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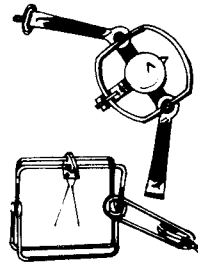
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Study XV: Wildlife Harvests

Job No. 3: Trapper harvest survey, 1988-89

By

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ILLINOIS DEPARTMENT OF CONSERVATION

31 December 1989

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JOB COMPLETION REPORT

SURVEYS AND INVESTIGATIONS PROJECTS

STATE OF ILLINOIS

PROJECT NO. W-99-R-1

STUDY XV: Wildlife Harvests

JOB NO. 3: Trapper harvest survey, 1988-89

ABSTRACT: A stratified random sample of 1,200 persons who purchased 1988 series trapping licenses in Illinois was surveyed after the trapping season. The licensees were contacted by first class mail in three mailings. Questionnaires were deliverable to 1,183 (98.58%) recipients from which 958 useable replies were received (80.98% return). Of these, 79.23% were active, i.e. set one or more traps during the season. Only 1.98% of the active trappers were ineffective, i.e. caught nothing.

The 1988-89 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 total trapper harvest and trapper harvest per unit area, and average season catch. Statewide projections for the number of effective trappers and total trapper harvest (in parentheses) are: muskrat (Ondatra zibethicus) 4,344 (124,673), mink (Mustela vison) 2,484 (6,160), raccoon (Procyon lotor) 5,329 (67,838), opossum (Didelphis marsupialis) 3,502 (21,888), red fox (Vulpes vulpes) 1,587 (4,824), gray fox (Urocyon cinereoargenteus) 713 (1,519), beaver (Castor canadensis) 1,988 (12,008), striped skunk (Mephitis mephitis) 1,202 (2,656), weasel (Mustela frenata, M. nivalis) 56 (72), and coyote (Canis latrans) 1,194 (4,561).

The average trapper had traps set for 22.0 days (or nights). Active trappers used an average of 28.71 traps; only 2.42% used more than 100. Just under 14% of the trappers had attended a trapper education course sponsored by the Illinois Department of Conservation. Almost two-thirds of the effective muskrat trappers (62.8%) caught 20 or fewer muskrats during the season. Most effective raccoon trappers (76.6%) harvested from 1 to 15 raccoons for the entire season and 86.7% trapped 25 or less. Illinois trappers caught an estimated 47.67% of their harvest in body-gripping traps, 50.52% was taken in foothold type traps, and box/cage traps were used to capture the remaining 1.81%. Of the 759 active trappers who provided information, 1.98% stated they had taken one or more animals in Woodstream "Soft-Catch" padded traps. Furbearers, primarily raccoons, were also hunted by 26.54% of the licensed trappers. The harvest of furbearers by hunting trappers amounted to 7.26% of the total trapped catch in the sample.

JOB COMPLETION REPORT

SURVEYS AND INVESTIGATIONS PROJECTS

STATE OF ILLINOIS

PROJECT NO.: W-99-R-1

STUDY XV: Wildlife Harvests

JOB NO. 3: Trapper harvest survey, 1988-89

OBJECTIVE: To collect information on the annual trapper harvest of furbearers in Illinois and associated trapper characteristics.

PROCEDURES: A stratified random mail survey of individuals who purchased trapping licenses was the basic technique employed. Mail survey address cards were filled out by license vendors for the first license sold in each book of five resident and non-resident trapping licenses in the 1988 series (total sales estimate 7,677 - 1 July 1989) (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 activities since he might be contacted after the close of the season (Fig. 2). The survey 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.

Prior to the close of the muskrat trapping season, a random sub-sample based on the distribution of the 1978-82 trapping license sales was drawn. The size of the sub-sample was set at 1,200 since this quantity would result in 900 to 1,000 useable replies for adequate reliability at the statewide level. Address cards in the drawn sample were manually marked with serial numbers to provide for the removal of respondents and undeliverables from the initial and first follow-up mailings.

An initial and two follow-up mailings to non-respondents were made with a different letter of transmittal for each mailing (Figs. 3, 4, 5). Questionnaire cards were numbered to correspond with appropriate address cards and included with each transmittal letter (Fig. 6). First class postage was used for all mailings.

Questionnaires were returned via business reply permit printed on the back of the form. Those received were checked for useableness, and the respondents were initially placed into one of two categories: inactive - those who did not set traps for furbearers during the 1988-89 seasons, or active - those who did set one or more traps for furbearers during the 1988-89 seasons. 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. Next, the county trapped in most, species trapped, and species hunted were numerically coded. Reply data were transferred directly to computer files at the Division of Wildlife Resources office, Illinois Department of Conservation, Springfield,

Illinois, and stored for subsequent analysis. Mr. Scott Bennett, a consultant from Champaign, Illinois, prepared the data entry and analysis programs.

Reply 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:

where N = total license sales

n = number of licensees
in sample

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

$q = 1-p$

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

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

where n_1 = number of licensees in
sample who effectively
trapped species in
question

x_1 = reported season catch
for species in question

$$\pm 1.96 \frac{\sqrt{\frac{\sum (x_i - \bar{x}_i)^2}{n_1 - 1}}}{\sqrt{n_1}}$$

c. Total trapper harvest:

where x = reported season catch for
all licensees responding
to survey

$$\pm 2N \left(\frac{\sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}}{\sqrt{n}} \right)$$

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:

1988-89 Trapping Seasons

The 1988-89 fur-bearing mammal trapping seasons varied from 35 to 106 days in length (Table 1). The seasons for all species except beaver, red fox, gray fox, and coyote lasted 45 days in both the northern and southern management zones (Fig. 8). Opening dates were 15 November 1988 and 25 November 1988, respectively. Red fox, gray fox, and coyote could be legally trapped for 35 days in the northern zone and 45 days in the southern zone starting 25 November 1988. Beaver trapping season was 96 or 106 days in length depending on zone and opened simultaneously with all other species except fox and coyote. No bag limits were in effect for any furbearer. Special regulations reduced the length of the beaver season to 45 days along the Mississippi River from Interstate 80 north to the JoDaviess County line as a protective measure for river otter (Lutra canadensis).

1988-89 Trapper Mail Survey

The initial mailing of 1,200 questionnaires was made on 28 January 1989. The two follow-up mailings to non-respondents were made on 6 March and 29 March and closed out on 30 April 1989. Approximately two days preparation was required for each mailing.

A total of 1,183 (98.58%) licensees in the 1988-89 survey sample was reached by the Postal Service via first class mail. The 17 remaining questionnaires were returned as undeliverable. There were 958 useable replies received from the licensees contacted, representing an 80.98% response on the number delivered. Of these respondents, 759 (79.23%) reported that they set one or more traps for furbearers during the season and were classified as active. A total of 744 (98.02%) active trappers were effective, i.e. caught one or more furbearers, and the remaining 15 (1.98%) were ineffective, i.e. caught nothing.

a. Number of days trapped

Active trappers had traps set an average of 22.0 days (or nights) during the 1988-89 season (Fig. 9). The maximum number of days a trapper could have legally trapped was 106. However, only 1.6% of the respondents stated they had traps set for over 45 days, and just 21.5% trapped over 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 1987-88, Illinois trappers had traps set an average of 25.2 days during a 106-day season (Hubert 1988) compared with 26.6 days in 1986-87 (Hubert 1987). The mean number of days trapped in 1985-86 was 23 (Hubert 1986).

b. Number of traps used

The average active trapper used 28.71 traps during 1988-89 (Fig. 10). In spite of the fact that there were no restrictions on the number of traps that could be set, 90.00% of all active trappers employed between 1 and 50. Only 2.42% used more than 100. In comparison, the average active Illinois trapper used 31.18 traps during 1987-88 (Hubert 1988) 26.48 traps in 1977-78 (Hubert 1978).

c. Trapper education training

During the 1988-89 season, 13.82% of the active trappers who responded to the survey (n = 774) indicated they had attended a trapper education class sponsored by the Illinois Department of Conservation. The legislation which mandated an 8-hour training course for first-time trappers under 18 years of age became effective in 1985. Previous surveys have determined that 11.7 to 16.4% of the trappers in Illinois are 18 years old or younger (Hubert 1983, 1986). Therefore, it appears that essentially all of the individuals who are required by law to attend trapper education classes do so. In addition, the percentage of trapper education course graduates among all trappers may be starting to increase as the population of trappers turns over.

d. Trapper harvest summary

A statewide summary for the 10 species of furbearers surveyed in 1988-89 is presented in Table 2. The data for each species include the estimated number of effective trappers and their percent of all licensees, average season catch per effective trapper, estimated total trapper harvest, and estimated percent and total sold. Similar information for each of the 10 species plus estimated density of effective trappers and furbearers harvested 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 (season catch of one or more).

Statewide confidence intervals at the 95% level for number of effective trappers, average season catch per effective trapper, and total harvest for each furbearer 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. In 1988-89, effective raccoon trappers were the most numerous and their projected number varied by only $\pm 2.14\%$. The 95% confidence interval projections for less numerous red fox trappers varied by $\pm 6.30\%$ and for uncommon weasel trappers by $\pm 37.50\%$.

e. Distribution of harvest among effective trappers

The muskrat and raccoon were the two most important furbearers trapped during the 1988-89 season in terms of number of effective trappers, average season catch, and total harvest (Table 2). The reported number of muskrats harvested by 526 effective muskrat trappers ranged from 1 to 1,000 and averaged 28.79 (Fig. 11). During the season, 62.8% of these trappers harvested 20 or fewer muskrats and 95.3% caught 100 or less. All values are similar to those obtained in the seven previous seasons (Hubert 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988). Of the effective trappers who responded, 88 (16.7%) stated their catch averaged one or more 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 637 effective raccoon trappers from whom data were available averaged 12.87 and ranged from 1 to 145 (Fig. 12). Less than the average season catch was taken by 68.8% of these trappers. For the entire season, 76.6% harvested 15 or fewer raccoons and 86.7% trapped 25 or less. Only 36 (5.7%) of the effective raccoon trappers reported making an average daily catch of one or more 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 five of these species, less than 15% of the effective trappers made season catches exceeding five pelts. The exceptions were: effective opossum trappers - 35.92% of these individuals trapped more than five opossums, effective beaver trappers - 31.04% caught more than five beavers, and effective coyote trappers - 20.80% captured over five coyotes.

