



I L L I N O I S

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

**PRODUCTION NOTE**

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



NHX

0511101113  
F-966  
1981/82

NATURAL HISTORY SURVEY

JOB COMPLETION REPORT

NOV 7 1994

SURVEYS AND INVESTIGATIONS PROJECTS

LIBRARY

As Required By

FEDERAL AID IN WILDLIFE RESTORATION ACT

ILLINOIS

Federal Aid Project No. W-49-R-29

Study XV: Wildlife Harvests

Job No. 3: Fur harvest survey, 1981-82

By

G. F. Hubert, Jr.



David Kenney, Director

ILLINOIS DEPARTMENT OF CONSERVATION

S. W. Harrison  
P-R Coordinator

M. Conlin, Supervisor  
Div. of Fish & Wildl. Res

14 July 1982

PERMISSION TO QUOTE

This is a progress report that may contain tentative or preliminary findings. It may be subject to future modifications and revisions. To prevent the issuing of misleading information, persons wishing to quote from any of this report, to cite it in bibliographies, or to use it in other forms should first obtain permission from the project leader under whose direction the work was performed or from the Supervisor of the Division of Fish and Wildlife Resources.

Printed by authority of the State of Illinois 150-10-82

The Department of Conservation is an equal opportunity employer.

JOB COMPLETION REPORT

SURVEYS AND INVESTIGATIONS PROJECTS

STATE OF ILLINOIS

PROJECT NO. W-49-R-29

STUDY XV

JOB NO. 3

STUDY XV: Wildlife Harvests

JOB NO. 3: Fur harvest survey, 1981-82

ABSTRACT: The Illinois Department of Conservation licensed 236 individual fur buyers (223 residents; 13 non-residents) during 1981-82, a 7.8% increase from 1980-81. The number of trapping licenses issued was estimated at 18,412, down 7.6%. The estimated number of raccoon hunters decreased 0.7% to 43,172.

Reports required of all licensed fur buyers were used to determine the annual furbearer harvest and its value to fur-takers during the 1981-82 season. Based on a 96.19% response from individual buyers, the total harvest of the 10 open season furbearers was estimated at 757,195 pelts, a decrease of 10.9% from 1980-81. Total value of the harvest decreased 4.7% to \$10,106,561.05. Muskrats (Ondatra zibethicus) and raccoons (Procyon lotor) were the two most important species accounting for 84.58% of the total pelt harvest and 83.97% of its value. The harvest of six species decreased compared with the previous season, the raccoon and red fox (Vulpes vulpes) catches remained stable, and the opossum (Didelphis marsupialis) and coyote (Canis latrans) take increased. The harvest fluctuations for striped skunks (Mephitis mephitis), muskrats, opossums, and coyotes were probably influenced by population changes.

The following table summarizes the 1981-82 statewide harvest:

Species	Estimated harvest	Average pelt price per pelt	Estimated total value to fur-takers
Muskrat	325,415	\$ 4.30	\$1,399,284.50
Mink	24,478	\$17.45	\$ 427,121.10
Raccoon	314,963	\$22.50	\$7,086,667.50
Opossum	55,729	\$ 1.05	\$ 58,515.45
Red fox	13,533	\$46.75	\$ 632,667.75
Gray fox	7,649	\$28.75	\$ 219,908.75
Beaver	4,145	\$ 6.40	\$ 26,528.00
Striped skunk	840	\$ 2.15	\$ 1,806.00
Weasel	53	\$ 0.50	\$ 26.50
Coyote	10,390	\$24.45	\$ 254,035.50
Totals or Mean	757,195	\$13.35	\$10,106,561.05

JOB COMPLETION REPORT

SURVEYS AND INVESTIGATIONS PROJECTS

STATE OF ILLINOIS

PROJECT No. W-49-R-29

STUDY XV

JOB NO. 3

STUDY XV: Wildlife Harvests

JOB NO. 3: Fur harvest survey, 1981-82

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 furtakers during the 1981-82 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 1982. Buyers failing to report by that date were mailed a reminder notice by registered mail on 19 April 1982. Only original pelt sales were used to avoid duplication. An adjustment factor of 4.9% was used to account for out-of-state pelt sales (Hubert 1982a). 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 Permit Section, Illinois Department of Conservation. Fur hunting pressure was estimated from the number of raccoon, red fox, and coyote hunters in the post-season hunter harvest survey, Federal Aid Project W-49-R-29, Study XV, Job No. 1.

Information about the disposition of raccoon and beaver (Castor canadensis) carcasses following the pelting process was obtained from a mail survey of all resident fur buyers who were licensed as wild game food dealers. After the reporting deadline listed above, these individuals were mailed a questionnaire form (Appendix I), a business reply envelope, and a cover letter explaining the survey. A single mailing using first class postage was employed. Upon receipt all questionnaires were edited for useableness.

