

**THE UNIVERSITY OF MANITOBA**

**Population Fluctuations in Mink (*Mustela vison*),  
with Comparisons to Muskrat (*Ondatra zibethicus*) and Ermine (*Mustela erminea*),  
in southeastern Manitoba and northwestern Ontario.**

**by**

**Richard Ryan Puttenham**

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**POPULATION FLUCTUATIONS IN MINK (Mustela vison), WITH COMPARISONS  
TO MUSKRAT (Ondatra zibethicus) AND ERMINE (Mustela erminea),  
IN SOUTHEASTERN MANITOBA AND NORTHWESTERN ONTARIO**

**BY**

**RICHARD RYAN PUTTENHAM**

**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University  
of Manitoba in partial fulfillment of the requirements of the degree  
of  
MASTER OF SCIENCE**

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## ABSTRACT

Manitoba Department of Natural Resources fur harvest records were examined to determine if the provincial populations of mink (*Mustela vison*), muskrat (*Ondatra zibethicus*), and ermine (*Mustela erminea*) exhibit any periodicity. The above fur return data were analyzed using an autocorrelation formula. This analysis provided evidence that the provincial mink population exhibits an 8-year cycle. However, the provincial muskrat and ermine populations do not express any discernable trends.

The same fur return data were used to determine if there is any association in population cycles among the three fur-bearer species. The correlation coefficients calculated for this interspecific analysis indicate a two year lag in population cycles between mink and muskrat. There was no evidence of a lag in population cycles between mink and ermine, and muskrat and ermine.

The provincial fur-return data were compared to the price per pelt to determine if there is any association between the number of animals caught per year and the price per pelt offered by the fur buyers. The provincial mink population showed a slightly cyclic negative trend in association between the number of animals caught and the price per pelt. The muskrat and ermine populations showed a negative linear trend over eight years of lagged analysis.

To examine if portions of the province express similar cyclicality in population trends, the fur harvest records of eight Manitoba Registered Trapline (RTL) sections plus two Northwestern Ontario RTL regions were examined in the above manner. The two Northwestern Ontario RTL regions were divided into five sections for further comparison. There is evidence of 4-, 8-, 9-, and 10- year population cycles for mink in all but three sections. Similar results were found for muskrat, which exhibited 4-, 6-, and 9- to 10-year cycles for 7 of 13 sections examined. There was also evidence of population cycles of various lengths for ermine in 7 of 13 sections.

As with the provincial fur harvest records, the Manitoba sectional fur return data were examined to determine if there is any evidence of association in population cycles among the three species. There is evidence of two and four year lags in population cycles between mink and muskrat for 5 of 8 sections. There was evidence for cycles of association between mink and ermine, and muskrat and ermine in all sections. The cycles of association were of various lengths.

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## INTRODUCTION

The mink (*Mustela vison*), is one of the most widespread of the North American mustelids. With a few exceptions, it inhabits all of Canada south of the treeline, and occur in all of the United States except the arid regions of the southwest (Eagle & Whitman 1987, Linscombe *et al.* 1982). The North American mink has also been introduced into many countries in Europe (Brzezinski & Zurowski 1992, Day & Linn 1972, Erlinge 1969, 1972, Gerell 1967, 1968, 1969, & 1970, Smal 1991, Wildhagen 1956). The mink is a weasel that has become adapted for an aquatic existence. Its morphology represents an intermediate between a weasel, genus *Mustela*, which is terrestrial, and the otter, genus *Lutra*, which is even more highly specialized for an aquatic existence (Peterson 1966). This intermediate position allows the mink to feed on a variety of prey items such as: mammals, fish, birds, amphibians, crustaceans, insects and reptiles. Several authors have studied the food habits of mink (Akande 1972, Birks & Dunstone 1985, Breault & Cheng 1988, Casson & Klimstra 1983, Chanin & Linn 1980, Dunstone & Birks 1987, Gilbert & Nancekivell 1982, Hamilton 1936, 1940, Korschgen 1958, Sealander 1943,) with the general conclusion that mink are opportunistic feeders, and that their food habits vary with the habitat due to differences (abundance and availability) in the potential prey present (Gerell 1968).

Much research has been conducted on mink (see Shump *et al.* 1976), with most of the effort being directed towards the various aspects of fur farming (Eagle & Whitman 1987). The remaining research has been primarily conducted on the large prairie marshes and wetlands of north central United States and Canada (Arnold & Fritzell 1987, 1990, Cowen & Reilly 1973, Eberhardt 1973, Errington 1943, 1954a, Mitchell 1961, Proulx *et al.* 1987, Sargeant *et al.* 1973, Wilson 1954). There have been very few studies based on mink in the boreal

forest. The primary purpose of this study is to examine the population fluctuations of mink, with comparisons to muskrat (*Ondatra zibethicus*), a prey item of the mink, and ermine (*Mustela erminea*), a predator competing for similar prey species, in the boreal forest of southeastern Manitoba and northwestern Ontario, Canada.

Several authors have described many northern boreal forest fur-bearer populations as cyclic in nature, with many species exhibiting the classical "10 Year Cycle" (Butler 1953, Elton & Nicholson 1942, Errington 1954a & 1954b, Finerty 1980, Hickey 1954, Keith 1963, Lack 1954, Rowan 1950, 1954, Siivonen 1948, 1954). Many of these same authors agree that cycles of species may be interrelated with the cycle of one species/animal affecting the cycle of another. Finerty (1980) and Keith (1963), conclude that mink and muskrat are cyclic, with the muskrat population cycle regulating or affecting the mink "10 Year Cycle." The null hypotheses for this portion of my analysis are:  $H_0$ 1 the Provincial populations of a) mink, b) muskrat, and c) ermine do not exhibit any cyclicity or periodicity;  $H_0$ 2 the Provincial populations of mink, muskrat, and ermine do not exhibit any interspecific cyclic association between: a) mink versus muskrat, b) mink versus ermine and c) muskrat versus ermine .

Since the mink is both a terrestrial and aquatic hunter, it is logical to assume that there will be competition with the weasels, for common prey species. The weasels have evolved an elongated body shape that permits them to enter burrows and other confined spaces in search of prey and thus hunt for prey more efficiently than mink, which are restricted due to their larger size (Brown & Lasiewski 1972). This question of any evidence of predator competition will be determined by my second null hypothesis,  $H_0$ 2.

Mink and muskrat are considered two of the most valuable fur animals in North America

(Perry 1982, Linscombe *et al.* 1982). Muskrat lead all other wild fur-bearers in number caught and overall pelt value. Ermines, on the other hand, are not considered a very valuable fur, and historically represent a very small percentage of the total fur market (Fagerstone 1987, Svendsen 1982). The fur market is price driven, and therefore the number of animals taken may be dependent on the price per pelt offered by the fur buyers. The null hypothesis for this portion of my analysis is:  $H_03$  There is no association between the number of a) mink, b) muskrat, and c) ermine caught and the price per pelt offered.

For this analysis, I have used the fur-return data, collected by natural resource officers, from eight Manitoba Registered Trapline sections, seven from the Eastern RTL District; Berens River, Bloodvein, Hole River, Lac Du Bonnet, Little Grand Rapids, Pauingassi, and Whiteshell, and one from the Western RTL District, Duck Mountain, to act as a control for comparison (Figure 1). As a further comparison, I have also included the fur-returns for selected traplines in two northwestern Ontario sections, Red Lake and Kenora. As with the provincial fur-return data, the localized sectional fur-return data will be examined for possible cycles in mink, muskrat, and ermine populations, and any possible cycles in association among the three species. The null hypotheses for this portion of my analysis are:  $H_04$  the localized or sectional populations of a) mink, b) muskrat, and c) ermine do not exhibit any cyclicity or periodicity;  $H_05$  the localized or sectional populations of mink, muskrat, and ermine do not exhibit any interspecific cyclic association between: a) mink versus muskrat, b) mink versus ermine and c) muskrat versus ermine .

The Registered Trapline (RTL) system was designed in the 1940's to eliminate destructive competition between trappers, which was the main reason for the decline in fur-bearer populations in the 1930s and 1940s (Johnson 1989). Each RTL section is differentiated based

**Figure 1. Location of study area in Manitoba showing Registered Trapline sections used.**



on natural and manmade physical features, such as lakes, rivers, and roads, as borders and is composed of a number of Registered Traplines, "owned" or managed by individual trappers or native tribe/bands. In turn, the trappers must practice sound fur conservation and management, and submit annual reports on the trend of wildlife in their area. These annual reports are compiled and form the basis for future management plans (Johnson 1989). The fur-returns used in this analysis are from the annual sectional reports, itemizing the number of animals caught for each year.

### Study Area

The RTL sections used exhibit many of the various forest classes within the Boreal Forest Region (Rowe 1972). This coniferous region, which comprises the greater part of the forested region in Canada, is characterised by white and black spruce (*Picea glauca* (Moench) Voss; and *Picea mariana* (Mill.) BSP.; respectively), tamarack (*Larix laricina* (Du Roi) K. Koch), jack pine (*Pinus banksiana* Lamb.), and balsam fir (*Abies balsamea* (L.) Mill.). There is also a general admixture of broadleaved trees such as paper birch (*Betula papyrifera* Marsh.), trembling aspen (*Populus tremuloides* Michx.), and balsam poplar (*Populus balsamifera* L.). Within this vast region are a number of different forest zones, each with its own unique characteristics. The seven eastern Manitoba and the two Ontario RTL sections comprise five different forest types.

The most prevalent forest type is the Northern Coniferous zone which is around the southwestern part of the Precambrian Shield. This zone is within an area where glaciation was intense and the resulting relief is irregular, rocky parallel ridges separating poorly drained depressions and innumerable narrow lakes. Black spruce is the predominant tree that

can be found with jack pine on the uplands and with tamarack on the poorly drained lowlands. The climate is favourable for moderate tree growth. Frequent fires, which are an integral feature of this forest type, have helped in the spread of jackpine and birch throughout this area (Rowe 1972). This forest type is characteristic of areas within Berens River, Bloodvein, Hole River, Lac Du Bonnet, Little Grand Rapids, Pauingassi, and Red Lake RTL Sections.

In contrast to the irregular ridges of the Northern Coniferous zone is the relatively flat area of the Nelson River. This area is in a strip along the eastern shore of Lake Winnipeg, and extends north and northeastward. The Nelson River area was covered by glacial Lake Agassiz, and the deposition of clays and sands have levelled the irregularities caused by glaciation. Black spruce is the dominant tree, but proximity to the numerous and extensive bogs has restricted its growth. Stands of birch, trembling aspen, poplar, and balsam fir can be found in areas with better drainage. As with the Northern Coniferous zone, fires also play an integral part in the fragmentation and dispersal of the various tree species (Rowe 1972). This forest type can be found in: Berens River, Bloodvein, Hole River and a small portion of Little Grand Rapids.

The next forest type to be examined is the Manitoba Lowlands which extends from the eastern shore of Lake Winnipeg to an area northwest of the lake. This forest type consists of black spruce and tamarack on flat, poorly drained lands, with intervening bogs and meadows. Stands of white spruce, aspen, poplar, birch and balsam fir occur on the drier alluvial strips bordering rivers and streams. Ridges of sand and gravel mark the ancient shoreline of Lake Agassiz, with low, narrow, parallel rises with swampy depressions between, reflecting the topography of the ancient lake bottom (Rowe 1972). Areas of this forest type can be found

in: Berens River, Bloodvein, Hole River, and Lac Du Bonnet.

South of the Northern Coniferous zone is the Lower English River forest type, which is covered by stands of aspen, poplar, and white spruce on well-drained sites. Black spruce and tamarack can be found in shallow bogs. As with the Nelson River zone, post-glaciation deposition of clay materials has resulted in this section having a relatively low relief, relieved by occasional morainic ridges and fluvial terraces (Rowe 1972). This is the dominant forest type in: Lac Du Bonnet, and areas of Hole River, Whiteshell, Red Lake and Kenora.

Quetico represents the southernmost forest type included within the scope of this analysis. The soil and climate of this area favoured the development of pine communities, interspersed with mixed stands of aspen, birch, balsam fir, white and black spruce. The underlying granites, sediments and volcanic rocks of the Precambrian Shield have been heavily glaciated with the resulting irregular terrain being dotted with vast numbers of rock-rimmed lakes of various sizes (Rowe 1972). This forest type is found in the Whiteshell and Kenora sections.

For comparison, I used the Duck Mountain RTL Section, which is in the western region of Manitoba. This section also lies within the Boreal Forest Region, but unlike the eastern sections, it is characterized by the Mixedwood forest type. This area is dominated by a mixture of aspen, poplar, birch, white spruce and balsam fir, covering well-drained uplands. There are also a few bogs where black spruce and tamarack can be found. Glaciation of this area has resulted in rolling morainic deposits on the uplands with glacio-lacustrine deposits on the lowlands (Rowe 1972).

## METHODS

I had originally intended to conduct a radiotelemetry and tracking study of mink at the University of Manitoba's Taiga Biological Station located in the Atikaki Provincial Wilderness Park (51° 05' N, 95° 20' W) from September of 1993 to May 1995. During my first winter season, I was able to locate and follow seven mink, based on fresh tracks in the snow, within the area surrounding the research station. I obtained clearance from the University of Manitoba's Council on Animal Care to proceed with live-capture and tracking of radio-collared mink, in spring of 1994. After discussion with my advisor, Dr. W.O. Pruitt, it was decided to commence live trapping in the late summer and early fall of 1994. With the assistance and guidance of the local trapper, B. Conley, twenty-two national live traps of different sizes were placed in various riparian locations. No mink were caught after approximately 1650 trap nights. No sign or tracks of mink were found during the late fall and winter seasons of 1994/95. Only one mink track was found in early April of 1995. After many discussions with local trappers, it appeared that the population of mink had decreased significantly in the surrounding area. I returned to the University of Manitoba campus in May 1995, where it was decided amongst myself and my advisory committee to investigate the causes for the apparent decline in the mink population. I approached the Manitoba Department of Natural Resources in order to examine the fur return records for southeastern Manitoba to determine if there was any historical trend or periodicity in the mink population. I also examined the fur return records of muskrat and ermine to determine if there were any possible associations amongst the three species.

### Manitoba Provincial Analysis

The provincial totals of mink, muskrat, and ermine caught per year (Appendix 1, Figures 2, 3, & 4), were transcribed from a Manitoba Department of Natural Resources publication, the "Manitoba Fur Fact Book" (Johnson 1989), which is a collection of the most recent fur sales statistics, fur industry facts and fur management guidelines for the province. These totals were then graphed to give a visual representation and the numbers were used in a correlation analysis to decide whether there is any trend or cyclicity.

To test a time series for periodicity, the fur-return data were analyzed using the following autocorrelation formula:

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

Where  $x$  = variable #1  
 $y$  = variable #2

The correlation coefficient,  $r$ , is unitless and ranges from  $-1 < r < 1$ . A positive coefficient,  $r > 0$ , implies that with an increase in one variable,  $x$ , there is an increase in the second variable,  $y$ . A negative coefficient,  $r < 0$ , indicates an increase in one variable,  $x$ , and a decrease in the second variable,  $y$ . The correlation coefficient is not a measure of quantitative change of one variable with respect to the other, but it is a measure of intensity of association between the two variables (Zar 1974).

For this analysis, the number of animals caught in a particular year (year  $t$ ) was correlated to the number of animals caught in the next year (year  $t+1$ ) and subsequent years ( $t+2$ ,  $t+3$ , . . .  $t+10$ ). The coefficients calculated showed the level or intensity of association between the various years. If a series (fur-return data) is periodic, a large positive correlation will be observed when the maxima of the series (at time  $t$ ) correspond to the maxima (at time  $t+n$ ). A large negative correlation will be observed when the maxima (at time  $t$ ) correspond to the minima (at time  $t+n$ ). If the series is periodic, the autocorrelation function will oscillate at regular intervals. Conversely, if the series is not periodic, the autocorrelation function will not oscillate and the results will be linear or random in nature (Finerty 1980).

The coefficients calculated by this formula are insensitive to proportional differences between the two populations being sampled. That is, the correlation formula can compare populations of different sizes: Population "A" is twice the size of Population "B." However, the coefficients are strongly affected by sample size. That is, if more than half of the variables being compared are equal to zero, then the correlation coefficients should not be used (see Krebs 1989).

Bulmer (1974) proposed the use of a periodogram for analyzing fur-return data. This method can be regarded as the decomposition of the variance into components due to different frequencies. In short, the number of peaks observed in the data is divided by the total number of years that the data encompasses. The components are examined using an analysis of variance test, with the resulting intensity (sum of squares) determining what the frequency is for the fur-return data. However, for this analysis to work one must decide which peaks to include and which peaks to exclude. Within all fur-return data, there will be minor fluctuations resulting in minor peaks embedded within the overall population periodicity. If one ignores or discounts the minor peaks, the data become smoothed, resulting in the loss of minor fluctuations that may hold insights into what is happening to the populations as a whole. There is also the problem of determining what is a major peak and what is a minor peak. Cole (1951) attempted objectively to define a peak by considering the data series as individual random fluctuations rather than a whole time series. Cole defined a peak as an entry in which the preceding and succeeding entries are both lower in value. However, with Cole's approach the researcher is still left with the task of determining which peaks to include and which to exclude. The above noted autocorrelation avoids this problem by comparing all the peaks, both major and minor, treating the time series as a whole rather than as individual fluctuations.

This autocorrelation formula was used to examine the relationships and possible periodicity within the provincial mink, muskrat and ermine populations (Appendix 1, Table 1, Figures 5, 6, & 7). The autocorrelation formula was also used to test for any association among the three fur-bearer species (Appendix 1, Table 2, Figures 8, 9, & 10). In this later analysis, the population of one species in a particular year (year  $t$ ) is compared to the population of a second species in the same year (year  $t$ ) and subsequent years (year  $t+1$  . . . year  $t+10$ ). The resulting correlation coefficients show the level of association between the two species.

### **Price per Pelt Analysis**

The average auction price per pelt for the given fur year (Appendix 2, Figures 11, 12, & 13) was also transcribed from the "Manitoba Fur Fact Book" (Johnson 1989). There is the possibility that the price per pelt offered by the fur buyers will have an effect on the total number of animals taken. To examine this possibility, the provincial fur harvest numbers were correlated to the price per pelt offered in the same year (year  $t$ ) and the subsequent eight years ( $t+1$ , . . .  $t+8$ ). The resulting correlation coefficients show the intensity of association between price offered and the total number of animals caught (Appendix 2, Table 3, Figures 14, 15, & 16). The prices per pelt offered are in original dollars. That is, the monetary values have not been converted to 1994 dollar-equivalents (B. Verbiwski, *pers. comm.*).

### **Manitoba Sectional Analysis**

Detailed Manitoba Department of Natural Resources fur trapping records were consulted for eight Registered Trapline (RTL) sections from ~1960 to 1994. Fur returns were recorded for seven RTL sections from the Eastern RTL District, located in the southeastern portion of Manitoba. These RTL sections are listed here from south to north, along with their approximate sizes in  $\text{km}^2$ : Whiteshell - 3,070, Lac du Bonnet - 5,810, Hole River - 3,695, Bloodvein - 3,931, Little Grand Rapids - 4,698, Berens River - 5,180, & Pauingassi - 3,183 (Based on 1980 Manitoba Department of Natural Resource map - Johnson 1989). Also included in this analysis is the Duck Mountain RTL section in the Western RTL District, which encompasses 3,688  $\text{km}^2$ . This western section was included to act as a comparison or a control with regards to the eastern sections (Figure 1). The sectional fur return numbers were transcribed from Manitoba Department of Natural Resources annual fur production records. However, in most of the sections being examined, there were some missing years. This is probably due to files/reports being removed from the sectional folders to calculate the regional annual reports, but never returned.

For the purposes of this analysis, the RTL number, the number of trappers per line, the total number of mink, muskrat, and ermine caught per year were recorded. Since each registered trapline is "owned" by an individual, only the RTL number is recorded to protect the trapper's identity. These harvest numbers were then entered onto a spreadsheet (Microsoft Excel 5.0) and the total number of trappers, mink, muskrats and ermine were then calculated per year (See Appendix 3).

These returns (Table 4) were graphed to show the trends among the three species of fur-bearers (Figures 17 - 24). In most sections, the total number of muskrats caught far exceeded the total numbers of mink and ermine, so that minute trends in the mink and ermine lines were obscured. Therefore, the total harvest numbers for each section were transformed to the common logarithm, Log<sub>10</sub> (Table 5). These common logarithms were then graphed allowing minute or micro-trends to appear visually (Figures 25 - 32). However, in many instances the total number of animals caught equaled zero, which does not have a corresponding logarithm. Also, the spreadsheet program being used does not graph logarithms equal to zero. Therefore, to calculate the logarithms of the fur returns, a value of +2 was added to all returns (L.Armstrong, *pers. comm*). This addition allows the logarithmic trends to be graphed. However, one must keep in mind that these graphed values have been adjusted and are only meant to show representative trends in the data.

### **Manitoba Sectional Intraspecific Analysis**

In order to determine if the mink, muskrat and ermine populations for each section were periodic in nature, the fur harvest data were subjected to the above autocorrelation analysis (Appendix 4). The results were graphed to show any possible trends within each species (Table 6, Figures 33, 34 & 35).

### **Manitoba Sectional Interspecific Analysis**

To show if there was any association among the three fur-bearers, the sectional fur-return data were analyzed in the same manner as above (see Manitoba Provincial Analysis), where the harvest data of one species were compared to the harvest data of another in the same year and subsequent years (Appendix 4). The results were graphed to show any possible trend between each species (Table 7, Figures 36, 37 & 38).

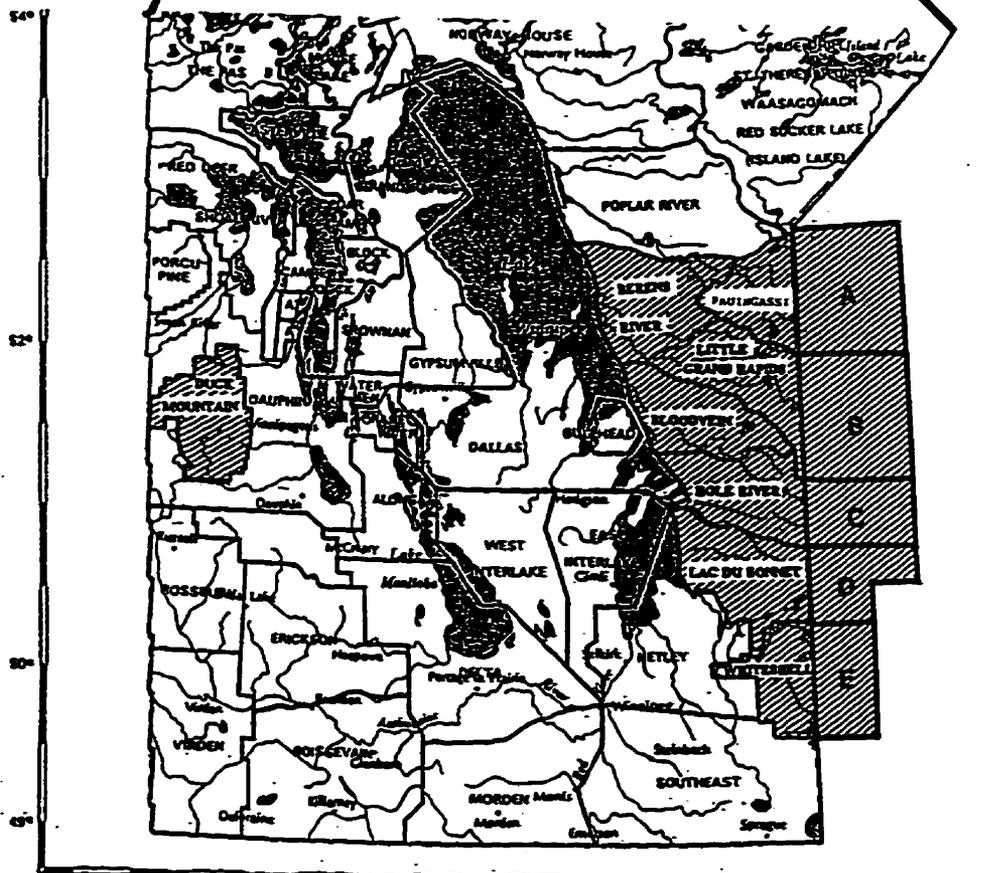
### **Northwestern Ontario Analysis**

Fur-returns for traplines within two Northwestern Ontario RTL Regions were transcribed from Ontario Ministry of Natural Resources records (Appendix 5, Table 8) and graphed (Figures 40 & 41). The traplines are located between 94°00'W Longitude and the Manitoba/Ontario border (95°10'W) (Figure 39).