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 effect.

f. Distribution of trap types used by trappers

During the 1988-89 season, Illinois trappers caught an estimated 47.67% of the animals they harvested in body-gripping traps (Table 16). In comparison, foothold type traps were used to catch 50.52% and box/cage traps accounted for 1.81%. The distribution of trap types used was similar in 1987-88 (Hubert 1988). Body-gripping traps were employed most often to take aquatic furbearers such as the muskrat and beaver. Foot-hold traps were the primary device used to catch semi-aquatic and terrestrial species, especially the red fox, gray fox, and coyote. Box/cage traps were utilized on a limited basis probably due to their size, weight, cost, and relative inefficiency for certain species. However, this trap type was of some importance for capturing raccoons and opossums, most likely in or near buildings. Relatively little information concerning trap types used by Midwestern trappers to take each species of furbearer is available (Hamilton and Fox 1987). Kansas trappers indicated they used about 35 traps per season (L. B. Fox, unpub. rep., 1985). Of these, 66% were footholds, 19% were killing devices (body-gripping), 13% were snares, and 3% were cage traps. The use of snares has not been permitted in Illinois since the 1946-47 season.

g. Use of Woodstream "Soft-Catch" traps

Woodstream "Soft-Catch" traps were not commonly used to harvest furbearers in Illinois during the 1988-89 season. Of the 759 active trappers who provided information, 15 (1.98%) stated they had taken one or more animals in "Soft-Catch" devices. These 15 trappers reported catching a total of 77 furbearers with "Soft-Catch" traps (35 raccoons, 19 muskrats, 12 opossums, 2 mink, 4 coyotes, 3 red foxes, and 2 striped skunks). Woodstream Corporation began marketing "Soft-Catch" traps in 1986. By mid-1988 approximately 200,000 such traps had been sold (pers. comm., Pete Askins, Woodstream Corp.).

h. Fur hunting by trappers

A total of 241 (26.54%) trappers reported hunting furbearers with gun and/or dogs in 1988-89 (Table 17). Their total hunting harvest was 2,179 pelts or an average of 9.04 per hunting trapper. This is equivalent to 7.26% of the total trapped catch in the sample. The raccoon was hunted by more trappers than any other species. Next in popularity was the coyote. In 1986-87 and 1987-88, 29.14% and 28.98%, respectively, of the trappers in Illinois also hunted furbearers (Hubert 1987, 1988). 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. Management zone data summary

Management zone and statewide data summaries for each of the 10 species of furbearers surveyed in 1979-80 (Hubert 1980), 1980-81 (Hubert 1981), 1981-82 (Hubert 1982), 1982-83 (Hubert 1983), 1983-84 (Hubert 1984), 1984-85 (Hubert 1985), 1985-86 (Hubert 1986), 1986-87 (Hubert 1987), 1987-88 (Hubert 1988), and 1988-89 are presented in Tables 18 through 27. 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 (Fig. 13) are nearly identical to the zones employed for regulatory management from 1979-80 through 1988-89 (Fig. 8).

RECOMMENDATIONS:

A mail survey of this type probably realizes its best use and reliability for furbearer management as an indicator of trends in trapping pressure, trapper success, trapper harvest, and trapping recreation. In addition, this particular survey provides the only regional harvest data available for the trapped portion of the annual furbearer catch. It is recommended that the survey be continued in essentially the same form.

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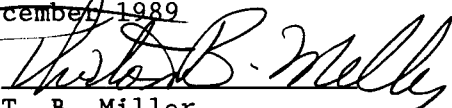
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DATA AND REPORTS:

Original data and reports in this investigation are on file in the Division of Wildlife Resources office, Illinois Department of Conservation, Springfield, Illinois 62706.

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Table 1. Illinois fur-bearing mammal trapping season for 1988-89.

Species	Trapping Season	
	Northern zone	Southern zone
Muskrat, Mink, Raccoon, Opossum, Striped skunk, Weasel	15 Nov - 29 Dec (45) ^a	25 Nov - 8 Jan (45)
Beaver	15 Nov - 28 Feb (106) ^b	25 Nov - 28 Feb (96)
Red Fox, Gray Fox, Coyote	25 Nov - 29 Dec (35)	25 Nov - 8 Jan (45)

^a Numbers in parentheses are season lengths in days.

^b 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 15 Nov. - 29 Dec. 1988 only.

Table 2. Summary of statewide data from post-season mail survey of Illinois resident trappers, 1988-89 season (n = 958).

Species	Estimated number of effective trappers	Percent of total licenses	Average season catch	Estimated total trapper harvest	Estimated percent ^a sold	Estimated total sold
Muskrat	4,344	56.58	28.70	124,673	99.66	124,249
Mink	2,484	32.36	2.48	6,160	99.59	6,135
Raccoon	5,329	69.42	12.73	67,838	99.42	67,445
Opossum	3,502	45.62	6.25	21,888	86.64	18,964
Red fox	1,587	20.67	3.04	4,824	95.45	4,605
Gray fox	713	9.29	2.13	1,519	96.24	1,462
Beaver	1,988	25.89	6.04	12,008	95.98	11,525
Striped skunk	1,202	15.66	2.21	2,656	39.89	1,059
Weasel	56	0.73	1.29	72	61.11	44
Coyote	1,194	15.55	3.82	4,561	95.24	4,344

^a From Hubert (1987).

Table 3. Summary of muskrat trapper and harvest data for wildlife management units in Illinois, 1988-89, from post-season resident trapper mail survey (n = 542).

Wildlife management unit	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest ^a	Estimated trapper harvest/100 km ²
Northwest Hills	505 (11.63) ^b	5.37	42.33	21,369 (17.14) ^b	227.35
Northeast Moraine	256 (5.90)	3.09	29.06	7,455 (5.98)	90.12
Mississippi Border-North	361 (8.30)	4.60	62.73	22,616 (18.14)	288.18
Mississippi Border-South	585 (13.47)	4.28	18.00	10,522 (8.44)	76.94
Western Prairie/Forest	433 (9.96)	3.00	21.80	9,438 (7.57)	65.45
Central Sand Prairie	128 (2.95)	3.09	22.06	2,830 (2.27)	68.24
Grand Prairie	1,282 (29.52)	2.44	24.50	31,418 (25.20)	59.70
Southern Plain	634 (14.58)	2.67	25.80	16,332 (13.10)	68.83
Wabash Border	104 (2.40)	1.54	15.08	1,571 (1.26)	23.30
Shawnee Hills	56 (1.29)	1.07	20.00	1,122 (0.90)	21.51
Statewide	4,344 (100.00)	2.97	28.70	124,673 (100.00)	85.35

^a Sum of wildlife management unit totals may not equal statewide total due to rounding error.

^b Numbers in parentheses are percentages of statewide total.

Table 4. Summary of mink trapper and harvest data for wildlife management units in Illinois, 1988-89, from post-season resident trapper mail survey (n = 310).

Wildlife management unit	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest ^a	Estimated trapper harvest/100 km ²
Northwest Hills	168 (6.77) ^b	1.79	2.71	456 (7.40) ^b	4.85
Northeast Moraine	160 (6.45)	1.93	3.35	536 (8.70)	6.48
Mississippi Border-North	168 (6.77)	2.14	1.38	232 (3.77)	2.96
Mississippi Border-South	305 (12.27)	2.23	2.63	800 (12.99)	5.85
Western Prairie/Forest	200 (8.06)	1.39	2.00	400 (6.49)	2.77
Central Sand Prairie	64 (2.58)	1.54	1.75	112 (1.82)	2.70
Grand Prairie	810 (32.58)	1.54	2.63	2,128 (34.55)	4.04
Southern Plain	489 (19.68)	2.06	2.56	1,248 (20.26)	5.26
Wabash Border	56 (2.26)	0.83	2.00	112 (1.82)	1.66
Shawnee Hills	64 (2.58)	1.23	2.13	136 (2.20)	2.61
Statewide	2,484 (100.00)	1.70	2.48	6,160 (100.00)	4.22

^a Sum of wildlife management unit totals may not equal statewide total due to rounding error.

^b Numbers in parentheses are percentages of statewide total.

Table 5. Summary of raccoon trapper and harvest data for wildlife management units in Illinois, 1988-89, from post-season resident trapper mail survey (n = 665).

Wildlife management unit	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapped harvest ^a	Estimated trapper harvest/100 km ²
Northwest Hills	553 (10.38) ^b	5.88	14.35	7,931 (11.69) ^b	84.38
Northeast Moraine	273 (5.11)	3.30	15.18	4,134 (6.09)	49.98
Mississippi Border-North	393 (7.37)	5.01	10.55	4,141 (6.11)	52.77
Mississippi Border-South	625 (11.73)	4.57	14.95	9,341 (13.77)	68.31
Western Prairie/Forest	601 (11.28)	4.17	14.43	8,668 (12.78)	60.11
Central Sand Prairie	192 3.61	4.63	7.71	1,482 (2.18)	35.74
Grand Prairie	1,603 (30.07)	3.05	11.11	17,801 (26.24)	33.82
Southern Plain	777 (14.59)	3.27	14.01	10,887 (16.05)	45.88
Wabash Border	200 (3.76)	2.97	10.84	2,171 (3.20)	32.20
Shawnee Hills	112 (2.10)	2.15	11.43	1,282 (1.89)	24.58
Statewide	5,329 (100.00)	3.65	12.73	67,838 (100.00)	46.44

^a Sum of wildlife management unit totals may not equal statewide total due to rounding error.

^b Numbers in parentheses are percentages of statewide total.

Table 6. Summary of opossum trapper and harvest data for wildlife management units in Illinois, 1988-89, from post-season resident trapper mail survey (n = 437).

Wildlife management unit	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest ^a	Estimated trapper harvest/100 km ²
Northwest Hills	393 (11.21) ^b	4.18	8.47	3,326 (15.19) ^b	35.39
Northeast Moraine	208 (5.95)	2.51	6.08	1,266 (5.78)	15.30
Mississippi Border-North	224 (6.41)	2.85	6.57	1,475 (6.74)	18.79
Mississippi Border-South	433 (12.36)	3.17	5.96	2,581 (11.79)	18.87
Western Prairie/Forest	337 (9.61)	2.34	6.57	2,212 (10.11)	15.34
Central Sand Prairie	104 (2.97)	2.51	5.54	577 (2.64)	13.91
Grand Prairie	1,114 (31.81)	2.12	5.47	6,099 (27.87)	11.59
Southern Plain	489 (13.96)	2.06	6.26	3,062 (13.99)	12.91
Wabash Border	128 (3.66)	1.90	4.38	561 (2.56)	8.32
Shawnee Hills	72 (2.06)	1.38	10.11	729 (3.33)	13.98
Statewide	3,502 (100.00)	2.40	6.25	21,888 (100.00)	14.98

^a Sum of wildlife management unit totals may not equal statewide total due to rounding error.

^b Numbers in parentheses are percentages of statewide total.

Table 7. Summary of red fox trapper and harvest data for wildlife management units in Illinois, 1988-89, from post-season resident trapper mail survey (n = 198).

Wildlife management unit	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest	Estimated trapper harvest/100 km ²
Northwest Hills	88 (5.56) ^b	0.94	3.82	337 (6.98) ^b	3.59
Northeast Moraine	136 (8.58)	1.64	5.41	737 (15.28)	8.91
Mississippi Border-North	56 (3.53)	0.71	1.29	73 (1.50)	0.93
Mississippi Border-South	201 (12.63)	1.47	2.68	537 (11.13)	3.93
Western Prairie/Forest	136 (8.59)	0.94	5.18	705 (14.62)	4.89
Central Sand Prairie	48 (3.03)	1.16	1.33	64 (1.33)	1.54
Grand Prairie	537 (33.84)	1.02	2.60	1,394 (28.90)	2.65
Southern Plain	257 (16.16)	1.08	2.88	737 (15.28)	3.11
Wabash Border	64 (4.04)	0.95	1.50	96 (1.99)	1.42
Shawnee Hills	64 (4.04)	1.23	2.25	144 (2.99)	2.76
Statewide	1,587 (100.00)	1.09	3.04	4,824 (100.00)	3.30

^a Sum of wildlife management unit totals may not equal statewide total due to rounding error.

^b Numbers in parentheses are percentages of statewide total.

Table 8. Summary of gray fox trapper and harvest data for wildlife management units in Illinois, 1988-89, from post-season resident trapper mail survey (n = 89).

Wildlife management unit	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest ^a	Estimated total trapper harvest/100 km ²
Northwest Hills	32 (4.49) ^b	0.34	1.50	48 (3.16) ^b	0.51
Northeast Moraine	64 (8.99)	0.77	2.00	128 (8.42)	1.55
Mississippi Border-North	--	---	---	--	---
Mississippi Border-South	120 (16.85)	0.88	3.27	392 (25.79)	2.87
Western Prairie/Forest	48 (6.74)	0.33	1.17	56 (3.69)	0.39
Central Sand Prairie	--	---	---	--	---
Grand Prairie	217 (30.34)	0.41	2.07	447 (29.47)	0.85
Southern Plain	144 (20.23)	0.61	2.28	328 (21.58)	1.38
Wabash Border	32 (4.49)	0.47	1.25	40 (2.63)	0.59
Shawnee Hills	56 (7.87)	1.07	1.43	80 (5.26)	1.53
Statewide	713 (100.00)	0.49	2.13	1,519 (100.00)	1.04

^a Sum of wildlife management unit totals may not equal statewide total due to rounding error.

