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JOB COMPLETION REPORT

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SURVEYS AND INVESTIGATIONS PROJECTS

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Federal Aid Project No. W-49-R(28)

Study XV: Wildlife Harvests

Job No. 3: Fur harvest survey, 1980-81

By

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JOB COMPLETION REPORT

SURVEYS AND INVESTIGATIONS PROJECTS

STATE OF ILLINOIS

PROJECT NO. W-49-R-28

STUDY XV

JOB NO. 3

STUDY XV: Wildlife Harvests

JOB NO. 3: Fur harvest survey, 1980-81

ABSTRACT: The Illinois Department of Conservation licensed 219 individual fur buyers (207 residents; 12 non-residents) during 1980-81, a 7.2% decline from 1979-80. The number of trapping licenses issued was estimated at 19,845, down 7.3%. The estimated number of raccoon hunters decreased 17.5% to 43,460.

Reports required of all licensed fur buyers were used to determine the annual furbearer harvest and its value to fur-takers during the 1980-81 season. Based on a 97.26% response from individual buyers, the total harvest of the 10 open season furbearers was estimated at 849,820 pelts, a decrease of 10.4% from 1979-80. Total value of the harvest decreased 28% to \$10,603,487.30. Muskrats (Ondatra zibethicus) and raccoons (Procyon lotor) were the two most important species accounting for 86.65% of the total pelt harvest and 83.43% of its value. The decreases in harvest recorded for eight species probably reflected a combination of decreased harvest pressure, less favorable weather conditions for fur-taking compared with the previous season, and altered harvest seasons which opened five days later than in 1979-80. The increases in mink (Mustela vison) and opossum (Didelphis marsupialis) harvests were attributed to higher populations and extended seasons.

The following table summarizes the 1980-81 statewide harvest:

Species	Estimated harvest	Average pelt price per pelt	Estimated total value to fur-takers
Muskrat	421,585	\$ 6.50	\$ 2,740,302.50
Mink	26,607	\$18.90	\$ 502,872.30
Raccoon	314,777	\$19.40	\$ 6,106,673.80
Opossum	46,710	\$ 1.45	\$ 67,729.50
Red fox	13,965	\$44.80	\$ 625,632.00
Gray fox	8,716	\$36.40	\$ 317,262.40
Beaver	7,338	\$10.60	\$ 77,782.80
Striped skunk	1,625	\$ 2.00	\$ 3,250.00
Weasel	85	\$ 0.60	\$ 51.00
Coyote	<u>8,412</u>	<u>\$19.25</u>	<u>\$ 161,931.00</u>
Totals or Mean	849,820	\$12.48	\$10,603,487.30

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JOB COMPLETION REPORT

SURVEYS AND INVESTIGATIONS PROJECTS

STATE OF ILLINOIS

PROJECT NO. W-49-R-28

STUDY XV

JOB NO. 3

STUDY XV: Wildlife Harvests

JOB NO. 3: Fur harvest survey, 1980-81

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 1980-81 seasons were estimated from fur purchase reports required of all fur buyers licensed by the Department of Conservation (Fig. 1). Approximately 10 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 1981. Buyers failing to report by that date were mailed a reminder notice on 15 April 1981. Only original pelt sales were used to avoid duplication. An adjustment factor of 4.6% was used to account for out-of-state pelt sales (Hubert 1981a). 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-28, Study XV, Job No. 1.

Additional opinion-type information on certain aspects of furbearer season timing and management zones was obtained from a mail survey of resident fur buyers. After the reporting deadline listed above, a random sample of 55 fur buyers was selected (approximately 25% of those licensed for 1980-81). These individuals were mailed a questionnaire form (Appendix I), a business reply envelope, and a cover letter explaining the purpose of the survey and the questionnaire. A single mailing using first class postage was used. Upon receipt, all questionnaires were edited for usability.