The fur-returns for Ontario regions are based on "sealed" skins, which represent pelts that have been marked/stamped by a Resource Officer, prior to sale. In the Kenora Region, muskrat pelts do not require sealing, and therefore there are no records of muskrat harvest after the 1971/72 trapping season (C. MacDonald, *pers. comm*). Red Lake Region, on the other hand, has continued to record fur-returns for muskrats. As far as I can discern from the fur-return data, the date of the Ontario fur-returns corresponds to the fur-returns for Manitoba. That is, the Ontario fur-returns for 1990/91 represent the animals caught in the same year as the Manitoba fur-returns for 1990/91.

As with the Manitoba sections, the extreme difference in total number of mink, muskrat and ermine caught, override any minute trends due to the large scale used. To compensate, the totals were converted to a common logarithm, Log10, with the value of +2 being added to all totals (Table 9). The converted totals were graphed to show any possible trends within and between species (Figures

**Figure 39. Location of study area in Northwestern Ontario: showing division of Kenora and Red Lake Registered Trapline regions into five section, A - E**



102° 100° 98° 96° 94°  
 Cartography by: Surveys and Mapping Branch, Manitoba 1980

42 & 43).

The Ontario fur-return data were also examined using the above-mentioned correlation formula, with the intraspecific results (Appendix 6, Table 10) graphed to show any possible population cycles or periodicity (Figures 44 & 45)

Because the Kenora and Red Lake Regions cover a very large area of land the Ontario results were divided into five sections, roughly corresponding to the five easternmost Manitoba sections. That is, Northwestern Ontario (NWO) Section A - corresponds to Pauingassi RTL Section, NWO Section B- corresponds to Little Grand Rapids RTL Section, NWO Section C - corresponds to Hole River RTL Section, NWO Section D - corresponds to Lac Du Bonnet RTL Section, and NWO Section E - corresponds to Whiteshell RTL Section (Figure 39)

The various RTLs within Kenora and Red Lake regions were divided into the above mentioned five NWO sections (Appendix 7, Table 11). The number of animals caught per NWO section were graphed to show any possible trends within and between the species (Figures 46 - 50).

To determine if there is any relationship within the three species, the total number of animals caught for a given year (year  $t$ ) was correlated to subsequent years ( $t+1$ ,  $t+2$ , . . .  $t+8$ ) (Appendix 8). The coefficients calculated for correlations within the species are recorded on Table 12 and show in Figures 51 to 55. Due to the lack of data on the number of muskrats caught per year, I was not able to conduct the interspecific correlation analysis.

## **RESULTS**

### **Provincial Results**

As previously mentioned, the province-wide fur returns were transcribed from Department of Natural Resources records (Appendix 1), and the totals for each species graphed (Figures 2, 3 & 4). There appears to be a change in both the frequency and the total number of animals taken between the pre-1970 and post-1970 data for the mink returns (Figure 2). The dotted line represents the 1970 division point.

The provincial fur returns were divided into three components; Provincial Totals 1919/20 - 1993/94, Provincial Totals 1919/20 - 1969/70, and Provincial Totals 1970/71 - 1993/94, and time lagged correlation coefficients were calculated (Table 1).

### **Intraspecific Results**

The intraspecific correlation coefficients calculated for each component were then plotted for each species (Figures 5, 6 & 7). The mink (Figure 5) show a moderately high coefficient value,  $r = 0.62$ , which decreases to  $r = -0.09$ , then increases to  $r = 0.45$  at the 8 Year point. The pre-1970 and post- 1970 components show similar curves, which combine to form the Provincial Totals 1919/20 - 1993/94 line. The result is that the provincial totals of mink exhibit a distinct 8 - 9 year cycle.

The muskrats (Figure 6) show an initially very high combined total correlation,  $r = 0.84$ , which decreases over time. However, this combined total is composed of the pre-1970 line,

showing a similar curve, and the post-1970 line which exhibits two peaks, at 4 Years Out ( $r = 0.71$ ), and 8 Years Out ( $r = 0.47$ ). The result is that the overall provincial totals of muskrat do not exhibit any sign of cyclicity or periodicity. The post-1970 component implies that there is a possible 4-year cycle which may be due to socioeconomic factors such as price per pelt offered.

The ermine (Figure 7) exhibit a relatively stable combined total, with coefficients ranging from  $r = 0.86$  to  $r = 0.67$ . This stable combined total is the product of the pre-1970 component, with moderate coefficient values, and the post-1970 which consists of relatively low coefficient values. The result is that the provincial totals of ermine do not exhibit any sign of cyclicity or periodicity.

### **Interspecific Results**

The interspecific correlation coefficients calculated for each component were also plotted (Figures 8, 9 & 10). Figure 8 shows the correlation coefficients calculated for mink versus muskrat. The overall Provincial Totals 1919/20 - 1993/94, show an increase in value from  $r = 0.34$ , up to  $r = 0.60$  at the 2 Years Out point, then decreasing to  $r = 0.25$  at the 7 Years Out point. The coefficients increase to  $r = 0.34$  at the 8 Years Out point. The overall Provincial Totals line is the result of combining the pre-1970 and post-1970 components as mentioned above. The pre-1970 component shows values similar in shape and trend to that found in the overall totals segment. The post-1970 component shows a markedly different trend. In the post-1970 component, there are three distinct peaks, at the 1, 5 and 9 Years Out points ( $r = 0.60$ ,  $0.51$ , and  $0.57$  respectively). The result of this analysis is that there is a moderately high level of association between the muskrat population of one specific year

(year  $t$ ) and the mink population two years later (year  $t+2$ ).

Figure 9 shows the correlation coefficients calculated for mink versus ermine. In this analysis the overall Provincial Totals 1919/20 - 1993/94 segment shows a relatively low value,  $r = 0.26$ , increasing gradually over the 10 years lagged sequence, to  $r = 0.40$ . The overall Provincial Totals segment is composed of the similar shaped pre-1970 component and the distinctly regressive post-1970 component. The pre-1970 component shows an initial decrease then a gradual increase in absolute value over time, from  $r = -0.25$  at the 1 Year Out point, up to  $r = 0.19$  at the 8 Years Out point. The post-1970 component exhibits a dramatic decrease in value from  $r = 0.80$  at the Same year point, to  $r = -0.05$  at the 6 years Out point. The values level off near this value for the next four years. The result is a very low positive level of association between mink and ermine.

Figure 10 shows the correlation coefficients calculated for muskrat versus ermine. The overall Provincial Totals 1919/20 - 1993/94 segment exhibits relatively high and stable values, ranging from  $r = 0.53$  up to  $r = 0.67$  at the 6 years Out point, then decreasing slightly to  $r = 0.60$  at the 10 Years Out point. The pre-1970 component exhibits an almost identical trend, with the coefficients being lower in value. The post-1970 component deviates from this stable trend, with values decreasing steadily from  $r = 0.57$ , to  $r = 0.00$  at the 5 Years Out point, increasing slightly to  $r = 0.16$  at the 8 Years Out point, then decreasing dramatically to  $r = -0.29$  at the 10 Years Out point. The result is a relatively high positive level of association between muskrat and ermine.

### **Price per Pelt Analysis**

The price per pelt offered for mink, muskrat, and ermine was also transcribed from provincial Department of Natural Resources records (Johnson 1989) from 1919/20 to 1993/94 (Appendix 1). The price per pelt was plotted against the total number of pelts sold (Figures 11, 12 & 13)

Figure 11, representing the mink, shows the price per pelt remaining relatively low from 1919/20 to 1942/43, peaking during the late 1940's then decreasing gradually until the mid 1970's when the price increased dramatically into the 1980's.

Figure 12, representing the muskrat, shows a similar pattern to that seen in Figure 4, with relatively low values from 1919/20 to approximately 1942/43, peaking slightly in the late 1940's, decreasing during the 1950's and 1960's, then increasing dramatically in the late 1970's and early 1980's. The price finally decreased in the late 1980's and early 1990's.

The ermine, Figure 13, unlike the mink and muskrat, show moderate prices in the mid 1920's, but then decrease in 1936/37. The price rebounded to moderate values from the early 1940's through to the mid 1970's, when the price increased steadily to 1993/94.

The total number of pelts sold was then correlated to the price per pelt to determine if there were any observable relationships. Table 3 lists the time-lagged correlation coefficients for each species, divided into the three components outlined above. The time lagged correlations were calculated for up to eight years out of sequence and plotted (Figures 14, 15 & 16).

Figure 14 shows the correlation values for mink versus price per pelt. The combined Provincial Total (1919/20 - 1993/94) shows a relatively stable low negative correlation with values ranging from  $r = -0.12$ , increasing to  $r = -0.20$ , at the 2 Year point, decreasing to  $r = 0.00$ , at the 6 Year point, then increasing slightly to  $r = -0.07$  at the 8 Year point.. The combined Provincial Total is the product of the pre-1970 coefficients, which are low, then increase in relative amount over the next five years, peaking at  $r = 0.55$ , at the 5 Year point, then decreasing to  $r = 0.33$ , at the 8 Year point, and the post-1970 coefficients, which start at low positive values then decrease over time, becoming relatively high negative values, with values increasing to  $r = -0.63$ , at both the 4 and 5 Year points, then decreasing to  $r = -0.36$ , at the 8 Year point..

Figure 15 shows the correlation values for muskrat versus price per pelt. As with the mink, the combined Provincial totals are relatively stable, low negative values, which are the products of the increasing pre-1970 and the decreasing post-1970 values. The pre-1970 values increase steadily to  $r = 0.54$ , at the 4 Year point, then decreasing over the next four years to  $r = 0.34$ . In contrary, the post-1970 values show a steady decline from  $r = 0.41$ , to  $r = -0.29$ , at the 6 Year point, then values close on the zero mark.

Figure 16 shows the correlation values for ermine versus price per pelt. The combined Provincial totals are moderate, stable negative values, ranging between  $r = -0.32$ , and  $r = -0.44$ . Both the pre-1970 and post-1970 categories show increasing (absolute) negative values. The pre-1970 values show a steady decline from  $r = 0.02$ , to  $r = -0.41$ , at the 8 Year point. The post-1970 values show an increase (absolute) from  $r = -0.29$ , at the 1 Year point, to  $r = -0.85$ , at the 5 Year point, then the values decrease to  $r = -0.59$ , at the 8 Year point.

## **Sectional Results**

Once all of the sectional totals were recorded, the next step was to examine for any correlation within each species, and then between the three fur-bearers (Appendix 4). In his analysis, Chatfield (1989), defines the limit of time series correlations based on the total number of "pairs of observations" divided by 4. That is, if there are 30 pairs of observations, then the maximum distance that one can proceed with a time series correlation is,  $30/4 = 7.5$  years. Therefore, any correlation coefficients calculated after this point are very weak and must be interpreted with the knowledge of the very low number of actual year - year correlation pairings. Had there been more harvest records available, correlation coefficients could have been calculated up to the 10 year lagged sequence point, as with the Provincial analysis.

## **Intraspecific Analysis**

The first series of correlations examined the association within each species for each section. Table 6 shows the calculated coefficient values for mink, muskrat, and ermine through eight years of lagged correlations. These coefficient values were then graphed (Figures 33, 34 & 35), to show a visual representation of the data.

## **Mink**

Figure 33 shows the correlation values for mink, for each RTL section, over the eight years.

Berens River shows two large positive coefficient values at the 2 and 8 Year marks. The value at the 2 Year point,  $r = 0.70$ , represents a much stronger correlation than the value,  $r = 0.70$ , at the 8 Year point, due to the small sample size used in this lagged correlation. Using Chatfield's formula,  $N = 18$  years (Appendix 3), and therefore  $N/4 = 4.5$ . Thus the correlation values calculated for the 5, 6, 7, and 8 years out-of-sequence analyses must be interpreted with the knowledge of the very low number of actual correlation pairings. Therefore, the only correlation coefficient of note is that of  $r = 0.70$ , at the 2 Year point.

Bloodvein section shows a different trend from that in Berens River. With the one exception at the 3 Year point, the rest of the correlation coefficients show a possible eight year cycle. This agrees with the possible eight year cycle found throughout the province. The correlation analysis for this section is valid to the 6 Year point ( $N = 27$ ,  $N/4 = 6.75$ ).

Duck Mountain section exhibits an unique trend. There is very high, positive correlation within the mink population at the 1 Year point, then the trend stabilizes at approximately the mid point between 0.00 and 1.00. However, as for Berens River, the later correlations are based on very few aligned years and therefore do not carry the same power as the earlier calculations ( $N = 21$ ,  $N/4 = 5.25$ ).

Hole River appears to have two peaks; one small,  $r = 0.42$  at the 4 Year point, and a larger,  $r = 0.64$ , at the 8 Year point. Therefore, this section also corresponds to the provincial eight year cycle ( $N = 25$ ,  $N/4 = 6.25$ ).

Lac Du Bonnet shows a general decline, or negative slope, throughout the eight year sequence. With the exception of the slight positive value at the 7 Year point, the coefficient

values range from  $r = +0.27$  to  $r = -0.32$ , indicating a very low intensity of association both positively and negatively ( $N = 29$ ,  $N/4 = 7.25$ ).

Little Grand Rapids shows a very stable progression with regards to the lagged sequence correlations. The very large positive value,  $r = 0.75$ , at the 1 Year point indicates that there is a great level of association between the population total of one year and the population total of the next. This very high association continues throughout the eight year sequence ( $N = 25$ ,  $N/4 = 6.25$ ).

Pauingassi exhibits an unique four year cycle. However, due to the short time period of the fur record for this new RTL section, 1982/83 - 1993/94, as one progresses through the eight year sequence, the actual number of year - year correlations decreases. Due to the extremely low number of year - year pairings, ( $N = 12$ ,  $N/4 = 3$ ), the strength of the correlation analysis has been decreased. Therefore, one must disregard the coefficients at the 4, 5, 6, 7, & 8 year points, or accept them with the understanding of the lowered power.

Whiteshell exhibits a general decrease or negative slope in the correlation values over time. As with Lac Du Bonnet, there is a decrease in the intensity of association as the populations being compared move farther apart ( $N = 35$ ,  $N/4 = 8.75$ ).

### **Muskrat**

Figure 34 shows the correlation values for muskrat, for each RTL section, over the eight years.

Berens River shows an unique possible four year cycle, with peaks occurring at the 4 Year point,  $r = 0.44$ , and at the 8 Year point,  $r = 0.53$ . However, as mentioned above in the mink analysis,  $N = 18$ , and  $N/4 = 4.5$ , therefore all correlation coefficients calculated after the 4 Year point, must be interpreted with the knowledge of the very low number of actual correlation pairings.

Bloodvein exhibits a general decline over time, with the correlation coefficients starting at  $r = 0.80$ , then decreasing to  $r = 0.08$ , at the 7 Year point. This implies that the association between muskrat populations decrease as the years being compared move farther apart ( $N = 27$ ,  $N/4 = 6.75$ ).

Duck Mountain shows a decrease from  $r = +0.45$  to  $r = -0.08$ , from the 1 Year point to the 2 Year point. The coefficients remain relatively stable ranging between  $r = 0.12$  and  $r = -0.24$ . There is a slight correlation between the population of muskrats from one year to the next year, but not for subsequent years ( $N = 21$ ,  $N/4 = 5.25$ ).

Hole River, with the exception of the 5 Year point, shows a possible six year muskrat cycle,  $r = 0.41$ . ( $N = 25$ ,  $N/4 = 6.25$ ). This is contrary to the other Manitoba RTL sections.

Lac Du Bonnet does not show any discernable cycle or trend. The correlation coefficients decrease from a relatively low positive value to relatively low negative values. There is the possibility of a five year negative correlation,  $r = -0.30$ , at the 5 Year point, indicating that the population of muskrats from one year is negatively correlated to the population five years out of sequence ( $N = 29$ ,  $N/4 = 7.25$ ).

Little Grand Rapids exhibits a very large positive correlation coefficient for the 1 Year point which gradually decreases over time. This implies a very strong association between the population from one year and the next. The values do not indicate any discernable cycle ( $N = 25$ ,  $N/4 = 6.25$ ).

Paungassi also exhibits moderately large positive correlation coefficients for the first three years, implying that the population from one year is strongly associated with the populations for the next few years. However, as mentioned above, this section is relatively new and therefore does not have very many years of usable fur-return data ( $N = 12$ ,  $N/4 = 3$ ).

Whiteshell exhibits a trend very similar to that found in the Little Grand Rapids section. The correlation coefficient calculated for the 1 Year point is relatively large, with the later values decreasing over time until the 8 Year point, when the value increases, hinting at a possible eight or nine year cycle ( $N = 35$ ,  $N/4 = 8.75$ ).

### **Ermine**

Figure 35 shows the correlation values for ermine, for each RTL section, over the eight years.

The correlation coefficients calculated for Berens River do not exhibit any discernable trend or cycle ( $N = 18$ ,  $N/4 = 4.5$ ).

Bloodvein shows a possible cycle with peaks occurring at the 2 and 7 Year points. Since  $N = 27$ ,  $N/4 = 6.75$ , for this section, one must disregard the 7 Year peak, or accept it with the

understanding of the limited number of year - year pairings used for the correlation calculation.

Duck Mountain shows the opposite trend to that found in Bloodvein: a possible five year cycle. The correlation coefficients increase from  $r = 0.09$ , at the 2 Year point, to  $r = 0.35$ , at the 5 Year point. However, the coefficients are relatively low in value, and therefore represent a low level of association between the years ( $N = 21$ ,  $N/4 = 5.25$ ).

Hole River also shows a possible five year cycle. The relatively low coefficients decrease from  $r = 0.17$ , to  $-0.06$ , then increase to  $0.24$ , at the 5 Year point. As mentioned for Duck Mountain, these coefficient values are very low and therefore express a low level of association between the years ( $N = 25$ ,  $N/4 = 6.25$ ).

Lac Du Bonnet shows a possible two year cycle with coefficient values rising to  $r = 0.63$  at the 2 Year point, then decreasing over time to moderate negative values ( $N = 29$ ,  $N/4 = 7.25$ ).

Little Grand Rapids exhibits an unique trend with very large coefficients increasing from  $r = 0.72$  to  $r = 0.79$  at the 3 Year point, then decreasing over time. These very large values indicate a very high level of association between the populations of one year over the next few years ( $N = 25$ ,  $N/4 = 6.25$ ).

Paungassi shows a possible four year cycle with peaks occurring at the 4 and 8 Year points. However, as mentioned above, the limited amount of fur-returns decreases the validity of the later correlations ( $N = 12$ ,  $N/4 = 3$ ).

Whiteshell does not exhibit any discernable cycle. The relatively low coefficient values decrease over time from  $r = +0.29$ , to  $r = -0.29$ , at the 7 Year point ( $N = 35$ ,  $N/4 = 8.75$ ).

### **Interspecific Analysis**

The second series of correlations examined the association between the three species for each section. Table 7 shows the calculated coefficient values for mink versus muskrat, mink versus ermine, and muskrat versus ermine through eight years of lagged correlations. These coefficient values were then graphed (Figures 36, 37 & 38), to show a visual representation of the data.

### **Mink versus Muskrat**

Figure 36 shows the correlation values for mink versus muskrat, for each RTL section, over the eight years.

Berens River shows a possible four year cycle of association with peaks occurring at the 4 and 8 Year points. The coefficient calculated for the 4 Year point is relatively large,  $r = 0.84$ , which implies a strong level of association between mink and muskrat populations four years apart. This association may be due to factors other than a predator/prey relationship. A predator/prey association should be demonstrated by a one to two year difference, when the mink population would increase to take advantage of the increased muskrat population. A delay of four years indicates something other than a direct predator/prey affiliation ( $N = 18$ ,  $N/4 = 4.5$ ).

Bloodvein also exhibits a four year cycle of association. Unlike Berens River, the coefficient values increase gradually to  $r = 0.78$ , at the 4 Year point. As mentioned above, this four year lagged association could not be interpreted as a direct predator/prey relationship ( $N = 27$ ,  $N/4 = 6.75$ ).

Duck Mountain shows a possible three year association with a moderate peak occurring at the 1 Year point,  $r = 0.56$ , and a relatively low peak,  $r = 0.32$  at the 4 Year point. This analysis is more supportive of a possible predator/prey relationship between mink and muskrat. That is, the population of mink should increase one year after an increase in the population of muskrat ( $N = 21$ ,  $N/4 = 5.25$ ).

Hole River also exhibits a possible three year cycle of association with a peak,  $r = 0.58$  at the 2 Year point, and a second peak,  $r = 0.46$ , at the 5 Year point. This analysis is not as supportive of the direct predator/prey relationship as found in the Duck Mountain data, but more supportive than the Berens River and Bloodvein data ( $N = 25$ ,  $N/4 = 6.25$ ).

Lac Du Bonnet also exhibits a well defined four year cycle of association, with a coefficient value of  $r = 0.65$  occurring at the 4 Year point. As mentioned above, this is not indicative of a predator/prey association ( $N = 29$ ,  $N/4 = 7.25$ ).

Little Grand Rapids shows a two to three year peak, with coefficient values reaching  $r = 0.85$ , and  $0.83$  respectively, implying a strong level of association between mink and muskrat populations two to three years apart, similar to that found in Hole River ( $N = 25$ ,  $N/4 = 6.25$ ).

Paungassi shows a relatively stable high level of association between mink and muskrat, with values ranging between  $r = 0.51$  to  $0.73$  for the first few years of calculations. There is no discernable trend or cycle found. This section supports the possible predator/prey relationship between mink and muskrat ( $N = 12$ ,  $N/4 = 3$ ).

Whiteshell shows a possible peak at the 2 Year point,  $r = 0.45$ , then the values decrease over time. This analysis also supports the possibility of a predator/prey relationship between mink and muskrat ( $N = 35$ ,  $N/4 = 8.75$ ).

### **Mink versus Ermine**

Figure 37 shows the correlation values for mink versus ermine, for each RTL section, over the eight years.

Berens River exhibits a possible four year cycle of association with moderate peaks occurring at the 4 Year point,  $r = 0.44$ , and the 8 Year point,  $r = 0.28$ . Unlike in the mink versus muskrat analysis, where there was the possibility of a predator/prey relationship, any cycle of association between mink and ermine would indicate predator/predator interaction or competition. This possible cycle implies that the population of mink would increase four years after a rise in the ermine population. This gives support to a possible predator exclusion situation since mink feed also on small mammals (see studies cited in Introduction) and therefore would be in competition with the ermine ( $N = 18$ ,  $N/4 = 4.5$ ).