## FINDINGS AND ANALYSIS:

### 1981-82 Fur Seasons

The 1981-82 fur-bearing mammal seasons varied from 30 to 359 days in length (Table 1). Trapping seasons for all species except beaver, red fox, gray fox (Urocyon cinereoargenteus), and coyote were 45 days long with the northern management zone opening 10 days before the southern zone (Fig. 2). Red fox, gray fox, and coyote could be legally trapped for 30 days statewide beginning 30 November. Beaver trapping season was 96 or 106 days in length depending on zone and opened simultaneously with all other species except fox and coyote. A 56- or 58-day hunting season was in effect for raccoon, opossum, and striped skunk; opening dates varied by zone. The statewide hunting season lasted 60 days for fox and 359 days for coyote. No bag limits were in force for any furbearer.

The weather during the month of November was generally favorable for fur-taking activities. Average temperatures were slightly above normal in most sections of the state. The main fur seasons opened in the northern zone following a near normal period from 7 to 13 November when temperatures ranged from lows near  $-5^{\circ}$  C to highs of  $16^{\circ}$  C. During the last week of November when the southern zone seasons opened, temperatures were about 1 degree (2 degrees F) below normal in the northern areas and 1 degree above normal in the central and southern sections. Monthly precipitation was approximately 1 to 4 cm below normal in all areas except the northwest and west where it was 0.5 to 1 cm above normal. Moderate amounts of rainfall were received during the first week of the month. During the last three weeks, rainfall was light and scattered. The southeast section did, however, receive 2.5 cm during the fourth week. The northern part of the state recorded the first snowfall of the season during the third week of the month. Amounts ranged from 2.5 to 10 cm, but it had little effect on the total November fur catch. The above normal temperatures and below normal precipitation provided reasonably good hunting and trapping conditions and contributed to a typical harvest of most furbearers.

Fur-taking conditions were good during the first half of December and poor during the last half. Temperatures remained above normal through 14 December, but averaged 5-8 degrees (9-14 degrees F) below normal across the entire state for the third week of the month. Maximum readings were below  $-17^{\circ}$  C in the northern two-thirds of the state and set several new minimum temperature records. Three storms occurred in late December and produced heavy snow in central Illinois. The first took place on the 16th and 17th, the second on the 22nd, and the third on the 27th and 28th. These storms marked the beginning of an extended period of severe winter weather. Night hunting and trapping activities were greatly curtailed after mid-month throughout the state. However, the severe weather did not arrive soon enough to have a major impact on the annual catch of muskrats, minks (Mustela vison), raccoons, or opossums. In addition, the general presence of snow late in the month enhanced the success of canid hunters, particularly in central and southern Illinois.

The weather in January was poor to fair for fur-taking. Average monthly temperatures were 3-7 degrees (6-13 degrees F) below normal over the entire state. The northeast part had the largest below normal variation (7 degrees below normal). A cool trend which began during the second half of December continued through January with the second week being the coldest. Numerous new record minimum temperature records were set as readings fell to  $-32^{\circ}$  C. However, during mid-January maximum readings climbed above  $15^{\circ}$  C in the south. January precipitation was above normal throughout Illinois. This was the first time in six months that precipitation was above normal in most sections. Precipitation amounts were moderate during the first two weeks and heavy during the fourth week. Five separate storms each deposited from 2.5 to 10 cm of new snow in the northern and central parts of the state between 1 and 21 January. On 30 January a blizzard deposited 5 to 50 cm with the greatest amounts in central and southern Illinois. Freezing rain also occurred. Night hunting and trapping (except for beaver) were essentially impossible during January. In contrast, canid hunters encountered reasonably favorable conditions in central and southern Illinois, but bitter cold, strong winds, and poor tracking snow made fox and coyote hunting in northern Illinois difficult.

The weather during the 1981-82 season can be summarized as more or less average for fur-taking throughout the state. The near normal temperatures and below normal precipitation coupled with a general lack of snow during November and the first half of December increased the effectiveness of trappers. Night hunters also benefitted, but additional precipitation in the form of rain probably would have improved scenting conditions for hounds. In contrast, the cold, snowy weather of late December and January which curtailed trapping and night hunting activities enhanced the efforts of canid hunters, especially in central and southern Illinois. Overall, the muskrat, mink, raccoon, opossum, and fox catch by trappers as well as the harvest of raccoons and opossums by night hunters was typical. The beaver catch may have been depressed in part by the cold, snowy weather late in the season. These same conditions appear to have enhanced the efforts of coyote hunters.

#### Trends in Fur License Sales

Records of fur buyer permits sold by the License and Permit Section, Illinois Department of Conservation, for 1981-82 were compiled prior to mailing out fur purchase report forms and instructions. A total of 236 individuals purchased 243 fur buyer permits during 1981-82. This represents a 7.8% increase from 1980-81 in the number of persons licensed. Of the 236 buyers, 223 were residents and 13 were non-residents. The 223 residents bought 230 permits (Table 2). Just under 67% of all resident buyers were headquartered in the Mississippi Border-South, Western Prairie/Forest, Grand Prairie, and Southern Plain management units (Table 2, Fig. 3). Fur buyer distribution within the state is probably not indicative of furbearer or fur harvest distribution.

