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JOB COMPLETION REPORT

SURVEYS AND INVESTIGATIONS PROJECTS

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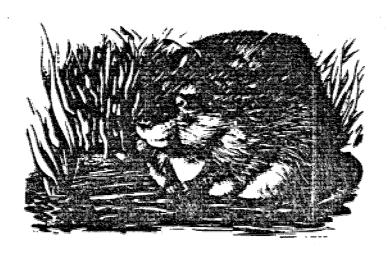
Federal Aid Project No. W-49-R-32

Study XV: Wildlife Harvests

Job No. 3: Fur harvest survey, 1984-85

Ву

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Michael Witte, Director

ILLINOIS DEPARTMENT OF CONSERVATION

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23 July 1985

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#### JOB COMPLETION REPORT

#### SURVEYS AND INVESTIGATIONS PROJECTS

STATE OF ILLINOIS

PROJECT NO. W-49-R-32

STUDY XV: Wildlife Harvests

JOB NO. 3: Fur harvest survey, 1984-85

ABSTRACT: The Illinois Department of Conservation licensed 228 individual fur buyers (205 residents; 23 non-residents) during 1984-85, a 4.1% increase from 1983-84. The number of trapping licenses issued was estimated at 11,976, down 2.6%. The estimated number of raccoon hunters decreased 13.6% to 40,678.

Reports required of all licensed fur buyers were used to determine the annual furbearer harvest and its value to fur-takers during the 1984-85 season. Based on a 96.93% response from individual buyers, the total harvest of the 10 open season furbearers was estimated at 565,428 pelts, an increase of 10.2% from 1983-84. Total value of the harvest increased 48.1% to \$6,201,538.95. Muskrats (Ondatra zibethicus) and raccoons (Procyon lotor) were the two most important species accounting for 87.65% of the total pelt harvest and 88.02% of its value. The harvest of six species increased and four decreased compared with the previous season. The harvest fluctuations for muskrat and mink (Mustela vison) may have been influenced by population changes. Other harvest variations were the result of a reduction in the number of fur-takers, favorable trapping and night-hunting conditions during the early part of the season, and unfavorable canid hunting conditions, especially late in the season.

The following table summarizes the 1984-85 statewide harvest:

Species	Estimated harvest	Average pelt pric per pelt	e Estimated total value to fur-takers
Muskrat	225,629	\$3.55	\$ 800,982.95
Mink	18,068	\$16.60	\$ 299,928.80
Raccoon	269,991	\$17.25	\$ 4,657,344.75
Opossum	28,204	\$0.95	\$ 26,793.80
Red fox	8,835	\$27.20	\$ 240,312.00
Gray fox	3,902	\$24.10	\$ 94,038.20
Beaver	3,683	\$6.80	\$ 25,044.40
Striped skunk	232	\$1.05	\$ 243.60
Weasel	37	\$0.55	\$ 20.35
Coyote	6,847	\$8.30	\$ 56,830.10
Totals or mean	565,428	$\bar{x} = \$10.95$	\$ 6,201,538.95

#### JOB COMPLETION REPORT

#### SURVEYS AND INVESTIGATIONS PROJECTS

STATE OF ILLINOIS

PROJECT No. W-49-R-32

STUDY XV: Wildlife Harvests

JOB NO. 3: Fur harvest survey, 1984-85

OBJECTIVE: To collect information on the annual fur-taker harvest of all

open season furbearers in Illinois and its economic value.

PROCEDURES:

Numbers of wild fur pelts taken in Illinois and sold by fur-takers during the 1984-85 seasons were estimated from fur purchase reports required of all fur buyers licensed by the Department of Conservation (Fig. 1). Approximately 15 days before the muskrat trapping season opened, all buyers were mailed fur purchase report forms and written instructions to maintain records of their transactions throughout the season. The reports of raw furs purchased were to be submitted no later than 20 March 1985. Buyers failing to report by that date were mailed a reminder notice by 1st class mail on 15 April 1985. Only original pelt sales were used to avoid duplication. An adjustment factor of 4.8% was used to account for out-of-state pelt sales (Hubert 1985a). Average pelt prices for all sizes and grades were estimated from price data supplied by representative buyers during and after the open seasons. Numbers and distribution of fur buyer permittees and trapping pressure were determined from license sales records obtained from the License and Regi-Title office, Illinois Department of Conservation. Fur hunting pressure was estimated from the number of raccoon, red fox (Vulpes vulpes), and coyote (Canis latrans) hunters in the post-season hunter harvest survey, Federal Aid Project W-49-R-32, Study XV, Job No. 1.

Information about the history of weasel (<u>Mustela frenata</u>, <u>M. nivalis</u>) harvest regulations was obtained from official Department of Conservation files. These records were supplemented by a review of the published Illinois Revised Statutes and Laws at the University of Illinois library. In addition, pertinent Department of Conservation publications were examined.

FINDINGS AND ANALYSIS:

# 1984-85 Fur Seasons

The 1984-85 fur-bearing mammal seasons varied from 35 to 359 days in length (Table 1). Trapping seasons for all species except beaver (Castor canadensis), red fox, gray fox (Urocyon cinereoargenteus), and coyote lasted

47 days in the northern management zone and 45 days in the southern management zone (Fig. 2). Opening dates were 13 November 1984 and 25 November 1984, 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 1984. Beaver trapping season was 96 or 108 days in length depending on zone and opened simultaneously with all other species except fox and coyote. A 58-day hunting season was in effect for raccoon and opossum (Didelphis marsupialis); opening dates varied by zone. The statewide hunting season lasted 65 days for fox and 359 days for striped skunk (Mephitis mephitis) and coyote. No bag limits were in force for any furbearer.