Bloodvein shows a possible three year cycle of association with a large peak,  $r = 0.73$ , at the 3 Year point, and a smaller peak,  $r = 0.35$ , at the 6 Year point. These results support the

theory of a predator exclusion model, with the population of mink increasing three years after an increase in the ermine ( $N = 27$ ,  $N/4 = 6.75$ ).

Duck Mountain exhibits a definite peak at the 4 Year point,  $r = 0.64$ , which is similar to that found in the Berens River analysis ( $N = 21$ ,  $N/4 = 5.25$ ).

Hole River shows a moderate peak at the 3 Year point,  $r = 0.53$ , which supports the theory of predator exclusion as in Bloodvein. However, there is a large coefficient at the Same Year point, implying that is a very strong association between the populations of mink and ermine at the same time. This may be due to an increase in terrestrial prey which could support large populations of both predators, or there could be an increase in non-terrestrial prey which could support the mink population independent of the ermine ( $N = 25$ ,  $N/4 = 6.25$ ).

Lac Du Bonnet shows two moderate peaks, at the Same Year,  $r = 0.60$ , and the 2 Year,  $r = 0.56$ , points, and a smaller peak,  $r = 0.28$ , at the 4 Year point. This set of data implies a two year cycle of association between mink and ermine, with an increase in prey resources as the reason for the relatively large Same Year coefficient value ( $N = 29$ ,  $N/4 = 7.25$ ).

Little Grand Rapids exhibits a relatively large, stable level of association between mink and ermine. The coefficient values range from  $r = 0.77$  peaking slightly at the 3 Year point,  $r = 0.85$ , then decreasing over time. This level of association may be due to relatively large numbers of prey, allowing for large populations of both predators ( $N = 25$ ,  $N/4 = 6.25$ ).

Pauingassi shows a relatively large peak,  $r = 0.88$  at the 4 Year point, and a moderate peak,  $r = 0.69$ , at the 8 year point. These results support the theory of a predator exclusion model,

with the population of mink increasing four years after an increase in the ermine. However, there is a very large coefficient value,  $r = 0.82$ , at the Same Year point, which could be due to relatively high levels of prey, allowing for large populations of both predators ( $N = 12$ ,  $N/4 = 3$ ).

Whiteshell shows a large coefficient value,  $r = 0.61$ , at the Same Year point, which decreases over time. As with the results from Little Grand Rapids and Pauingassi, this level of association may be due to relatively large numbers of prey, allowing for large populations of both predators ( $N = 35$ ,  $N/4 = 8.75$ ).

### **Muskrat versus Ermine**

Figure 38 shows the correlation values for muskrat versus ermine for each RTL section, over the eight years.

Berens River shows a relatively large coefficient value,  $r = 0.69$ , at the Same Year point, then the coefficients decrease to moderate negative values over time. The large level of association at the Same Year point could be due to environmental factors favourable to both species, and not the result of a predator/prey relationship ( $N = 18$ ,  $N/4 = 4.5$ ).

Bloodvein shows a moderate peak,  $r = 0.61$ , at the 1 Year point, then the values decrease over time. This peak, like the large coefficient found in the Berens River analysis, could be due to favourable conditions that promote population growth in the muskrats, and possibly the prey species that the ermine feed upon ( $N = 27$ ,  $N/4 = 6.75$ ).

Duck Mountain shows an unique four year cycle, with peaks at the 3 Year point,  $r = 0.69$ , and at the 7 Year point,  $r = 0.88$ . This association may be due to the reasons mentioned above, or a quirk of the correlation analysis, produced when two unrelated species are compared ( $N = 21$ ,  $N/4 = 5.25$ ).

Hole River exhibits a moderate coefficient value,  $r = 0.51$ , at the Same Year point, which decreases over time, then peaks,  $r = 0.49$ , at the 6 Year point. This correlation may be due to the reasons mentioned above: environmental factors favourable to both species ( $N = 25$ ,  $N/4 = 6.25$ ).

Lac Du Bonnet does not exhibit any discernable trend or cycle. The correlation coefficients, both positive and negative, are low in value, ranging from  $r = 0.28$ , to  $-0.38$  ( $N = 29$ ,  $N/4 = 7.25$ ).

Little Grand Rapids shows an unique trend, with very large correlation coefficients, ranging from  $r = 0.78$ , peaking at  $r = 0.87$ , at the 2 Year point, decreasing gradually over time to  $r = 0.50$ , at the 5 Year point, then increasing to  $r = 0.62$  at the 7 Year point. This very strong association could only be possible due to environmental factors favourable to both species ( $N = 25$ ,  $N/4 = 6.25$ ).

Paungassi shows moderate decreasing coefficients, from  $r = 0.71$ , at the 1 Year point, which peak slightly,  $r = 0.70$ , at the 4 and 5 Year points, then decrease dramatically to low negative values. As with the other sections, this high level of association could only be due to environmental factors favourable to both species. The very large value calculated for the 8 Year point,  $r = 0.91$ , must be dismissed due to the very limited amount of fur-return data for

this section ( $N = 12$ ,  $N/4 = 3$ ).

Whiteshell shows moderate correlation coefficients for the Same and 1 Year points,  $r = 0.57$ , for both, which decrease to low positive values. The first two correlations are resultant of the previously mentioned favourable conditions, while the remaining coefficients are more indicative of a correlation between two unrelated species ( $N = 35$ ,  $N/4 = 8.75$ ).

### **Northwestern Ontario Results**

#### **Intraspecific Results**

The first series of correlations examined the association within each species for part of two Northwestern Ontario Trapline Regions. Table 10 shows the calculated coefficient values for mink, muskrat and ermine through ten years of lagged correlations. These coefficient values were then graphed (Figures 44 & 45), to show a visual representation of the data.

#### **Mink**

Kenora shows a relative high value,  $r = 0.63$ , decreasing gradually to  $r = -0.22$  at the 5 Year point, then increasing to  $r = 0.56$  at the 9 Year point. The value decreased to  $r = 0.29$  at the 10 Year point ( $N = 31$ ,  $N/4 = 7.75$ ).

Red Lake shows a very similar pattern to that seen in Kenora. Large value,  $r = 0.68$ , decreasing to  $r = -0.55$  at the 4 Year point, then increasing to  $r = 0.40$  at the 9 Year point. The value, decreased to  $r = -0.02$  at the 10 Year point ( $N = 18$ ,  $N/4 = 4.5$ ).

### **Muskrat**

Due to muskrat pelts not being "sealed" after the 1972/73 season, there are no fur-return records for muskrat from the Kenora region, and therefore no correlations possible ( $N = 31$ ,  $N/4 = 7.75$ ).

Red Lake exhibits an initially large value,  $r = 0.61$ , which decreases to relatively stable moderate values, ranging from  $r = 0.49$  to  $0.42$ , for the 2 to 5 Year points. The values decrease to  $r = 0.01$  at the 7 Year point, increase to  $r = 0.17$  at the 8 Year point, then decrease to  $r = -0.16$  at the 10 Year point ( $N = 18$ ,  $N/4 = 4.5$ ).

### **Ermine**

Kenora shows coefficient values decreasing from  $r = 0.41$ , to  $r = -0.48$  over the first nine years. The value, increased slightly to  $r = -0.31$  at the 10 Year point ( $N = 31$ ,  $N/4 = 7.75$ ).

Red Lake shows an initially moderate value,  $r = 0.43$ , which decreases gradually to  $r = -0.14$  at the 6 Year point, then increasing to  $r = 0.29$  at the 8 Year point. The values decrease to  $r = -0.31$  at the 10 Year point ( $N = 18$ ,  $N/4 = 4.5$ ).

### **Sectional Interspecific Analysis**

The fur-returns for the two Northwestern Ontario Trapline regions were divided into five sections, corresponding to the five Manitoba sections that border Ontario (Figure 39). This second series of correlations examined the association within each species for the five

sections. Table 12 shows the calculated coefficient values for mink, muskrat, and ermine, through ten years of lagged correlations. These coefficient values were then graphed (Figures 51 - 55), to show a visual representation of the data.

### **Mink**

**NWO Section A:** Shows coefficient values decreasing from  $r = 0.63$  to  $-0.63$  at the 4 Year point, then increasing to  $r = 0.62$  at the 8 Year point. The value decreases to  $r = -0.03$  at the 10 Year point.

**NWO section B:** The correlation coefficients decrease from  $r = 0.65$  to  $r = -0.50$  at the 4 Year point, then increase to a peak,  $r = 0.30$  at the 9 Year point.

**NWO section C:** Shows the coefficient values decreasing from  $r = 0.49$  to  $-0.43$  at the 4 Year point. The values increase slightly then decrease to  $r = -0.48$  at the 6 Year point, before increasing to  $r = 0.34$  at the 9 Year point.

**NWO section D:** The coefficients increase slightly from  $r = 0.23$  to  $0.57$  at the 2 Year point, then decrease to  $r = -0.29$  at the 5 Year point. The values increase to  $r = 0.27$  at the 9 Year point before decreasing to  $r = -0.20$ .

**NWO section E:** The coefficient values decrease from  $r = 0.57$  to  $-0.39$  at the 5 Year point. The values then increase to  $r = 0.45$  at the 10 Year point.

### **Muskrat**

**NWO section A:** Shows the coefficient values initially decreasing from  $r = 0.63$  to  $0.54$  then increasing to  $0.69$  at the 3 Year point. The values decrease to  $r = 0.20$  at the 7 Year point, then increase to a peak,  $r = 0.49$  at the 9 Years out.

**NWO section B:** The correlation coefficients decrease from  $r = 0.51$  to  $0.31$  at the 3 Year point, then increase to  $0.51$  at the 5 Year point. The values decline to  $r = -0.01$  at the 10 Year point.

**NWO section C:** The coefficient values increase from,  $r = 0.34$ , to  $0.55$  at the 4 Year point, then decrease to  $0.01$  at the 7 Year point. The coefficients increase to  $r = 0.31$  at the 8 Year point, then decrease to  $r = -0.42$  at the 9 Year point.

**NWO section D:** Shows the coefficient values decreasing from  $r = 0.36$  to  $-0.05$  at the 4 Year point, then increasing to  $r = 0.20$  at the 6 Year point. The values dip to  $r = -0.21$  at the 7 Year point, before increasing slightly to  $0.00$ , then decreasing to  $r = -0.36$  at the 9 Year point.

**NWO section E:** The correlation coefficients decrease steadily from  $r = 0.81$  to  $r = -0.14$  at the 9 Year point.

### **Ermine**

**NWO section A:** Shows the coefficient values dip from  $r = 0.14$  to  $-0.31$  at the 2 Year point, then increase to  $r = 0.37$  at the 4 Year point. The values decrease to a peak of  $r = -0.36$  at the 5 Year point before increasing to  $0.66$  at the 7 Year point. The values finally decrease to  $r$

= -0.40 at the 9 Year point.

**NWO section B:** The correlation coefficients decrease from  $r = 0.51$  to  $r = -0.22$  at the 5 Year point. The values increase to  $r = 0.26$  at the 8 Year point before decreasing to  $r = -0.18$  at the 10 Year point.

**NWO section C:** In this section the coefficients decrease from  $r = 0.26$  to  $0.03$  at the 3 Year point, peaking at  $r = 0.47$  at the 4 Year point, before decreasing to  $r = -0.13$  at the 7 Year point. The values increase to  $r = 0.26$  at the 9 Year point, then drop to  $r = -0.46$ .

**NWO section D:** The coefficient values decrease from  $r = 0.26$  to low negative values between  $r = -0.19$  and  $-0.04$ , before increasing to  $r = 0.51$  at the 7 Year point. The values decrease steadily to  $r = -0.33$  by the 10 Year point.

**NWO section E:** Shows the correlation coefficients fall rapidly from  $r = 0.76$  to  $r = -0.33$  at the 7 Year point, then decrease slightly to  $r = -0.38$  by the 10 Year point.

## DISCUSSION

Although some may argue that one should not use or cannot use fur harvest data to interpret wildlife populations, in most instances trapping records are the only data available for many species. In most instances, the population of an animal is calculated for a small sample or survey area, and the results extrapolated for other, larger regions. While this may be a valid method for ecologically similar areas, in actuality each region or area is composed of various elements all of which are variable and can influence a particular species. The fur harvest records provide researchers with actual field data for the individual regions in question. With the Registered Trapline (RTL) system utilized in the province of Manitoba, one can consult the RTL maps and determine the specific biological classification or composition of the individual trapline areas. This classification along with the detailed fur harvest records allows for in-depth, site-specific analysis. Thus, the rationalization for using the fur harvest records to examine for any population trends and possible correlations among the species.

In order to use the fur harvest records in the above-mentioned way, one must make the basic assumption that the fur harvest is indicative or reflective of the population as a whole. In other words, as the population increases, so does the number of animals caught. Butler (1953) concluded that there was evidence indicating that a greater proportion of the population is trapped during a period of abundance than during a time of population scarcity. Butler also concluded that the numbers of animals trapped increases or decreases directly but not proportionally in relation to the actual population size.

### **Variables Affecting Fur Harvest**

There are seven variables that may affect the fur harvest (Johnson 1989). The first such variable is the price per pelt, which fluctuates constantly and is subject to the "demand" for specific species. If there is a great demand for a particular fur, such as lynx (*Lynx lynx*) or coyote (*Canis latrans*), then the price offered by the fur buyers would increase. Conversely, if there is a surplus of pelts of a particular species, then the price offered could decrease.

The second variable, and possibly the most influential, is the weather, which has a twofold effect on the fur harvest. First, the effect of severe weather on the trappers themselves. Trappers are subject to the vagaries of the winter weather such as: the time when waterways become frozen over allowing travel into inaccessible areas, or the thickness of snow cover that could hinder the ease of movement within forested areas. Secondly, the weather affects the fur-bearers directly. The onset of the hiemal threshold, which is the critical thickness of snow needed for thermal insulation on the forest floor, affects the small mammal population (Pruitt 1957) and in turn the food base for the carnivorous fur-bearers.

There are two basic biological variables; Environmental disturbance, where certain activities such as mining, forestry, or recreational use will restrict trappers' use of the area and also destroy the habitat; and Fur-Bearer populations, which can naturally fluctuate or are subject to natural factors such as disease. Of these two variables, only the impact of human activity can be regulated. If human disturbance is unchecked, then very large regions of land can become compromised, with wildlife populations declining due to loss of habitats.

There are two socioeconomic variables; Community employment and Operating costs. Major

work projects, such as mining, forestry, civil engineering projects (constructing roads, bridges, dams etc.), can affect trapping by providing greater, more stable sources of income to the trapper. This factor, combined with the operating costs associated with trapping (fuel for transportation, basic equipment costs, etc.) creates an alternative more profitable than trapping.

Finally, there is the actual number of trappers operating per year. If there are more trappers, there are more traps being set, and therefore, the number of animals caught should increase proportionally. That is, if one trapper can set and manage 100 traps then theoretically, 10 trappers can set and manage 1000 traps. If the local animal population is of sufficient size and density, then an increase in the number of traps set throughout the area should be reflective in more animals being caught. However, if the local animal population is not sufficiently large enough to handle the increased trapping pressure, then an increase in the number of traps results in a decrease in the return of animals caught per trap.

Historically, mink have accounted for 13% of all pelts sold within Manitoba (Johnson 1989). This percentage has fluctuated over time, with the value increasing as high as 28% during the 1949/50 - 1958/59 seasons, and dropping as low as 5% during the 1983/84 season. From 1975 to 1987, mink accounted for 9% of the total fur harvest (Johnson 1989).

Muskrats have historically accounted for 30% of the total fur harvest, with the lowest percentage occurring in the 1985/86 season, 7%, and the largest in the 1939/40 - 1948/49 seasons, with 53% of the total. From 1975 to 1987, muskrats accounted for 19.23% of the total fur harvest (Johnson 1989).

Finally, ermine have historically represented a very small percentage of the total fur harvest. Percentages have been around 6 - 7% from 1919/20 - 1958/59. From 1975 to 1987, the ermine only constituted <1% of the total fur harvest (Johnson 1989).

The total numbers of pelts of mink, muskrat and ermine, sold within Manitoba, were graphed (Figures 2, 3 & 4 respectively).

There is an inherent problem with using the provincial fur harvest records. The problem is that the province-wide records include a wide range of biomes and habitats, from the northern coniferous forest or taiga, through the parklands/mixed wood forest, to the large prairie marshes in the south. It is this southern region that presents an unique problem in the data, for the prairie marshes are large and relatively stable, which provides ideal habitat for mink and muskrats. The northern forest, on the other hand, is composed of many small lakes and streams with large regions covered in bogs, which may not be as productive an area for mink and muskrats. Therefore, by including this southern region in the provincial records, the overall fur return numbers may be artificially skewed due to the possibly more productive prairie marshes. The result is the southern region fur-returns dominating the provincial harvest data. If it were possible, the best method for this type of analysis, the comparison between species in the forested region, would be the separation of forested and prairie regions of the province.

### **Provincial Intraspecific Analysis**

As previously mentioned, there appears to be a change in both the frequency and the total number of mink taken between the pre-1970 and post-1970 periods (Figure 2). This shift

may be due to socioeconomic pressures. Prior to 1970, the trapper hunted all fur-bearer species, regardless of fluctuating prices, in order to provide an income. After 1970, many trappers found work on various government-sponsored projects such as the construction of roads, bridges and hydroelectric dams, or elsewhere which provided an alternate and more reliable source of income. However, many trappers continued to set traps on a part-time or weekend basis, which provided additional income: Thus the emergence of the "Hobby Trapper". In this instance, it is probable that the trapper would target or select those animals with the greatest price per pelt offered. This could explain the change in frequency and total returns for many of the fur-bearer species.

Based on the total mink returns, which include the southern prairie pot-hole/marsh regions, there appears to be an 8-year cycle, (correlation value  $r = 0.45$ ) (Table 1, Figure 5). There also appears to be a change in the frequency and total number of pelts sold, from the 1919/20 - 1969/70 component as compared to the 1970/71 - 1993/94 component. In the pre-1970 component, the correlation value (Table 1) for an eight year cycle is  $r = 0.44$ , very close to the observed correlation value  $r = 0.45$  for the whole province 1919/20 - 1993/94. However, in the post-1970 component, the correlation value for an 8-year cycle is  $r = 0.25$ , almost half (55%) of the value for the whole time period. Therefore, there is less indication of any 8-year cycle after 1970. From the correlation values calculated for the post-1970 component, there does not appear to be any definitive cycle.

This result is comparable to the 8-year cycle found by Keith (1963) for the province of Manitoba. Keith's analysis was based on fur-return data obtained from Manitoba Department of Mines and Natural Resources records. Keith also examined the fur-return data for Saskatchewan, finding similar results as those in Manitoba, but the data were much more

haphazard. Other authors have found similar results to those calculated by Keith. Finerty (1980) cites two authors who worked with early, 1848 - 1909, Hudson's Bay Company fur sales statistics; J.W. Jones, stating the mink cycle as 10-years in length, and C.G. Hewitt, who calculated the average cycle length as 9.7-years. Butler (1953), using Hudson's Bay Company fur sales records and the Dominion Bureau of Statistics, also found an average cycle length of 10-years.

The general belief among many trappers is that muskrats play an important part in the mink diet and, in turn, the mink population. Therefore, the provincial fur-return totals of muskrats were recorded and correlations were calculated to determine if any trends occurred within this species.

Table 1 and Figure 6 list the correlation coefficients of muskrats as described in the mink synopsis. The muskrats do not show any historical trend or cyclicity, from 1919/20 - 1993/94. The same applies to the pre-1970 component (See Figure 3), where the largest coefficient is found in the 1 Year lagged correlation. This indicates that the population of one year has a great intensity of association to the population of the next year. However, in the post-1970 component, there appears to be a possible 4-year cycle,  $r = 0.71$ , which can be seen in Figure 6. This result is contrary to that found by Elton and Nicholson (1942) and Butler (1953) who determined that muskrat exhibit a strongly marked 10-year cycle. Elton and Nicholson's analysis was also based on Hudson's Bay Company (HBC) fur sales statistics, which were divided among the many HBC outposts across Canada. This division showed how fluctuations in the muskrat populations would originate in one region and spread outward into neighbouring areas. Butler (1962) also determined that muskrat exhibit an overall 6-year cycle in Saskatchewan. His analysis of Hudson's Bay Company fur sales

records showed a 6-year cycle in the southern prairie and middle aspen grove portions of the province, while the northern Canadian Shield portion expressed a 10-year cycle.

Included in this discussion of mink populations and cycles is the possible association/competition with the ermine. Since the mink feed on both aquatic and terrestrial prey, there is the potential for competition with the ermine for various small mammals. Therefore, the provincial totals for ermine have been recorded and the correlation coefficients calculated (Table 1).

The Manitoba fur records do not discriminate among the three species of weasel, the Least (*Mustela rixosa*), the Long-tailed (*Mustela frenata*), and the Short-tailed or Ermine (*Mustela erminea*). The provincial totals therefore include all three species under the heading or fur term "ermine." There is no discernable method to divide the record into the three separate species. Therefore, any population trends or cycles noted for the weasels must allow for the mixing of species in the fur record. There are several ecological implications due to this mixing. While the least weasel and ermine are found throughout Manitoba, the long-tailed weasel is only found in the drier, southwestern portion of the province. Therefore, the overall provincial results are not comparable to the results of the RTL sectional analysis, due to the absence of the long-tailed weasel in the eastern region. The three mustelid species may also exhibit different population trends. If the weasel populations cycle at different rates or are asynchronous, the overall combined results could be a negative cycle or a linear, non-cyclic trend.

From Table 1 and Figure 7 one can note the very large positive coefficient values, ranging from ( $r = 0.86$ , to  $0.67$ ), throughout the ten-year lagged correlations for the provincial totals

from 1919/20 to 1993/94. This implies a very strong association or affinity between the yearly populations (Figure 4). This could be due to a number of asynchronous cycles, from different regions of the province, which combine to produce the relatively large stable coefficients seen above. This strong 1 - 10 year association can be seen to a lesser degree in the pre-1970 synopsis, where coefficient values ranged from  $r = 0.69$  to  $0.19$ . However, the 1 - 10 year affinities decrease dramatically in the post-1970 component, where the coefficient values show a marked decline from  $r = 0.64$  to  $-0.21$  at the 9 Years Out point.

This lack of cyclicity in the ermine population is consistent with the findings of other authors. Bulmer (1974) found no evidence of any cyclicity in his analysis of ermine populations. Finerty (1980) cites the work of J.W. Jones, whose study did not show any regular periodicity for ermine. Finerty offers two possible explanations for this lack of periodicity: (1) the (Hudson's Bay Company fur sales) data may be dominated by ermine from forested areas where their major prey, voles or mice, are not cyclic; and (2) the ermine's ability to go under the snow for lemmings, or other prey, meaning that its food supply is not limited to those seasons when lemmings appear frequently.

### **Provincial Interspecific Analysis**

As mentioned previously, many trappers believe that muskrats play an important part in the mink diet and, in turn, in the mink population. Butler (1953) concludes that there is a close association both in cycle and habitat between muskrat and mink. Also mentioned above is the potential association/ competition with the ermine for the same prey resource. Therefore, to determine if there is any association between these three species, the provincial fur-return totals of mink, muskrats, and ermine were consulted and correlations were calculated to

determine if any trends occurred between these species (Table 2).