^b Numbers in parentheses are percentages of statewide total.

Table 9. Summary of beaver trapper and harvest data for wildlife management units in Illinois, 1988-89, from post-season resident trapper mail survey (n = 248).

Wildlife management unit	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest ^a	Estimated trapper harvest/100 km ²
Northwest Hills	217 (10.89) ^b	2.31	7.56	1,636 (13.63) ^b	17.41
Northeast Moraine	120 (6.05)	1.45	5.60	674 (5.61)	8.15
Mississippi Border-North	120 (6.05)	1.53	12.00	1,444 (12.02)	18.40
Mississippi Border-South	184 (9.27)	1.35	10.61	1,957 (16.30)	14.31
Western Prairie/Forest	217 (10.89)	1.50	7.00	1,516 (12.63)	10.51
Central Sand Prairie	56 (2.82)	1.35	2.00	112 (0.94)	2.70
Grand Prairie	705 (35.48)	1.34	4.41	3,113 (25.92)	5.91
Southern Plain	257 (12.90)	1.08	4.66	1,195 (9.95)	5.04
Wabash Border	48 (2.42)	0.71	2.00	96 (0.80)	1.42
Shawnee Hills	64 (3.23)	1.23	4.13	265 (2.20)	5.08
Statewide	1,988 (100.00)	1.36	6.04	12,008 (100.00)	8.22

^a Sum of wildlife management unit totals may not equal statewide total due to rounding error.

^b Numbers in parentheses are percentages of statewide total.

Table 10. Summary of striped skunk trapper and harvest data for wildlife management units in Illinois, 1988-89, from post-season resident trapper mail survey (n = 150).

Wildlife management unit	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest ^a	Estimated trapper harvest/100 km ²
Northwest Hills	153 (12.67) ^b	1.63	2.11	320 (12.05) ^b	3.40
Northeast Moraine	96 (8.00)	1.16	3.75	360 (13.56)	4.35
Mississippi Border-North	80 (6.67)	1.02	2.80	224 (8.43)	2.85
Mississippi Border-South	104 (8.67)	0.76	2.00	208 (7.83)	1.52
Western Prairie/Forest	72 (6.00)	0.50	2.78	200 (7.53)	1.39
Central Sand Prairie	64 (5.33)	1.54	1.25	80 (3.01)	1.93
Grand Prairie	449 (37.32)	0.85	2.07	928 (34.94)	1.76
Southern Plain	144 (12.00)	0.61	1.67	240 (9.04)	1.01
Wabash Border	8 (0.67)	0.12	1.00	8 (0.30)	0.12
Shawnee Hills	32 (2.67)	0.61	2.75	88 (3.31)	1.69
Statewide	1,202 (100.00)	0.83	2.21	2,656 (100.00)	1.82

^a Sum of wildlife management unit totals may not equal statewide total due to rounding error.

^b Numbers in parentheses are percentages of statewide total.

Table 11. Summary of weasel trapper and harvest data for wildlife management units in Illinois, 1988-89, from post-season resident trapper mail survey (n = 7).

Wildlife management unit	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest ^a	Estimated trapper harvest/100 km ²
Northwest Hills	--	---	---	--	---
Northeast Moraine	--	---	---	--	---
Mississippi Border-North	8 (14.29) ^b	0.10	1.00	8 (11.11) ^b	0.10
Mississippi Border-South	8 (14.29)	0.06	1.00	8 (11.11)	0.06
Western Prairie/Forest	--	---	---	--	---
Central Sand Prairie	--	---	---	--	---
Grand Prairie	24 (42.84)	0.05	1.67	40 (55.56)	0.08
Southern Plain	8 (14.29)	0.03	1.00	8 (11.11)	0.03
Wabash Border	--	---	---	--	---
Shawnee Hills	8 (14.29)	0.15	1.00	8 (11.11)	0.15
Statewide	56 (100.00)	0.04	1.29	72 (100.00)	0.05

^a Sum of wildlife management unit totals may not equal statewide total due to rounding error.

^b Numbers in parentheses are percentages of statewide total.

Table 12. Summary of coyote trapper and harvest data for wildlife management units in Illinois, 1988-89, from post-season resident trapper mail survey (n = 149).

Wildlife management unit	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest ^a	Estimated total trapper harvest/100 km ²
Northwest Hills	48 (4.03) ^b	0.51	3.17	152 (3.34) ^b	1.62
Northeast Moraine	24 (2.01)	0.29	3.67	88 (1.93)	1.06
Mississippi Border-North	56 (4.70)	0.71	1.00	56 (1.23)	0.71
Mississippi Border-South	152 (12.75)	1.11	4.11	625 (13.71)	4.57
Western Prairie/Forest	160 (13.42)	1.11	5.20	834 (18.28)	5.78
Central Sand Prairie	16 (1.34)	0.39	3.00	48 (1.05)	1.16
Grand Prairie	361 (30.21)	0.69	3.13	1,130 (24.78)	2.15
Southern Plain	225 (18.79)	0.95	5.14	1,154 (25.31)	4.86
Wabash Border	88 (7.38)	1.31	2.73	241 (5.27)	3.57
Shawnee Hills	64 (5.37)	1.23	3.63	233 (5.10)	4.47
Statewide	1,194 (100.00)	0.82	3.82	4,561 (100.00)	3.12

^a Sum of wildlife management unit totals may not equal statewide total due to rounding error.

^b Numbers in parentheses are percentages of statewide total.

Table 13. Statewide sample sizes for 1988-89 post-season mail survey of Illinois resident trappers (n = 958).

Species	Total effective trappers	Percent effective trappers	Total season catch
Muskrat	542	56.58	15,558
Mink	310	32.36	770
Raccoon	665	69.42	8,468
Opossum	437	45.62	2,731
Red fox	198	20.67	602
Gray fox	89	9.29	190
Beaver	248	25.89	1,497
Striped skunk	150	15.66	332
Weasel	7	0.73	9
Coyote	149	15.55	569

Table 14. Estimated number of effective trappers, average season catch, and total trapper harvest by species in Illinois for 1988-89 season based on post-season trapper mail survey (n = 958).

Species	Estimated number of effective trappers		Estimated average season catch		Estimated total harvest	
Muskrat	4,344±	123 ^a	28.70±	5.43 ^a	124,673±	25,082 ^a
Mink	2,484±	116	2.48±	0.28	6,160±	913
Raccoon	5,329±	114	12.73±	1.14	67,838±	6,861
Opossum	3,502±	124	6.25±	0.68	21,888±	2,862
Red fox	1,587±	100	3.04±	0.52	4,824±	1,044
Gray fox	713±	72	2.13±	0.60	1,519±	534
Beaver	1,988±	109	6.04±	1.30	12,008±	2,945
Striped skunk	1,202±	90	2.21±	0.30	2,656±	546
Weasel	56±	21	1.29±	0.56	72±	62
Coyote	1,194±	90	3.82±	0.84	4,561±	1,232

^a 95% confidence interval.

Table 15. Distribution of harvest among effective trappers for 8 species of furbearers in Illinois, 1988-89, from post-season resident trapper mail survey.

Total season catch	Percentage of effective trappers for species							
	Mink (310) ^a	Opossum (437)	Red fox (198)	Gray fox (89)	Beaver (248)	Striped skunk (150)	Weasel (7)	Coyote (149)
1	48.71	14.87	44.44	50.56	27.82	53.33	85.71	42.95
2	20.65	14.65	20.71	28.09	13.31	16.67	..	14.77
3	11.94	14.65	12.12	8.99	12.10	12.67	14.29	10.07
4	6.13	11.44	6.06	7.87	10.89	8.00	..	8.05
5	2.58	8.47	2.02	2.25	4.84	2.00	..	3.36
6	3.23	7.55	4.04	1.12	5.24	4.00	..	4.70
7	2.26	2.29	3.03	..	3.63	..	..	4.70
8	2.26	3.20	1.52	..	4.84	2.00	..	2.68
9	..	1.37	..	..	0.40	..	..	1.34
10	..	7.55	1.01	..	3.23	0.67	..	..
11	..	1.14	1.52	..	2.02	..	..	..
12	0.97	2.06	1.01	..	2.02	0.67	..	1.34
13	0.32	0.69	..	..	1.21	..	..	..
14	0.32	0.69	0.51	..	0.81	..	..	0.67
15	..	2.29	0.51	..	1.61	..	..	2.01
16-20	0.65	3.20	0.51	..	2.02	..	..	2.01
21-25	..	1.83	0.51	..	2.02	..	..	0.67
>25	..	2.06	0.51	1.12	2.02	..	..	0.67

^a Numbers in parentheses indicate sample size for species.

Table 16. Distribution of major trap types used by trappers to catch 10 species of furbearers in Illinois, 1988-89 season, from post-season resident trapper mail survey (n = 908).

Species	Total number caught in traps	Total number caught in body-gripping traps	Total number caught in foot-hold traps	Total number caught in box/cage traps
Muskrat	15,287	9,428 (61.67) ^a	5,830 (38.14)	29 (0.19)
Mink	753	245 (32.54)	507 (67.33)	1 (0.13)
Raccoon	8,200	2,490 (30.37)	5,330 (65.00)	380 (4.63)
Opossum	2,639	943 (35.73)	1,572 (59.57)	124 (4.70)
Red fox	600	24 (4.00)	575 (95.83)	1 (0.17)
Gray fox	186	17 (9.14)	169 (90.86)	0 (0.00)
Beaver	1,448	1,020 (70.44)	428 (29.56)	0 (0.00)
Striped skunk	322	122 (37.89)	194 (60.25)	6 (1.86)
Weasel	9	4 (44.44)	5 (55.56)	0 (0.00)
Coyote	562	12 (2.14)	550 (97.86)	0 (0.00)
TOTALS	30,006	14,305 (47.67)	15,160 (50.52)	541 (1.81)

^a Numbers in parentheses are percentages.

Table 17. Summary of fur hunting activities of trappers in Illinois, 1988-89 season, from post-season resident trapper mail survey (n = 908).

Species	Number of trappers hunting species	Total number 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	172	1,751	10.18	18.94	14,802
Opossum	40	144	3.60	4.41	1,220
Red fox	27	45	1.67	2.97	381
Gray fox	8	20	2.50	0.88	170
Striped skunk	8	18	2.25	0.88	153
Coyote	69	201	2.91	7.60	1,697
All species	241	2,179	9.04	26.54	18,423

Table 18. Summary of muskrat trapper and harvest data for furbearer management zones in Illinois, 1979-80 through 1988-89, from post-season resident trapper mail survey (n = 730; 747; 696; 691; 646; 641; 555; 671; 676; 542).