Trapping licenses issued statewide in 1981-82 numbered approximately 18,412 (1 July 1982 estimate), a decrease of 7.6% from the previous year (1980-81 revised estimate of trapping license sales = 19,930). The decrease occurred throughout the state and was not confined to specific management



units. The decline may have been due in part to the substantial decrease in the average pelt price for muskrat. Raccoon hunter numbers declined 0.7% from an estimated 43,460 in 1980-81 to 43,172 in 1981-82 (Ellis 1982). As in earlier seasons, most of these hunters were in the southern, western, and northwestern management units (Fig. 3). The number of red fox hunters increased 24.9% to an estimated 22,369, and the estimated number of coyote hunters climbed 16.0% to a record high 31,540 (Ellis 1982).

#### Fur Buyer Fur Purchase Survey

Reports of raw furs purchased had been submitted by 227 of the 236 (96.19%) individual fur buyers when the survey was closed out on 31 May 1982. Of these, 27 stated they did not buy any pelts during the 1981-82 season. The nine 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 757,195 pelts was harvested and sold by Illinois fur-takers during the 1981-82 season (Table 3). This estimate includes an adjustment factor of 4.9% to account for out-of-state pelt sales (Hubert 1982a). 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 84.58% of the total pelt harvest and 83.97% of its value. Other top-ranking species included mink, opossum, and red fox. The 1981-82 pelt harvest was valued to fur-takers at \$10,106,561.05, about \$497,000 less than the previous year (Table 4).

The total fur harvest for 1981-82 represented a 10.9% decrease in pelts taken compared with the 1980-81 season (Table 4). All changes were affected by the slight increase in allowance for out-of-state pelt sales in 1981-82. Also, as noted above, 1,500 fewer trapping licenses were sold. Major declines (25%) in the beaver, striped skunk, and weasel (Mustela frenata, M. rixosa) harvests occurred. The decrease for beaver was due primarily to a decline in average pelt price coupled with difficult trapping conditions. The skunk harvest may have dropped due to a decline in the population (Hubert 1982b) and weather variations which reduced skunk movements and made this species less vulnerable to harvest. Weasel harvest and population data are limited. Overall, most weasels seem to be trapped incidentally to other species. Pelt prices remain low and no interest in weasels exists.

Minor drops (5-25%) in the muskrat, mink, and gray fox harvests were recorded in 1981-82 (Table 4). Census data are not available, but apparently the 1981 statewide muskrat population was much lower than in 1980 due to water level fluctuations which increased pre-season mortality. This was especially true in the Northwest Hills, Mississippi Border-South, and Central Sand Prairie management units (Hubert 1981a, 1982a) (Fig. 3). In addition, the average pelt price of muskrats dropped over 33%. The decline in the mink catch is no doubt related to the reduced muskrat population/harvest which reduced trapping pressure. Mink pelt values remained fairly stable.

The probable causes for the drop in gray fox harvest include poor weather conditions for night hunting during most of the season and a 21% decline in average pelt price. The estimated number of gray fox hunters and trappers remained stable (Ellis 1982, Hubert 1981a, 1982a).

The raccoon and red fox harvests remained stable (<5% change) from 1980-81 to 1981-82, but the average pelt prices for both species increased (Table 4). Apparently, the raccoon catch failed to fluctuate because the number of raccoon-takers, the weather conditions which affect raccoon hunter and trapper efficiency, and the statewide raccoon population were similar between years. In spite of the fact that the number of red fox hunters was almost 25% higher in 1981-82 compared with the previous season (Ellis 1982), the harvest was constant. Perhaps the increase in hunter numbers offset the effects of poorer hunting conditions in 1981-82. Fur buyer estimates for the percentage of red foxes taken by hunters were similar for both seasons (34.4% and 39.0%). Unfortunately, no census data were collected for red fox.

Minor increases (5-25%) in the harvests of opossum and coyote were recorded (Table 4). The increased opossum catch probably reflected a higher statewide population compared with 1980. Hubert (1982c) reported a 44.9% increase in the annual road-kill index for this species between 1980 and 1981. The average opossum pelt price declined slightly from the previous year. The 1981-82 coyote harvest is the highest recorded to date. Two factors - excellent harvest conditions and a population increase in the peripheral portion of this species' range - are probably responsible. The average price paid for coyote pelts went up 27%, but apparently had little influence on the harvest pressure exerted. As noted earlier, the number of coyote hunters reached a new high, but the presence of tracking snow in central and southern Illinois during January and February rather than higher coyote populations or pelt values seems to have been responsible.