Table 2 and Figure 8 show the calculated correlation coefficients for mink versus muskrat. The overall result, for the 1919/20 - 1993/94 fur-returns, is a distinct cycle, with the peak ( $r = 0.60$ ) occurring at the 2 Years Out point. This implies that there is a high level of association between the muskrat population and the mink population two years later. The pre-1970 component shows a similar trend with the peak ( $r = 0.53$ ) occurring at the 3 years Out point. However, the post-1970 component shows a dramatically different trend with three peaks occurring at the 1, 5, & 9 Years Out points ( $r = 0.60, 0.51, \& 0.57$  respectively). The post-1970 component implies a moderate association occurring on a shorter time scale, with the mink population peaking one, five and nine years out of sequence, as compared with the two and three-year lag for the whole and pre-1970 components. It is possible that this post-1970 analysis is the result of the periodicity seen in the post-1970 component of the intraspecific muskrat analysis (Figure 6).

Both Butler (1953) and Bulmer (1974) examined the relationship between the peak collections of mink and muskrat. Butler found that the peak of the mink population usually occurs one or two years later than the muskrat peak. Bulmer calculated correlation coefficients between mink and muskrat populations, and concluded that an increase in muskrats is followed by an increase in mink a year later. Bulmer further stated that, based on his correlation analysis, there was strong evidence that the prey-predator relationship between muskrat and mink directly affects the population dynamics of both of them.

Bulmer (1975) further clarified this situation by classifying the relationship between prey and predator as the "prey driving the predator population" or the "predator driving the prey

population". In the first case, the effect on the predator population, represents density-dependent factors acting on the predators, such as limited resources and competition for space. These factors are contrary to density-independent effects such as mortality and birth rates, which remain constant even though the actual number of deaths and births increase with density. There is also the effect of limited prey items, due to the "number of prey per predator" rather than to the "absolute density of prey". That is, with more predators and a fixed number of prey, there will be less prey per carnivore. When the "predator drives the prey population", it represents density-dependent factors affecting the prey animals. This results in a change in the predation rate caused by the fluctuation in the density of prey. The greater the density of prey animals, the lower the overall quality of health due to limited resources, epizootics and dispersal pressure, and therefore the greater predation rate.

Bulmer stated that this interaction is represented by a phase lag in the prey/predator population cycles, with the predator cycle always lagging behind the prey cycle. Bulmer calculated the phase lag as  $1/4$ , of a period when there is no density dependence. As density dependence becomes more pronounced, the phase lag increases for predator driving prey. Conversely, as the density dependence becomes less pronounced, the phase lag decreases. From his 1974 publication, Bulmer calculated that the muskrat cycle should be ahead of the mink by either 2.4 or 1.9 years in the absence of density dependence.

Based on the calculated 8-year cycle in mink, the phase lag would be  $8/4 = 2$  years behind the muskrat. This corresponds to the high level of association found at the 2 Year point in the overall mink versus muskrat analysis. Therefore, the provincial mink population cycles two years after the peak in the muskrat population, which indicates a lack of density-dependent factors affecting the mink. However, the analysis of the post-1970 components

shows a different trend. In this portion of the analysis, the mink population peaks 1-, 5- and 9-years after the muskrat population. This could be due to the calculated 4-year cycle found in the post-1970 provincial muskrat analysis (see Figure 8). Therefore, the post-1970 component of the provincial mink population cycles one year after the peak in the post-1970 muskrat population, indicating a decrease in the effect of density-dependent factors acting on the mink.

Table 2 and Figure 9 show the correlation coefficients calculated for a comparison between mink and ermine. The overall provincial totals 1919/20 - 1993/94 analysis show a low to moderate positive correlation, with the values increasing gradually from  $r = 0.21$  at the 1 Year Out point, to  $r = 0.46$  at the 8 Year point. This component is more linear than cyclic in shape, indicating a low to moderate level of positive association between the two species. Although the pre-1970 component exhibits the same trend, the coefficient values increase from  $r = -0.25$  at the 1 Year Out point, to  $r = 0.19$  at the 8 Years Out point. This initial negative correlation implies that an increase in the mink population, causes a decrease in the ermine population. The post-1970 component shows an entirely different trend, with the coefficient values decreasing dramatically from  $r = 0.80$  to  $-0.05$  at the 6 Year point. This segment implies an extremely high level of positive association between the mink and ermine within the same year and then decreases after that.

I could find no reference in the literature of any authors having ever calculated correlation coefficients between competing predators. If the ermine and mink are competing for the same food resource, one would expect to find a moderate to high level of negative correlation. That is, as the population of ermine, which have evolved to be better adapted to hunt small mammals in tunnels and burrows, increases one would expect to find the

population of mink, a generalized predator, to decrease. However, only a small portion of the pre-1970 component shows this expected negative correlation. For most of the mink versus ermine analysis, the correlation coefficients are positive in value, which indicates that an increase in mink is matched by an increase in ermine. However, the coefficients are relatively low in value, implying a low level of association between these two species. A possible explanation for this gradually increasing trend, seen for the overall 1919/20 - 1993/94 component, is the relatively stable high level of association found in the ermine intraspecific analysis (Figure 6). As previously mentioned, this stable trend may be due to the inclusion of the three weasel species (*Mustela erminea*, *Mustela frenata*, and *Mustela rixosa*) under the fur designation "ermine."

An interspecific analysis was also done between muskrat and ermine to determine if there was any association between two non-related species. Table 2 and Figure 10 show the correlation coefficients calculated for this analysis. Surprisingly, the overall 1919/20 - 1993/94 component shows a relatively high and stable level of correlation, with the coefficients ranging from  $r = 0.51$  to  $0.67$ . This trend is also seen in the pre-1970 segment, with lower values ranging from  $r = 0.23$  to  $0.52$ . This implies that there is a high level of association between muskrats and ermine. The post-1970 component exhibits a different trend from that seen in the pre-1970 and overall segments. In the post-1970 analysis, the coefficients decrease steadily from  $r = 0.57$  to  $0.00$  at the 5 Year point. There is a slight peak at the 7 Year point which then decreases to low negative values.

Several authors (see Svendsen 1982) have examined the food habits of weasels, which generally consist of small mammals such as voles, mice and shrews. Only one author (W.J. Hamilton, Jr. in Svendsen 1982) found muskrat to be a part of the weasel's diet (comprising

1%). Since muskrat are not considered to be a major food item of the weasel, the above analysis showing the high level of association may be due to environmental factors that positively affect both the muskrats and the prey of the weasels. Environmental elements that promote muskrat populations, such as favourable climatic conditions (mild winters, warm springs, moderate precipitation, etc.) and abundant resources (space, food, shelter, nesting materials, etc.), are also elements that promote small mammal populations. Therefore, this high level of association between two non-related species may be due to external factors and not the presumption of a predator-prey interaction. This analysis is a good example of a nonsense correlation, in which two unrelated variables are compared and a possible association is discovered.

### **Price Per Pelt Analysis**

The above analysis is based entirely on fur-return data and with it the assumption that the "cycle" in the number of pelts sold is indicative of the animal populations in the wild. That is, when there are more fur-bearers in the wild, more will be caught and therefore, more pelts will be sold. One must keep in mind the above mentioned variables that affect fur harvest. The first, and possibly the most unstable, is the price fur buyers are willing to pay for a pelt (see Figures 11, 12 & 13). When demand is high, buyers offer higher prices for the pelts brought to the Fur Auctions. Thus the question is; Does the price of the pelt directly affect the number of animals caught? Table 3 shows the correlation values calculated between the number of pelts sold and the price paid per pelt for each year.

For the whole province, from 1919/20 - 1993/94, the correlation coefficient between mink pelts sold and price, within the same year, is  $r = -0.12$ . A negative correlation indicates that

an increase in value of one of the two variables, in this case the number of pelts sold, is accompanied by a decrease in value of the second variable, the price per pelt. Although the correlation value for the whole province, between 1919/20 - 1993/94, is a negative number, the absolute value (0.12) is very small in relation to 1.00. The correlation coefficient is not a measure of quantitative change of one variable with respect to the other, but is a measure of the "intensity of association" between the variables (Zar 1974). Therefore, with respect to the correlation between the number of pelts sold and the price per pelt within the same year, the absolute value of 0.12 indicates that there is a low intensity of association, and thus the price per pelt does not appear to affect the number of animals caught within the same year.

Figure 14, shows the calculated coefficients for an 8 year series of lagged correlations for Mink versus Price. From these results, one can see that the correlation values for the whole province, 1919/20 - 1993/94, show a relatively flattened negative cycle with the coefficients ranging from  $r = -0.12$ , peaking at  $-0.20$ , then decreasing to near zero values. However, there is a dramatic change in the distribution of the correlation values for the pre-1970 component (1919/20 - 1969/70) and the post-1970 component (1970/71 - 1993/94).

For the pre-1970 component, the correlation values are positive, implying that an increase in one variable is accompanied by an increase in the second variable (Zar 1974). Therefore, as the number of pelts sold increases, so does the price per pelt, or the opposite, as the price increases so does the number of pelts sold. The correlation coefficients are also increasing in absolute value, from  $r = 0.11$  for the Same Year up to  $r = 0.55$  at the 5 year mark. The values decrease slightly over the next three years to  $r = 0.33$ , at the 8 Year point. This peak at the 5 Year point shows that the intensity of association is initially increasing, then

decreasing over time (See Figure 14). This increase may represent the trapper basing his/her decision to trap a particular species on very long term historical reference.

The post-1970 component shows the opposite trend. The correlation coefficient for the number of pelts sold and the price per pelt within the same year is positive ( $r = 0.21$ ). Yet as one progresses through the 8 year series of lagged correlations, the values become negative and increase in intensity. Therefore, there is a greater level of intensity of association ( $r = 0.63$ ) occurring at the 4 and 5 Year lagged correlation, where the number of pelts sold and the price per pelt are out of sequence by four to five years. This correlation is also negative, implying that as the number of pelts increases, the price per pelt decreases. This decrease may be due to the increase in hobby trapping, people trapping on weekends or as a supplement to an income, or a decrease in reliance of the trappers using or referring to long term historical trends.

As with the provincial mink totals, the muskrat totals were correlated with the price per pelt, and the coefficient values listed in Table 3. The correlation values for the province, for 1919/20 - 1993/94, show a negative, but very stable trend (Figure 15). This negative correlation implies that the number of fur-bearers trapped is not dependent on the price per pelt offered. This stable trend is due to the combined average of the pre-1970 and post-1970 components. The coefficient values for the pre-1970 component show an increase in the relative/absolute value from  $r = 0.19$  to  $0.54$ , at the 4 Year point, then decreasing to  $r = 0.34$ , at the 8 Year point. This positive correlation implies that as the price per pelt increases there is an associated increase in the number of pelts sold, with an overall increase in association over time. The post-1970 component shows a decrease in relative value,  $r = 0.41$  to  $-0.29$ , at the 6 Year point, then increasing to  $r = -0.03$  and  $-0.04$ , at the 7 and 8 Year points of the

correlation coefficients. As with the pre-1970 component there is a positive correlation between the price per pelt and the number of pelts sold for the first three years. However, the post-1970 trend shows a decrease in overall association until at the 4 year lagged correlation point, the coefficient value becomes negative implying that as the number of pelts increases the price per pelt decreases.

Table 3 and Figure 16 show the correlation coefficients calculated between the number of pelts sold and the price per pelt offered for ermine. For the province, from 1919/20 - 1993/94, the coefficients are very consistent throughout the time lagged sequence, with values ranging between  $r = -0.32$  and  $-0.44$ . This stable negative association implies that the number of animals taken in a given year is not related to the price per pelt offered. The stability of the 1919/20 - 1993/94 segment is due to the combination of the pre-1970 and post-1970 components, which produce the total average. The pre-1970 coefficient values range from  $r = 0.02$  to  $-0.41$ , whereas the post-1970 values range from  $r = -0.38$ , up to  $-0.29$ , at the 1 Year point, decreasing to  $r = -0.85$ , at the 5 Year point, then increasing to  $r = -0.59$ , by the 8 Year point. The product of these two components combines to give the stable average as seen in the 1919/20 - 1993/94 component. It is interesting to note that in the post-1970 component the negative correlation values increase in relative or absolute amount. That is, as the number of pelts increases, the price per pelt decreases, with the 5 Year lagged correlation value of  $-0.85$ , indicating an extreme negative association or affinity.

If trappers are targeting specific fur-bearer species based on the price per pelt, then one would expect to find large positive correlations between the number of pelts sold and the price per pelt. One would expect a trapper to target a species based on the previous years price, since the trapper would not know the price offered for the current year until the fur

auctions which occur in the later part of the trapping season. Also, the trapper would base his/her decision not just on the previous year but on the past number of years, thus the reason for the 8 year lagged correlation analysis.

### **Manitoba Sectional Fur Return Analysis**

Most of the research on mink has been centred in the large prairie pot-hole/marsh regions with very few studies being conducted in the expansive northern boreal forest region of North America. This is an interesting point when one examines the Manitoba provincial fur-returns, which list some of the most productive mink producing areas as Brochet, Pukatawagan and Cross Lake, in the northern taiga region of the province (Johnson 1989). Annual fur-returns were consulted for seven Registered Trapline (RTL) sections in the southeastern portion of the province of Manitoba, and one RTL section from the western portion to act as a comparison.

These eastern RTL sections represent the southern-most extent of the northern boreal forest, or taiga, in Manitoba. This region has had some development, with mineral extraction, forestry and limited hydroelectric production being the major industries present. There are numerous towns and hamlets scattered throughout the southern portion of the study area, with fewer settlements in the northern portion. For the most part, the region remains relatively undeveloped, with numerous lakes, rivers, and large tracts of undisturbed forest. This lack of development is primarily due to the general inaccessibility of the region. The northern-most permanent roadway is in the Hole River section. There are a few seasonal roadways into the other sections, but these are primarily winter roads and are only usable for a few months a year. The traplines located within the study area are relatively stable with the

majority of lines remaining within families and/or tribes and bands for several generations. This region has historically been a trapping area, with the other industries, such as forestry, mining, and hydroelectric production, slowly gaining significance.

As detailed in the introduction, these seven RTL sections exhibit different boreal forest biomes, with the Northern Coniferous zone being the most widespread. One of the most significant differences between the various zones is the variation in gross topography, which is due to glaciation. The Northern Coniferous zone is covered by irregular, rocky ridges, which separate long narrow lakes and bogs. These ridges were left behind when the Wisconsinan glacier retreated. The next most widespread forest biome is the Nelson River zone. This zone is relatively flat, as compared to the Northern Coniferous zone, due to being covered by glacial Lake Agassiz, which deposited clays and gravel into the above-noted irregularities. This zone has extensive bogs but not as many narrow lakes. Along the northwestern shore and down the eastern side of Lake Winnipeg is the Manitoba Lowlands zone. Much like the Nelson River zone, this area is relatively flat and covered by large bogs and meadows. The Lower English River zone is similar to the Manitoba Lowlands, in that it is relatively flat but does not have the extensive bogs. Finally, there is the Quetico zone, which exhibits strongly glaciated terrain with numerous rock-rimmed lakes.

It is this glaciated terrain which may have an effect on the mink populations. Allen (1986) postulated a habitat suitability index model for mink. One of the key components of the model is the availability of suitable wetland habitat. Allen compiled the findings of various authors, and determined that irregular and diverse shorelines of wetland habitats with dense vegetation are more suitable for mink than wetlands with straight, open, exposed shorelines. Therefore, the RTL sections with the irregular topography and numerous narrow lakes and

bogs would be more suitable for mink than areas which do not exhibit these traits.

The western RTL section is within the Duck Mountain Provincial Forest. This area has had a limited forestry practice in the past. However, presently there are large scale cutting operations being conducted by various logging companies within the boundary of the provincial forest and the Duck Mountain Provincial Park. In addition to the devastating forestry operations, there is a growing tourist industry which also has a dramatic impact on the land and animals therein. More tourists mean more roads, which results in more forest being cut to provide right-of-ways. Further, more tourists mean more camping facilities are needed, which also impacts the forest. The overall result is a splintered mosaic of forest and open areas, which has dire consequences for the wildlife within the region, since loss of habitat is one of the leading causes of population decline.

Unlike the eastern RTL sections, this western region is covered by the Mixedwood forest zone, dominated by a mixture of deciduous and coniferous plant species. Glaciation of this area has resulted in a well-drained rolling terrain with few bogs. Therefore, unlike the eastern RTL sections, this western section, which has fewer bogs and marshes, should be less suitable for mink. This western RTL section was also selected to act as a control in the event that eastern mink populations were being affected by epizootics, or other detrimental factors, such as mercury, PCBs, or pesticides. However, as the scope of this study evolved, I was not able to examine for these agents.

The fur-return records for the various sections were consulted and the number of animals caught per year were plotted (Figures 17 - 24). Due to the large scale of the returns for muskrat, any visible trend for mink and ermine was obscured. To compensate for this

extreme difference in numbers, all of the fur-return data were transcribed to the logarithm base 10 (Log10). The results of this transformation were plotted (Figures 25 - 31), but no trends were apparent. Therefore, the original data were analyzed using the autocorrelation formula to determine if there were any trends within and between the three species.

### **Sectional Intraspecific Analysis**

Like the provincial fur-returns, the sectional harvest data for the three species were analyzed using the autocorrelation formula (Table 6). The intraspecific results of each section were graphed together to show any possible conjunction between the various areas.

Figure 33 shows the correlation coefficients calculated for mink from each section. It is interesting to note that almost every section displayed a different series of correlation coefficients, with no sections showing agreement. Some of the sections hint at a possible 8-year or longer cycle: Berens River, Bloodvein, Little Grand Rapids, and Whiteshell. Other sections show a possible shorter 4-year cycle: Hole River and Pauingassi, while Duck Mountain and Lac Du Bonnet sections do not show any discernable trend.

The provincial results show a clear 8-year cycle, which may be due to the accumulation of varied sectional data. That is, each section may show a different trend, but the accumulative result being a blending of the various cycles. The overall result is the provincial 8-year cycle. One possible explanation for the differences among the sections is the limited range of fur-returns used. For most sections, I was able to examine the fur harvest records back to approximately 1961/62. The Manitoba Department of Natural Resources provided almost thirty years of fur-return data, with only a few years missing. The missing years are possibly

due to records being removed in order to compile annual reports. If the mink in Manitoba do express an 8-year cycle, then thirty years of fur returns should allow for 3.75 cycles. However, one must keep in mind Chatfield's (1989) discussion on the length of time required by lagged autocorrelation analysis and the minimum number of "year - year" pairings required. Chatfield stipulated that an autocorrelation analysis should not proceed beyond the total number of record years,  $N$ , divided by four,  $N/4$ . In this instance, the majority of the sectional analyses should not proceed past  $30/4 = 7.5$  years out of sequence. Since the provincial mink cycle is 8-years in length, the correlation coefficients calculated for the sectional results will fall outside this statistically allowable parameter. Thus the difference in mink population trends among the RTL sections.

There is the possibility that the topography may have an effect on the mink population. Berens River, Bloodvein and Little Grand Rapids RTL sections hint at a possible 8-year cycle. These three sections have areas of the Nelson River forest type, which is characterized by relatively flat topography covered by bogs and black spruce intermixed with stands of birch, aspen, poplar and fir (Rowe 1972). However, Hole River RTL section which also has areas of Nelson River forest type, exhibits a possible 4 -year cycle, not the possible 8-year cycle seen in the other three sections. The Whiteshell RTL section also exhibits a possible 8-year cycle. This section is removed from the topography of the Berens River, Bloodvein and Little Grand Rapids sections. The Whiteshell section consists of the Lower English River and Quetico forest types, which are primarily deciduous species such as aspen, birch, and poplar, intermixed with white spruce and some pine (Rowe 1972). The Lac Du Bonnet section, which is located between the Hole River and Whiteshell sections, does not exhibit any discernable trend, nor does the Duck Mountain RTL section. Therefore, there is no detectable topographical explanation for the difference among the RTL sections.

Figure 34 shows the population trends for muskrat from the different sections. As with the mink analysis, almost all of the sections express different trends. A number of the sections suggest a possible 9 - 10 year cycle: Bloodvein, Lac Du Bonnet, Little Grand Rapids and Whiteshell. Berens River exhibits a possible 4 year cycle, while Duck Mountain and Pauingassi show a declining linear trend. Hole River does not show any discernable trend.

Like the mink analysis above, the muskrat analysis does not show any discernable trend among the different sections. This agrees with the provincial results, which showed no observable population cycle or periodicity. The reason for this lack of periodicity may be due to the limited length of fur-return records consulted, as mentioned above. A possible cycle or trend could become evident if a longer period of harvest data had been consulted.

With the exception of Hole River, the southernmost RTL sections, Bloodvein, Lac Du Bonnet, Little Grand Rapids, and Whiteshell, exhibit a possible 9 to 10-year muskrat cycle. No specific topographical feature can be found connecting these sections with regards to the possible muskrat cycle. Berens River exhibits a 4-year cycle, which may be due to the number of narrow lakes and bogs found between the glacial ridges in the Northern Coniferous forest type. However, this forest type is found exclusively in Pauingassi, which shows a declining trend in the muskrat population over time. Duck Mountain also expresses the same general declining results as those found in Pauingassi. Therefore, as with the mink analysis, there is no detectable topographical explanation for the difference among the RTL sections.

Figure 35 shows the calculated coefficients for ermine from each section. With only a few exceptions, no discernable trends were observed for all sections. The Bloodvein section

shows two minor peaks at the 2 and 7 year points, Duck Mountain hints at a possible 5 year cycle, while Pauingassi shows a possible 4 year cycle.

As mentioned above, this lack of periodicity in the sectional results may be due to the limited length of fur-return records consulted. A possible cycle or trend could become evident if a longer period of harvest data had been consulted. However, this lack of periodicity was also found in the provincial ermine fur harvest results, which covered a period from 1919/20 to 1993/94. Therefore, the lack of any discernable trend for the ermine may be due to other unknown factors.

There is no detectable topographical explanation for the lack of periodicity in the ermine population among the RTL sections. The three sections that show possible trends/cycles, Bloodvein, Duck Mountain and Pauingassi, are separated by distance and consist of different forest cover types. Ultimately, this lack of cyclicity may be due to the grouping together of the different weasel species. If the different species could be separated within the fur harvest records, then a possible cycle may emerge.

In addition to the above noted reasons, the discrepancy between the sections may be due to various factors such as: the amount of precipitation which affects the water table and in turn the size of wetlands; the availability and quality of food resources; and external factors such as pollution and human activity. Conversely, there could be actual differences in the periodicity of the mink, muskrat and ermine populations between the sections. Unfortunately, this possibility would require more research and examination of older annual fur harvest records.

### **Sectional Interspecific Analysis**

As with the analysis of the provincial fur harvest data, the fur-returns for mink, muskrat, and ermine were examined to determine if there was any association between the three species (Table 7).

Figure 35 shows the level of association between mink and muskrat populations for each RTL section. Little Grand Rapids and Whiteshell sections show higher levels of association occurring at the 2 year point, similar to that found in the provincial interspecific analysis. Berens River, Bloodvein and Lac Du Bonnet sections show a higher level of association at the 4 year point. Duck Mountain and Pauingassi show declining linear trends, while Hole River exhibits peaks at the 2 and 5 year points.