Area/Season	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest	Estimated trapper harvest/100 km ²
NORTHERN ZONE					
1979-80	9,224 (62.19) ^a	11.27	39.63(+6.48) ^b	365,592 (77.10) ^a	446.73
1980-81	8,745 (61.71)	10.69	40.86(+5.19)	357,305 (75.31)	436.61
1981-82	7,590 (63.79)	9.27	27.69(+3.05)	210,246 (78.01)	256.90
1982-83	6,316 (61.36)	7.72	35.33(+4.91)	223,160 (75.86)	272.69
1983-84	4,922 (65.79)	6.01	35.59(+4.33)	175,148 (82.66)	214.02
1984-85	5,221 (64.27)	6.38	30.43(+3.67)	158,837 (72.99)	194.09
1985-86	3,319 (59.82)	4.06	31.41(+5.17)	104,240 (69.37)	127.38
1986-87	4,695 (56.78)	5.74	46.54(+6.14)	218,464 (65.66)	266.95
1987-88	5,537 (63.17)	6.77	41.61(+4.85)	230,416 (76.79)	281.55
1988-89	2,653 (61.07)	3.24	32.58(+8.44)	86,411 (69.31)	105.59
SOUTHERN ZONE					
1979-80	5,608 (37.81)	8.73	19.37(+3.07)	108,587 (22.90)	169.04
1980-81	5,426 (38.29)	8.45	21.59(+4.32)	117,140 (24.69)	182.35
1981-82	4,309 (36.21)	6.71	13.75(+2.25)	59,266 (21.99)	92.26
1982-83	3,977 (38.64)	6.19	17.85(+3.29)	71,014 (24.14)	110.55
1983-84	2,560 (34.21)	3.99	14.36(+2.91)	36,742 (17.34)	57.20
1984-85	2,902 (35.73)	4.52	20.26(+2.97)	58,778 (27.01)	91.50
1985-86	2,230 (40.18)	3.47	20.65(+4.08)	46,027 (30.63)	71.65
1986-87	3,573 (43.22)	5.56	31.97(+5.25)	114,240 (34.34)	177.84
1987-88	3,229 (36.83)	5.03	21.57(+3.16)	69,644 (23.21)	108.41
1988-89	1,691 (38.93)	2.63	22.63(+4.30)	38,262 (30.69)	59.56
STATEWIDE					
1979-80	14,832	10.15	31.97(+4.25)	474,179	324.61
1980-81	14,171	9.70	33.48(+3.66)	474,445	324.79
1981-82	11,899	8.15	22.65(+2.17)	269,512	184.50
1982-83	10,293	7.05	28.58(+3.33)	294,174	201.38
1983-84	7,482	5.12	28.32(+3.11)	211,890	145.05
1984-85	8,123	5.56	26.79(+2.61)	217,615	148.97
1985-86	5,549	3.80	27.08(+3.52)	150,267	102.87
1986-87	8,268	5.66	40.24(+4.19)	332,704	227.76
1987-88	8,766	6.00	34.23(+3.36)	300,060	205.41
1988-89	4,344	2.97	28.70(+5.43)	124,673	85.35

^a Numbers in parentheses are percentages of statewide totals.

^b 95% confidence interval.

Table 19. Summary of mink trapper and harvest data for furbearer management zones in Illinois, 1979-80 through 1988-89, from post-season resident trapper mail survey (n = 419; 501; 471; 445; 439; 410; 324; 418; 410; 310).

Area/Season	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest	Estimated trapper harvest/100 km ²
NORTHERN ZONE					
1979-80	5,040 (59.19) ^a	6.16	2.86 (+0.43) ^b	14,428 (61.17) ^a	17.63
1980-81	5,559 (58.48)	6.79	3.13 (+0.45)	17,403 (58.49)	21.27
1981-82	5,146 (63.91)	6.29	3.12 (+0.36)	16,029 (64.01)	19.59
1982-83	3,814 (57.53)	4.66	2.92 (+0.39)	11,144 (60.47)	13.62
1983-84	2,942 (57.86)	3.59	2.94 (+0.40)	8,651 (58.67)	10.57
1984-85	3,092 (59.51)	3.78	3.08 (+0.48)	9,521 (60.08)	11.63
1985-86	1,780 (54.94)	2.18	2.37 (+0.41)	4,215 (48.56)	5.15
1986-87	2,784 (54.07)	3.40	2.92 (+0.41)	8,133 (42.23)	9.94
1987-88	3,048 (57.32)	3.72	2.74 (+0.35)	8,338 (52.10)	10.19
1988-89	1,354 (54.52)	1.65	2.47 (+0.39)	3,336 (54.16)	4.08
SOUTHERN ZONE					
1979-80	3,475 (40.81)	5.41	2.63 (+0.41)	9,159 (38.83)	14.26
1980-81	3,947 (41.52)	6.14	3.13 (+0.47)	12,351 (41.51)	19.23
1981-82	2,906 (36.09)	4.52	3.11 (+0.55)	9,013 (35.99)	14.03
1982-83	2,815 (42.47)	4.38	2.85 (+0.36)	7,285 (39.53)	11.34
1983-84	2,143 (42.14)	3.36	2.85 (+0.41)	6,095 (41.33)	9.49
1984-85	2,104 (40.49)	3.28	3.01 (+0.44)	6,327 (39.92)	9.85
1985-86	1,459 (45.06)	2.27	3.06 (+0.54)	4,466 (51.44)	6.95
1986-87	2,366 (45.93)	3.68	4.70 (+1.11)	11,128 (57.77)	17.32
1987-88	2,269 (42.68)	3.53	3.38 (+0.63)	7,666 (47.90)	11.93
1988-89	1,130 (45.48)	1.76	2.50 (+0.40)	2,824 (45.84)	4.40
STATEWIDE					
1979-80	8,515	5.83	2.77 (+0.31)	23,587	16.15
1980-81	9,506	6.51	3.13 (+0.33)	29,754	20.37
1981-82	8,052	5.51	3.11 (+0.30)	25,042	17.14
1982-83	6,629	4.54	2.78 (+0.27)	18,429	12.62
1983-84	5,085	3.48	2.90 (+0.29)	14,746	10.09
1984-85	5,196	3.56	3.05 (+0.33)	15,848	10.85
1985-86	3,239	2.22	2.68 (+0.33)	8,681	5.94
1986-87	5,150	3.53	3.74 (+0.56)	19,261	13.19
1987-88	5,317	3.64	3.01 (+0.34)	16,004	10.96
1988-89	2,484	1.70	2.48 (+0.28)	6,160	4.22

^a Numbers in parentheses are percentages of statewide totals.

^b 95% confidence interval.

Table 20. Summary of raccoon trapper and harvest data for furbearer management zones in Illinois, 1979-80 through 1988-89, from post-season resident trapper mail survey (n = 755; 756; 815; 816; 753; 727; 653; 715; 738; 665).

Area/Season	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest	Estimated trapper harvest/100 km ²
NORTHERN ZONE					
1979-80	9,265 (60.40) ^a	11.32	9.86(±1.36) ^b	91,338 (64.51) ^a	111.61
1980-81	8,576 (59.79)	10.78	10.44(±1.70)	89,481 (65.39)	109.34
1981-82	8,411 (60.37)	10.28	9.96(±1.12)	83,766 (64.30)	102.36
1982-83	7,150 (58.82)	8.74	11.51(±1.54)	82,316 (65.18)	100.59
1983-84	5,247 (60.16)	6.41	9.55(±1.26)	50,123 (63.29)	61.25
1984-85	5,564 (60.39)	6.80	13.36(±1.76)	74,326 (61.82)	90.82
1985-86	3,899 (59.72)	4.76	11.48(±1.94)	44,787 (63.00)	54.73
1986-87	5,175 (58.74)	6.32	13.79(±1.60)	71,369 (57.62)	87.21
1987-88	5,771 (60.30)	7.05	14.20(±1.64)	81,984 (60.93)	100.18
1988-89	3,173 (59.55)	3.88	12.20(±1.48)	38,708 (57.06)	47.30
SOUTHERN ZONE					
1979-80	6,075 (39.60)	9.46	8.27(±1.17)	50,250 (35.49)	78.22
1980-81	5,768 (40.21)	8.98	8.21(±1.05)	47,361 (34.61)	73.73
1981-82	5,522 (39.63)	8.60	8.42(±0.98)	46,508 (35.70)	72.40
1982-83	5,005 (41.18)	7.79	8.79(±1.16)	43,974 (34.82)	68.45
1983-84	3,475 (39.84)	5.41	8.37(±1.08)	29,073 (36.71)	45.26
1984-85	3,649 (39.61)	5.68	12.58(±1.77)	45,904 (38.18)	71.46
1985-86	2,629 (40.28)	4.09	10.00(±1.22)	26,303 (37.00)	40.95
1986-87	3,635 (41.26)	5.66	14.44(±1.90)	52,500 (42.38)	81.73
1987-88	3,799 (39.70)	5.91	13.83(±1.75)	52,570 (39.07)	81.84
1988-89	2,156 (40.45)	3.36	13.52(±1.79)	29,130 (42.94)	45.35
STATEWIDE					
1979-80	15,340	10.50	9.23(±0.94)	141,588	96.93
1980-81	14,344	9.82	9.54(±1.10)	136,842	93.68
1981-82	13,933	9.54	9.35(±0.78)	130,274	89.18
1982-83	12,155	8.32	10.39(±1.03)	126,290	86.45
1983-84	8,722	5.97	9.08(±0.87)	79,196	54.22
1984-85	9,213	6.31	13.05(±1.27)	120,230	82.31
1985-86	6,528	4.47	10.89(±1.26)	71,090	48.67
1986-87	8,810	6.03	14.06(±1.23)	123,869	84.80
1987-88	9,570	6.55	14.06(±1.21)	134,554	92.11
1988-89	5,329	3.65	12.73(±1.14)	67,838	46.44

^a Numbers in parentheses are percentages of statewide totals.

^b 95% confidence interval.

Table 21. Summary of opossum trapper and harvest data for furbearer management zones in Illinois, 1979-80 through 1988-89, from post-season resident trapper mail survey (n = 374; 446; 549; 542; 484; 522; 431; 505; 588; 437).

Area/Season	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest	Estimated trapper harvest/100 km ²
NORTHERN ZONE					
1979-80	3,413 (44.92) ^a	4.17	2.68(±0.38) ^b	9,151 (33.36) ^a	11.18
1980-81	3,832 (45.29)	4.68	3.60(±1.12)	13,806 (36.58)	16.87
1981-82	5,266 (56.10)	6.43	4.34(±0.53)	22,841 (42.03)	27.91
1982-83	4,543 (56.27)	5.55	6.13(±1.03)	27,892 (51.56)	34.08
1983-84	3,139 (55.99)	3.84	6.32(±0.98)	19,846 (54.97)	24.25
1984-85	4,056 (61.30)	4.96	6.84(±0.94)	27,775 (61.02)	33.94
1985-86	2,389 (55.45)	2.92	6.04(±0.99)	14,426 (49.38)	17.63
1986-87	3,401 (54.65)	4.16	7.53(±1.00)	25,609 (53.94)	31.29
1987-88	4,487 (58.84)	5.48	9.15(±1.09)	41,046 (58.07)	50.16
1988-89	2,140 (61.10)	2.61	6.33(±0.85)	13,544 (61.88)	16.55
SOUTHERN ZONE					
1979-80	4,186 (55.08)	6.52	4.37(±0.62)	18,281 (66.64)	28.46
1980-81	4,630 (54.71)	7.21	5.17(±0.66)	23,935 (63.42)	37.26
1981-82	4,120 (43.90)	6.41	7.65(±1.11)	31,504 (57.97)	49.04
1982-83	3,531 (43.73)	5.50	7.42(±1.02)	26,204 (48.44)	40.79
1983-84	2,467 (44.01)	3.84	6.59(±0.94)	16,257 (45.03)	25.31
1984-85	2,560 (38.70)	3.99	6.93(±1.05)	17,743 (38.98)	27.62
1985-86	1,920 (44.55)	2.99	7.70(±1.47)	14,789 (50.62)	23.02
1986-87	2,821 (45.35)	4.39	7.75(±1.12)	21,865 (46.06)	34.04
1987-88	3,138 (41.16)	4.88	9.45(±1.42)	29,638 (41.93)	46.14
1988-89	1,362 (38.90)	2.12	6.12(±1.11)	8,344 (38.12)	12.99
STATEWIDE					
1979-80	7,599	5.20	3.61(±0.39)	27,432	18.78
1980-81	8,462	5.79	4.46(±0.63)	37,741	25.84
1981-82	9,386	6.43	5.79(±0.59)	54,345	37.20
1982-83	8,074	5.53	6.70(±0.74)	54,096	37.03
1983-84	5,606	3.84	6.44(±0.69)	36,103	24.72
1984-85	6,616	4.53	6.88(±0.70)	45,518	31.16
1985-86	4,309	2.95	6.78(±0.86)	29,215	20.00
1986-87	6,222	4.26	7.63(±0.75)	47,474	32.50
1987-88	7,625	5.22	9.27(±0.87)	70,684	48.39
1988-89	3,502	2.40	6.25(±0.68)	21,888	14.98

^a Numbers in parentheses are percentages of statewide totals.
^b 95% confidence interval.