FINDINGS AND ANALYSIS:

1980-81 Fur Seasons

The 1980-81 fur-bearing mammal seasons varied from 30 to 359 days in length (Table 1). Trapping seasons for all species except beaver (Castor canadensis), red fox (Vulpes vulpes), gray fox (Urocyon cinereoargenteus), and coyote (Canis latrans) 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 upon 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 (*Mephitis mephitis*); 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 good for fur-taking activities. Average temperatures were near normal in all sections of the state. The main fur seasons in the northern zone opened following a warm period from 3 to 9 November when temperatures had ranged from 3-5 degrees (5-8 degrees F) above normal. During the last week of November when the southern zone seasons opened, temperatures were slightly below normal in the south, but near normal over the remainder of Illinois. Monthly precipitation was 2.5 to 4 cm below normal in all areas. The first week of November was extremely dry, and only light to moderate rainfall was recorded during mid-month. The southern part of the state received more than 2.5 cm in the third week. Scattered precipitation fell during the fourth week with some areas receiving almost 2 cm. The eastern and central sections of Illinois recorded 7.5 to 25 cm of snow during the last week of the month, but it had little effect on the total fur catch for November. The near normal temperatures and below normal precipitation provided good hunting and trapping conditions and contributed to a slightly better than average harvest of most furbearers.

Fur-taking conditions during December were good to excellent through mid-month, but only fair during the last two weeks. Average monthly temperatures were again near normal; the greatest variation recorded was 1 degree (2 degrees F) above normal in the southwestern part of the state. The initial two weeks of December had above normal temperatures which sent maximum readings into the 16-21° C (60-70° F) range. Several new maximum temperature records were established. The latter half of the month was below normal. Minimum readings dropped below -18° C (0° F) in the northern zone setting many new minimum records. December precipitation was above normal in the northern and western sections, and below normal throughout the remainder of the state. Monthly totals in the southern half of the southern zone were almost 5 cm below normal. Approximately 2.5 to 5 cm of precipitation fell in the north during the first week, but the southern zone recorded only trace amounts. During the second week, 2.5 cm fell in the south followed by a dry third week. Light to moderate precipitation was recorded across the state during the last week of the month. On 1 December, 5 to 10 cm of snow fell on the extreme northwestern part of the state. Additional snow was not received until 23-24 December when 2.5 to 10 cm fell in the northern and central sections. On 28-29 December, an additional 2.5 to 7.5 cm of snow was recorded in the northern zone. The moderate snowfall in the northern zone at the beginning of December temporarily suppressed the activities of canid trappers and raccoon hunters. However, the effects only lasted a few days. Overall, December weather enhanced the efforts of night hunters and trappers, especially during the first two weeks, but the general absence of snow until late in the month limited the success of red fox and coyote hunters.

The weather in January was generally poor to fair for fur-taking. Average monthly temperatures were 0.5-2 degrees (1-4 degrees F) below normal except in the northwestern part of the state where the average was slightly above normal.

The month started near normal with portions of the southern zone above normal. Next a cool period during the first week sent minimum readings below -18°C (0°F) in the northern zone. A warm period developed in the north in the second week and continued over the entire state for the remainder of the month. Several new maximum temperature records were set in the third week as daily maximum readings exceeded 16°C (60°F) in many localities. January precipitation was 2.5 to 7.5 cm below normal throughout the state with the largest deviation occurring in the extreme south. Many sections of Illinois reported January 1981 to be the driest on record. Total amounts recorded ranged from 3 cm below normal in the northwest to 6.8 cm below normal in the southeast. During the first week of the month, 2.5 to 5 cm of snow fell over the northern two-thirds of the state. An additional 2.5 cm fell over the same area on 14 January. The southern zone received up to 15 cm of snow on 29 January. On 31 January, 2.5 to 7.5 cm fell in the northern zone and continued through 1 February. Beaver trappers were able to operate during January, but a general absence of ice may have hampered their efforts. The below normal temperatures and snow early in the month effectively brought an end to most night hunting, especially in the northern zone, even though the seasons did not close until mid-month. Canid hunters encountered adverse conditions throughout the state due to the below normal precipitation and associated absence of suitable tracking snow.

The weather during the 1980-81 season can be summarized as somewhat better than average for fur-taking throughout the state. The near normal temperatures and below normal precipitation along with a general lack of snow during November and December increased the effectiveness of trappers. Night hunters also benefited, but additional precipitation probably would have improved scenting conditions for both tree and trail hounds. Overall, the muskrat, mink, raccoon, opossum, fox, and beaver catch by trappers as well as the harvest of raccoons and opossums by night hunters was enhanced. The lack of snow and dry conditions present in December and January which improved trapping and, to a lesser extent, night hunting conditions had an adverse effect on canid hunters. Portions of the red fox and gray fox harvests apparently were diverted to trappers.