Both Berens River and Bloodvein sections exhibit a 4-year cycle of association between mink and muskrat. This could be possibly due to both sections sharing similar topographical features. However, this does not explain the 2-year cycle found in Little Grand Rapids and the declining trend found in the Pauingassi section, both of which share similar forest types with Berens River and Bloodvein. The difference in the Pauingassi results may be due to the limited number of annual fur-returns available for this section. The Pauingassi RTL section was created just prior to the 1982/83 season, with traplines from Berens River and Little Grand Rapids sections. The result is a very limited number of returns on which to base the above analysis. Had there been more data available, there is the possibility that Pauingassi would also exhibit the 4-year phase lag in association. There is also a notable difference in the cycle of association among Hole River, Lac Du Bonnet, and Whiteshell sections, which share some common topographical features. The Whiteshell section exhibits a peak at the 2

Year point, consistent with the overall provincial results, while Lac Du Bonnet, which is the section immediately north of Whiteshell, shows a dramatic peak at the 4 Year point. Hole River, which is further north, shows two peaks, possibly indicating two separate distinct populations of muskrat interacting with one population of mink, or *vice versa*.

Bulmer (1974) offers several factors that would affect the phase lag between the prey cycle and the predator cycle: (1) The age at first breeding. Predators with a short reproductive cycle are able to exploit any increase in the prey population better. Mink have a very short reproduction cycle, with females being able to produce their first litter at one year of age (Eagle & Whitman 1987). Other predators that have longer reproductive cycles, such as fishers that have delayed implantation (Douglas & Strickland 1987), are not able to adapt quickly to changes in prey populations; (2) The changing age structure of the population. Some predators may have very low survivability from one age class to the next, with the result being a relatively young population. On the other hand, predators could have very high survivability, resulting in a mixed age population. Survivability and age class have an effect on reproduction and hunting technique/success; (3) Switching to alternative food. If the preferred prey population decreases to a critical point, predators may switch to other, more abundant or easier prey items. This shift in predation pressure will allow the typical prey species to regain their numbers. A switch to alternate food will only occur if there is a second prey item available; (4) Density-dependent factors affecting both the predator and prey populations. If the population increases to a critical point, then several density-dependent factors could arise, resulting in a decline in both quality and quantity of prey and predators. Such elements as spatial distribution, territoriality, intraspecific predator interference and disease, are all examples of density-dependent factors (Begon & Mortimer 1986).

As with the provincial analysis, the fur-return data of mink were compared to the fur-return data of ermine for each section to determine if there is any association between these two species. Berens River shows comparable results to that found in Pauingassi. Both sections share similar forest types and exhibit a 4-year cycle, implying that the population of mink peak 4 years after the ermine. Bloodvein and Little Grand Rapids also share similar topographical features and results, with both sections expressing a 3-year cycle. Hole River shows high levels of association between mink and ermine in the same year and three years later. Lac Du Bonnet also shows a high level of association in the same year, but also at the 2 Year point. Finally, Whiteshell shows a declining trend from a relatively high level of association in the same year. This shift to high levels of association in the Same Year for Hole River, Lac Du Bonnet and Whiteshell may be due to differences in the overall topography of these areas as compared to the other eastern sections. The Duck Mountain sectional results show a high level of association at the 4-year point, similar to that found in Berens River and Pauingassi sections.

If the ermine and mink were competing for the same food resource, one would expect to find a moderate to high level of negative correlation, or a possible positive correlation occurring three to five years out of sequence (based on the mink exhibiting an 8-year cycle). Therefore, the mink and ermine populations in Berens River, Bloodvein, Little Grand Rapids and Pauingassi are responding in a predator-exclusion manner. There is evidence that mink and ermine in the remaining eastern sections are exhibiting high levels of association at the same time. This may be due to an increase in terrestrial prey which could support large populations of both mink and ermine, or an increase in non-terrestrial prey which could support the mink population independent of the ermine.

To complete the interspecific analysis, the fur-returns of muskrat were compared to the fur-returns of ermine for each section. As mentioned in the provincial analysis, this comparison of two non-related species is an example of a nonsense correlation. The results of this analysis (Figure 38) show great variation in trends among the different sections. Berens River and Lac Du Bonnet hint at a possible 9 to 10-year cycle, while Bloodvein shows a peak in association at the 1 Year point. Hole River exhibits moderate levels of association at the Same Year and 6 Year points. Little Grand Rapids peaks at the 2 Year point, as Pauingassi exhibits three possible peaks at the 1, 5 and 8 Year points. Whiteshell shows relatively high levels of association at the Same and 1 Year points then decreases to low coefficient values, whereas Duck Mountain shows two distinct peaks at the 3 and 7 Year points.

Any association between these two species may be due to environmental factors favourable to both the muskrat and the prey of the weasels, and not the result of predator/prey interaction. The 9 to 10-year cycle hinted at in Berens River and Lac Du Bonnet could be due to the limited amount of fur-harvest data consulted. Chatfield's (1989) formula results in a correlation analysis limited to 4.5 years for Berens River due to the limited number of fur records available,  $N = 18$ . The highest level of association between muskrat and ermine occurred in the Little Grand Rapids section, which shows relatively high coefficient values. There are no similar trends found in the sections surrounding this area. Therefore this high level of association in Little Grand Rapids may not be due to topographical features, since other sections share common forest types. It is interesting to note the distinct peaks at the 3 and 7 Year points in the Duck Mountain section. This section also shows a very low level of association at the Same Year point indicating that the two species are not related.

### **Northwestern Ontario Fur Return Analysis**

In order to determine if there was any difference in population cycles between Manitoba RTL sections bordering Lake Winnipeg and those away from the lake, fur-return records were consulted from two northwestern Ontario trapping regions, Kenora and Red Lake, which were divided into five corresponding areas. The Ontario fur-returns were analyzed in the same fashion as the Manitoba provincial and sectional returns. Unfortunately, Ontario Ministry of Natural Resource officers do not seal or stamp muskrat pelts and therefore some Registered Trapline regions do not have annual muskrat harvest data. This is the case for the fur harvest data from the Kenora RTL region. Though the muskrat pelts were not sealed, other regions did continue to keep a record of the number of animals taken per year. Since the muskrat fur-return data are limited, only the intraspecific correlation analyses were conducted.

### **Northwestern Ontario Regional Analysis**

The Kenora and Red Lake regional fur-returns were analyzed using the correlation formula outlined above. Figure 45 shows the correlation coefficients calculated for mink, muskrat and ermine in the Red Lake region. The mink exhibit a distinct 9-year cycle. This is one year greater than the 8-year cycle calculated above for Manitoba, but is also closer to the 10-year cycles determined by Butler (1953) and other authors (see Finerty 1980).

The coefficients calculated for the muskrat harvest data show a general decline over time, with only a slight peak at the 5 Year point. This is consistent with the declining trend noted above for the Manitoba provincial muskrat analysis. As with the calculated Manitoba trend,

the Red Lake data contradict the 10-year cycles found by Elton and Nicholson (1942) and Butler (1953).

The ermine caught within Red Lake RTL region show a possible cycle with peaks occurring at the 3 and 8 Year points. However, the peak at the 3 Year point does not fit with a clean 4-year cycle. This may be a result of the generally low numbers of ermine caught per year, which may be a factor of price or the amount of effort required to prepare the pelt. If more ermine were caught, the population trend may become clearer. This possible cycle is contrary to the stable high level of association calculated for the Manitoba ermine above, as well as to the results found by other authors (Bulmer 1974, see Finerty 1980).

Figure 44 shows the correlation coefficients calculated for mink and ermine within the Kenora RTL region. As mentioned above, the Kenora region did not keep records of the number of muskrats caught per year, and therefore are not included in this intraspecific analysis. The mink from this region show a 7 to 9-year cycle. The discrepancy in cycle length is due to a slight decrease in the coefficient value between the 7 and 9 Year points. This cycle corresponds to the calculated 8-year mink cycle for Manitoba.

The ermine caught within the Kenora RTL region do not show any discernable trend in association. This is contrary to the stable high level of association calculated for the Manitoba ermine above. However, this lack of periodicity is consistent with the results found by other authors (Bulmer 1974, see Finerty 1980).

### **Northwestern Ontario Sectional Analysis**

To determine if Lake Winnipeg and its surrounding lowland topography have any affect on the annual fur-return data, Ontario fur harvest results were divided into five sections and compared to the five Manitoba sections that border with Ontario, namely Pauingassi, Little Grand Rapids, Hole River, Lac Du Bonnet and Whiteshell (see Figure 39). The Registered Traplines within the Kenora and Red Lake regions were divided among the five Ontario areas mentioned above (Figures 46 - 50). The harvest data were analyzed similar to the data for the Manitoba sections, and the results graphed (Figures 51 - 55).

Northwestern Ontario (NWO) section A, which corresponds to Pauingassi, shows the mink as exhibiting an 8-year cycle, which is contrary to the 4-year cycle seen in Pauingassi. The coefficients calculated for muskrat express a slightly declining trend, similar to that found in Pauingassi, but the values are larger on the Ontario side. The ermine show a possible 3.5-year cycle with peaks occurring between the 3 and 4 Year points, the 7 Year point, and increasing at the 10 Year point. This trend is close to the 4-year cycle shown in Pauingassi. This high level of correspondence between the two RTL sections implies a common factor or set of factors. One such factor could be topography, since both sections are located within the Northern Coniferous forest zone.

Northwestern Ontario section B corresponds to Little Grand Rapids RTL section. Though the later coefficients are low in value, there is indication of a 9-year cycle for mink. The coefficients calculated for the Little Grand Rapids data indicate a possible 8-year or longer cycle, though the cycle is relatively flat in appearance. The muskrats caught within this section show an overall declining trend with a slight peak occurring at the 5 Year point. In

contrast, the Little Grand Rapids results show a possible 8-year or longer cycle. The Ontario ermine results show the possibility of an 8-year cycle with a small positive peak occurring at the 8 Year point. In contrast, the Little Grand Rapids analysis shows a high level of association at the 3 Year point, then a general decline over time. These two sections do not show the same degree of correspondence as do Pauingassi and NWO section A. Though most of Little Grand Rapids and the whole of NWO section B share the same forest type, Northern Coniferous, there is a portion of Little Grand Rapids which is covered by the Nelson River type biome. This could explain the differences in population analyses between these two sections.

Northwestern Ontario section C corresponds to Hole River RTL section. Like the above NWO area, this section shows a 9-year cycle in the mink population, which is contrary to the 4-year cycle found in Hole River. As well, the muskrat population in this NWO section exhibits a notable 4-year cycle, whereas Hole River expresses a possible 6 year cycle. The ermine caught within this section also exhibit a possible 4-year cycle, with peaks occurring at the 4 and between the 8 and 9 Year points. In comparison, the ermine population in Hole River exhibits a 5-year cycle. This discrepancy between these two sections may be due to the differences in forest cover. Hole River is a mixture of four different forest zones: Northern Coniferous, Nelson River, Manitoba Lowlands and Lower English River, while NWO section C is comprised of two: Northern Coniferous and Lower English River. Hole River also borders onto Lake Winnipeg, and therefore may be affected by such factors as weather patterns which traverse the lake, or water-table height which affects the amount of wetlands edging the lake.

Northwestern Ontario section D corresponds to Lac Du Bonnet RTL section. This section

is composed of Registered Traplines from both the Red Lake and Kenora regions. This may explain why the coefficients calculated for mink do not show any discernable trend, with peaks at the 2, 4 and 9 Year points. This agrees to a limited extent with the returns for Lac Du Bonnet, which show peaks at the 2 and 7 Year points. The muskrats show a possible 6-year cycle which is contrary to the 8-year or longer cycle found in Lac Du Bonnet. Finally, the Ontario ermine returns show a 7-year cycle, opposite to the slight peak at the 2 Year point then general decline, found in Lac Du Bonnet. The notable discrepancy between these two sections may be due to topography as mentioned above, but may be influenced to a greater degree by the mixing of fur-harvest data from the Ontario regions. Lac Du Bonnet section also borders onto Lake Winnipeg, and therefore is subjected to the same factors as noted for Hole River.

Finally, Northwestern Ontario section E corresponds to Whiteshell RTL section. This NWO section shows the mink as having a 10-year or greater cycle, as compared to the 8-year or greater cycle noted in the Whiteshell. Although the Kenora region has discontinued the recording of muskrats caught per year, there was a limited number of records from prior to the 1971/72 trapping season. These early returns were used to calculate correlation coefficients, which are shown in Figure 55. Since there were very few years available, the correlation analysis shows an overall decline in the level of association for muskrat. The Whiteshell returns show a possible 8-year or greater cycle for muskrat. The ermine caught within this NWO section, also show a general decline over time with no cycle or trend detectable. This corresponds to the ermine results in the Whiteshell RTL section, which show no discernable trend. With the above exception of the muskrat, the two sections agree in the comparison of population trends between the mink and ermine. This agreement could be due in part to both sections sharing common types of forest cover: Lower English River and

Quetico.

There is a noticeable difference in the quality of the fur-return records when one compares the Manitoba data to the Ontario data. The Ontario fur-harvest data produce very clean, correlation results, with all three species exhibiting population cycles in some degree. The Manitoba fur-harvest data do not produce the same quality of results. This degradation could be due to the absence of many of the annual records, or to the method of recording the number of animals caught. The Ontario Ministry of Natural Resources officers seal all pelts prior to sale. This provides the Ministry with very accurate reports on the actual number of animals caught. This system of recording fur-harvest results does not exist in Manitoba. Until the late 1960s, trappers in Manitoba recorded the number of animals caught per year on the back of their licenses. This record had to be filled out prior to a new license being issued each year. After 1969, trappers did not have to record their catches on the licenses. From that point onward, it was the responsibility of the fur-buyers to prepare statements on the fur purchased from trappers (D. Stardom *pers. comm.*). This early system of trappers recording their own catches could lead to misleading or inaccurate totals, either by accident or purpose. The current system in Manitoba, where the fur-buyers record the number of pelts sold, is an improvement over the old "licence-based" system.

## CONCLUSIONS

The first null hypothesis,  $H_0$ 1 a) mink: was rejected due to evidence that the provincial population of mink exhibited an 8-year cycle.  $H_0$ 1 b) and c) were not rejected because the provincial populations of muskrat and ermine do not exhibit any cyclicity or periodicity.

$H_0$ 2 a) mink versus muskrat: was rejected. There was evidence of interspecific cyclic association between mink and muskrat. The null hypotheses  $H_0$ 2 b) and c) were not rejected due to no evidence of interspecific cyclic association occurring between mink and ermine, and muskrat and ermine.

The third null hypothesis,  $H_0$ 3 was rejected.  $H_0$ 3 a) mink: was rejected due to evidence of a slightly cyclic, negative correlation between the number of mink pelts sold and the price per pelt offered.  $H_0$ 3 b) muskrat and c) ermine: were rejected. There are moderate, negative correlations between the numbers of muskrat and ermine caught and the price per pelts offered.

$H_0$ 4 a) mink: was rejected. There is evidence that the sectional population of mink exhibit an 8-year cycle for Berens River, Bloodvein, Little Grand Rapids, and Whiteshell. There is also evidence of a 4-year cycle found in Hole River and Pauingassi. There is evidence of 8-, 9-, and 10-year cycles in mink populations in Northwestern Ontario sections A, B, C and E. No cycles in population were found in Duck Mountain, Lac Du Bonnet and Northwestern Ontario section D.

**H<sub>0</sub>4 b) muskrat: was rejected. There is evidence of a 9 to 10-year cycle in the sectional population of muskrat for Bloodvein, Lac Du Bonnet, Little Grand Rapids and Whiteshell. There is evidence of a 6-year cycle in Northwestern Ontario section D. A 4-year cycle was found for Berens River and Northwestern Ontario section C. No evidence was found for population cycles in Duck Mountain, Hole River, Pauingassi and Northwestern Ontario sections A, B, and E.**

**H<sub>0</sub>4 c) ermine: was rejected. There is evidence for population cycles of different lengths for ermine in Bloodvein, Duck Mountain, Pauingassi and Northwestern Ontario sections A, B, C, and D. No evidence of population cycles were found in Berens River, Hole River, Lac Du Bonnet, Little Grand Rapids, Whiteshell and Northwestern Ontario section E.**

**H<sub>0</sub>5 a) mink versus muskrat: was rejected. There is evidence of a 2-year cycle of association in Little Grand Rapids and Whiteshell. There is evidence of a 4-year cycle of association in Berens River, Bloodvein and Lac Du Bonnet. There is no evidence of any discernable cycle in Duck Mountain, Hole River and Pauingassi.**

**H<sub>0</sub>5 b) mink versus ermine: was rejected. There is evidence for cycles of association of different lengths in all Manitoba sections except Whiteshell.**

**H<sub>0</sub>5 c) muskrat versus ermine: was rejected. There is evidence for cycles of association of different lengths in all Manitoba sections.**

## **RECOMMENDATIONS**

- 1. All fur-harvest data should be entered into a computer system which will allow easier use for future research. At this time, many of the older records are still in the original manilla spreadsheet format, which was filled in by hand, and are currently filed away in storage boxes. If the records were transcribed into an electronic format, such discrepancies as missing years or incorrect totals could be observed more readily and corrected.**
- 2. There is a general lack of information regarding the mink, and to a lesser degree muskrat and ermine, in the boreal forest, or taiga, biome. Much of the research on fur-bearer species is conducted in compact areas with easy road or waterway access. Unfortunately, easy access to the area is usually the result of destructive human activity such as forestry, mining, or hydroelectric constructions. These destructive activities put undue stress on the wildlife of the area causing many species to disperse or alter their behaviours. Studies examining the impact of human activities and degradation of habitat due to development must be conducted in order to examine the effects on the mink, and other northern animals.**
- 3. There is little information regarding the habitat selection, movement and food preferences of the mink in the boreal forest region. Since a large percentage of the annual mink harvest in Manitoba is from three northern boreal Registered Trapline sections (Johnson 1989), it is imperative to conduct population and telemetry studies in the taiga region, in order to understand the natural history of this animal.**

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Provincial Fur Sales Statistics - Mink

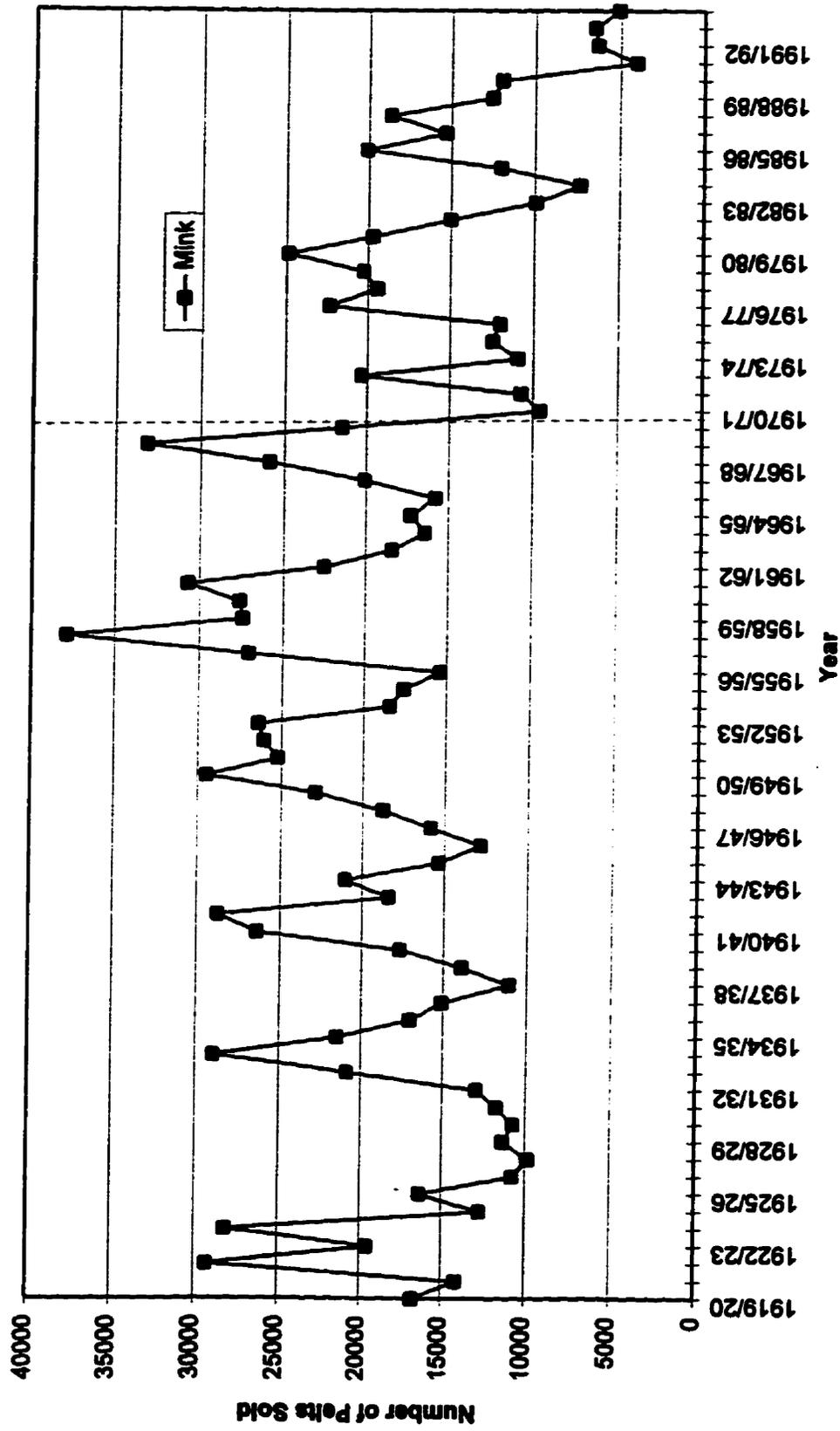


Figure 2. Manitoba fur return totals for mink: 1919/20 - 1993/94. The dotted line represents the 1970 division point.