The weather during the month of November was, in general, good for fur-taking activities except in a few sections of the southern zone where scattered heavy rainfall hampered night hunters and trappers. Average temperatures ranged from 1 degree C above normal in the northwest portion of the state to 1 to 2 degrees C below normal throughout the remainder of Illinois. The southwest section had the largest below normal variation. Maximum temperatures varied from 15 to 25 degrees C early in the month, but then dropped to near normal. Readings remained near normal during the second week when the northern zone seasons opened. A cool period developed during the third week in several sections with minimum temperatures dropping below -7 degrees C in the north. Maximum temperatures again rose to near 20 degrees C in the fourth week before falling into the 0 to 10 degrees C range. Monthly precipitation was above normal throughout the state. A few areas, mainly in the south, received a total of nearly 18 cm of rain during the month. More than 2.5 cm of rain fell over many sections on 1 November. A week-long dry period followed. Moderate to heavy rain fell at the end of the second week. During the third week a dry period again developed. Moderate to heavy rain fell over the state during the fourth week. As noted above, localized heavy rains temporarily hampered fur-takers in a few areas. However, these were not widespread enough to affect the November furbearer harvest. The overall catch was average to above average.

Fur-taking conditions throughout December were generally good, but the success of night hunters was reduced during a few short periods of cold and/ or snowy weather. Average temperatures for the month ranged from 2 to 5 degrees C above normal in the state with the southeast portion recording the largest above normal variation. Temperatures started out the month above normal across the state with a brief drop on 6 December. As a result, minimum readings in the northwest fell below -18 degrees C for one night. Maximum temperatures then climbed into the 5 to 15 degrees C range during mid-month. On 16 December, readings rose to near 20 degrees C before a cool period developed. On 24 and 25 December minimum readings once again fell below -18 degrees C in the northwest. This cool spell was short; on the 28th and 29th a few maximum temperature records were set as readings shot up over 20 degrees The warm period failed to last long because readings fell to near normal by the end of the month. Precipitation for the month was again above normal throughout Illinois. The largest above normal variation was in the southwest. A few areas in the southern zone received a total of 18 to 25 cm of precipitation during the month. Moderate precipitation fell over many sections in

the first week of December followed by a week-long dry period. Moderate to heavy precipitation fell during the third and fourth weeks with the south receiving the greatest amount. On 5 December a snow storm dumped 13 to 20 cm over much of the southern zone. Also, several other storms deposited 7.5 to 20 cm of snow throughout the state. Antioch received one of the heaviest snows with a total of 39 cm for the month. Rockford received 36 cm. As usual, periods of cold and snow had an adverse impact on night hunters and trappers, but failed to greatly affect the furbearer harvest since they did not occur until after mid-season. Fox and coyote hunters operated throughout most of the month with more or less typical to above average success except when temperatures were well above normal.

The weather in January was poor to fair for fur-taking. Monthly temperatures ranged from 2 to 4 degrees C below normal in the northern zone to 2 to 5 degrees C below normal in the southern zone with the southwest section recording the largest below normal variation. At the beginning of the month temperatures across the state were below normal with minimum readings in the northwest falling below -18 degrees C. During the second week, temperatures rose slightly above normal in many areas as maximum temperatures climbed into the 0 to 10 degrees C range. A record breaking cold period then developed in the third week and lasted through the end of the month. Minimum readings dropped below -29 degrees C in many parts of the state on 20 January setting new record lows. Many sections, mainly in the northern zone, failed to climb above O degrees C after 8 January. Precipitation was slightly above normal in the northwest, west, and central sections and below normal over the rest of the state. Heavy precipitation fell on 1 January, and light amounts were recorded during the second, third, and fourth weeks. Heavy snows (13 to 30 cm) fell in many areas during the first week (the south received the heaviest amounts). Several other snows covered the state with 2.5 to 15 cm during the month. Carbondale received the most snow with a total of almost 63 cm. Obviously, the extreme cold and heavy snow brought a halt to trapping and night hunting. These same conditions coupled with high winds in many areas depressed the activities of fox and coyote hunters and reduced their success.

The weather during the 1984-85 season can be summarized as average to above average for water trapping, land trapping, and night hunting, and below average to average for canid hunting. Adverse weather conditions did not become widespread until the latter half of the season when the harvest by trappers and night hunters was essentially complete. The above normal temperatures in November and December increased the effectiveness of water trappers, land trappers, and night hunters. However, these favorable temperatures were somewhat offset by above normal precipitation in certain areas. Canid hunters, on the other hand, enjoyed suitable harvest conditions on a sporadic basis because of record cold, heavy snows, and high winds. Overall, the muskrat, raccoon, opossum, red fox, and beaver catch by trappers as well as the harvest of raccoons and opossums by night hunters was likely enhanced by the weather. To a lesser extent the take of mink by trappers was increased. In contrast, canid hunters recorded a below average harvest, especially for gray foxes and coyotes.

# Trends in Fur License Sales

Records of fur buyer permits sold by the License and Regi-Title office, Illinois Department of Conservation, for 1984-85 were compiled prior to mailing out fur purchase report forms and instructions. A total of 228 individuals purchased 229 fur buyer permits during 1984-85. This represents a 4.1% increase from 1983-84 in the number of persons licensed. Of the 228 buyers, 205 were residents and 23 were non-residents. The 205 residents bought 206 permits (Table 2). Almost 68% of all resident buyers were head-quartered in the Northwest Hills, Western Prairie/Forest, Grand Prairie, and Southern Plain wildlife management units (Table 2, Fig. 3). Fur buyer distribution within the state is not indicative of furbearer or fur harvest distribution.