Trends in Fur License Sales

Records of fur buyer permits sold by the License and Permit Section, Illinois Department of Conservation, for 1980-81 were compiled prior to mailing out fur purchase report forms and instructions. A total of 219 individuals purchased 224 fur buyer permits during 1980-81. This represents a 7.2% decline from 1979-80 in the number of persons licensed. Of the 219 buyers, 207 were residents and 12 were non-residents. The 207 residents bought 212 permits (Table 2). Just over 60% of all resident buyers were headquartered in the 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 1980-81 numbered approximately 19,845 (1 July 1981 estimate), a decrease of 7.3% from the previous year (1979-80 revised estimate of trapping license sales = 21,407). The decrease occurred throughout the state and was not confined to specific management units. The majority of this decline was probably related to the increase in the resident trapping license fee from \$3.25 to \$10.50 since average pelt prices remained high. Raccoon hunter numbers declined 17.5% from an estimated

52,664 in 1979-80 to 43,460 in 1980-81 (Ellis 1981). 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 dropped 15.2% to an estimated 17,912, but the estimated number of coyote hunters increased 18.6% to 27,186 (Ellis 1981).

Fur Buyer Fur Purchase Survey

Reports of raw furs purchased had been submitted by 213 of the 219 (97.26%) individual fur buyers when the survey was closed out on 31 May 1981. Of these, 21 stated they did not buy any pelts during the 1980-81 season. The six 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 849,820 pelts was harvested and sold by Illinois fur-takers during the 1980-81 season (Table 3). This estimate includes an adjustment factor of 4.6% to account for out-of-state pelt sales (Hubert 1981a). 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 86.65% of the total pelt harvest and 83.43% of its value. Other top-ranking species included mink, opossum, red fox, and gray fox. The 1980-81 pelt harvest was valued to fur-takers at \$10,603,487.30, about \$4.1 million less than the record high in 1979-80.

The total fur harvest for 1980-81 represented a 10.4% decrease in pelts taken compared with the previous year (Table 4). All changes were affected by the slight decrease in allowance for out-of-state pelt sales in 1980-81. Major declines (>25%) in the striped skunk and weasel (Mustela frenata, M. rixosa) harvests occurred. These decreases were probably the result of less suitable weather conditions for fur-taking in 1980-81 compared with 1979-80. Also, the later opening date for the 1980-81 seasons (5 days later than in 1979-80) undoubtedly influenced the situation because a later season is known to reduce fur-taker efficiency for certain species (Hubert 1979). These factors apparently played a major role in depressing the skunk harvest because the number of striped skunks in Illinois increased between 1979 and 1980 (Hubert 1981b). 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, raccoon, gray fox, and coyote harvests were recorded in 1980-81 (Table 4). The decrease in the statewide catch of these species was likely due to the decrease in fur-taker efficiency related to the 5-day delay in the season opening and less suitable weather conditions for fur-taking as mentioned above. Census data are not available, but it also appears possible that the 1980 muskrat population in central Illinois was somewhat lower than in 1979 because of below normal precipitation during the spring and summer months. Raccoon population data (Hubert 1981c, Sanderson 1981) indicate that the 1980 population was not markedly different from its 1979 level. The same is probably true for gray fox and coyote populations. However, no census information for these two species is available.

The red fox and beaver harvests remained stable (<5% change) between 1979-80 and 1980-81 (Table 4) in spite of a 15.2% decline in the number of red fox hunters (Ellis 1981). Fur buyers reported 34.4% of the red fox pelts they purchased in 1980-81 were taken by hunters (Table 5) compared with 40.6% in 1979-80 (Hubert 1980a). Therefore, the lack of fluctuation in the red fox and beaver harvests can probably be accounted for by a relative stability in the number and efficiency of fox and beaver trappers during the two seasons (Hubert 1980b, 1981a). Unfortunately, no census data for red fox or beaver were collected.

Minor increases (5-25%) in the harvests of mink and opossum were recorded (Table 4). The increased catches probably reflect higher populations for both species. Hubert (1981d) reported a 37.5% increase in the annual road-kill index for opossum between 1979 and 1980. However, the longer trapping season for mink in 1980-81 (45 days vs. 30 days in 1979-80) may also have affected the harvest of this species. Erickson (1981) found the harvest of bobcats, a species taken incidentally to harvest efforts for other species, was evenly distributed throughout the season. Since few individuals are accomplished mink trappers and many mink are caught in traps set for muskrats, the harvest dynamics of mink may be similar to bobcats. In addition, mink may be more vulnerable to conventional trapping methods during December. Average pelt prices for both mink and opossum declined from 1979-80 to 1980-81, and, therefore, probably did not enhance the annual catch.