The total value of the 1981-82 fur harvest was \$496,926.25 (4.7%) less than the previous season (Table 4). The change was due to a combination of the decrease in total pelt harvest (especially for muskrats) and a substantial decline in the average price paid for muskrats. Average pelt prices for 6 of the 10 species surveyed declined. The 1981-82 average pelt prices reflect a somewhat stronger market demand for the long-haired furs of raccoon, red fox, and coyote, and a slight reduction in demand for the short-haired furs of muskrats and mink. Nevertheless, the market values for all major species in Illinois remained good to excellent.

#### Distribution of Harvest Among Fur-takers

The distribution of the fur catch between hunters and trappers is always a source of controversy. Also, this aspect of the annual harvest is a potentially important factor in the establishment of sound regulations and the evaluation of management programs. During the 1981-82 season, the percentage of animals harvested by hunters was monitored for two species as a part of certain furhouse studies in Federal Aid Project W-49-R-29. In addition, the present survey requested fur buyers to estimate the portion of pelts purchased from hunters for the six furbearers that could be legally taken 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 11.6% for striped skunks to 74.5% for opossums (Table 5). By applying the estimates from furhouse studies and fur buyer estimates for canids and skunks to the 1981-82 harvest figures, the number of pelts taken by hunters was estimated to be 283,888 or approximately 37.5% of the total harvest for the year. As stated earlier, there were an estimated 43,172 raccoon hunters and 18,412 licensed trappers during the 1981-82 season. Excluding fox hunters, coyote hunters, and canid chasers, fur hunters made up 70.1% of all Illinois fur-takers. These hunters harvested 37.5% of all pelts taken. The "typical" fur hunter harvested 6.6 pelts valued at \$130.99 while the "typical" trapper took 25.7 pelts worth \$241.76. The distribution of harvest emphasizes the higher efficiency of trappers compared with hunters as well as the higher monetary rewards of trapping. The 1981-82 distribution values were almost identical to the previous season (Hubert 1981b).

#### Furbearer Carcass Utilization Survey

A single mailing of 27 questionnaires was made on 28 May 1982. The response file was closed on 1 July 1982. Approximately one-half day was required to prepare the single mailing.

All 27 fur buyers/wild game food dealers (100.00%) in the survey sample were reached by the Postal Service via first class mail. There were 17 useable replies received from the buyers contacted representing a 62.96% response on the number delivered. Of these respondents, 15 stated they had purchased both raccoons and beavers on-the-carcass during the 1981-82 season. The remaining two buyers failed to purchase any whole beavers.

The 17 buyers who purchased whole raccoons stated they bought 33,716 such animals during the 1981-82 season. After the raccoons were skinned, 686 (2.0%) carcasses were reportedly discarded as garbage, 24,400 (72.4%) were sold or given to rendering companies, and 8,630 (25.6%) were sold or given to individuals for human consumption or use as pet food. Apparently, if raccoons are sold whole, almost all the carcasses are utilized in some beneficial manner.

The 15 buyers who provided data for beaver reportedly purchased 742 whole animals. The carcasses which remained after skinning were disposed of in the following manner: 20 (2.7%) discarded as garbage, 501, (67.5%) sold or given to rendering companies, and 221 (29.8%) sold or given to individuals for human consumption or use as pet food. Beaver carcasses were utilized in a manner similar to that indicated for raccoons.

Overall, fur buyers licensed as wild game food dealers waste few carcasses from raccoons and beavers skinned at their establishments. Only 6 of the 17 buyers (35.29%) who provided data discarded some raccoon and/or beaver carcasses as garbage. Rendering is apparently the most common method of carcass disposal, but numerous carcasses are used as food.

### Fur Auctions

During the 1981-82 season, two fur auctions were held in Illinois compared with four the previous year (Table 6). Both were organized by the Central Illinois Chapter of the Fur-takers of America. The first took place on 20 December 1981, and the second on 3 January 1982. These two auctions resulted in the sale of 2,643 pelts worth approximately \$49,000. Prices paid at the auctions are normally higher than the statewide averages. The same was true in 1981-82. For example, the mean prices at the second New Berlin sale for muskrat, raccoon, red fox, and opossum were \$5.20, \$28.98, \$55.21, and \$2.66, respectively. However, no furs were sold on-the-carcass, the majority were from trapped animals, and most were stretched and dried. The two auctions accounted for approximately 0.35% of all Illinois pelts sold during the past season.

### 1975-1981 Fur Harvest Trends

Statewide furbearer harvest trend data for the years 1975 through 1981 are presented in Tables 7 through 12. During this 7-year period, total estimated pelt harvests based on fur buyer surveys ranged from 520,032 in 1976 to 948,392 in 1979, and averaged 764,368. No allowances for out-of-state pelt sales were made in 1975 or 1976. Out-of-state sales adjustments for the last five seasons have averaged 4.33%. Since 1975 the harvest of coyotes has steadily increased. The trends for the other nine species have been more variable.