Table 22. Summary of red fox trapper and harvest data for furbearer management zones in Illinois, 1979-80 through 1988-89, from post-season resident trapper mail survey (n = 175; 180; 187; 190; 173; 210; 171; 167; 173; 198).

Area/Season	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest	Estimated trapper harvest/100 km ²
NORTHERN ZONE					
1979-80	2,052 (57.71) ^a	2.51	4.20(±1.92) ^b	8,616 (68.06) ^a	10.53
1980-81	2,220 (65.00)	2.71	3.02(±1.64)	6,694 (68.54)	8.18
1981-82	1,932 (60.43)	2.36	2.95(±0.58)	5,694 (64.53)	6.96
1982-83	1,757 (62.11)	2.15	3.27(±0.78)	5,742 (66.55)	7.02
1983-84	1,158 (57.80)	1.42	3.05(±0.81)	3,538 (63.28)	4.32
1984-85	1,635 (61.43)	2.00	3.93(±1.07)	6,419 (76.82)	7.84
1985-86	910 (53.22)	1.11	4.79(±1.80)	4,364 (69.54)	5.33
1986-87	1,195 (58.08)	1.46	3.94(±1.23)	4,714 (67.97)	5.76
1987-88	1,245 (55.49)	1.52	2.43(±0.53)	3,020 (53.20)	3.69
1988-89	858 (54.04)	1.05	3.50(±0.87)	3,005 (62.29)	3.67
SOUTHERN ZONE					
1979-80	1,504 (42.29)	2.34	2.69(±0.82)	4,043 (31.94)	6.29
1980-81	1,195 (35.00)	1.86	2.57(±1.05)	3,073 (31.46)	4.78
1981-82	1,265 (39.57)	1.97	2.47(±0.61)	3,130 (35.47)	4.87
1982-83	1,072 (37.89)	1.67	2.69(±0.66)	2,886 (33.45)	4.49
1983-84	846 (42.20)	1.32	2.42(±0.63)	2,053 (36.72)	3.20
1984-85	1,026 (38.57)	1.60	1.89(±0.34)	1,937 (23.18)	3.02
1985-86	800 (46.78)	1.25	2.39(±0.53)	1,912 (30.46)	2.98
1986-87	863 (41.92)	1.34	2.57(±0.88)	2,221 (32.03)	3.46
1987-88	999 (44.51)	1.56	2.66(±0.52)	2,657 (46.80)	4.14
1988-89	729 (45.96)	1.13	2.49(±0.49)	1,819 (37.71)	2.83
STATEWIDE					
1979-80	3,556	2.43	3.56(±1.17)	12,659	8.67
1980-81	3,415	2.34	2.86(±1.12)	9,767	6.69
1981-82	3,197	2.19	2.76(±0.43)	8,824	6.04
1982-83	2,829	1.94	3.05(±0.54)	8,628	5.91
1983-84	2,004	1.37	2.79(±0.54)	5,591	3.83
1984-85	2,661	1.82	3.14(±0.68)	8,356	5.72
1985-86	1,710	1.17	3.67(±1.00)	6,276	4.30
1986-87	2,058	1.41	3.37(±0.81)	6,935	4.75
1987-88	2,244	1.54	2.53(±0.38)	5,677	3.89
1988-89	1,587	1.09	3.04(±0.52)	4,824	3.30

^a Numbers in parentheses are percentages of statewide totals.

^b 95% confidence interval.

Table 23. Summary of gray fox trapper and harvest data for furbearer management zones in Illinois, 1979-80 through 1988-89, from post-season resident trapper mail survey (n = 146; 139; 145; 130; 111; 102; 103; 78; 92; 89).

Area/Season	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest	Estimated trapper harvest/100 km ²
NORTHERN ZONE					
1979-80	1,301 (43.84) ^a	1.59	1.48(±0.20) ^b	1,931 (32.87) ^a	2.36
1980-81	1,271 (48.20)	1.55	2.03(±0.60)	2,584 (45.79)	3.16
1981-82	1,163 (46.90)	1.42	1.44(±0.24)	1,675 (37.55)	2.05
1982-83	745 (38.46)	0.91	2.00(±0.61)	1,488 (39.22)	1.82
1983-84	510 (39.64)	0.62	1.98(±0.78)	1,009 (40.65)	1.23
1984-85	659 (50.98)	0.81	1.69(±0.36)	1,114 (45.13)	1.36
1985-86	460 (44.66)	0.56	1.98(±0.54)	909 (39.39)	1.11
1986-87	382 (39.74)	0.47	1.71(±0.40)	652 (37.06)	0.80
1987-88	402 (33.70)	0.49	2.19(±0.84)	883 (33.33)	1.08
1988-89	280 (39.33)	0.34	2.03(±0.43)	568 (37.37)	0.69
SOUTHERN ZONE					
1979-80	1,666 (56.16)	2.59	2.37(±0.71)	3,944 (67.13)	6.14
1980-81	1,366 (51.80)	2.13	2.24(±0.73)	3,059 (54.21)	4.76
1981-82	1,316 (53.10)	2.05	2.12(±0.31)	2,787 (62.45)	4.34
1982-83	1,191 (61.54)	1.85	1.94(±0.31)	2,307 (60.78)	3.59
1983-84	776 (60.36)	1.21	1.90(±0.30)	1,473 (59.35)	2.29
1984-85	633 (49.02)	0.99	2.14(±0.51)	1,354 (54.87)	2.11
1985-86	570 (55.34)	0.89	2.46(±0.71)	1,398 (60.61)	2.18
1986-87	579 (60.26)	0.90	1.91(±0.40)	1,107 (62.94)	1.72
1987-88	791 (66.30)	1.23	2.23(±0.50)	1,765 (66.67)	2.75
1988-89	433 (60.67)	0.67	2.20(±0.96)	951 (62.63)	1.48
STATEWIDE					
1979-80	2,967	2.03	1.98(±0.41)	5,875	4.02
1980-81	2,637	1.81	2.14(±0.47)	5,643	3.86
1981-82	2,479	1.70	1.80(±0.21)	4,462	3.05
1982-83	1,936	1.33	1.96(±0.30)	3,795	2.60
1983-84	1,286	0.88	1.93(±0.36)	2,482	1.70
1984-85	1,292	0.88	1.91(±0.31)	2,468	1.69
1985-86	1,030	0.71	2.24(±0.46)	2,307	1.58
1986-87	961	0.66	1.83(±0.29)	1,759	1.20
1987-88	1,193	0.82	2.22(±0.43)	2,648	1.81
1988-89	713	0.49	2.13(±0.60)	1,519	1.04

^a Numbers in parentheses are percentages of statewide totals.
^b 95% confidence interval.

Table 24. Summary of beaver trapper and harvest data for furbearer management zones in Illinois, 1979-80 through 1988-89, from post-season resident trapper mail survey (n = 131; 158; 142; 129; 117; 166; 158; 224; 248; 248).

Area/Season	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest	Estimated trapper harvest/100 km ²
NORTHERN ZONE					
1979-80	1,849 (69.47) ^a	2.26	3.52(±0.88) ^b	6,500 (72.89) ^a	7.94
1980-81	2,031 (67.72)	2.48	3.41(±0.78)	6,934 (61.66)	8.47
1981-82	1,693 (69.72)	2.07	2.92(±0.59)	4,938 (71.36)	6.03
1982-83	1,415 (73.64)	1.73	3.94(±0.97)	5,575 (83.11)	6.81
1983-84	1,042 (76.92)	1.27	4.06(±0.90)	4,223 (82.02)	5.16
1984-85	1,521 (72.29)	1.86	3.93(±0.82)	5,981 (79.19)	7.31
1985-86	1,109 (70.25)	1.36	3.60(±0.71)	4,000 (62.40)	4.89
1986-87	1,824 (66.07)	2.23	4.45(±0.93)	8,125 (67.52)	9.93
1987-88	2,140 (66.53)	2.61	3.64(±0.74)	7,801 (57.62)	9.53
1988-89	1,291 (64.92)	1.58	6.17(±1.68)	7,973 (66.40)	9.74
SOUTHERN ZONE					
1979-80	813 (30.53)	1.27	2.97(±1.19)	2,418 (27.11)	3.76
1980-81	968 (32.28)	1.51	4.45(±1.53)	4,312 (38.34)	6.71
1981-82	735 (30.28)	1.14	2.70(±0.83)	1,982 (28.64)	3.09
1982-83	507 (26.36)	0.79	2.24(±0.67)	1,133 (16.89)	1.76
1983-84	313 (23.08)	0.49	2.96(±1.11)	926 (17.98)	1.44
1984-85	583 (27.71)	0.91	2.70(±0.72)	1,572 (20.81)	2.45
1985-86	470 (29.75)	0.73	5.13(±1.46)	2,411 (37.60)	3.75
1986-87	936 (33.93)	1.46	4.17(±1.31)	3,909 (32.48)	6.09
1987-88	1,076 (33.47)	1.67	5.33(±1.48)	5,738 (42.38)	8.93
1988-89	697 (35.08)	1.09	5.78(±2.03)	4,035 (33.60)	6.28
STATEWIDE					
1979-80	2,662	1.82	3.35(±0.71)	8,918	6.11
1980-81	2,999	2.05	3.75(±0.73)	11,246	7.70
1981-82	2,428	1.66	2.85(±0.48)	6,920	4.74
1982-83	1,922	1.32	3.49(±0.74)	6,708	4.59
1983-84	1,355	0.93	3.80(±0.74)	5,149	3.52
1984-85	2,104	1.44	3.59(±0.63)	7,553	5.17
1985-86	1,579	1.08	4.06(±0.67)	6,411	4.39
1986-87	2,760	1.89	4.36(±0.76)	12,034	8.24
1987-88	3,216	2.20	4.21(±0.71)	13,539	9.27
1988-89	1,988	1.36	6.04(±1.30)	12,008	8.22

^a Numbers in parentheses are percentages of statewide totals.
^b 95% confidence interval.

Table 25. Summary of striped skunk trapper and harvest data for furbearer management zones in Illinois, 1979-80 through 1988-89, from post-season resident trapper mail survey (n = 258; 240; 179; 215; 128; 147; 154; 142; 186; 150).