Trapping licenses issued statewide in 1984-85 numbered approximately 11,976 (11,966 resident, 10 non-resident - 1 July 1985 estimate), a decrease of 2.6% from the previous year (1983-84 revised estimate of trapping license sales = 12,291). The decrease occurred throughout the state and was not confined to specific management units. The decline may have been due in part to pre-season predictions of low fur prices and a brighter employment picture in the rural labor market. Raccoon hunter numbers decreased 13.6% from an estimated 47,058 in 1983-84 to 40,678 in 1984-85 (Ellis 1985). The change is likely due to sampling variation, but poor weather conditions for fur harvesting may have reduced hunting activity in certain areas. As in previous seasons, most of these hunters were in the northern, western, and southern management units (Fig 3). The number of red fox hunters decreased 6.8% to an estimated 17,571, and the estimated number of coyote hunters dropped 6.6% to 31,952 (Ellis 1985). Both decreases may be attributed to a lack of suitable tracking snow and poor hunting conditions throughout much of the winter. Opossum hunters were estimated to number 14,201 or 14.3% fewer than the previous season (Ellis 1985).

#### Fur Buyer Fur Purchase Survey

Reports of raw furs purchased had been submitted by 221 of the 228 (96.93%) individual fur buyers when the survey was closed out on 31 May 1985. Of these, 32 stated they did not buy any pelts during the 1984-85 season. The seven buyers who failed to report were assumed to have purchased raw furs at the same rate as the buyers who submitted records of their activities.

An estimated total of 565,428 pelts was harvested and sold by Illinois fur-takers during the 1984-85 season (Table 3). This estimate includes an adjustment factor of 4.8% to account for out-of-state pelt sales (Hubert 1985a). No allowance was made for pelts harvested by hunters and trappers that were not sold.

Muskrats and raccoons were the two most important furbearers in terms of harvest and value (Table 3). Together these species accounted for 87.65% of the total pelt harvest and 88.02% of its value. Other top-ranking species included mink, opossum, red fox, and coyote. The 1984-85 pelt harvest was valued to fur-takers at \$6,201,538.95, about \$2,013,225 more than the previous year (Table 4).

The total fur harvest for 1984-85 represented a 10.2% increase in pelts taken compared with the 1983-84 season (Table 4). All changes were influenced by the decrease in allowance for out-of-state pelt sales in 1984-85. Also, as noted above, fewer trapping licenses were sold and the number of fur hunters decreased. Major increases (>25%) in the raccoon, opossum, beaver, and striped skunk harvests occurred. The increases for raccoon and opossum were primarily due to good night hunting and trapping conditions which prevailed during the initial half of the season. The increase in average pelt prices may also have played a role, but major population increases can be ruled out (Hubert 1985b, Hubert 1985c). The higher beaver catch can also be attributed to these same factors. The increase in the skunk harvest appears to be the result of sampling variation and favorable trapping conditions as the statewide skunk population continued to decline (Hubert 1985d).

A minor increase (5 to 25%) in the mink catch took place between 1983-84 and 1984-85 (Table 4). Mink trappers were also favorably impacted by weather conditions as were the water trappers pursuing other species. However, the statewide mink population may have been somewhat higher in 1984-85, but supportive data are not available. Better weather for water trapping is the factor most likely involved in the harvest change.

The red fox harvest remained stable (<5% change) from 1983-84 to 1984-85 even though the average price for this species declined (Table 4). The number of red fox hunters was almost 7% lower in 1984-85 compared with the previous year (Ellis 1985), but the harvest was constant. Apparently the red fox catch failed to fluctuate because trapper success increased (Hubert 1985a) and trapping accounted for a larger portion of the catch. Such a change, however, was not reflected by fur buyer estimates of the percentage of red foxes taken by hunters. Although it is likely that the statewide red fox population was similar between years, no census data were collected.

Minor drops (5 to 25%) in the muskrat, gray fox, and coyote harvests were recorded in 1984-85 (Table 4). Census data are not available, but field observations indicated the 1984 statewide muskrat population was lower than in 1983. Therefore, the decline in the muskrat catch can probably be attributed to a population drop because water trapping conditions were good through much of the season. In fact, field reports suggest the muskrat catch would have declined even more had the harvest conditions been average. The probable causes for the slight drops in the gray fox and coyote harvests include a decline in the number of canid hunters, lower pelt prices, and below average hunting conditions during much of the season, especially the latter half. Neither a reduction in trapper success nor population declines seemed to be involved. However, as with several other species, no population trend data are available.

A major decline (>25%) in the weasel harvest took place compared with the previous season. This change is not meaningful because only a small number of weasels are trapped each year. Also, population data are limited. Most weasels are trapped incidentally to other species. Pelt prices remain low and no interest in weasels exists.

The total value of the 1984-85 fur harvest was \$2,013,224.90 (48.1%) more than the previous season (Table 4). The change was due to a combination of an increase in the total pelt harvest (especially for mink, raccoon, and opossum) and an increase in the average prices paid for muskrat, mink, and raccoon. Even though the average pelt prices for 5 of the 10 species surveyed decreased compared with a year earlier, the overall average pelt price increased from \$8.20 to \$10.95 (Table 4). The 1984-85 average pelt prices reflect a slightly renewed market demand for the short-haired furs of muskrat, mink, and beaver, and a noticeable reduction in demand for selected long-haired furs (red fox, gray fox, and coyote). The market for raccoon pelts, however, was somewhat stronger than it had been for two years. After a period of greatly inflated pelt prices in the late 1970's, the market values for most wild furs have apparently stabilized at realistic levels. As a whole, the prices paid for all major species in Illinois remain good.

# Distribution of Harvest Among Fur-takers

The distribution of the fur catch between hunters and trappers is traditionally a source of controversy. In addition, this aspect of the annual harvest is potentially important in the establishment of sound regulations and the evaluation of management programs. During the 1984-85 season, the percentage of animals harvested by hunters was monitored for two species as part of certain furhouse studies in Federal Aid Project W-49-R-32. Also, the present survey requested licensed fur buyers to estimate the portion of pelts purchased from hunters for the six furbearers that could be legally harvested by hunting or trapping methods.