### 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 changes 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. 1982. Hunter harvest survey, 1981-82. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-29, Study XV, Job 1. In preparation.
- Hubert, G. F., Jr. 1981a. Trapper harvest survey, 1980-81. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-28, Study XV, Job 4. 48pp.
- ..... 1981b. Fur harvest survey, 1980-81. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-28, Study XV, Job 3. 26pp.
- ..... 1982a. Trapper harvest survey, 1981-82. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-29, Study XV, Job 4. In preparation.

..... 1982b. Striped skunk road-kill survey. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-29, Study XI, Job 1. 14pp.

..... 1982c. Opossum investigations. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-29, Study X, Jobs 1 and 2. 17pp.

..... 1982d. Raccoon investigations. Illinois Dept. of Conservation P-R Proj. Rep. W-49-R-29, Study XII, Jobs 1, 2, and 4. In preparation.

DATA AND REPORTS:

Original data and related reports in this investigation are on file in the Division of Fish and Wildlife Resources office and License and Permit Section office, Illinois Department of Conservation, Springfield IL 62706.

PREPARED BY: G. F. Hubert, Jr.  
Furbearer Biologist  
Div. of Fish & Wildl. Res.

APPROVED BY: M. Conlin  
Supervisor  
Div. of Fish & Wildl. Res.

DATE: 14 July 1982

GH:lg

Table 1. Illinois fur-bearing mammal seasons for 1981-82.

Species	Hunting seasons		Trapping season	
	Northern zone	Southern zone	Northern zone	Southern zone
Muskrat, Mink, Weasel	Closed	Closed	15 Nov-29 Dec	25 Nov- 8 Jan
Raccoon, Opossum, Striped Skunk	15 Nov-13 Jan <sup>a</sup>	25 Nov-23 Jan <sup>a</sup>	15 Nov-29 Dec	25 Nov- 8 Jan
Beaver	Closed	Closed	15 Nov-28 Feb <sup>b</sup>	25 Nov-28 Feb
Red Fox, Gray Fox	30 Nov-31 Jan <sup>a</sup>	30 Nov-31 Jan <sup>a</sup>	30 Nov-29 Dec	30 Nov-29 Dec
Coyote	Continuous open season <sup>a</sup>		30 Nov-29 Dec	30 Nov-29 Dec

<sup>a</sup> Raccoon, opossum, striped skunk, and coyote hunting closed 24 hrs. on 20 and 21 Nov. and 11 and 12 Dec. and until 6 PM on 22 Nov. and 13 Dec. during firearms deer season. Red fox and gray fox hunting closed 24 hrs. on 11 and 12 Dec. and until 6 PM on 13 Dec. during firearms deer season.

<sup>b</sup> Cook County closed to beaver trapping. Those portions of Jo Daviess, Carroll, Whiteside, and Rock Island counties lying west of Ill. Rt. 84 and US Rt. 20, from Interstate-80 north to the Wisconsin line were open to beaver trapping from 15 Nov.-29 Dec. 1981 only.

Table 2. Summary of resident fur buyer permits issued in Illinois for the 1981-82 season.

Wildlife management unit	Number of individual permittees	License type	
		Retail	Wholesale
Northwest Hills	19 (8.5) <sup>a</sup>	18	2
Northeast Moraine	18 (8.1)	13	5
Mississippi Border-North	17 (7.6)	16	1
Mississippi Border-South	22 (9.9)	18	6
Western Prairie/Forest	24 (10.8)	24	1
Central Sand Prairie	2 (0.9)	2	-
Grand Prairie	64 (28.7)	51	15
Southern Plain	39 (17.5)	29	10
Wabash Border	11 (4.9)	8	4
Shawnee Hills	7 (3.1)	6	1
Totals	223 (100.0)	185	45

<sup>a</sup> Numbers in parentheses are percentages of statewide total.

Table 3. Composition of estimated fur harvest in Illinois and value to fur-takers during 1981-82 season.

Species	Total pelts <sup>a</sup>		Total value	
	Number	Percent	Dollars	Percent
Muskrat	325,415	42.98	\$1,399,284.50	13.85
Mink	24,478	3.23	427,121.10	4.23
Raccoon	314,963	41.60	7,086,667.50	70.12
Opossum	55,729	7.36	58,515.45	0.58
Red fox	13,533	1.79	632,667.75	6.26
Gray fox	7,649	1.01	219,908.75	2.17
Beaver	4,145	0.55	26,528.00	0.26
Striped skunk	840	0.11	1,806.00	0.02
Weasel	53	-	26.50	-
Coyote	10,390	1.37	254,035.50	2.51
Totals	757,195	100.00	\$10,106,561.05	100.00

<sup>a</sup> Includes 4.9% allowance for out-of-state pelt sales.



Table 4. Comparative fur harvest data for Illinois, 1980-81 vs. 1981-82.