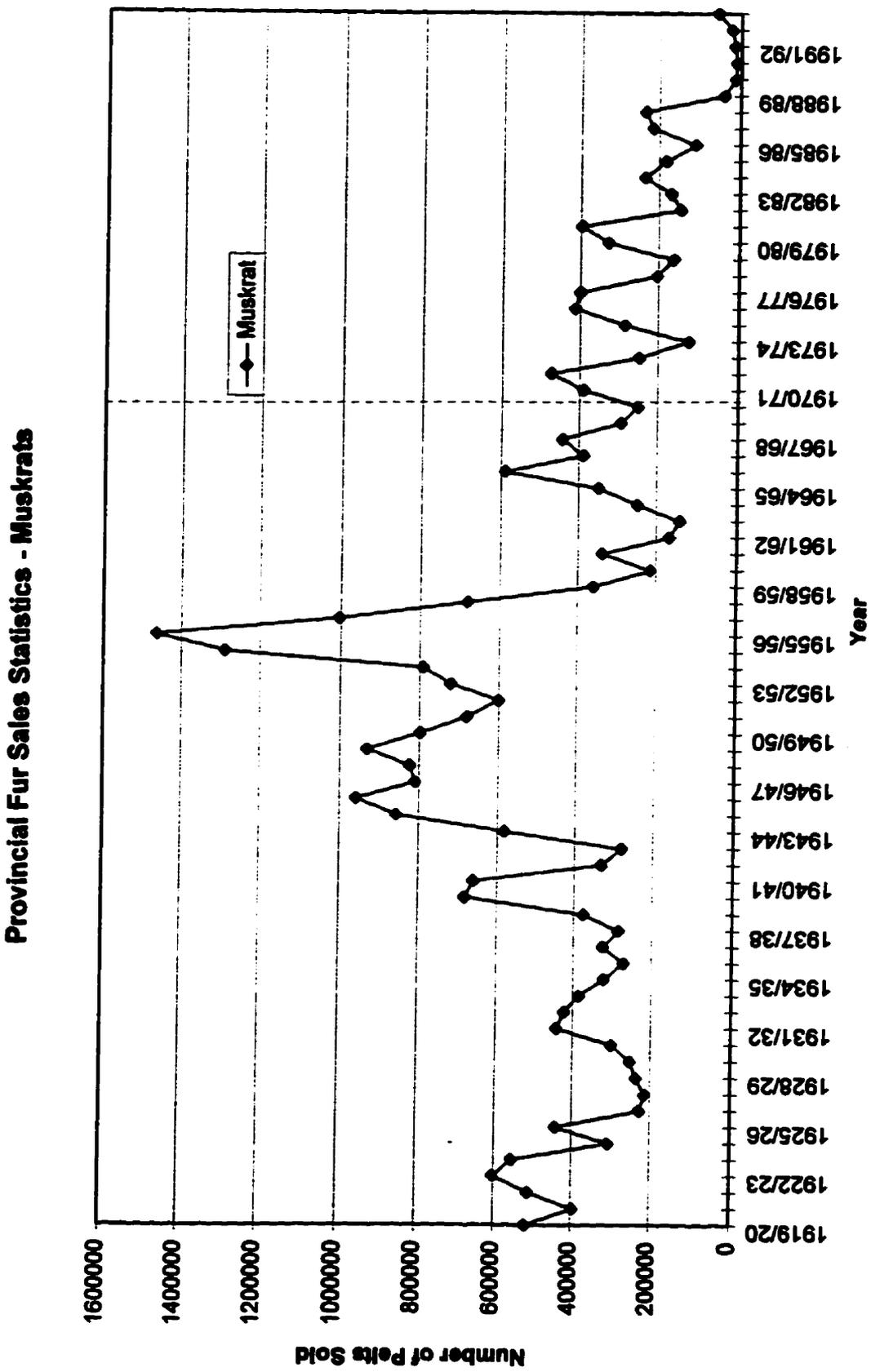


Figure 3. Manitoba fur return totals for muskrat: 1919/20 - 1993/94. The dotted line represents the 1970 division point.

Provincial Fur Sales Statistics - Ermine

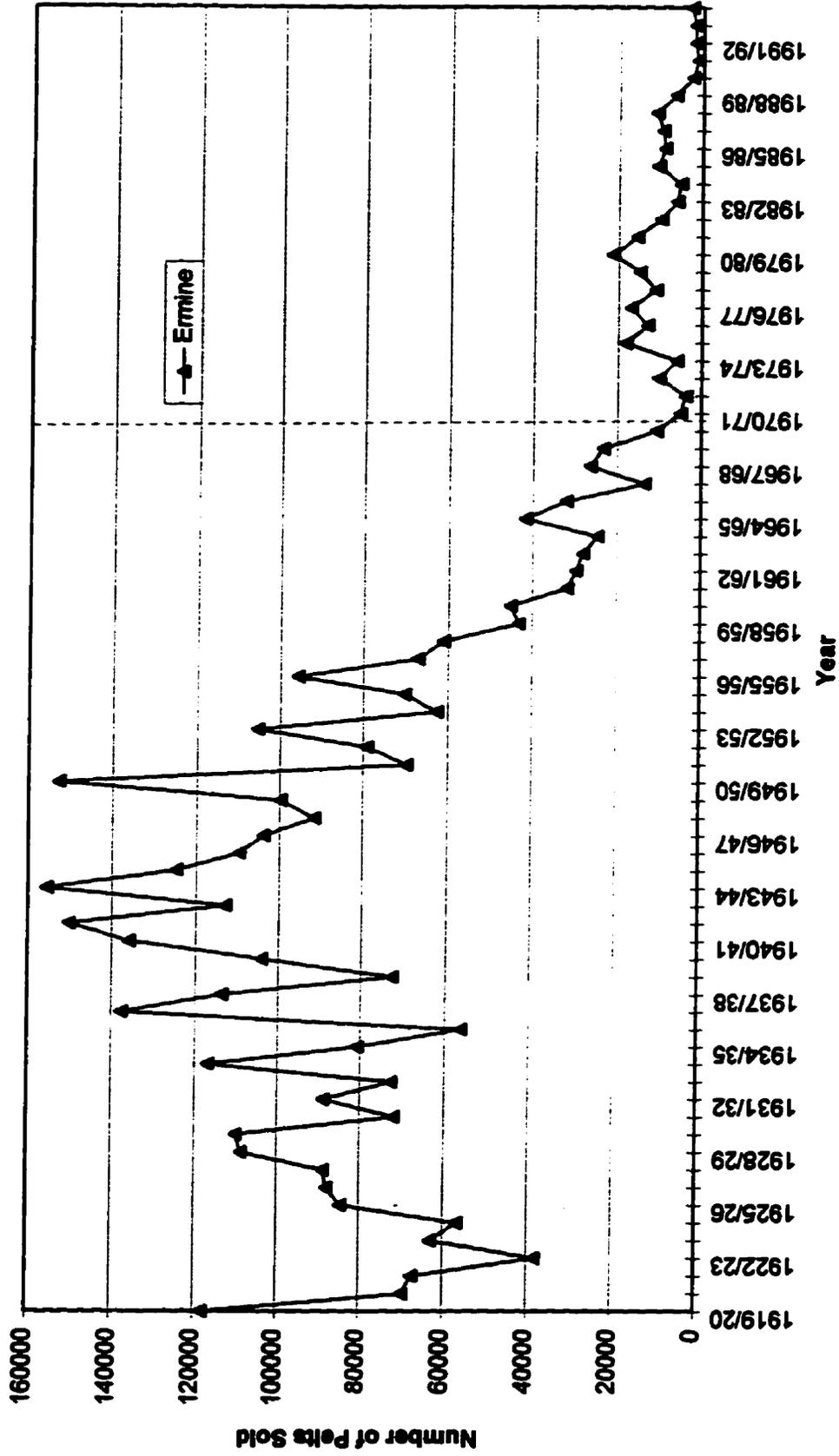


Figure 4. Manitoba fur return totals for ermine: 1919/20 - 1993/94. The dotted line represents the 1970 division point.

**Table 1. Intraspecific correlation coefficients calculated based on 1919/20 - 1993/94 provincial fur returns of mink, muskrat and mink.**

Correlation Values for Provincial Fur Totals									
	Mink vs Mink			Muskrats vs Muskrats			Ermine vs Ermine		
	Provincial Totals 1919/20 - 1993/94	Provincial Totals 1919/20 - 1969/70	Provincial Totals 1970/71 - 1993/94	Provincial Totals 1919/20 - 1993/94	Provincial Totals 1919/20 - 1969/70	Provincial Totals 1970/71 - 1993/94	Provincial Totals 1919/20 - 1993/94	Provincial Totals 1919/20 - 1969/70	Provincial Totals 1970/71 - 1993/94
1 Year out	0.62	0.55	0.58	0.84	0.81	0.64	0.86	0.69	0.64
2 Years out	0.35	0.28	0.33	0.62	0.52	0.21	0.82	0.62	0.50
3 Years out	0.07	-0.04	0.03	0.49	0.31	0.39	0.85	0.69	0.21
4 Years out	-0.04	-0.19	-0.16	0.43	0.20	0.71	0.82	0.59	0.11
5 Years out	-0.09	-0.20	-0.29	0.38	0.18	0.57	0.77	0.49	0.11
6 Years out	-0.01	-0.08	-0.21	0.34	0.14	0.28	0.77	0.48	-0.03
7 Years out	0.23	0.20	0.13	0.32	0.12	0.33	0.75	0.44	0.00
8 Years out	0.45	0.44	0.25	0.33	0.13	0.47	0.76	0.43	-0.09
9 Years out	0.43	0.40	0.29	0.35	0.13	0.39	0.70	0.28	-0.21
10 Years out	0.35	0.38	0.07	0.32	0.08	0.20	0.67	0.19	-0.11

### Correlation Values for Mink

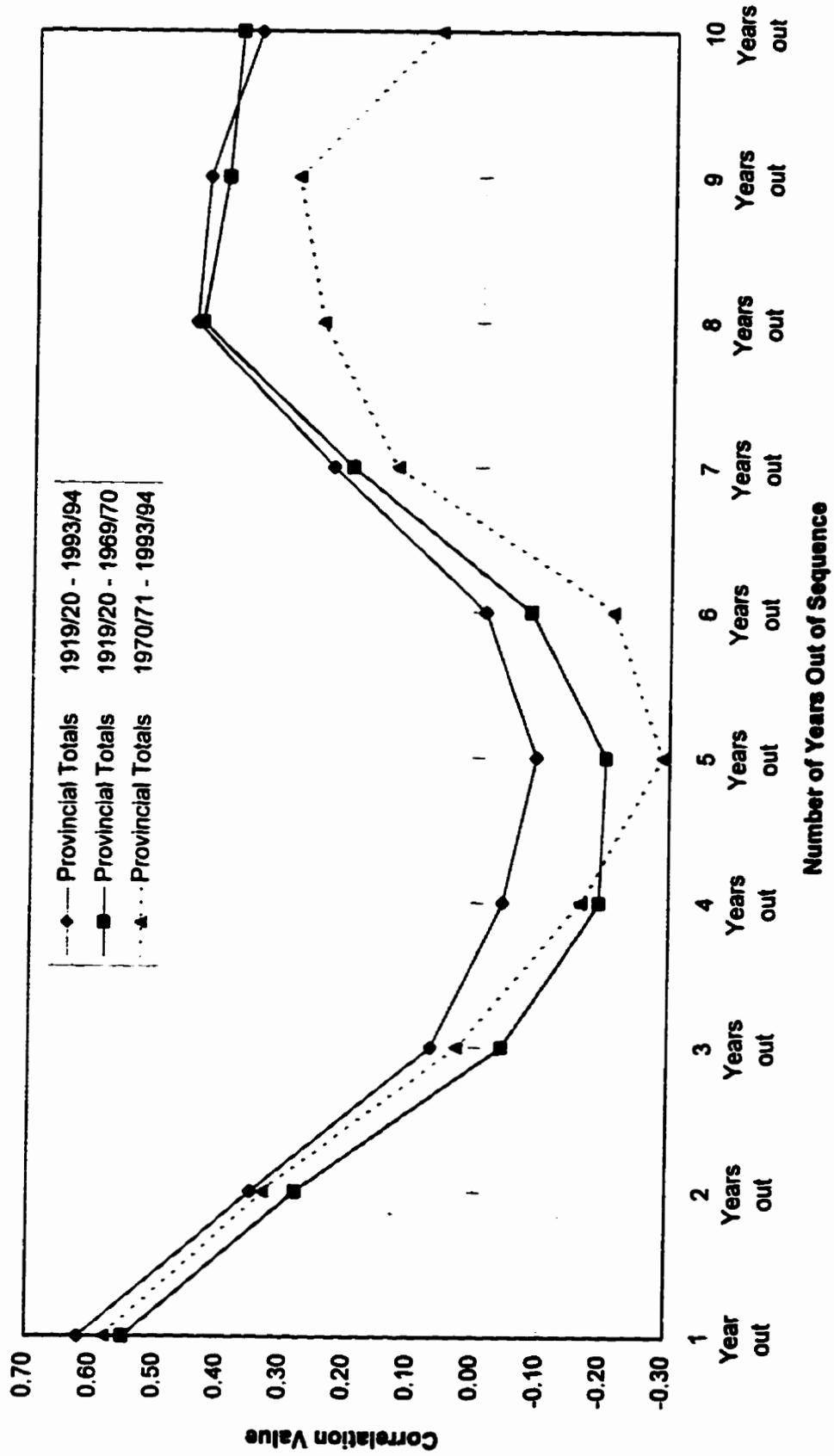


Figure 5. Correlogram for intraspecific analysis of provincial mink fur returns.

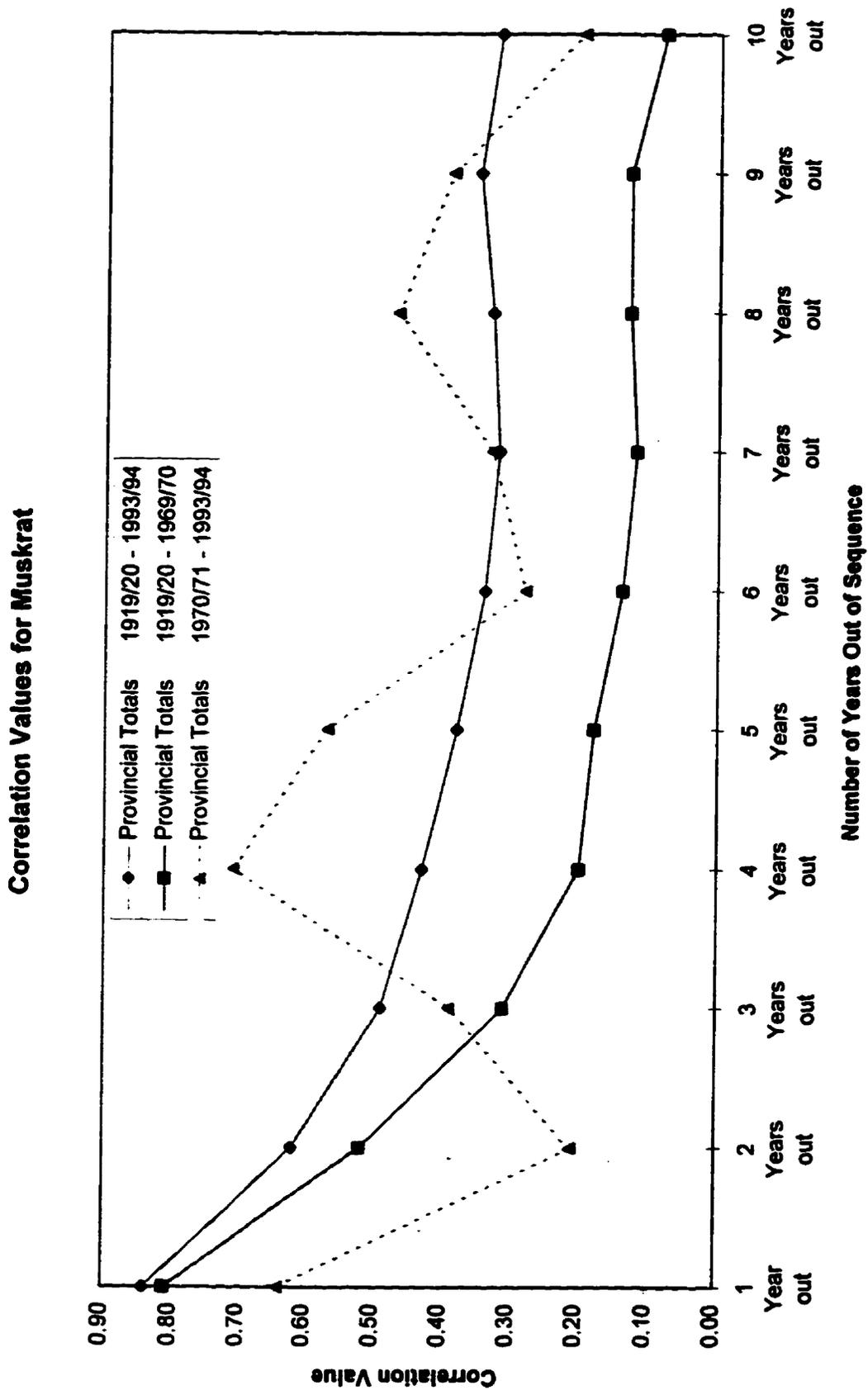


Figure 6. Correlogram for intra specific analysis of provincial muskrat fur returns.

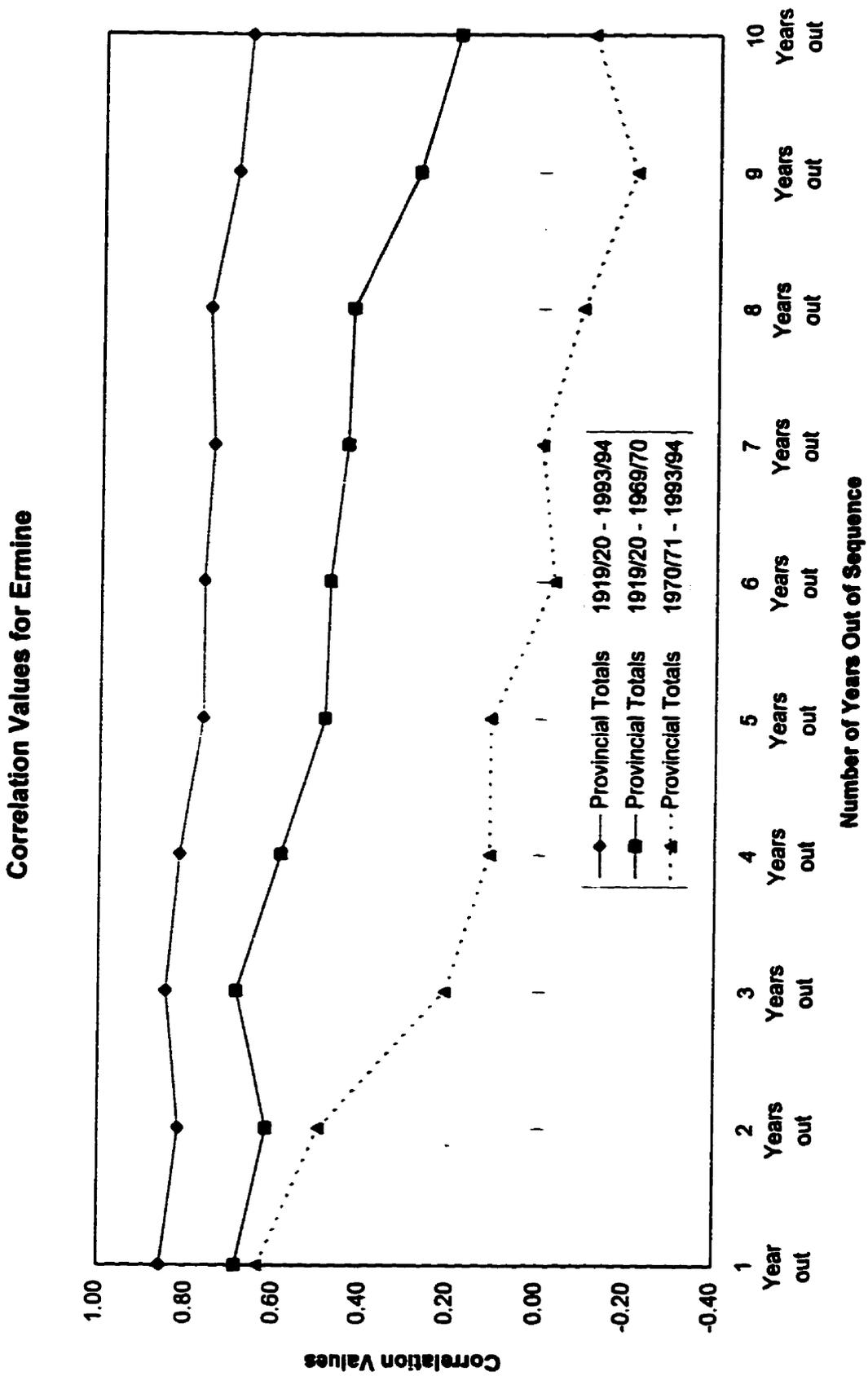


Figure 7. Correlogram for intraspecific analysis of provincial ermine fur returns.

**Table 2. Interspecific correlation coefficients calculated based on 1919/20 - 1993/94 provincial fur returns of mink, muskrat and ermine.**

<b>Correlation Values for Provincial Fur Totals</b>									
	<b>Mink vs Muskrat</b>			<b>Mink vs Ermine</b>			<b>Muskrat vs Ermine</b>		
	<b>Provincial Totals 1919/20 - 1993/94</b>	<b>Provincial Totals 1919/20 - 1969/70</b>	<b>Provincial Totals 1970/71 - 1993/94</b>	<b>Provincial Totals 1919/20 - 1993/94</b>	<b>Provincial Totals 1919/20 - 1969/70</b>	<b>Provincial Totals 1970/71 - 1993/94</b>	<b>Provincial Totals 1919/20 - 1993/94</b>	<b>Provincial Totals 1919/20 - 1969/70</b>	<b>Provincial Totals 1970/71 - 1993/94</b>
<b>Same Year</b>	0.34	0.10	0.43	0.26	-0.15	0.80	0.53	0.27	0.57
<b>1 Year out</b>	0.49	0.32	0.60	0.21	-0.25	0.64	0.51	0.23	0.51
<b>2 Years out</b>	0.60	0.51	0.50	0.29	-0.11	0.51	0.56	0.33	0.40
<b>3 Years out</b>	0.58	0.53	0.28	0.29	-0.08	0.28	0.64	0.46	0.23
<b>4 Years out</b>	0.51	0.44	0.31	0.37	0.06	0.14	0.63	0.45	0.11
<b>5 Years out</b>	0.42	0.30	0.51	0.37	0.07	0.08	0.63	0.46	0.00
<b>6 Years out</b>	0.29	0.13	0.30	0.33	0.01	-0.05	0.67	0.52	0.08
<b>7 Years out</b>	0.25	0.04	0.22	0.40	0.12	0.00	0.64	0.46	0.18
<b>8 Years out</b>	0.27	0.05	0.40	0.46	0.19	-0.03	0.63	0.43	0.16
<b>9 Years out</b>	0.31	0.06	0.57	0.41	0.04	-0.02	0.59	0.34	-0.25
<b>10 Years out</b>	0.34	0.13	0.47	0.4	-0.03	0.08	0.6	0.34	-0.29

### Correlation Values for Mink vs Muskrat

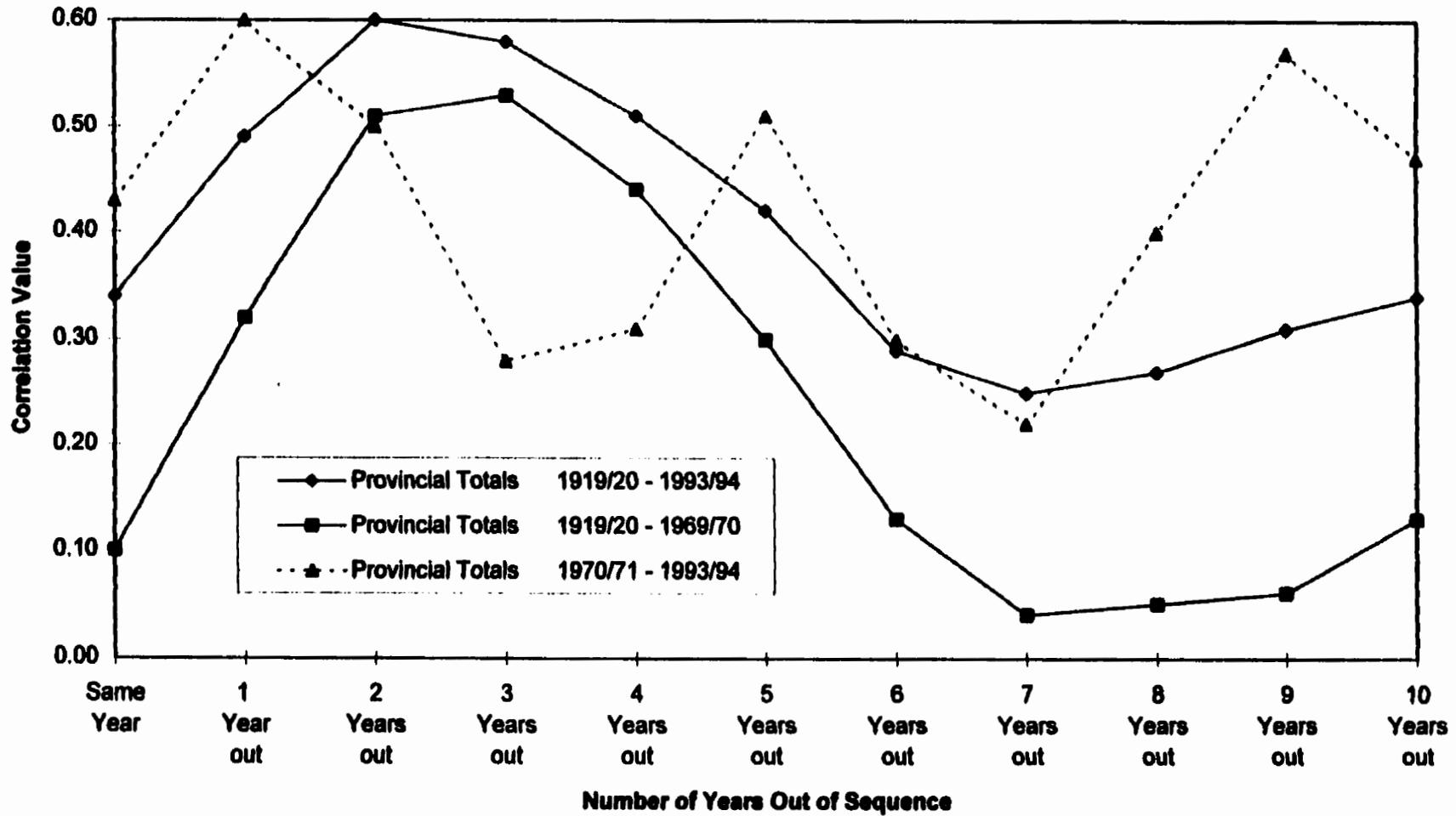


Figure 8. Correlogram for interspecific analysis of provincial fur returns: Mink versus Muskrat.