The total value of the 1980-81 fur harvest was \$4,114,416.80 (28.0%) 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 raccoons) and a decline in the average pelt price for 8 of the 10 species involved. Muskrat hides reached record high values. The slight decrease in the value of mink pelts was overshadowed by a harvest increase. In summary, the 1980-81 average pelt prices reflect a somewhat reduced market demand for the long-haired furs of raccoon, opossum, foxes, and coyote, and a continued high interest in the short-haired furs, particularly muskrat and mink.

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 1980-81 season, the percentage of animals harvested by hunters was monitored for 3 species as a part of certain furhouse studies in Federal Aid Project W-49-R-28. 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 11.9% for striped skunks to 86.7% for coyotes (Table 5). By applying the estimates from furhouse studies and fur buyer estimates for foxes and skunks to the 1980-81 harvest figures, the number of pelts taken by hunters was estimated to be 302,389 or approximately 35.6% of the total harvest for the year. As stated earlier, there were an estimated 43,460 raccoon hunters and 19,845 licensed trappers during the 1980-81

season. Excluding fox hunters, coyote hunters, and canid chasers, fur hunters made up 68.7% of all Illinois fur-takers. These hunters harvested just under 36% of all pelts taken. The "typical" fur hunter harvested 6.96 pelts valued at \$122.91 while the "typical" trapper took 27.59 pelts worth \$265.42. The distribution of harvest emphasizes the higher efficiency of trappers compared with hunters as well as the higher monetary rewards of trapping. The 1980-81 distribution values were almost identical to the previous season (Hubert 1980a).

Fur Buyer Opening Date/Management Zone Survey

A single mailing of 55 questionnaires was made on 1 May 1981. The response file was closed on 15 June 1981. Approximately one-half day was required to prepare the single mailing.

All 55 fur buyers (100.00%) in the survey sample were reached by the Postal Service via first class mail. There were 45 useable replies received from the buyers contacted representing an 81.82% response on the number delivered. Of these respondents, 31 of 42 (73.81%) stated they were satisfied with the present season opening dates (15 November-north; 25 November-south) and management zones (US Route 36 separating northern and southern management zones) used for establishing raccoon and opossum hunting seasons and muskrat, mink, raccoon, and opossum trapping seasons in Illinois. Retention of the present opening dates and zones was supported by 29 of 43 (67.44%) respondents.

One-half of the 14 buyers who indicated the season opening dates should be changed recommended retaining the existing 2 management zones. The other half stated that 3 management zones should be adopted. A majority of the latter 7 buyers suggested utilizing Interstate Routes 80 and 70 as the boundaries for northern, central, and southern zones. The present or later season opening dates were supported by 10 of the 14 (71.43%). Only 2 of the 7 buyers (28.57%) supporting the retention of 2 zones and the alteration of opening dates believed the northern zone seasons should open prior to 15 November; the same was true of the 7 who supported 3 management zones and an alteration of opening dates.

Overall, the opening dates and management zones used in 1980-81 appear to be well-suited to the Illinois situation, especially from the standpoint of pelt primeness. In addition, a sizeable majority of resident fur buyers support their continued use. The existing 2 zones and opening dates of 15 November and 25 November should be retained unless a change in the status of the furbearer resource or its users warrants an alteration. Stable opening dates and zones have many benefits for both management and research.

Fur Auctions

During the 1980-81 season, four fur auctions were held in Illinois compared with five the previous year (Table 6). The first took place on 14 December 1980 in Elizabeth and was sponsored by the Northwestern Illinois Fur-takers Chapter. A total of 1,592 pelts valued at \$14,941 was auctioned at Elizabeth. The New Berlin sales on 21 December 1980 and 4 January 1981 were organized by the Central Illinois Fur-takers Chapter. These two auctions resulted in the sale of 2,030 pelts worth approximately \$34,283. The Victoria sale was conducted by the West-Central Illinois Chapter of Fur-takers on 21 December 1980. A total of 772 skins was sold at Victoria for \$11,148. Prices paid at the auctions are normally higher than the statewide averages. The same was true in 1980-81. For example, the mean prices at the first New Berlin sale

for muskrat, raccoon, red fox, gray fox, and opossum were \$6.95, \$22.95, \$55.50, \$43.00, and \$2.48, respectively. However, no furs were sold on-the-carcass, the majority were from trapped animals, and most were stretched and dried. The four auctions accounted for approximately 0.5% of all Illinois pelts sold during the past season.