Area/Season	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest	Estimated trapper harvest/100 km ²
NORTHERN ZONE					
1979-80	3,392 (64.73) ^a	4.14	2.85(±0.35) ^b	9,664 (61.26) ^a	11.81
1980-81	2,940 (64.58)	3.59	3.10(±0.58)	9,118 (63.79)	11.14
1981-82	2,000 (65.36)	2.44	2.93(±0.55)	5,871 (60.71)	7.17
1982-83	2,220 (69.30)	2.71	3.28(±0.71)	7,278 (71.91)	8.89
1983-84	985 (66.41)	1.20	3.48(±0.81)	3,432 (78.72)	4.19
1984-85	1,305 (70.07)	1.59	3.00(±0.71)	3,914 (76.11)	4.78
1985-86	970 (62.99)	1.19	3.39(±0.78)	3,296 (72.79)	4.03
1986-87	1,134 (64.79)	1.39	2.95(±0.59)	3,337 (69.85)	4.08
1987-88	1,673 (69.35)	2.04	2.73(±0.53)	4,563 (73.33)	5.58
1988-89	833 (69.33)	1.02	2.33(±0.40)	1,936 (72.89)	2.37
SOUTHERN ZONE					
1979-80	1,849 (35.27)	2.88	3.31(±0.65)	6,111 (38.74)	9.51
1980-81	1,612 (35.42)	2.51	3.21(±0.92)	5,175 (36.21)	8.06
1981-82	1,060 (34.64)	1.65	3.58(±0.92)	3,799 (39.29)	5.91
1982-83	983 (30.70)	1.53	2.89(±0.74)	2,843 (28.09)	4.43
1983-84	498 (33.59)	0.78	1.86(±0.36)	928 (21.28)	1.44
1984-85	558 (29.93)	0.87	2.20(±0.65)	1,228 (23.89)	1.91
1985-86	570 (37.01)	0.89	2.16(±0.39)	1,232 (27.21)	1.92
1986-87	616 (35.21)	0.96	2.34(±0.60)	1,441 (30.15)	2.24
1987-88	739 (30.65)	1.15	2.25(±0.52)	1,660 (26.67)	2.58
1988-89	369 (30.67)	0.57	1.96(±0.37)	720 (27.11)	1.12
STATEWIDE					
1979-80	5,241	3.59	3.01(±0.32)	15,775	10.80
1980-81	4,552	3.12	3.14(±0.49)	14,293	9.78
1981-82	3,060	2.09	3.16(±0.48)	9,670	6.62
1982-83	3,203	2.19	3.16(±0.54)	10,121	6.93
1983-84	1,483	1.02	2.94(±0.57)	4,360	2.98
1984-85	1,863	1.28	2.76(±0.53)	5,142	3.52
1985-86	1,540	1.05	2.94(±0.52)	4,528	3.10
1986-87	1,750	1.20	2.73(±0.44)	4,778	3.27
1987-88	2,412	1.65	2.58(±0.40)	6,223	4.26
1988-89	1,202	0.83	2.21(±0.30)	2,656	1.82

^a Numbers in parentheses are percentages of statewide totals.
^b 95% confidence interval.

Table 26. Summary of weasel trapper and harvest data for furbearer management zones in Illinois, 1979-80 through 1988-89, from post-season resident trapper mail survey (n = 16; 17; 11; 16; 16; 18; 13; 16; 13; 7).

Area/Season	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest	Estimated trapper harvest/100 km ²
NORTHERN ZONE					
1979-80	163 (50.00) ^a	0.20	1.00(±0.00) ^b	163 (47.06) ^a	0.20
1980-81	171 (52.94)	0.21	1.00(±0.00)	171 (47.37)	0.21
1981-82	171 (90.91)	0.21	1.40(±0.43)	239 (93.33)	0.29
1982-83	105 (43.75)	0.13	1.14(±0.28)	119 (47.06)	0.15
1983-84	92 (50.00)	0.11	1.13(±0.24)	104 (47.37)	0.13
1984-85	139 (61.11)	0.17	1.18(±0.36)	164 (59.09)	0.20
1985-86	70 (53.85)	0.09	1.29(±0.36)	90 (56.25)	0.11
1986-87	86 (43.75)	0.11	1.29(±0.36)	111 (50.00)	0.14
1987-88	65 (38.46)	0.08	1.00(±0.00)	65 (35.71)	0.08
1988-89	32 (57.14)	0.04	1.50(±0.98)	48 (66.67)	0.06
SOUTHERN ZONE					
1979-80	163 (50.00)	0.25	1.13(±0.24)	183 (52.94)	0.28
1980-81	152 (47.06)	0.24	1.25(±0.32)	191 (52.63)	0.30
1981-82	17 (9.09)	0.03	1.00(±0.00)	17 (6.67)	0.03
1982-83	134 (56.25)	0.21	1.00(±0.00)	134 (52.94)	0.21
1983-84	93 (50.00)	0.14	1.25(±0.32)	116 (52.63)	0.18
1984-85	89 (38.89)	0.14	1.29(±0.56)	114 (40.91)	0.18
1985-86	60 (46.15)	0.09	1.17(±0.33)	70 (43.75)	0.11
1986-87	111 (56.25)	0.17	1.00(±0.00)	112 (50.00)	0.17
1987-88	104 (61.54)	0.16	1.13(±0.25)	118 (64.29)	0.18
1988-89	24 (42.86)	0.04	1.00(±0.00)	24 (33.33)	0.04
STATEWIDE					
1979-80	326	0.22	1.06(±0.12)	346	0.24
1980-81	323	0.22	1.12(±0.16)	362	0.25
1981-82	188	0.13	1.36(±0.40)	256	0.18
1982-83	239	0.16	1.06(±0.12)	253	0.17
1983-84	185	0.13	1.19(±0.20)	220	0.15
1984-85	228	0.16	1.22(±0.30)	278	0.19
1985-86	130	0.09	1.23(±0.24)	160	0.11
1986-87	197	0.13	1.13(±0.17)	223	0.15
1987-88	169	0.12	1.08(±0.15)	183	0.13
1988-89	56	0.04	1.29(±0.56)	72	0.05

^a Numbers in parentheses are percentages of statewide totals.

^b 95% confidence interval.

Table 27. Summary of coyote trapper and harvest data for furbearer management zones in Illinois, 1979-80 through 1988-89, from post-season resident trapper mail survey (n = 102; 101; 129; 116; 147; 143; 125; 122; 154; 149).

Area/Season	Estimated number of effective trappers	Estimated number of effective trappers/100 km ²	Average season catch	Estimated total trapper harvest	Estimated trapper harvest/100 km ²
NORTHERN ZONE					
1979-80	894	(43.14) ^a	4.86(+4.84) ^b	4,350	(59.44) ^a
1980-81	797	(41.58)	4.10(+4.06)	3,264	(57.14)
1981-82	855	(38.76)	1.92(+0.55)	1,644	(31.07)
1982-83	551	(31.90)	1.92(+0.55)	1,059	(26.30)
1983-84	741	(43.54)	2.77(+0.85)	2,050	(47.20)
1984-85	925	(51.05)	2.23(+0.51)	2,064	(44.66)
1985-86	640	(51.20)	2.98(+1.58)	1,911	(47.04)
1986-87	678	(45.08)	3.38(+1.47)	2,293	(52.25)
1987-88	960	(48.05)	4.07(+1.86)	3,903	(51.02)
1988-89	577	(48.32)	3.64(+1.42)	2,100	(46.05)
SOUTHERN ZONE					
1979-80	1,179	(56.86)	2.52(+1.12)	2,968	(40.56)
1980-81	1,120	(58.42)	2.19(+0.44)	2,449	(42.86)
1981-82	1,350	(61.24)	2.70(+0.65)	3,648	(68.93)
1982-83	1,177	(68.10)	2.52(+0.63)	2,967	(73.70)
1983-84	962	(56.46)	2.39(+0.40)	2,293	(52.80)
1984-85	887	(48.95)	2.89(+0.88)	2,557	(55.34)
1985-86	610	(48.80)	3.52(+0.89)	2,151	(52.96)
1986-87	825	(54.92)	2.54(+0.63)	2,096	(47.75)
1987-88	1,037	(51.95)	3.61(+1.18)	3,746	(48.98)
1988-89	617	(51.68)	3.99(+0.95)	2,461	(53.95)
STATEWIDE					
1979-80	2,073		3.53(+2.18)	7,318	
1980-81	1,917		2.98(+1.71)	5,713	
1981-82	2,205		2.40(+0.45)	5,292	
1982-83	1,728		2.33(+0.46)	4,026	
1983-84	1,703		2.55(+0.43)	4,343	
1984-85	1,812		2.55(+0.51)	4,621	
1985-86	1,250		3.25(+0.92)	4,062	
1986-87	1,503		2.92(+0.75)	4,389	
1987-88	1,997		3.83(+1.08)	7,649	
1988-89	1,194		3.82(+0.84)	4,561	

^a Numbers in parentheses are percentages of statewide totals.

^b 95% confidence interval.

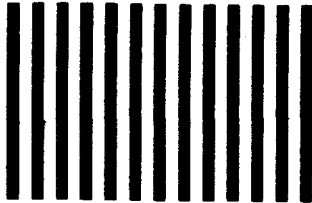
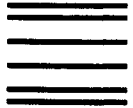

<p>No Postage Necessary if Mailed in the United States</p>												
	<p>BUSINESS REPLY MAIL FIRST CLASS PERMIT NO. 203, SPRINGFIELD, ILL.</p> <p>Postage Will Be Paid by Addressee</p> <p>DEPARTMENT OF CONSERVATION Wildlife Resources Division Furbearer Section</p> <p>LINCOLN TOWER PLAZA 524 SOUTH SECOND STREET SPRINGFIELD, ILLINOIS 62704-9680</p>											
<p>TO ISSUING AGENT:</p> <p>COMPLETE THIS FORM AND MAIL IMMEDIATELY UPON SALE OF FIRST LICENSE IN BOOK</p> <p>The Department of Conservation 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 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.</p> <p>Thank you for your cooperation. Please note reverse side is Business Reply postal card, perforated at binding for removing.</p> <p>MAIL IMMEDIATELY UPON SALE OF LICENSE TRAPPING (1988 SERIES) Please Print Plainly</p>												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; padding: 2px;">Name</td> <td style="padding: 2px;">TRAPPER JOHN</td> </tr> <tr> <td style="padding: 2px;">Rural Route or Street Address</td> <td style="padding: 2px;">RR 1, Box 23</td> </tr> <tr> <td style="padding: 2px;">Post Office</td> <td style="padding: 2px;">HOMETOWN</td> </tr> <tr> <td style="padding: 2px;">Zip Code</td> <td style="padding: 2px;">61234</td> </tr> <tr> <td style="padding: 2px;">County of Residence</td> <td style="padding: 2px;">SANGAMON</td> </tr> </table>			Name	TRAPPER JOHN	Rural Route or Street Address	RR 1, Box 23	Post Office	HOMETOWN	Zip Code	61234	County of Residence	SANGAMON
Name	TRAPPER JOHN											
Rural Route or Street Address	RR 1, Box 23											
Post Office	HOMETOWN											
Zip Code	61234											
County of Residence	SANGAMON											

Figure 1. Mail survey address card issued to license vendors in 1988-89 post-season trapper mail 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: _____

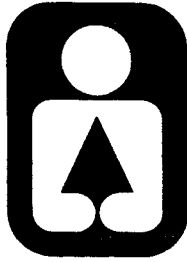
FURBEARERS CAUGHT IN TRAPS: _____

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 and activity record card issued to trappers in 1988-89 post-season trapper mail survey.

Illinois



Department of Conservation

life and land together

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

1

1988-89

Dear Illinois Trapper:

The harvest of fur-bearing animals is one of the few field and stream sports that is tied to our economy through a return from the crop. In the 1987-88 season, there were 638,032 pelts sold by Illinois fur-takers for a value to them of \$5,620,223. We need information on the trapped portion of the catch for the 1988-89 season.