The percentage of total harvest taken by hunters for species which may be hunted or trapped under current regulations ranged from 7.0% for striped skunk to 77.8% for coyote (Table 5). By applying the estimates from furhouse investigations and fur buyer estimates for canids and skunks to the 1984-85 harvest figures, the number of pelts taken by hunters was estimated to be 211,694 or approximately 37.4% of the total harvest for the year. As stated earlier, there were an estimated 40,678 raccoon hunters and 11,976 licensed trappers during the 1984-85 season. Excluding fox hunters, coyote hunters, opossum hunters, and canid chasers, fur hunters made up 77.3% of all Illinois fur-takers. These hunters accounted for 37.4% of all pelts taken. The average fur hunter harvested 5.2 pelts valued at \$81.71 compared with the average trapper who took 29.5 pelts worth \$240.29. The distribution of harvest emphasizes the greater efficiency of trappers as well as the higher monetary rewards of trapping. The 1984-85 distribution values are similar to previous seasons (Hubert 1982, 1983, 1984).

# 1975-1984 Fur Harvest Trends

Statewide furbearer harvest trend data for the years 1975 through 1984 are presented in Tables 6 through 11. During the 10-year period, total estimated pelt harvests based on fur buyer surveys ranged from 513,223 in 1983 to 948,392 in 1979, and average 709,944. No allowances for out-of-state pelt sales were made in 1975 or 1976. Out-of-state sales adjustments for the last

eight seasons have averaged 4.5%. Since 1975, the harvests of most species have undergone major fluctuations.

# Deer Hide Purchases

During the 1984-85 season, licensed fur buyers were requested to report the number of white-tailed deer (Odocoileus virginianus) hides that they bought from hunters. Purchases totaled an estimated 7,445 skins. The average price paid was \$3.75, so the total value to hunters was \$27,918.75. Since the 1984 firearms deer harvest in Illinois was approximately 29,000, only about 25% of the hides taken were sold. However, it is likely that many of the unsold hides are retained for personal use rather than discarded.

# History of Weasel Harvest Regulations

The weasel was first afforded protection by state statute in 1951 (Table 12). Prior to that year no regulations concerning the harvest of weasels existed in Illinois. The first restricted weasel harvest season was held from 15 November 1951 through 15 January 1952. Subsequent hunting and trapping seasons have ranged from 30 to 98 days. No weasel bag limits have ever existed. Overall, weasel harvest regulations have been relatively conservative since all the species present in Illinois were placed on the protected list in 1953.

#### **RECOMMENDATIONS:**

This investigation provides the only source of harvest and value data for all 10 open season species of furbearers. The information serves as a base for assessment of population trends and regulatory management. The fur harvest survey should be continued.

No alterations in the length or timing of the current furbearer seasons or management zones are recommended based on the data contained in this report. The maintenance of stable seasons and zones permits more realistic year to year comparisons of harvest information and associated biological data are easier to interpret. However, additional recommendations for harvest regulations are contained in the job reports for certain related furbearer studies. Those recommendations should also be considered.

#### LITERATURE CITED:

- Ellis, J. A. 1985. Hunter harvest survey, 1984-85. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-32, Study XV, Job 1. In preparation.
- Hubert, G. F., Jr. 1982. Fur harvest survey, 1981-82. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-29, Study XV, Job 3. 25pp.
- vation P-R Proj. Rep. W-49-R-30, Study XV, Job 3. 24pp.

. 1984. Fur harvest survey, 1983-84. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-31, Study XV, Job 3. 22pp.
. 1985a. Trapper harvest survey, 1984-85. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-32, Study XV, Job 4. In preparation.
P-R Proj. Rep. W-49-R-32, Study XII, Jobs 1, 2, 3, 4 and 6. In preparation.
. 1985c. Opossum investigations. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-32, Study X, Jobs 1 and 2. 19pp.
. 1985d. Striped skunk road-kill survey. Illinois Dept. of Con- servation P-R Proj. Rep. W-49-R-32, Study XI, Job 1. 16pp.
DATA AND REPORTS:
Original and related reports in this investigation are on file in the Division of Fish and Wildlife Resources office, Illinois Department of Conservation, Springfield, Illinois 62706.

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Furbearer Biologist

Special Projects Section

Div. of Fish and Wildlife Resources

DATE: 23 July 1985

APPROVED BY:

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Chief

Div. of Fish and Wildlife Resources

DATE: 14 Hugust 1985

GH:1g

Table 1. Illinois fur-bearing mammal seasons for 1984-85.

	Hunting	seasons <u>a</u>	Trapping s	easons
Species	Northern zone	Southern zone	Northern zone	Southern zone
Muskrat, Mink, Weasel	Closed	Closed	13 Nov-29 Dec	25 Nov- 8 Jan
Raccoon, Opossum	13 Nov-13 Jan	25 Nov-23 Jan	13 Nov-29 Dec	25 Nov- 8 Jan
Striped Skunk	Continuous o	pen season	13 Nov-29 Dec	25 Nov- 8 Jan
Beaver	Closed	Closed	13 Nov-28 Feb b	25 Nov-28 Feb
Red Fox, Gray Fox	25 Nov-31 Jan	25 Nov-31 Jan	25 Nov-29 Dec	25 Nov- 8 Jan
Coyote	Continuous o	pen season	25 Nov-29 Dec	25 Nov- 8 Jan

 $<sup>\</sup>frac{a}{c}$  Raccoon, opossum, striped skunk, and coyote hunting closed 24 hrs. on 16 and 17 Nov. and 7 and 8 Dec. and until 6 PM on 18 Nov. and 9 Dec. during firearms deer season. Red fox and gray fox hunting closed 24 hrs. on 7 and 8 Dec. and until 6 PM on 9 Dec. during firearms deer season.

b Those portions of Jo Daviess, Carroll, Whiteside, and Rock Island counties lying west of Illinois Rt. 84 and US Rt. 20, from Interstate-80 north to the Wisconsin line were open to beaver trapping from 13 Nov.-29 Dec. 1984 only.