Species	Number of pelts taken		Change in harvest from		Average pelt price per pelt		Total value to fur-takers (dollars)		Change in value from	
	1980-81 <sup>a</sup>	1981-82 <sup>b</sup>	1980-81	1981-82 <sup>c</sup>	1980-81	1981-82	1980-81	1981-82	1980-81	1981-82 (dollars)
Muskrat	421,585	325,415	-96,170	(-22.8) <sup>c</sup>	\$6.50	\$4.30	2,740,302.50	1,399,284.50	-1,341,018.00	(-48.9)
Mink	26,607	24,478	-2,129	(-8.0)	\$18.90	\$17.45	502,872.30	427,121.10	-75,751.20	(-15.1)
Raccoon	314,777	314,963	+186	(+0.1)	\$19.40	\$22.50	6,106,673.80	7,086,667.50	+979,993.70	(+16.0)
Opossum	46,710	55,729	+9,019	(+19.3)	\$1.45	\$1.05	67,729.50	58,515.45	-9,214.50	(-13.6)
Red fox	13,965	13,533	-432	(-3.1)	\$44.80	\$46.75	625,632.00	632,667.75	+7,035.75	(+1.1)
Gray fox	8,716	7,649	-1,067	(-12.2)	\$36.40	\$28.75	317,262.40	219,908.75	-97,353.65	(-30.7)
Beaver	7,338	4,145	-3,193	(-43.5)	\$10.60	\$6.40	77,782.80	26,528.00	-51,254.80	(-65.9)
Striped skunk	1,625	840	-785	(-48.3)	\$2.00	\$2.15	3,250.00	1,806.00	-1,444.00	(-44.4)
Weasel	85	53	-32	(-37.6)	\$0.60	\$0.50	51.00	26.50	-24.50	(-48.0)
Coyote	8,412	10,390	+1,978	(+23.5)	\$19.25	\$24.45	161,931.00	254,035.50	+92,104.50	(+56.9)
Totals	849,820	757,195	-92,625	(-10.9)	$\bar{x} = \$12.48$	$\bar{x} = \$13.35$	10,603,487.30	10,106,561.05	-496,926.25	(-4.7)

<sup>a</sup> Includes 4.6; allowance for out-of-state sales.

<sup>b</sup> Includes 4.9; allowance for out-of-state sales.

<sup>c</sup> Numbers in parentheses indicate percent change between years.

Table 5. Estimated percentage of annual harvest taken by hunters for selected furbearers in Illinois, 1981-82.

Species	Estimated percentage of harvest taken by hunters	
	Furhouse studies	Fur buyer estimates <sup>a</sup>
Raccoon	72.0 (Hubert 1982d) <sup>b</sup>	58.0
Opossum	74.5 (Hubert 1982c)	44.2
Red fox	-	39.0
Gray fox	-	37.6
Striped skunk	-	11.6
Coyote	-	70.7

<sup>a</sup> Based on present study.

<sup>b</sup> Authority listed in parentheses.

Table 6. Distribution of raw pelts sold at two fur auctions in Illinois, 1981-82 season.

Species	Auction location (date)		Totals
	New Berlin (20 Dec 81)	New Berlin (3 Jan 82)	
Muskrat	601	647	1,248 (47.2) <sup>a</sup>
Mink	60	22	82 (3.1)
Raccoon	340	509	849 (32.1)
Opossum	60	130	190 (7.2)
Red fox	25	118	143 (5.4)
Gray fox	21	45	66 (2.5)
Beaver	0	3	3 (0.1)
Striped skunk	1	16	17 (0.7)
Coyote	8	37	45 (1.7)
Total pelts	1,116	1,527	2,643 (100.00)

<sup>a</sup> Numbers in parentheses are percentages of all pelts sold.

Table 7. Muskrat, mink, and weasel trapping seasons, harvests, and pelt price data for Illinois, 1975-1981.

Year	Season opening date (season length in days)		Estimated harvest			Average price per pelt (dollars)		
	Southern zone		Muskrat	Mink	Weasel	Muskrat	Mink	Weasel
	Northern zone	Southern zone						
1975	8 Nov (69)	15 Nov (70)	445,737	18,009	181	2.90	6.00	0.50
1976	13 Nov (55)	20 Nov (55)	256,315	14,253	311	4.44	13.95	0.54
1977	15 Nov (45)	25 Nov (45)	300,314	12,910	147	5.10	13.20	0.60
1978	15 Nov (45)	25 Nov (45)	422,354	19,814	147	5.00	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	0.60
1981	15 Nov (45)	25 Nov (45)	325,415	24,478	53	4.30	17.45	0.50

Table 8. Beaver trapping seasons, harvests, and pelt price data for Illinois, 1975-1981.

Year	Season opening		Estimated harvest	Average price per pelt (dollars)
	Northern zone	Southern zone		
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	7.00
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

Table 9. Raccoon and opossum hunting and trapping seasons, harvests and pelt price data for Illinois, 1975-1981.