1975-1980 Fur Harvest Trends

Statewide furbearer harvest trend data for the years 1975 through 1980 are presented in Tables 7 through 12. During this 6-year period, total estimated pelt harvests based on fur buyer surveys ranged from 520,032 in 1976 to 948,392 in 1979, and averaged 765,563. No allowances for out-of-state pelt sales were made in 1975 or 1976. Out-of-state sales adjustments for the last four seasons have averaged 4.2%. Since 1975 only the harvest trends for beaver and coyote have been consistent; both have increased markedly.

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.

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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.

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DATE: 3 August 1981

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Table 1. Illinois fur-bearing mammal seasons for 1980-81.

Species	Hunting season		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 ^a	25 Nov-23 Jan ^a	15 Nov-29 Dec	25 Nov- 8 Jan
Beaver	Closed	Closed	15 Nov-28 Feb ^b	25 Nov-28 Feb
Red Fox, Gray Fox	30 Nov-31 Jan ^a	30 Nov-31 Jan ^a	30 Nov-29 Dec	30 Nov-29 Dec
Coyote	Continuous open season ^a		30 Nov-29 Dec	30 Nov-29 Dec

^a Raccoon, opossum, striped skunk, and coyote hunting closed 24 hrs. on 21 and 22 Nov. and 12 and 13 Dec. and until 6 PM on 23 Nov. and 14 Dec. during firearms deer season. Red fox and gray fox hunting closed 24 hrs. on 12 and 13 Dec. and until 6 PM on 14 Dec. during firearms deer season.

^b 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. 1980 only.

Table 2. Summary of resident fur buyer permits issued in Illinois for the 1980-81 season.

Wildlife management unit	Number of individual permittees	License type	
		Retail	Wholesale
Northwest Hills	20 (9.7) ^a	20	1
Northeast Moraine	17 (8.2)	13	4
Mississippi Border-North	13 (6.3)	12	1
Mississippi Border-South	18 (8.7)	13	6
Western Prairie/Forest	22 (10.6)	21	2
Central Sand Prairie	2 (1.0)	2	-
Grand Prairie	63 (30.4)	52	11
Southern Plain	40 (19.3)	30	10
Wabash Border	7 (3.4)	6	3
Shawnee Hills	5 (2.4)	4	1
Totals	207 (100.0)	173	39

^a Numbers in parentheses are percentages of statewide total.

Table 3. Composition of estimated fur harvest in Illinois and value to fur-takers during 1980-81 season.

Species	Total pelts ^a		Total value	
	Number	Percent	Dollars	Percent
Muskrat	421,585	49.61	\$2,740,302.50	25.84
Mink	26,607	3.13	502,872.30	4.74
Raccoon	314,777	37.04	6,106,673.80	57.59
Opossum	46,710	5.50	67,729.50	0.64
Red fox	13,965	1.64	625,632.00	5.90
Gray fox	8,716	1.03	317,262.40	2.99
Beaver	7,338	0.86	77,782.80	0.74
Striped skunk	1,625	0.19	3,250.00	0.03
Weasel	85	0.01	51.00	-
Coyote	8,412	0.99	161,931.00	1.53
Totals	849,820	100.00	\$10,603,487.30	100.00

^a Includes 4.6% allowance for out-of-state pelt sales.

Table 4. Comparative fur harvest data for Illinois, 1979-80 vs. 1980-81.