Table 2. Summary of resident fur buyer permits issued in Illinois for the 1984-85 season.

Wildlife management		er of vidual			cense ype	and the state of t	
unit	perm	ittees	<del></del>	Retail	Wholesale	····	
Northwest Hills	23	$(11.2)^{\frac{a}{}}$		23	1		
Northeast Moraine	17	(8.3)		12	5		
Mississippi Border- North	9	(4.4)		9	0		
Mississippi Border- South	21	(10.3)		15	6		
Western Prairie/Forest	23	(11.2)		22	1		
Central Sand Prairie	3	(1.5)		3	0		
Grand Prairie	55	(26.8)		43	12		
Southern Plain	38	(18.5)		28	10		
Wabash Border	14	(6.8)		12	2		
Shawnee Hills	2	(1.0)		. 1	1		
Totals	205	(100.0)		168	38		

 $<sup>\</sup>frac{a}{c}$  Numbers in parentheses are percentages of statewide total.

Table 3. Composition of estimated fur harvest in Illinois and value to fur-takers during 1984-85 season.

	Tota	l pelts <sup>a</sup>	Total v	alue
Species	Number	Percent	Dollars	Percent
Muskrat	225,629	39.90	\$ 800,982.95	12.92
Mink	18,068	3.20	299,928.80	4.84
Raccoon	269,991	47.75	4,657,344.75	75.10
Opossum	28,204	4.99	26,793.80	0.43
Red Fox	8,835	1.56	240,312.00	3.87
Gray Fox	3,902	0.69	94,038.20	1.52
Beaver	3,683	0.65	25,044.40	0.40
Striped skunk	232	0.04	243.60	
Weasel	37	0.01	20.35	- ·
Coyote	6,847	1.21	56,830.10	0.92
Totals	565,428	100.00	\$ 6,201,538.95	100.00

a Includes 4.8% allowance for out-of-state pelt sales.

Table 4. Companative fur harvest data for Illinois, 1983-84 vs. 1984-85.

Species	Number of pelis taken 1983-84 <sup>2</sup> 198	r of taken 1984–85 <sup>D</sup>	Change in harvest from 1983-84	Average peit price per pelt 1983-84 1984	e peit er peit 1984-85	Total value to fur-takers (dollars 1983-84 1984	Total value to -takers (dollars) 84 1984-85	Change in value from 1983-84 (dollars)
Muskrat	248,146	225,629	-22,517 (-9.1)5	\$3.15	\$3.55	781,659.90	800,982.95	+19,323.05 (+2.5)
Mink	16,056	18,068	+2,012 (+12.5)	\$15.15	\$16.60	243,248.40	299,928.80	+56,680.40 (+23.3)
Raccoon	203,633	269,991	+66,358 (+32.6)	\$13.15	\$17.25	\$17.25 2,677,773.95	4,657,344.75 +	4,657,344.75 +1,979,570.80 (+73.9)
unssodo	22,289	28,204	+5,915 (+26.5)	\$0.85	\$0.95	18,945.65	26,793.80	+7,848.15 (+41.4)
Red fox	8,719	8,835	+116 (+1.3)	\$30.90	\$27.20	269,417.10	240,312.00	-29,105.10 (-10.8)
Gray fox	4,152	3,902	-250 (-6.0)	\$27.35	\$24.10	113,557.20	94,038.20	-19,519.00 (-17.2)
Beaver .	2,742	3,683	+941 (+34.3)	\$5.45	\$6.80	14,943.90	25,044.40	+10,100.50 (+67.6)
Striped skunk	137	232	+95 (+69.3)	\$1.55	\$1.05	212.35	243.60	+31.25 (+14.7)
Weasel	09	37	-23 (-38.3)	\$0.65	\$0.55	39.00	20.35	-18.65 (-47.8)
Coyote	7,289	6,847	-442 (-6.1)	\$9.40	\$8.30	68,516.60	56,830.10	-11,686.50 (-17.1)
Totals	513,223	565,428	+52,205 (+10.2)	x = \$8.20 x	$\bar{x} = $10.95$	\$10.95 4,188,314.05	6,201,538.95 +	6,201,538.95 +2,013,224.90 (+48.1)

 $\frac{a}{}$  Includes 6.1% allowance for out-of-state sales.

 $\frac{b}{}$  Includes 4.8% allowance for out-of-state sales.

 $\stackrel{ extsf{c}}{-}$  Numbers in parentheses indicate percent change between years.

Table 5. Estimated percentage of annual harvest taken by hunters for selected furbearers in Illinois, 1984-85.

	Estimated percentage of	harvest taken by hunters
Species	Furhouse studies	Fur buyer estimates <sup>a</sup>
Raccoon	66.9 (Hubert 1985b) <sup>b</sup>	61.6
Opossum	71.7 (Hubert 1985c)	41.2
Red fox	-	43.5
Gray fox	-	42.6
Striped skunk	-	7.0
Coyote	-	77.8

 $<sup>\</sup>frac{a}{}$  Based on present study.

 $<sup>\</sup>frac{b}{}$  Authority listed in parentheses.

Table 6. Muskrat, mink, and weasel trapping seasons, harvests, and pelt price data for Illinois, 1975-1984.