You can make an important contribution to the future management of Illinois' fur harvests and trapping activity by completing the enclosed questionnaire. The questionnaire is self-explanatory. If you did not trap, simply answer questions #1 and #8 and return the questionnaire. If you did trap, please fill out the questionnaire completely.

The information requested from you and other trappers is used in determining catch, trapping success, trapping pressure, and trapper characteristics on a statewide basis. These facts are necessary for a better understanding of how regulations affect your trapping and the welfare of the furbearer populations. Also, with your help, the future of sport trapping will be assured.

Please take a few minutes and fill out the questionnaire. 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. Please reply even if you did not trap this season or were not successful.

Yours for better trapping.

Sincerely,

George Hubert, Jr.
 Furbearer Biologist

Figure 3. Letter of transmittal sent with initial mailing in 1988-89 post-season trapper mail survey.



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

2

Dear Illinois Trapper:

Recently we mailed to you a Trapping 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 card or haven't found time to complete it and return it to us.

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

Please fill out the form completely 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.

Sincerely,

George Hubert, Jr.
 Furbearer Biologist
 Div. of Wildlife Resources

Figure 4. Letter of transmittal sent with first follow-up mailing in 1988-89 post-season trapper mail survey.



LINCOLN TOWER PLAZA • 524 SOUTH SECOND STREET • SPRINGFIELD 62706
CHICAGO OFFICE - ROOM 100, 160 NO. LASALLE 60601

3-Trap

3

Dear Illinois Trapper:

This is to remind you that we would still like to receive an answer to the questionnaire concerning your trapping activity 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 card is enclosed. We hope 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 a complete response so that we may compile the information received from all co-operating trappers and prepare a report of our findings. Remember, your response is needed - even though you did not trap or had an unsuccessful season. Also, if you trapped in partnership with another person, kindly list only your half of the catch.

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

Sincerely,

George Hubert, Jr.
Furbearer Biologist

Figure 5. Letter of transmittal sent with second follow-up mailing in 1988-89 post-season trapper mail survey.

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Illinois Department of Conservation
Division of Wildlife Resources — Furbearer
Lincoln Tower Plaza
524 South 2nd Street
Springfield, Illinois 62794-9990
Attn: George Hubert, Jr.

**FURBEARER TRAPPING SURVEY
1988 - 1989 SEASON**

1. Did you trap for furbearers in Illinois during the 1988-89 season? Yes No
2. In what COUNTY did you do MOST of your trapping?

3. How many days (or nights) did you have traps set?

4. What was the average number of traps you used during the 1988-89 season? _____
5. Have you ever attended a trapper education class sponsored by the Illinois Dept. of Conservation? Yes No
6. Please fill in ALL FOUR BLANKS for each kind of furbearer you trapped in Illinois during the 1988-89 season:

	TOTAL Number Caught In Traps	Number Caught In CONIBEAR Traps	Number Caught In LEGHOLD Traps	Number Caught In BOX/CAGE Traps
Muskrat	_____	_____	_____	_____
Mink	_____	_____	_____	_____
Raccoon	_____	_____	_____	_____
Opossum	_____	_____	_____	_____
Red Fox	_____	_____	_____	_____
Gray Fox	_____	_____	_____	_____
Beaver	_____	_____	_____	_____
Skunk	_____	_____	_____	_____
Weasel	_____	_____	_____	_____
Coyote	_____	_____	_____	_____

7. Did you catch any furbearers in Woodstream "Soft Catch" padded leghold traps during the 1988-89 season? Yes No If yes, please list what kind and how many: _____
8. Did you also HUNT furbearers with gun and/or dogs during the 1988-89 season? Yes No If yes, please give the number of each kind taken:
Raccoon _____ Red Fox _____ Skunk _____
Opossum _____ Gray Fox _____ Coyote _____

NO POSTAGE REQUIRED

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2800 - 88

The Department of Conservation is an equal opportunity employer.

The Dept. of Conservation is requesting this information as outlined under the Wildlife Code, Chapter 61. Providing this information is mandatory. This form has been approved by the State Forms Management Center.

IL 422-0387

Figure 6. Questionnaire for post-season mail survey of Illinois trappers, 1988-89 season.

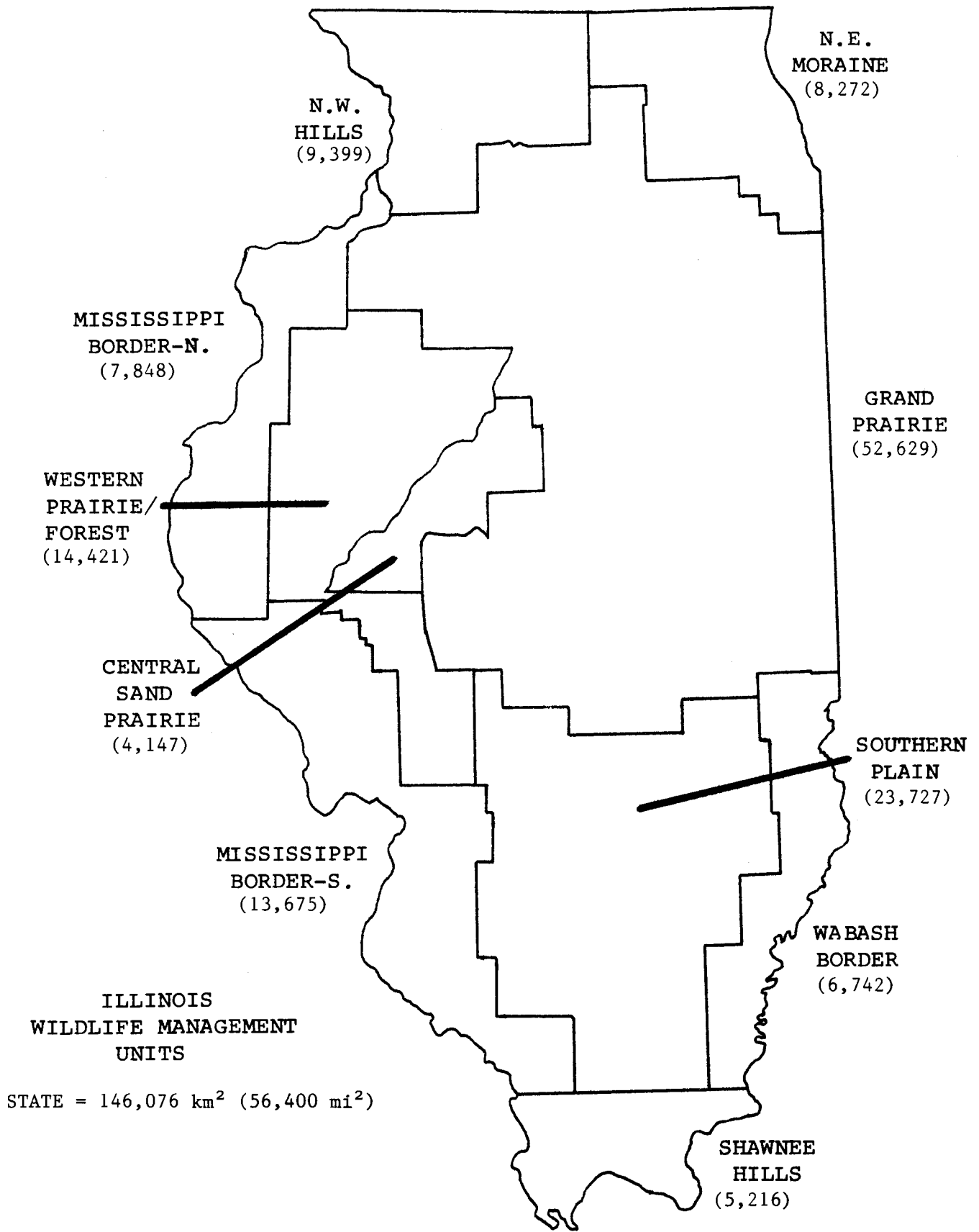


Figure 7. Area (km²) of wildlife management units in Illinois.



Figure 8. Furbearer management zones for the 1988-89 season.

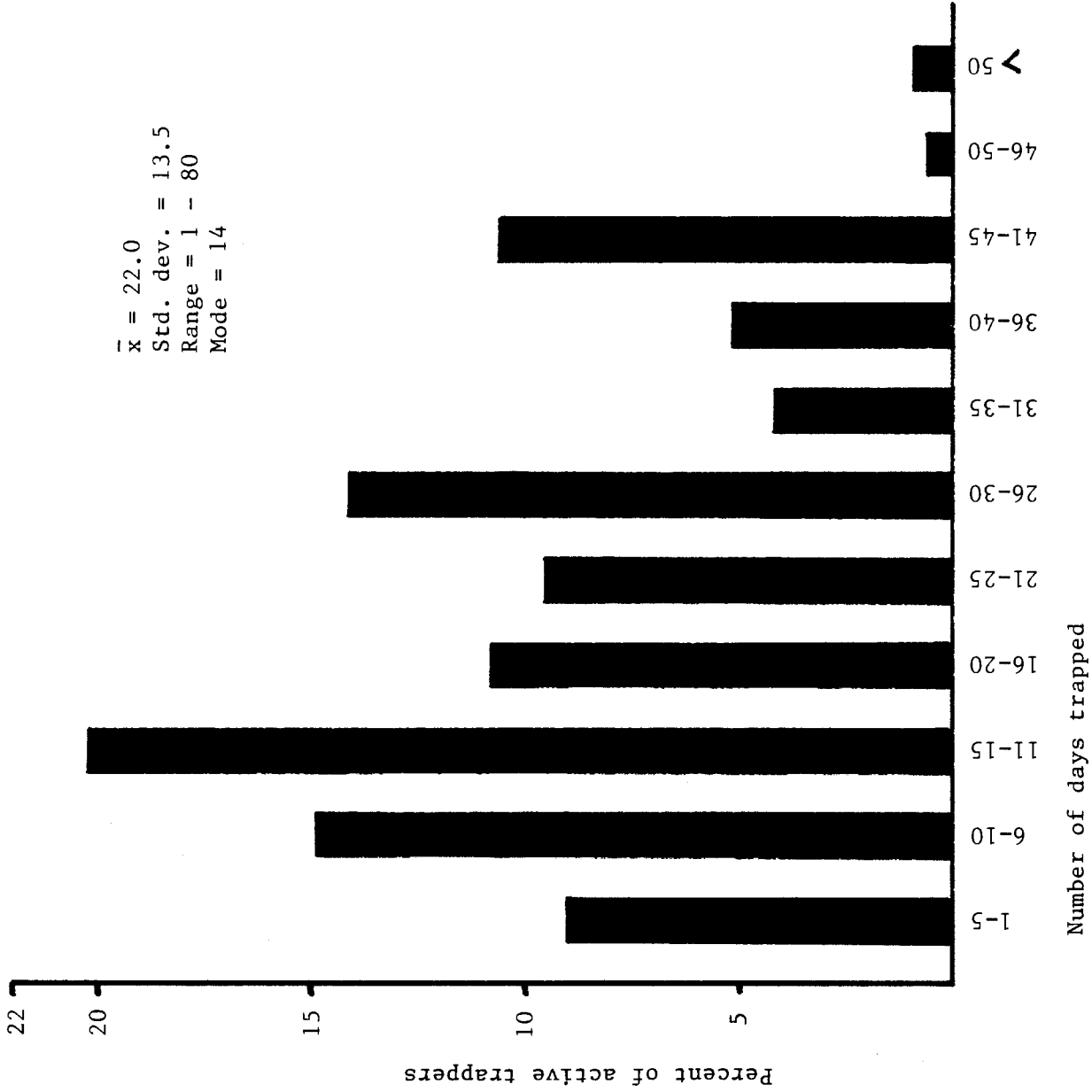


Figure 9. Distribution of days trapped per active trapper in Illinois, 1988-89 season (n = 744).