Year	Hunting season opening date (season length in days) <sup>a</sup>		Trapping season opening date (season length in days)		Estimated harvest		Average price per pelt (dollar)	
	Northern zone	Southern zone	Northern zone	Southern zone	Raccoon	Opossum	Raccoon	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

<sup>a</sup> Hunting season closed during firearms deer season.

Table 10. Red and gray fox hunting and trapping seasons, harvest, and pelt price data for Illinois, 1975-1981.

Year	Hunting season opening date (season length in days) <sup>a</sup>		Trapping season opening date (season length in days)		Estimated harvest		Average price per pelt (dollars)	
	Northern zone	Southern zone	Northern zone	Southern zone	Red fox	Gray fox	Red fox	Gray fox
1975	8 Nov (63)	15 Nov (64)	8 Nov (69)	15 Nov (70)	11,247	7,132	34.00	16.00
1976	20 Dec (45)	17 Nov (52)	27 Nov (41)	4 Dec (41)	7,206	6,166	45.61	27.67
1977	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	9,715	9,086	47.45	31.05
1978	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	13,582	9,525	61.50	42.95
1979	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	14,136	10,547	48.40	43.80
1980	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	13,965	8,716	44.80	36.40
1981	30 Nov (60)	30 Nov (60)	30 Nov (30)	30 Nov (30)	13,533	7,649	46.75	28.75

<sup>a</sup> Hunting season closed during firearms deer season.

Table 11. Striped skunk hunting and trapping seasons, harvest, and pelt price data for Illinois, 1975-1981.

Year	Hunting season opening date (season length in days) <sup>a</sup>		Trapping season opening date (season length in days)		Estimated harvest	Average price per pelt (dollars)
	Northern zone	Southern zone	Northern zone	Southern zone		
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

<sup>a</sup> Hunting season closed during firearms deer season.



Table 12. Coyote hunting and trapping seasons, harvests, and pelt price data for Illinois, 1975-1981.

Year	Hunting season opening date (season length in days) <sup>a</sup>		Trapping season opening date (season length in days)		Estimated harvest	Average price per pelt (dollars)
	Statewide		Northern zone	Southern zone		
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) <sup>b</sup> 30 Nov (30)	1 Sep (45) <sup>b</sup> 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

<sup>a</sup> Hunting season closed during firearms deer season.

<sup>b</sup> Split trapping season; season total length = 75 days.

STATE OF ILLINOIS  
DEPARTMENT OF CONSERVATION  
DIVISION OF FISH AND WILDLIFE RESOURCES  
FURBEARER SECTION

REPORT OF RAW FURS PURCHASED

WMU \_\_\_\_\_  
(FOR OFFICE USE)

SEASON OF \_\_\_\_\_  
FUR BUYER LICENSE NUMBER(S) \_\_\_\_\_ ( ) RESIDENT ( ) NON-RESIDENT

	MUSKRAT	MINK	RACCOON	OPOSSUM	RED FOX	GRAY FOX	BEAVER	SKUNK	WEASEL	COYOTE	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? \_\_\_\_\_ % SIGNED \_\_\_\_\_  
 APPROXIMATELY WHAT PERCENT OF THE ILLINOIS OPOSSUMS WERE BOUGHT FROM HUNTERS? \_\_\_\_\_ % FIRM NAME \_\_\_\_\_  
 APPROXIMATELY WHAT PERCENT OF THE ILLINOIS RED FOXES WERE BOUGHT FROM HUNTERS? \_\_\_\_\_ % ADDRESS \_\_\_\_\_  
 APPROXIMATELY WHAT PERCENT OF THE ILLINOIS GRAY FOXES WERE BOUGHT FROM HUNTERS? \_\_\_\_\_ % DATE \_\_\_\_\_  
 APPROXIMATELY WHAT PERCENT OF THE ILLINOIS SKUNKS WERE BOUGHT FROM HUNTERS? \_\_\_\_\_ % ZIP CODE \_\_\_\_\_  
 APPROXIMATELY WHAT PERCENT OF THE ILLINOIS COYOTES WERE BOUGHT FROM HUNTERS? \_\_\_\_\_ %

Figure 1. Report of raw furs purchased form used for the 1981-82 season.



Figure 2. Furbearer management zones for the 1981-82 season.