	Season	Season opening		Estimated		Ave	Average price	ره	
	date (season	date (season length in days)		harvest		per pe	per pelt (dollars)	rs)	
Year	Northern zone	Southern zone	Muskrat	Mink	Weasel	Muskrat	Mink	Weasel	
1975	8 Nov (69)	15 Nov (70)	445,737	18,009	181	2.90	00.9	0.50	
1976	13 Nov (55)	20 Nov (55)	256,315	14,253	311	77.7	13.95	0.54	
1977	15 Nov (45)	25 Nov (45)	300,314	12,910	147	5.10	13.20	09.0	
1978	15 Nov (45)	25 Nov (45)	422,354	19,814	147	2.00	15.20	0.65	
1979	10 Nov (30)	20 Nov (30)	460,674	22,971	145	6.35	20.15	0.50	
1980	15 Nov (45)	25 Nov (45)	421,585	26,607	85	6.50	18.90	09.0	
1981	15 Nov (45)	25 Nov (45)	325,415	24,478	53	4.30	17.45	0.50	
1982	15 Nov (45)	25 Nov (45)	297,872	17,768	. 74	2.75	13.90	0.50	
1983	15 Nov (45)	25 Nov (45)	248,146	16,056	09	3.15	15.15	0.65	
1984	13 Nov (47)	25 Nov (45)	225,629	18,068	37	3.55	16.60	0.55	

Table 7. Beaver trapping season, harvests, and pelt price data for Illinois, 1975-1984.

		on opening	Fotimeted	Average price
Year	Northern zone	length in days) Southern zone	Estimated harvest	per pelt (dollars)
1975	6 Dec (85)	6 Dec (85)	2,337	4.50
1976	18 Dec (80)	18 Dec (80)	1,548	7.00
1977	15 Nov (60)	25 Nov (60)	2,425	6.60
1978	15 Nov (90)	25 Nov (90)	3,386	7.25
1979	10 Nov (111)	20 Nov (101)	7,345	14.40
1980	15 Nov (106)	25 Nov (96)	7,338	10.60
1981	15 Nov (106)	25 Nov (96)	4,145	6.40
1982	15 Nov (106)	25 Nov (96)	2,517	4.95
1983	15 Nov (106)	25 Nov (96)	2,742	5.45
1984	13 Nov (108)	25 Nov (96)	3,683	6.80

Table 8. Raccoon and opossum hunting and trapping seasons, harvests and pelt price data for Illinois, 1975-1984.

	Hunting sea	Hunting season opening	1	Trapping season opening	Estimated	ated	Average I	price per
Year	date (season 1	date (season length in days)	date (season length in days Northern zone Southern zone	ength in days) Southern zone	Raccoon Opo	Opossum	Raccoon	(dollar) Opossum
1975	8 Nov (63)	15 Nov (64)	8 Nov (69)	15 Nov (70)	310,593	49,874	14.00	1.10
1976	13 Nov (54)	13 Nov (64)	13 Nov (55)	20 Nov (55)	187,377	42,153	17.17	1.21
1977	15 Nov (60)	25 Nov (60)	15 Nov (45)	25 Nov (45)	237,315	46,198	18.00	2.05
1978	15 Nov (60)	25 Nov (60)	15 Nov (45)	25 Nov (45)	292,728	25,097	27.25	2.65
1979	10 Nov (34)	20 Nov (37)	10 Nov (30)	20 Nov (30)	381,006	38,626	25.50	3,35
1980	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	314,777	46,710	19.40	1.45
1981	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	314,963	55,729	22.50	1.05
1982	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	292,189	35,548	14.55	0.95
1983	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	203,633	22,289	13.15	0.85
1984	13 Nov (58)	25 Nov (58)	13 Nov (47)	25 Nov (45)	269,991	28,204	17.25	0.95

a Hunting season closed during firearms deer season.

Red and gray fox hunting and trapping seasons, harvest, and pelt price data for Illinois, 1975-1984. Table 9.

Average price per pelt (dollars)	Red fox Gray fox	16.00	27.67	31.05	42.95	43.80	36.40	28.75	26.35	27.35	24.10
Average per pelt	Red fox	34.00	45.61	47.45	61,50	48.40	44.80	46.75	30.40	30.90	27.20
ated	Gray fox	7,132	6,166	980,6	9,525	10,547	8,716	7,649	5,943	4,152	3,902
Estimated harvest	Red fox Gray fox	11,247	7,206	9,715	13,582	14,136	13,965	13,533	9,780	8,719	8,835
son opening ength in days)	Southern zone	15 Nov (70)	4 Dec (41)	30 Nov (30)	25 Nov (45)						
Trapping season opening date (season length in days)	Northern zone	8 Nov (69)	27 Nov (41)	30 Nov (30)	25 Nov (35)						
Hunting season opening date (season length in days)	Southern zone	15 Nov (64)	17 Nov (52)	30 Nov (60)	25 Nov (65)						
Hunting season opening date (season length in day	Northern zone	8 Nov (63)	20 Dec (45)	30 Nov (60)	25 Nov (65)						
	Year	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984

a Hunting season closed during firearms deer season.

Table 10. Striped skunk hunting and trapping seasons, harvest, and pelt price data for Illinois, 1975-1984.

Year	Hunting season opening date (seasons length in date there is northern sone Southern	Hunting season opening date (seasons length in days) a Northern zone Southern zone	Trapping season opening date (season length in danthern zone Southern	Trapping season opening date (season length in days) Northern zone Southern zone	Estimated harvest	Average price per pelt (dollars)
1975	8 Nov (63)	15 Nov (64)	8 Nov (69)	15 Nov (70)	!	1.00
1976	Closed	Closed	13 Nov (55)	20 Nov (55)	821	2.25
1977	15 Nov (60)	25 Nov (60)	15 Nov (45)	25 Nov (45)	1,503	2.20
1978	15 Nov (60)	25 Nov (60)	15 Nov (45)	25 Nov (45)	1,633	2.55
1979	10 Nov (34)	20 Nov (37)	10 Nov (30)	20 Nov (30)	3,111	2.60
1980	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	1,625	2.00
1981	15 Nov (56)	25 Nov (58)	15 Nov (45)	25 Nov (45)	840	2.15
1982	Continuous (359)	Continuous (359)	15 Nov (45)	25 Nov (45)	341	1.50
1983	Continuous (359)	Continuous (359)	15 Nov (45)	25 Nov (45)	137	1,55
1984	Continuous (359)	Continuous (359)	13 Nov (47)	25 Nov (45)	232	1.05

 $\stackrel{
m a}{-}$  Hunting season closed during firearms deer season.