### Correlation Values for Mink vs Ermine

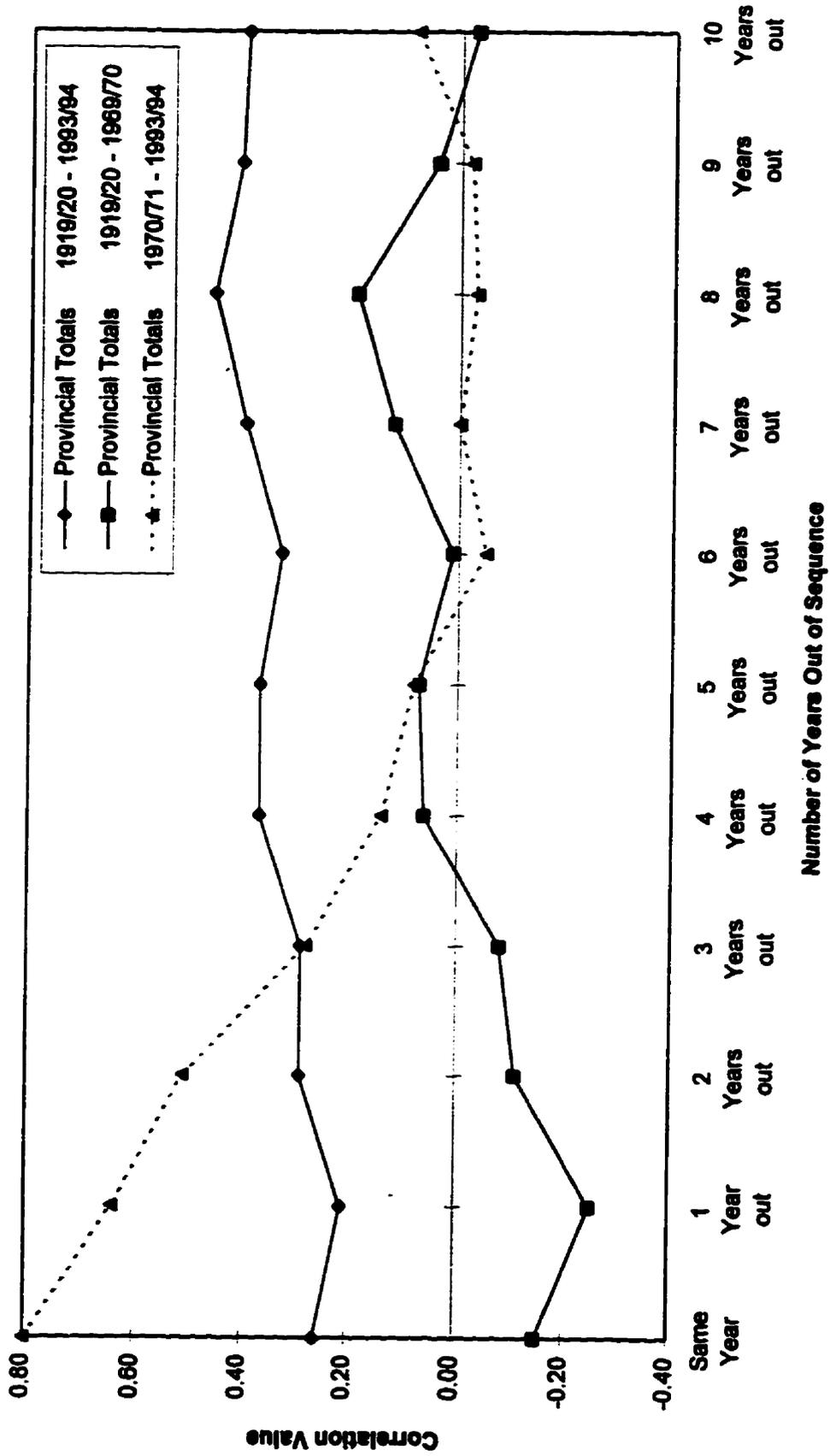


Figure 9. Correlogram for interspecific analysis of provincial fur returns: Mink versus Ermine.

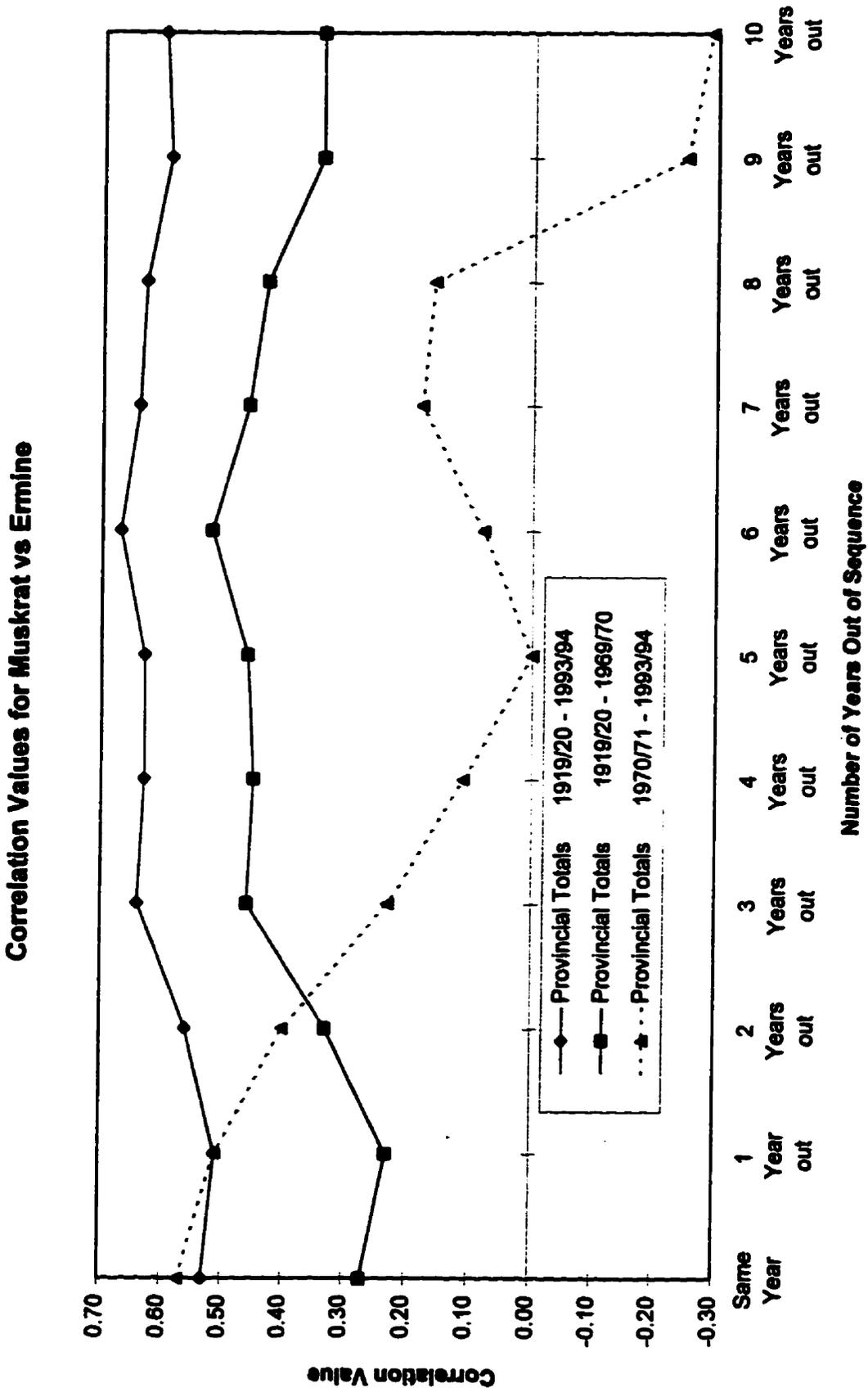


Figure 10. Correlogram for interspecific analysis of provincial fur returns: Muskrat versus Ermine.

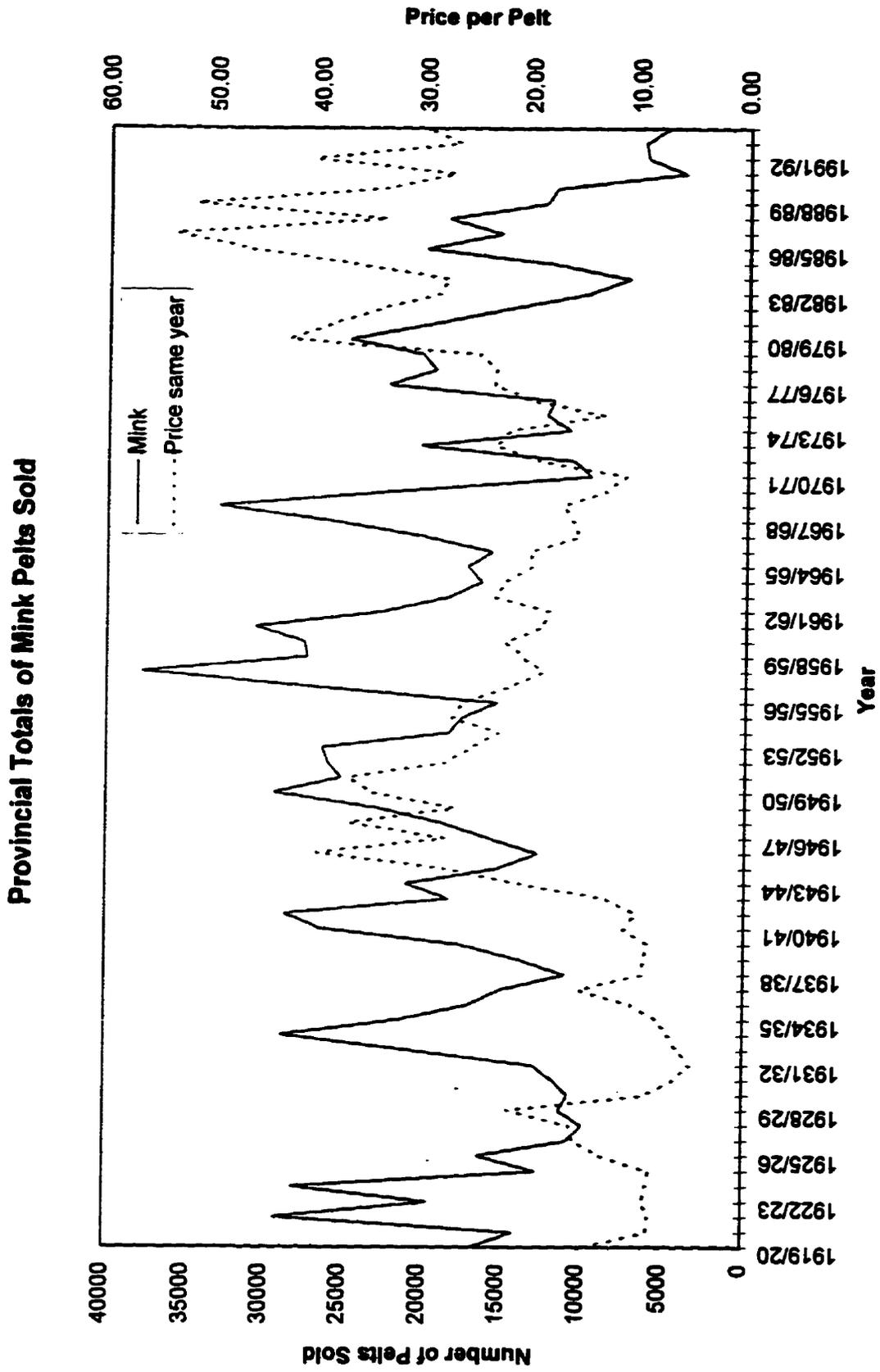


Figure 11. Manitoba fur return totals for mink with price per pelt offered: 1919/20 - 1993/94.

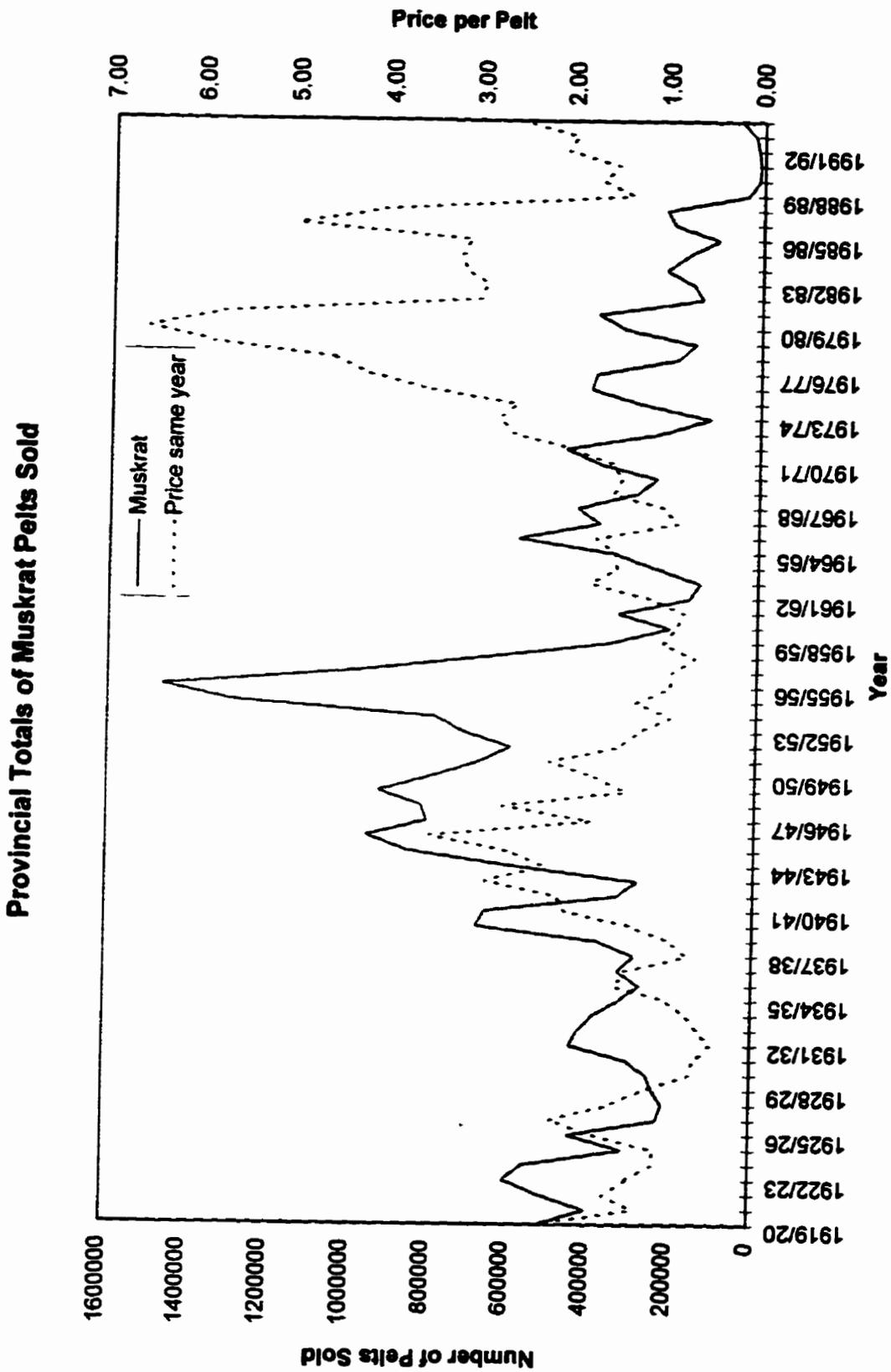


Figure 12. Manitoba fur return totals for muskrat with price per pelt offered: 1919/20 - 1993/94.

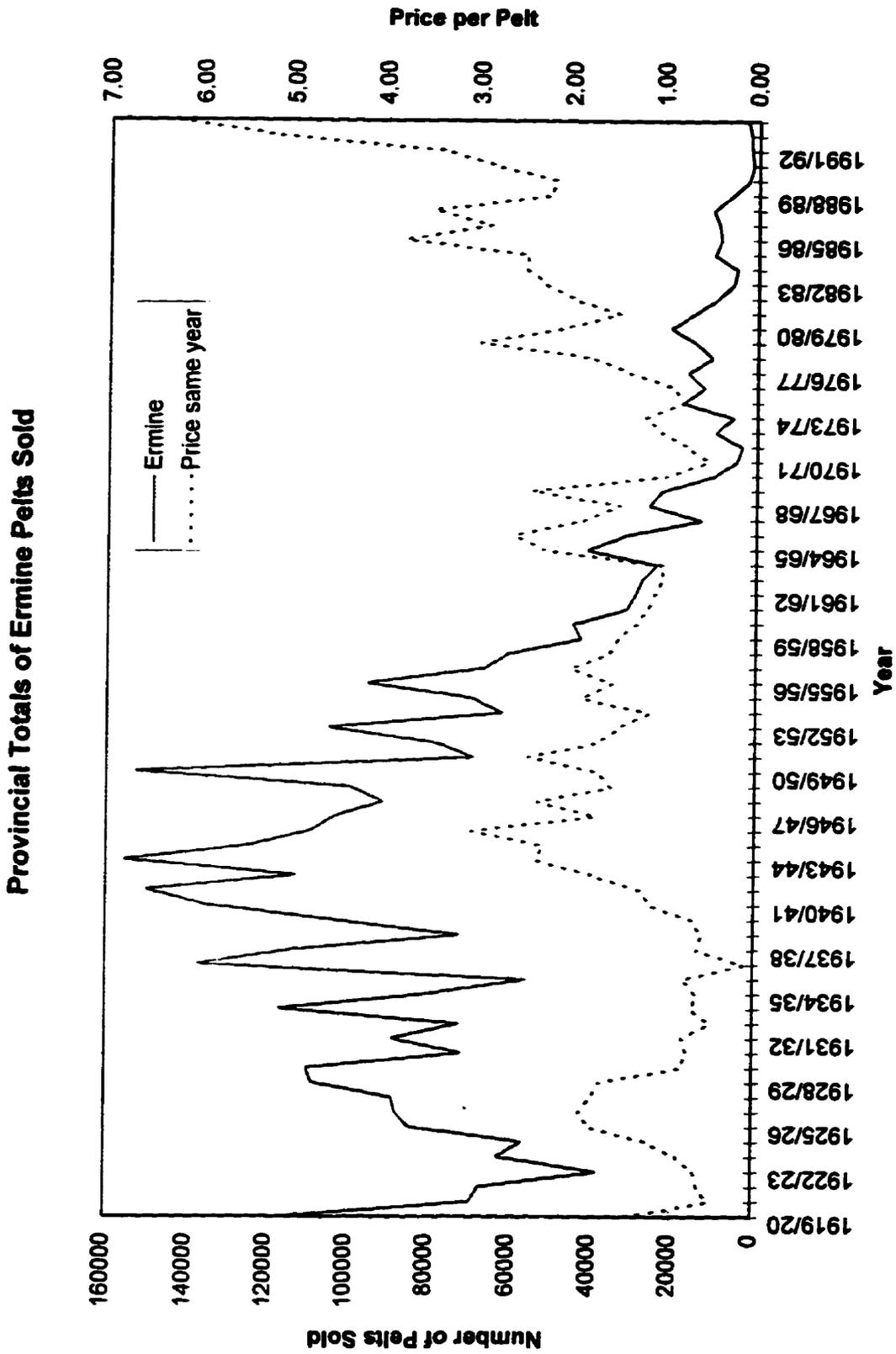


Figure 13. Manitoba fur return totals for ermine with price per pelt offered: 1919/20 - 1993/94.

Table 3. Correlation coefficients calculated for price per pelt versus 1919/20 - 1993/94 provincial fur returns of mink, muskrat and ermine.