Species	Number of pelts taken		Change in harvest from		Average pelt price per pelt		Total value to fur-takers (dollars)		Change in value from	
	1979-80 ^a	1980-81 ^b	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80 (dollars)	1980-81 (dollars)
Muskrat	460,674	421,585	-39,089	(-8.5) ^c	\$6.35	\$6.50	2,925,279.90	2,740,302.50	-184,977.40	(-6.3)
Mink	22,971	26,607	+3,636	(+15.8)	\$20.15	\$18.90	462,865.65	502,872.30	+40,006.65	(+8.6)
Raccoon	381,006	314,777	-66,229	(-17.4)	\$25.50	\$19.40	9,715,653.00	6,106,673.80	-3,608,979.20	(-37.1)
Opossum	38,626	46,710	+8,084	(+20.9)	\$3.35	\$1.45	129,397.10	67,729.50	-61,667.60	(-47.7)
Red fox	14,136	13,965	-171	(-1.2)	\$48.40	\$44.80	684,182.40	625,632.00	-58,550.40	(-8.6)
Gray fox	10,547	8,716	-1,831	(-17.4)	\$43.80	\$36.40	461,958.60	317,262.40	-144,696.20	(-31.3)
Beaver	7,345	7,338	-7	(-0.1)	\$14.40	\$10.60	105,768.00	77,782.80	-27,985.20	(-26.5)
Striped skunk	3,111	1,625	-1,486	(-47.8)	\$2.60	\$2.00	8,088.60	3,250.00	-4,838.60	(-59.8)
Weasel	145	85	-60	(-41.4)	\$0.50	\$0.60	72.50	51.00	-21.50	(-29.7)
Coyote	9,831	8,412	-1,419	(-14.4)	\$22.85	\$19.25	224,638.35	161,931.00	-62,707.35	(-27.9)
Totals	948,392	849,820	-98,572	(-10.4)	$\bar{x} = \$15.52$	$\bar{x} = \$12.48$	14,717,904.10	10,603,487.30	-4,114,416.80	(-28.0)

^a Includes 5.7% allowance for out-of-state sales.

^b Includes 4.6% allowance for out-of-state sales.

^c Numbers in parentheses indicate percent change between years.

Table 5. Estimated percentage of annual harvest taken by hunters for selected furbearers in Illinois, 1980-81.

Species	Estimated percentage of harvest taken by hunters	
	Furhouse studies	Fur buyer estimates ^a
Raccoon	78.8 (Hubert 1981c) ^b	59.5
Opossum	83.3 (Hubert 1981d)	50.9
Red fox	-	34.4
Gray fox	-	36.1
Striped skunk	-	11.9
Coyote	86.7 (Hubert, unpub. data)	65.0

^a Based on present study.

^b Authority listed in parentheses.

Table 6. Distribution of raw pelts sold at 4 fur auctions in Illinois, 1980-81 season.

Species	Auction location				Totals
	Elizabeth	New Berlin(1)	New Berlin(2)	Victoria	
Muskrat	1,435	741	337	367	2,880 (65.6) ^a
Mink	37	48	25	14	124 (2.8)
Raccoon	89	254	220	350	913 (20.8)
Opossum	1	16	95	10	122 (2.8)
Red fox	21	24	72	12	129 (2.9)
Gray fox	7	23	80	-	110 (2.5)
Beaver	1	1	6	4	12 (0.3)
Striped skunk	-	11	34	-	45 (1.0)
Coyote	1	8	35	15	59 (1.3)
Total pelts	1,592	1,126	904	772	4,394(100.0)

^a Numbers in parentheses are percentages of all pelts sold.

Table 7. Muskrat, mink, and weasel trapping seasons, harvests, and pelt price data for Illinois, 1975-1980.

Year	Season opening date (season length in days)		Estimated harvest		Average price per pelt (dollars)			
	Northern zone	Southern zone	Muskrat	Mink	Muskrat	Mink	Weasel	
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

Table 8. Beaver trapping seasons, harvests, and pelt price data for Illinois, 1975-1980.

Year	Season opening date (season length in days)		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

Table 9. Raccoon and opossum hunting and trapping seasons, harvests and pelt price data for Illinois, 1975-1980.

Year	Hunting season opening date (season length in days) ^a		Trapping season opening date (season length in days)		Estimated harvest		Average price per pelt (dollars)	
	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

^a Hunting season closed during firearms deer season.

Table 10. Red and gray fox hunting and trapping seasons, harvest, and pelt price data for Illinois, 1975-1980.

Year	Hunting season opening date (season length in days) ^a		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

^a Hunting season closed during firearms deer season.

Table 11. Striped skunk hunting and trapping seasons, harvest, and pelt price data for Illinois, 1975-1980.

Year	Hunting season opening date (season length in days) ^a		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

^a Hunting season closed during firearms deer season.

Table 12. Coyote hunting and trapping seasons, harvests, and pelt price data for Illinois, 1975-1980.

Year	Hunting season opening date (season length in days) ^a		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) ^b 30 Nov (30)	1 Sep (45) ^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

^a Hunting season closed during firearms deer season.