Coyote hunting and trapping seasons, harvests, and pelt price data for Illinois, 1975-1984. Table 11.

Year	Hunting season opening date (season length in days Statewide	Trapping season opening date (season length in days)	son opening ength in days) Southern zone	Estimated	Average price per pelt (dollars)
1975	1 Sep (175)	8 Nov (69)	15 Nov (70)	2,833	8.00
1976	1 Sep (175)	27 Nov (41)	4 Dec (41)	3,882	16.07
1977	1 Sep (175)	1 Sep $(45)^{\underline{b}}$ 30 Nov $(30)$	1 Sep $(45)^{\underline{b}}$ 30 Nov $(30)$	7,678	16.75
1978	1 Sep (175)	30 Nov (30)	30 Nov (30)	9,891	31,35
1979	Continuous (359)	30 Nov (30)	30 Nov (30)	9,831	22.85
1980	Continuous (359)	30 Nov (30)	30 Nov (30)	8,412	19.25
1981	Continuous (359)	30 Nov (30)	30 Nov (30)	10,390	24.45
1982	Continuous (359)	30 Nov (30)	30 Nov (30)	8,180	13.85
1983	Continuous (359)	30 Nov (30)	30 Nov (30)	7,289	9.40
1984	Continuous (359)	25 Nov (35)	25 Nov (45)	6,847	8.30

a Hunting season closed during firearms deer season.

 $<sup>\</sup>frac{b}{}$  Split trapping season; season total length = 75 days.

Table 12. Weasel hunting and trapping regulations in Illinois, 1915-1984.

		Season len	gth (days)	Special
Season	Zone <sup>a</sup>	Hunting	Trapping	regulations
1915-16 through 1922-23	Statewide	Continuous open season	Continuous open season	Not protected by state statute
1923-24 through 1938-39	Statewide	Continuous open season	Continuous open season	Not protected by state statute; un- lawful for hunting purposes
1939-40 through 1950-51	Statewide	Continuous open season	Continuous open season	Not protected by state statute
1951-52 through 1952-53	Statewide	15 Nov15 Jan.(62)	15 Nov15 Jan.(62)	One species pro- tected ( <u>Mustela</u> pennisulae olivacea)
1953-54 through 1954-55	Statewide	15 Nov15 Jan.(62)	15 Nov15 Jan.(62)	3 spp. protected (Mustela erminea, M. rixosa, M. frenata)
1955-56 through 1958-59	Northern Southern	1 Nov15 Jan.(76) 15 Nov15 Jan.(62)	15 Nov31 Dec.(47) 1 Dec15 Jan.(46)	
1959-60	Northern Southern	15 Oct15 Jan.(93) 1 Nov15 Jan.(76)	15 Nov31 Dec.(47) 25 Nov15 Jan.(52)	
1960-61	Northern Southern	25 Oct31 Jan.(98) 1 Nov31 Jan.(92)	15 Nov31 Dec.(47) 25 Nov15 Jan.(52)	
1961-62 through 1962-63	Northern Southern	1 Nov31 Jan.(92) 15 Nov31 Jan.(78)	20 Nov31 Dec.(42) 1 Dec15 Jan.(46)	
1963-64	Northern Southern	15 Nov31 Jan.(75) 15 Nov31 Jan.(75)	20 Nov31 Dec.(42) 25 Nov10 Jan.(47)	Hunting season closed during deer season (6 days)
1964-65	Northern Southern	5 Nov31 Jan.(82) 5 Nov31 Jan.(82)	20 Nov31 Dec.(42) 25 Nov10 Jan.(47)	Hunting season closed during deer season (6 days)
1965-66 through 1966-67	Northern Southern	10 Nov31 Jan.(77) 10 Nov31 Jan.(77)	15 Nov20 Dec.(36) 25 Nov 5 Jan.(42)	Hunting season closed during deer season (6 days)
1967–68	Northern Southern	16 Nov31 Jan.(77) 16 Nov31 Jan.(77)	16 Nov31 Dec.(46) 25 Nov 5 Jan.(42)	•

Table 12. Continued.

	_ а	Season leng		Special
Season	Zone <u>a</u>	Hunting	Trapping	regulations
1968-69	Northern Southern	1 Nov31 Jan. (86) 1 Nov31 Jan. (86)	* * *	Hunting season closed during deer season (6 days)
1969-70	Northern Southern	1 Nov31 Jan. (86) 1 Nov31 Jan. (86)		Hunting season closed during deer season (6 days)
1970-71	Northern Southern	1 Nov31 Jan. (86) 1 Nov31 Jan. (86)	The state of the s	Hunting season closed during deer season (6 days)
1971-72	Northern Southern	1 Nov31 Jan. (86) 1 Nov31 Jan. (86)	•	Hunting season closed during deer season (6 days)
1972-73	Statewide	Closed	11 Nov31 Jan.(82)	
1973-74	Statewide	Closed	10 Nov31 Jan.(83)	
1974-75	Statewide	Closed	9 Nov31 Jan.(84)	
1975–76	Northern Southern	Closed Closed	8 Nov15 Jan.(69) 15 Nov23 Jan.(70)	
1976-77	Northern Southern	Closed Closed	13 Nov 6 Jan.(55) 20 Nov13 Jan.(55)	
1977-78 through 1978-79	Northern Southern	Closed Closed	15 Nov29 Dec.(45) 25 Nov 8 Jan.(45)	
1979-80	Northern Southern	Closed Closed	10 Nov 9 Dec.(30) 20 Nov19 Dec.(30)	
1980-81 through 1983-84	Northern Southern	Closed Closed	15 Nov29 Dec.(45) 25 Nov 8 Jan.(45)	
1984-85	Northern Southern	Closed Closed	13 Nov29 Dec.(47) 25 Nov 8 Jan.(45)	

<sup>&</sup>lt;sup>a</sup> From 1955-56 through 1964-65 the northern zone included the area north of the southern boundaries of Pike, Greene, Macoupin, Montgomery, Shelby, Cumberland, and Clark counties.

