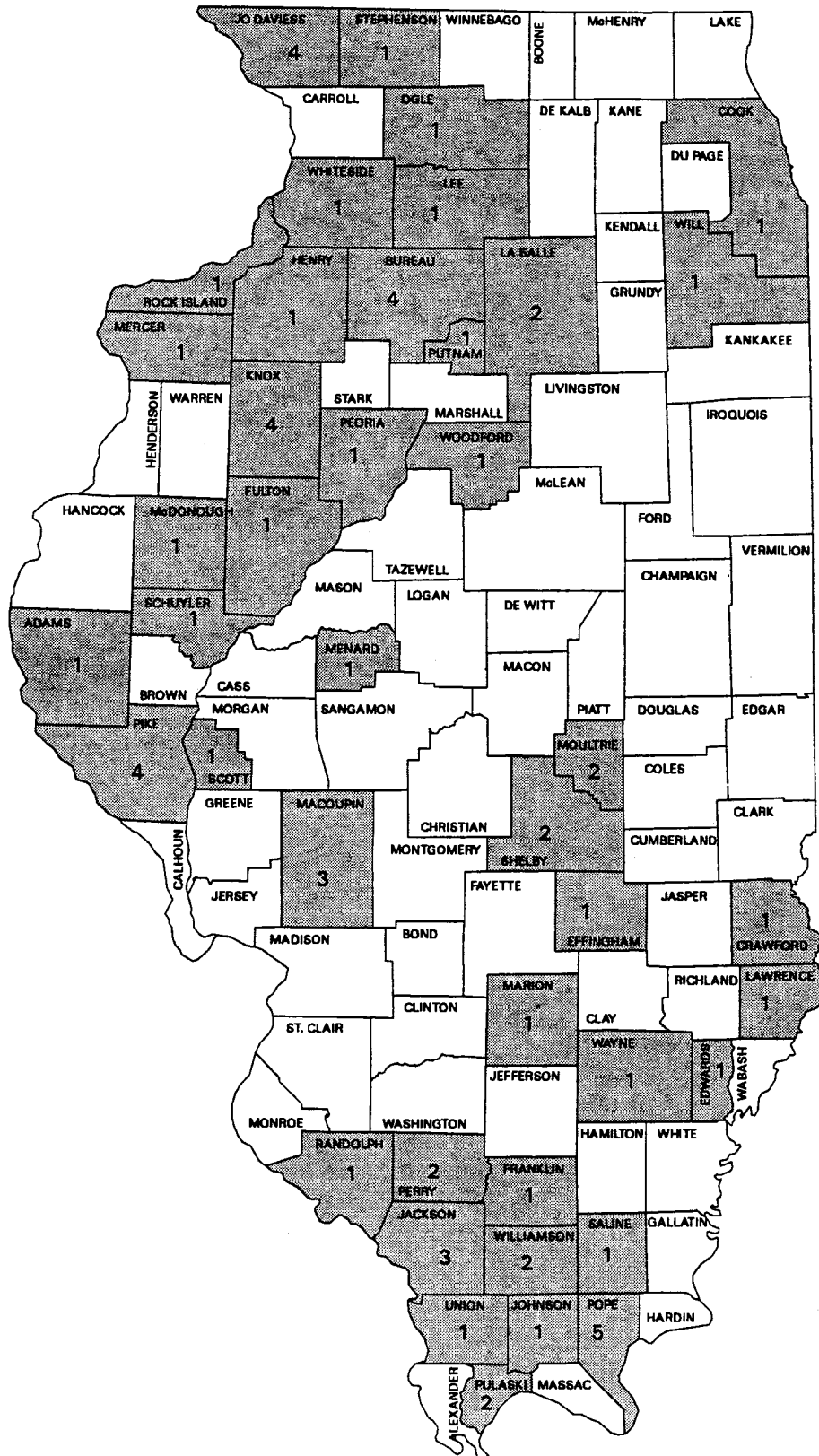


Figure 14. Illinois counties in which trappers reported observing bobcats or their sign during the past three years (1993-94, 1994-95, and 1995-96 seasons). The number of reports is listed for each county.