^b 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

SEASON OF 1980-81

WMU
(FOR OFFICE USE)

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? _____ %

APPROXIMATELY WHAT PERCENT OF THE ILLINOIS OPOSSUMS WERE BOUGHT FROM HUNTERS? _____ %

APPROXIMATELY WHAT PERCENT OF THE ILLINOIS RED FOXES WERE BOUGHT FROM HUNTERS? _____ %

APPROXIMATELY WHAT PERCENT OF THE ILLINOIS GRAY FOXES WERE BOUGHT FROM HUNTERS? _____ %

APPROXIMATELY WHAT PERCENT OF THE ILLINOIS SKUNKS WERE BOUGHT FROM HUNTERS? _____ %

APPROXIMATELY WHAT PERCENT OF THE ILLINOIS COYOTES WERE BOUGHT FROM HUNTERS? _____ %

SIGNED _____

FIRM NAME _____

ADDRESS _____

DATE _____

ZIP CODE _____

Figure 1. Report of raw furs purchased form used for the 1980-81 season.



Figure 2. Furbearer management zones for the 1980-81 season.

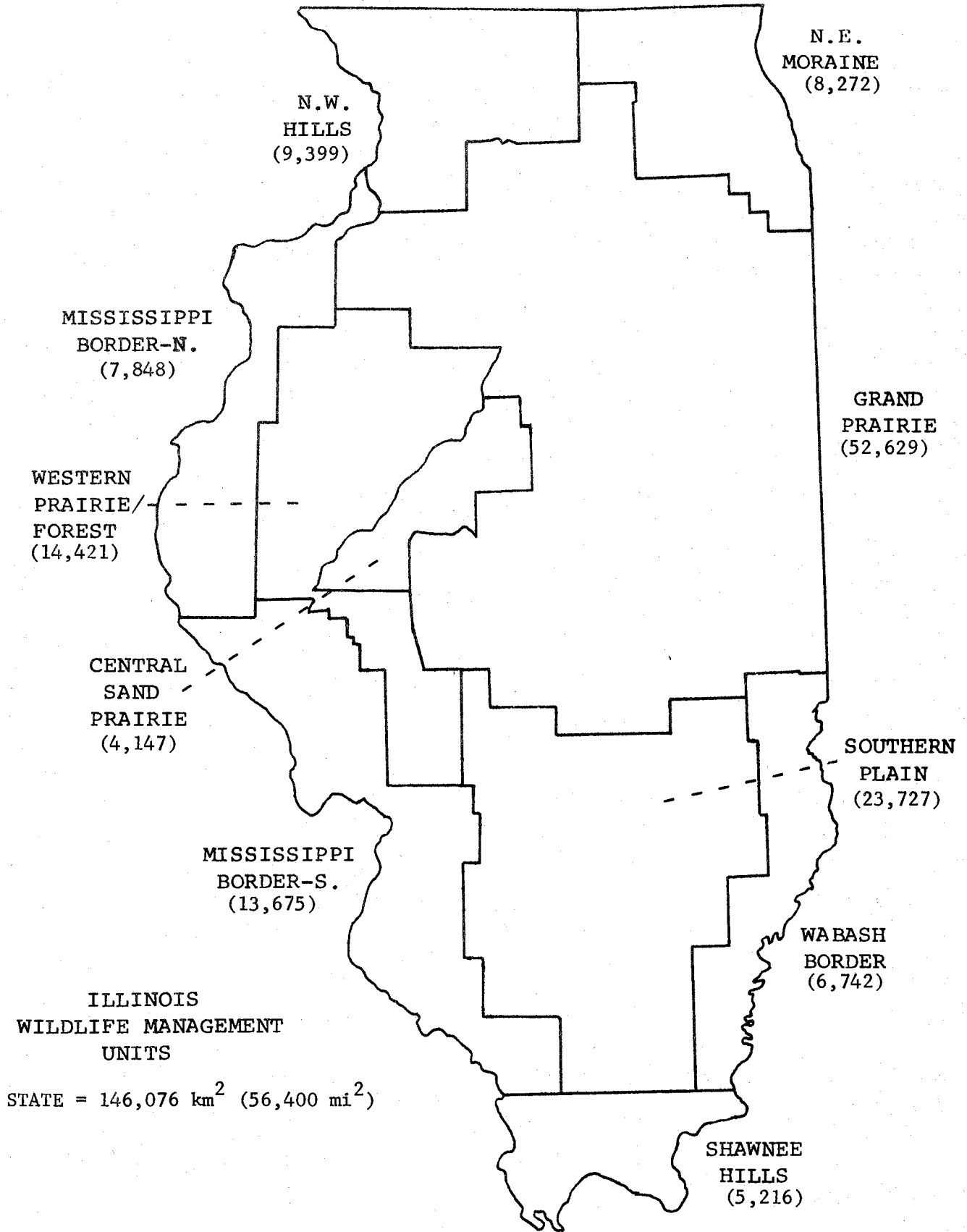


Figure 3. Area (km²) of wildlife management units in Illinois.