From 1965-66 through 1978-79 the northern zone included the area north of US Route 36 from the Indiana state line to Springfield, Route 29 from Springfield to Pekin, and Route 9 from Pekin to Dallas City, then due west to the Mississippi River.

From 1979-80 through 1984-85 the northern zone included the area north of US Route 36.

# ILLINOIS DEPARTMENT OF CONSERVATION DIVISION OF FISH AND WILDLIFE RESOURCES FURBEARER PROGRAM

SEASON OF I 9 84-85				REPO	T OF RAW FI	REPORT OF RAW FURS PURCHASED	۵l				MMU	
FUR BUYER LICENSE NUMBER(S)	s)			( )RESIDENT	DENT	( ) NON-RESIDENT	DENT	-			•	(FOR OFFICE USE)
	MUSKRAT	MINK	RACCOON	OPOSSUM	RED FOX	GRAY FOX	BEAVER	SKUNK	WEASEL	COYOTE	DEER	OTHER (LIST)
1. RAW FURS BOUGHT FROM ILLINOIS HUNTERS AND TRAPPERS								-				
2. RAW FURS BOUGHT FROM OTHER ILLINOIS FUR BUYERS												
3. RAW FURS BOUGHT FROM OUTSIDE OF ILLINOIS												
APPROXIMATELY WHAT PERCENT OF THE ILLINOIS RACCOONS WERE BOUGHT FROM HUNTERS?	T OF THE II	LINOIS F	VACCOONS WER	E BOUGHT FR	OM HUNTERS?		8	SIGNED				
APPROXIMATELY WHAT PERCENT OF	THE	J SIONIT	ILLINOIS OPOSSUMS WERE BOUGHT FROM HUNTERS?	E BOUGHT FRO	OM HUNTERS?		F.	FIRM NAME				
APPROXIMATELY WHAT PERCENT OF THE	T OF THE II	TINOIS E	ILLINOIS RED FOXES WE	WERE BOUGHT FROM HUNTERS?	ROM HUNTERS	,	8 IA	ADDRESS				
APPROXIMATELY WHAT PERCENT OF	THE	TINOIS C	ILLINOIS GRAY FOXES W	WERE BOUGHT FROM HUNTERS?	FROM HUNTERS	S?	<b>~</b> _					715 CODE
APPROXIMATELY WHAT PERCENT OF	THE	TINOIS §	ILLINOIS SKUNKS WERE BOUGHT FROM HUNTERS?	BOUGHT FROM	HUNTERS?		ď	DATE				1000 111
APPROXIMATELY WHAT PERCENT OF THE ILLINOIS COYOTES WERE BOUGHT FROM HUNTERS?	T OF THE IL	TINOIS C	OYOTES WERE	BOUGHT FROM	4 HUNTERS?		81					

Figure 1. Report of raw furs purchased form used for the 1984-85 season.



Figure 2. Furbearer management zones for the 1984-85 season.

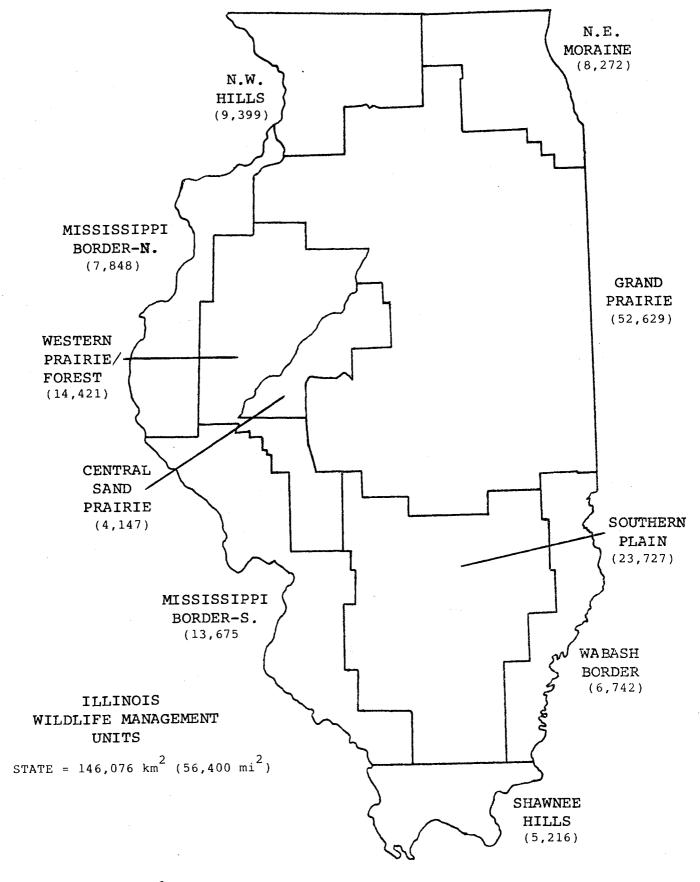


Figure 3. Area (km<sup>2</sup>) of wildlife management units in Illinois.

FUR HARVE BURNELO, ILL. 1884/85