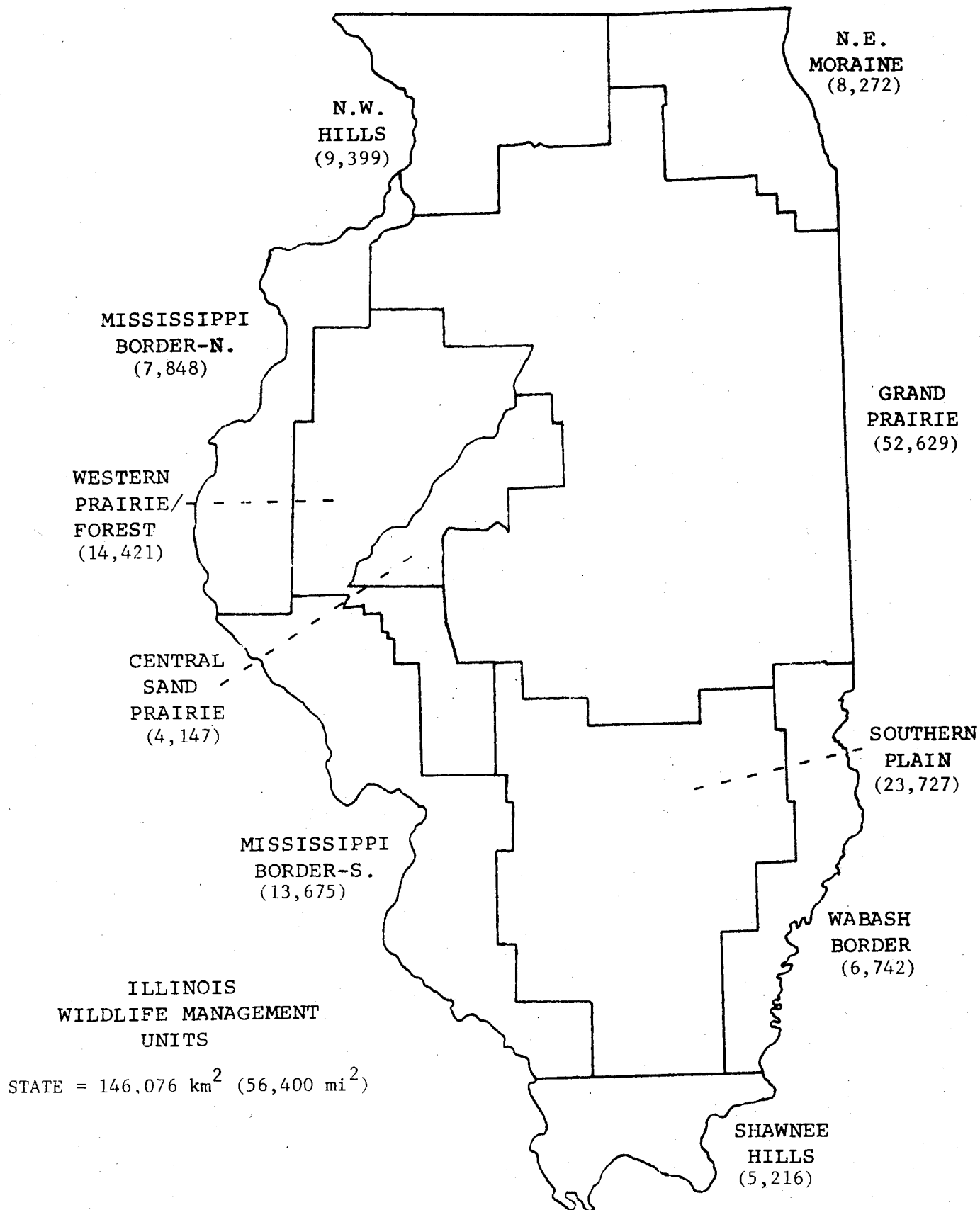


Figure 3. Area (km<sup>2</sup>) of wildlife management units in Illinois.

Appendix I. One-page questionnaire used to obtain information about utilization of raccoon and beaver carcasses, 1981-82 season.

FURBEARER UTILIZATION QUESTIONNAIRE - 1981-82

ILLINOIS DEPARTMENT OF CONSERVATION

1. Approximately how many raccoons did you buy on-the-carcass during the 1981-82 season?

\_\_\_\_\_ raccoons  
(Number)

2. Approximately how many beavers did you buy on-the-carcass during the 1981-82 season?

\_\_\_\_\_ beavers  
(Number)

3. After the raccoons were skinned, how many carcasses did you:

a. throw away as garbage - \_\_\_\_\_ raccoon carcasses  
(Number)

b. sell or give to rendering company - \_\_\_\_\_ raccoon carcasses  
(Number)

c. sell or give to individuals for  
human consumption or use as pet food - \_\_\_\_\_ raccoon carcasses  
(Number)

4. After the beavers were skinned, how many carcasses did you:

a. throw away as garbage - \_\_\_\_\_ beaver carcasses  
(Number)

b. sell or give to rendering company - \_\_\_\_\_ beaver carcasses  
(Number)

c. sell or give to individuals for  
human consumption or use as pet food - \_\_\_\_\_ beaver carcasses  
(Number)

THANK YOU FOR YOUR COOPERATION!!

PLEASE RETURN THIS PAGE  
IN THE ENCLOSED ENVELOPE



UNIVERSITY OF ILLINOIS-URBANA

01782

0112 017685444