Appendix I. Two-page questionnaire used to obtain information on furbearer season timing and management zones from resident fur buyers.

FURBEARER ZONE & SEASON QUESTIONNAIRE - 1981
ILLINOIS DEPARTMENT OF CONSERVATION

1. Are you (as a fur buyer) satisfied with the present opening dates (November 15 in northern zone and November 25 in southern zone) and zones (2 zones separated by US Route 36) used for establishing raccoon and opossum hunting seasons and muskrat, mink, raccoon, and opossum trapping seasons in Illinois, especially from the standpoint of pelt primeness?

Check one: Yes ___ No ___

2. Should the present opening dates and zones mentioned above be retained?

Check one: Yes ___ No ___

IF YOU ANSWERED "YES", YOU ARE FINISHED. PLACE THE QUESTIONNAIRE IN THE ENCLOSED ENVELOPE AND DROP IN MAIL.

If you answered "No", go to question #3.

3. In your opinion, how many management zones should Illinois be divided into for the purpose of establishing raccoon and opossum hunting seasons and muskrat, mink, raccoon, and opossum trapping seasons?

Check one: 2 Zones (north, south) ___ 3 Zones (north, central, south) ___

IF YOU ANSWERED "2 Zones", go to QUESTION #4.

IF YOU ANSWERED "3 Zones", go to QUESTION #5.

4. If Illinois is divided into 2 zones separated by US Route 36 for the purpose of establishing raccoon and opossum hunting seasons and muskrat, mink, raccoon, and opossum trapping seasons when should the season open?

a. In the Northern Zone (north of Route 36) - Check one: Nov. 5 ___
Nov. 10 ___
Nov. 15 ___
Nov. 20 ___
Other (please list) ___

b. In the Southern Zone (south of Route 36) - Check one: Nov. 15 ___
Nov. 20 ___
Nov. 25 ___
Dec. 1 ___
Other (please list) ___

YOU ARE NOW FINISHED. DO NOT ANSWER QUESTIONS #5, #6, or #7. PLACE THE QUESTIONNAIRE IN THE ENCLOSED ENVELOPE AND DROP IN MAIL.

5. If Illinois is divided into 3 zones for the purpose of establishing raccoon and opossum hunting seasons and muskrat, mink, raccoon, and opossum trapping seasons, what should be the dividing line between the Northern and Central Zones?

Check one: U.S. Route 30 ___
Interstate Route 80 ___
Other (please list) ___

GO TO QUESTION #6.

6. If Illinois is divided into 3 zones for the purpose of establishing raccoon and opossum hunting seasons and muskrat, mink, raccoon, and opossum trapping seasons, what should be the dividing line between the Central and Southern Zones?

Check one: Interstate Route 70 _____
 U.S. Route 50 _____
 Other (please list) _____

GO TO QUESTION #7.

7. If Illinois is divided into 3 zones separated by Interstate Route 80 and Interstate Route 70 for the purpose of establishing raccoon and opossum hunting seasons and muskrat, mink, raccoon, and opossum trapping seasons, when should the season open?

a. In the Northern Zone (north of I-80 to the Wisconsin line) -

Check one: Nov. 5 _____
 Nov. 10 _____
 Nov. 15 _____
Other (please list) _____

b. In the Central Zone (area between I-70 and I-80) -

Check one: Nov. 15 _____
 Nov. 20 _____
 Nov. 25 _____
Other (please list) _____

c. In the Southern Zone (south of I-70) -

Check one: Nov. 25 _____
 Dec. 1 _____
 Dec. 5 _____
Other (please list) _____

COMMENTS: _____

PLEASE RETURN THE COMPLETED QUESTIONNAIRE IN THE ENCLOSED PRE-ADDRESSED POSTPAID ENVELOPE TO:

ILLINOIS DEPT. OF CONSERVATION
DIV. OF WILDLIFE RESOURCES
FURBEARER SECTION
605 STRATTON OFFICE BLDG.
SPRINGFIELD IL 62706

THANK YOU FOR YOUR COOPERATION!!!