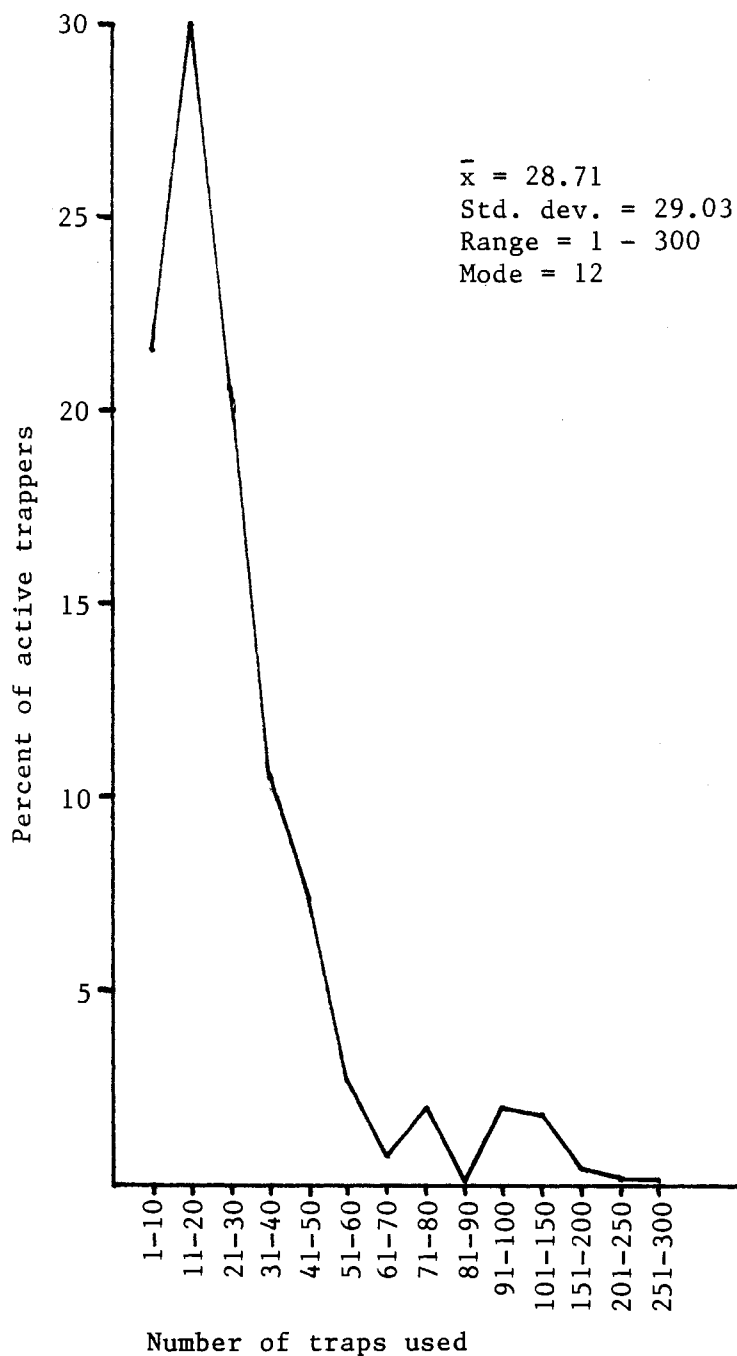


Figure 10. Distribution of number of traps used per active trapper in Illinois, 1988-89 season (n = 744).

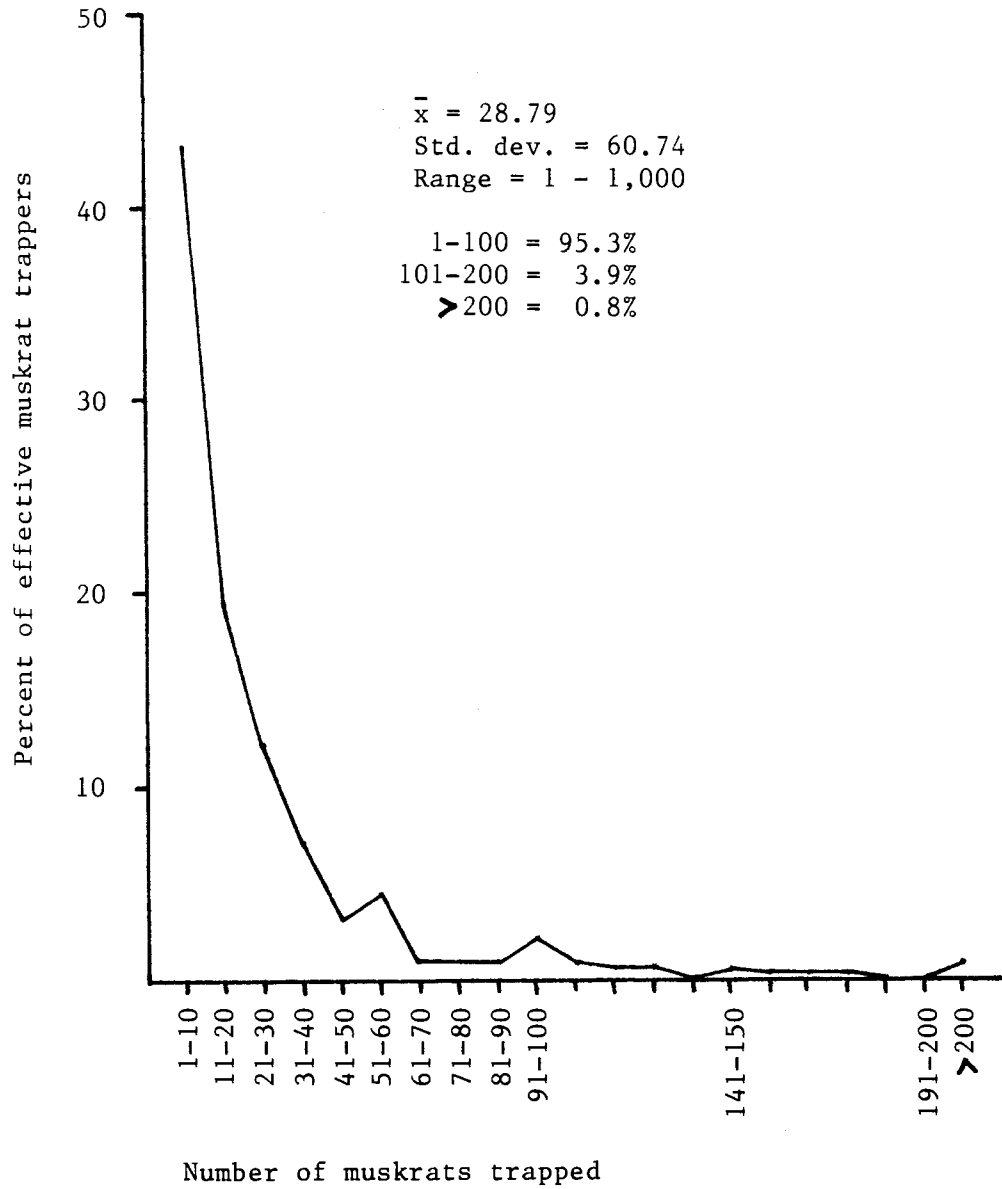


Figure 11. Distribution of muskrats trapped per effective muskrat trapper in Illinois, 1988-89 season (n = 526).

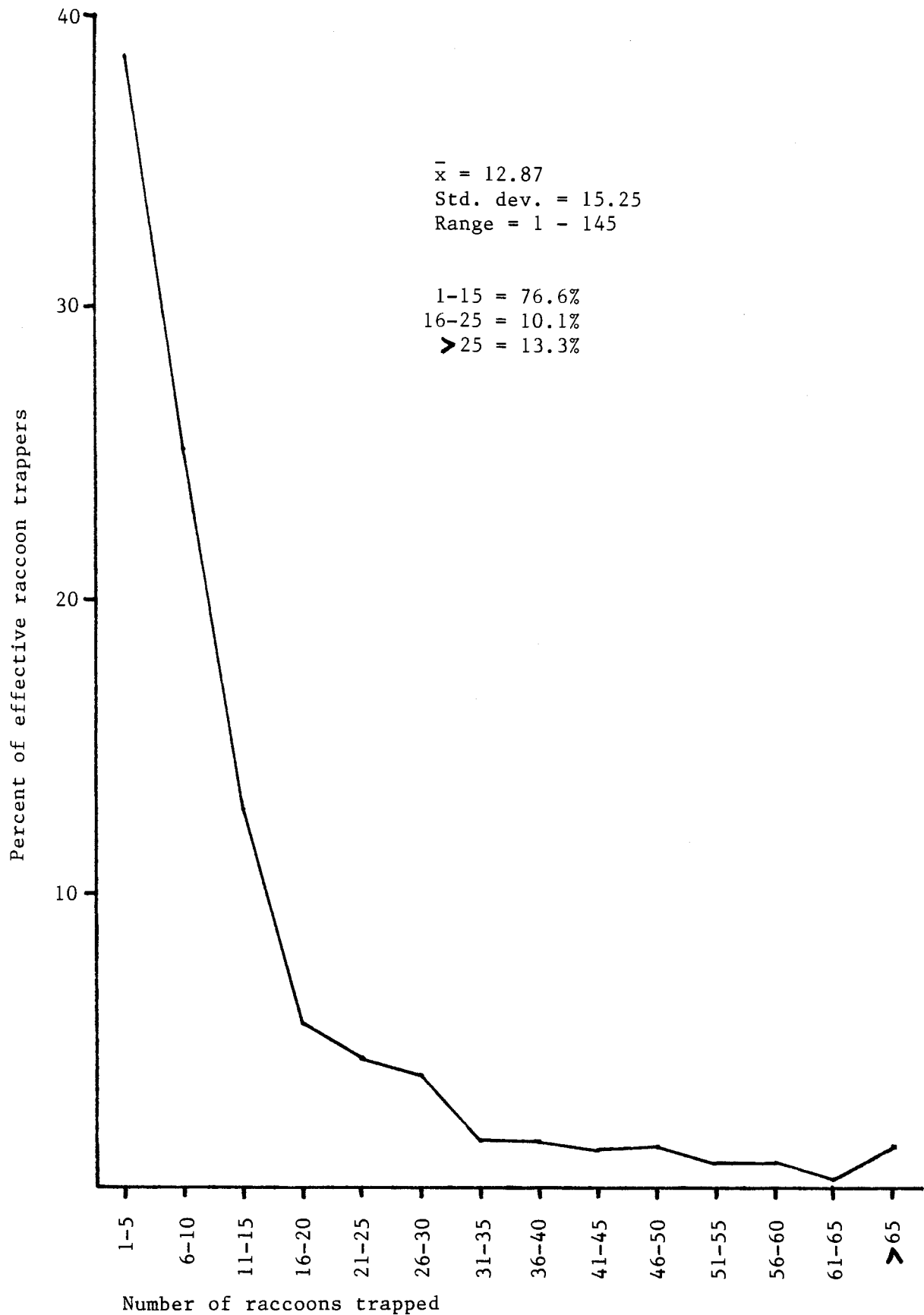


Figure 12. Distribution of number of raccoons trapped per effective raccoon trapper in Illinois, 1988-89 season (n = 637).



Figure 13. Existing furbeared management zones (based on county boundaries) used to prepare 1979-80 through 1988-89 season data summaries.

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639.109773T689 C001
TRAPPER HARVEST SURVEY SPRINGFIELD, ILL
1988/89



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