Correlation Values for Provincial Fur Totals vs Price									
	Mink vs Price			Muskrat vs Price			Ermine vs Price		
	Provincial Totals 1919/20 - 1993/94	Provincial Totals 1919/20 - 1969/70	Provincial Totals 1970/71 - 1993/94	Provincial Totals 1919/20 - 1993/94	Provincial Totals 1919/20 - 1969/70	Provincial Totals 1970/71 - 1993/94	Provincial Totals 1919/20 - 1993/94	Provincial Totals 1919/20 - 1969/70	Provincial Totals 1970/71 - 1993/94
Same Year	-0.12	0.11	0.21	-0.20	0.19	0.41	-0.33	0.02	-0.38
1 Year out	-0.15	0.13	-0.01	-0.21	0.23	0.33	-0.32	-0.07	-0.29
2 Years out	-0.20	0.24	-0.50	-0.21	0.34	0.21	-0.32	-0.06	-0.40
3 Years out	-0.15	0.33	-0.44	-0.17	0.48	0.13	-0.37	-0.21	-0.57
4 Years out	-0.10	0.45	-0.63	-0.17	0.54	-0.04	-0.39	-0.25	-0.84
5 Years out	-0.04	0.55	-0.63	-0.21	0.52	-0.26	-0.42	-0.27	-0.85
6 Years out	0.00	0.52	-0.52	-0.25	0.41	-0.29	-0.43	-0.27	-0.73
7 Years out	-0.03	0.48	-0.47	-0.24	0.35	-0.03	-0.44	-0.38	-0.65
8 Years out	-0.07	0.33	-0.36	-0.25	0.34	-0.04	-0.41	-0.41	-0.59

### Correlation Values for Mink vs Price

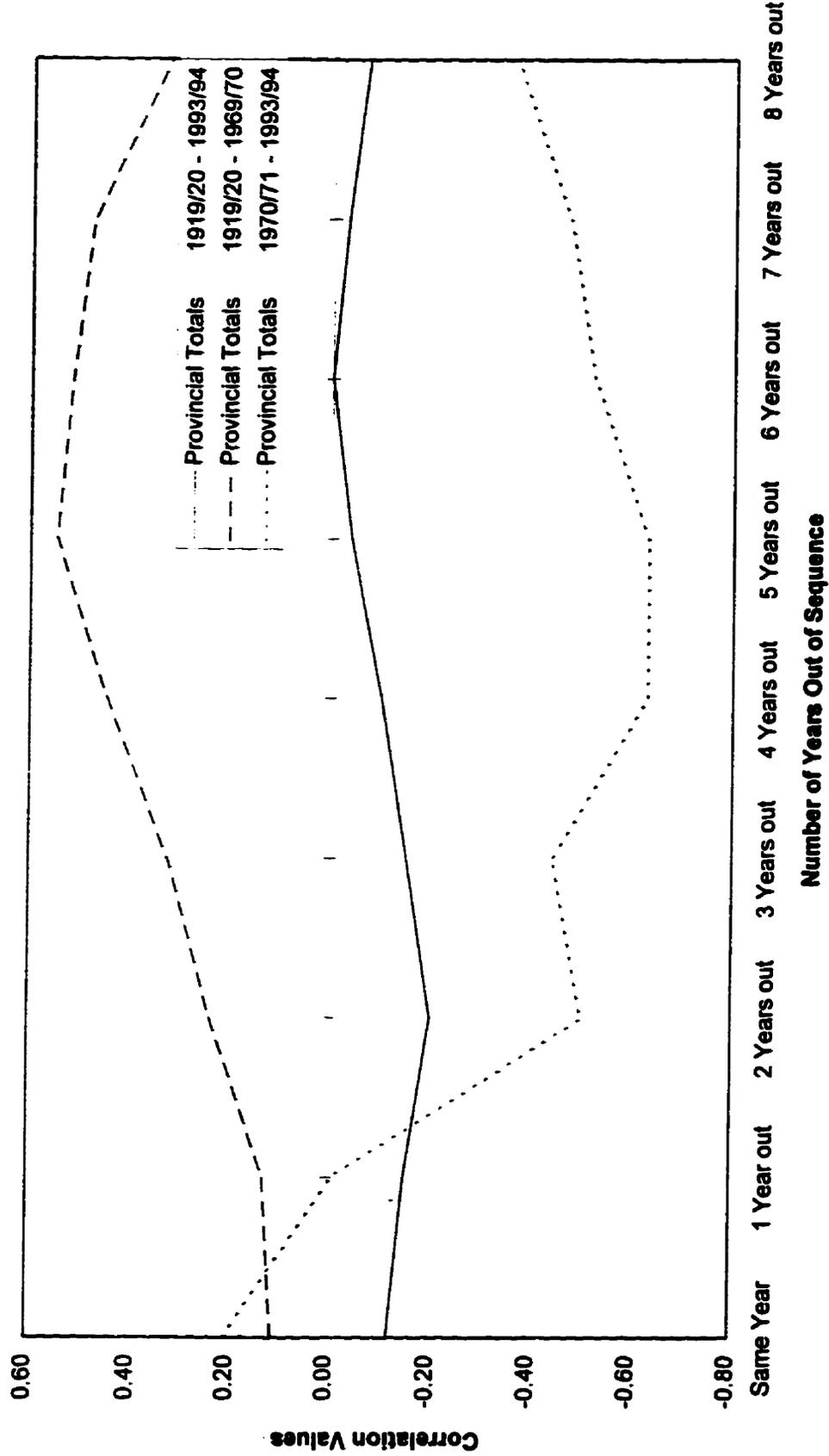


Figure 14. Correlogram for analysis of provincial mink fur returns versus price per pelt offered.

### Correlation Values for Muskrat vs Price

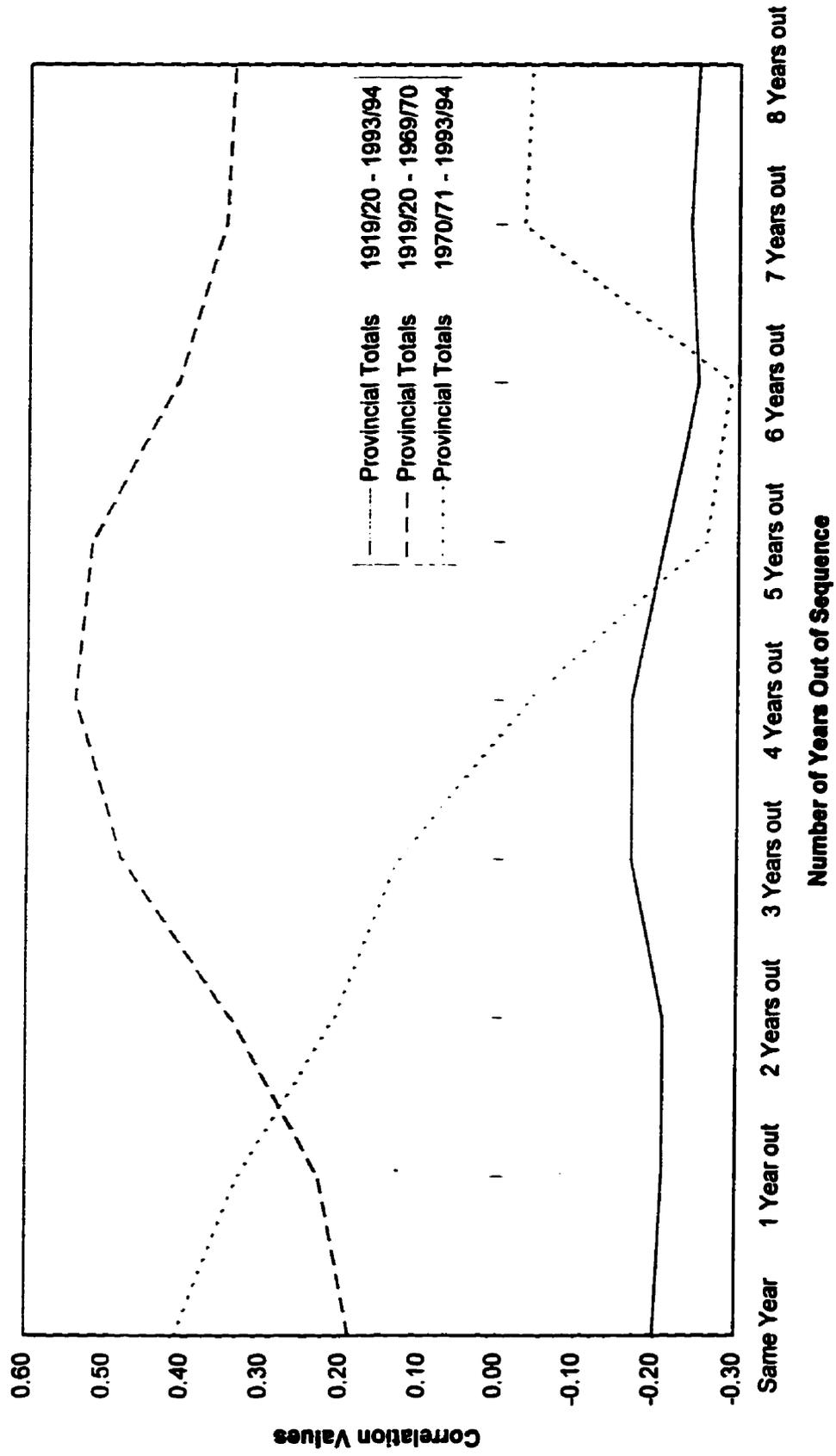


Figure 15. Correlogram for analysis of provincial muskrat fur returns versus price per pelt offered.

### Correlation Values for Ermine vs Price

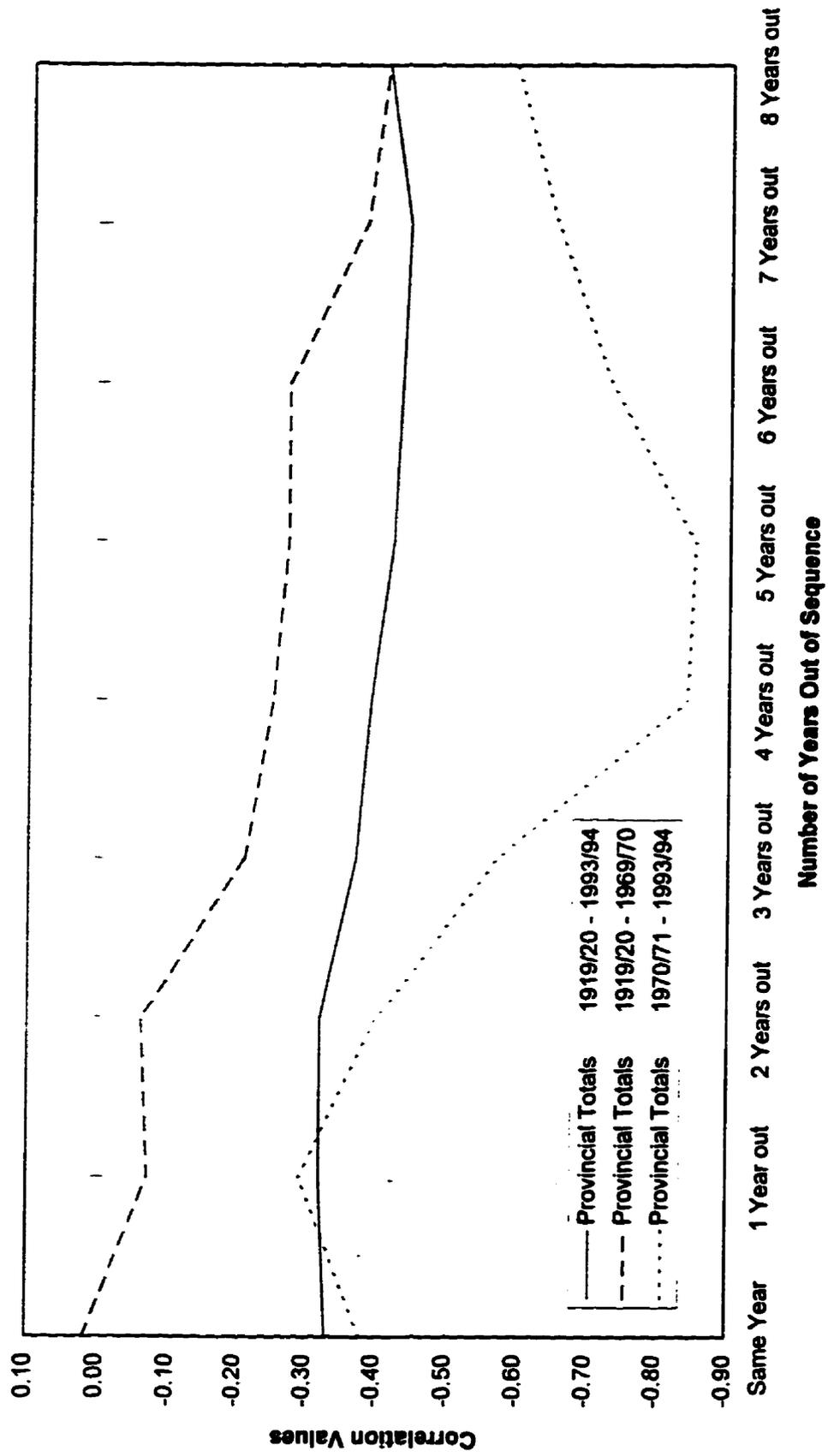


Figure 16. Correlogram for analysis of provincial ermine fur returns versus price per pelt offered.

Table 4. Fur return totals of mink, muskrat and ermine for each Manitoba Registered Trapline section.

Total Fur Production for each Registered Trapline Section															
Year	Berens River			Bloodvein			Duck Mountain			Hole River					
	Mink	Muskat	Ermine	Year	Mink	Muskat	Ermine	Year	Mink	Muskat	Ermine	Year	Mink	Muskat	Ermine
54/56				54/56				54/56				54/56			
56/57				56/57				56/57				56/57			
57/58				57/58				57/58				57/58			
58/59				58/59				58/59				58/59			
59/60				59/60				59/60				59/60			
60/61				60/61				60/61				60/61			
61/62				61/62	133	250	104	61/62	325	729	358	61/62			
62/63				62/63	61	726	95	62/63	330	828	445	62/63	82	384	83
63/64				63/64	47	1018	95	63/64	226	1711	636	63/64	74	1195	113
64/65				64/65	37	1577	89	64/65				64/65			
65/66				65/66	68	1362	201	65/66	288	2436	568	65/66			
66/67				66/67	31	1711	55	66/67	95	1297	115	66/67	68	967	72
67/68				67/68	87	660	121	67/68				67/68	81	670	45
68/69				68/69	250	492	154	68/69	488	1406	875	68/69	216	527	144
69/70				69/70	111	607	39	69/70	539	1816	375	69/70	76	760	9
70/71				70/71				70/71	364	3951	255	70/71	38	604	0
71/72	72	179	1	71/72	148	115	20	71/72	339	8927	199	71/72	109	34	30
72/73	65	200	32	72/73	46	136	77	72/73	538	3733	255	72/73			
73/74	24	131	14	73/74	13	120	4	73/74	388	579	132	73/74	24	390	43
74/75	43	1884	95	74/75	30	559	112	74/75	313	2086	370	74/75	32	1288	75
75/76	32	1117	87	75/76	32	496	127	75/76				75/76	48	1071	72
76/77	134	474	57	76/77	92	315	132	76/77				76/77	133	652	147
77/78	52	553	9	77/78				77/78				77/78	35	122	14
78/79	268	977	90	78/79				78/79				78/79			



Total Fur Production for each Registered Trapline Section																	
Year	Lac Du Bonnet			Little Grand Rapids			Paunigassl			Whiteshell							
	Mink	Muskat	Ftmine	Mink	Muskat	Ftmine	Year	Mink	Muskat	Ftmine	Year	Mink	Muskat	Ftmine			
54/56							54/56				54/56	119	2557	105			
56/57							56/57				56/57	130	2249	223			
57/58							57/58				57/58	279	2205	193			
58/59							58/59				58/59	202	2074	85			
59/60							59/60				59/60	145	1261	55			
60/61							60/61				60/61	271	763	229			
61/62							61/62				61/62	225	1273	53			
62/63	191	215	359	527	1292	333	62/63				62/63	32	60	12			
63/64	303	850	582	387	1759	328	63/64				63/64	214	706	118			
64/65	186	1220	421	228	3832	503	64/65				64/65	179	1208	86			
65/66				267	5279	353	65/66				65/66	296	1799	193			
66/67	106	501	411	171	6555	440	66/67				66/67	241	1715	196			
67/68	161	497	125	258	4613	153	67/68				67/68	233	964	66			
68/69	208	233	178	359	2271	267	68/69				68/69	222	657	77			
69/70	184	428	72	446	1512	344	69/70				69/70	247	958	124			
70/71	161	590	51	108	612	7	70/71				70/71	126	1148	16			
71/72	74	545	15				71/72				71/72	108	752	12			
72/73	176	303	85				72/73				72/73	127	910	8			
73/74	90	692	125	88	369	85	73/74				73/74	88	484	41			
74/75	60	728	122	39	424	38	74/75				74/75	52	768	62			
75/76	112	2381	405	66	1708	122	75/76				75/76	127	1619	269			
76/77	196	1553	207	38	1107	33	76/77				76/77	250	484	125			
77/78	349	515	431	169	448	72	77/78				77/78						
78/79	53	308	30				78/79				78/79						



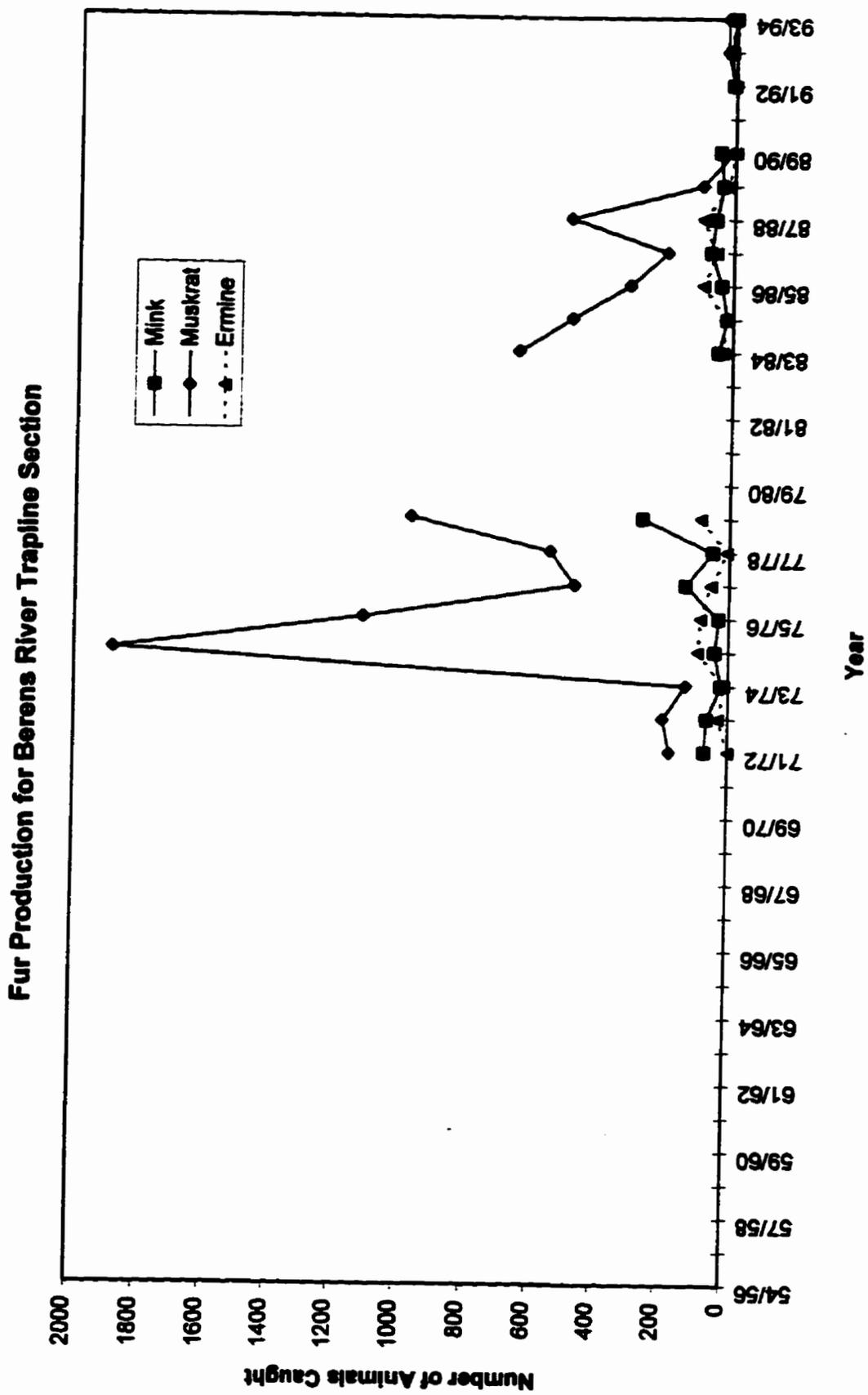


Figure 17. Fur return totals of mink, muskrat and ermine for Berens River Registered Trapline section.

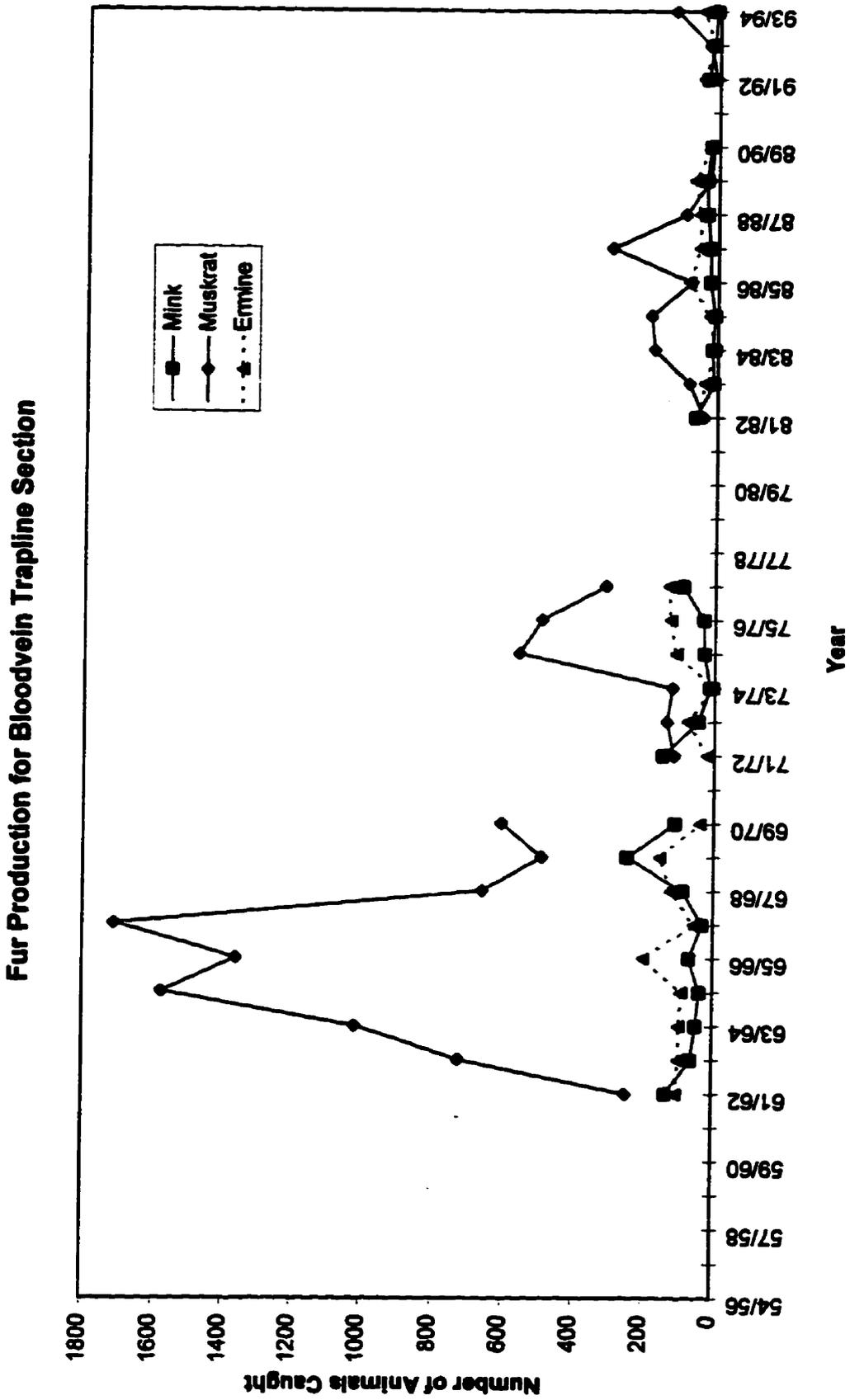


Figure 18. Fur return totals of mink, muskrat and ermine for Bloodvein Registered Trapline section.

### Fur Production for Duck Mountain Trapline Section

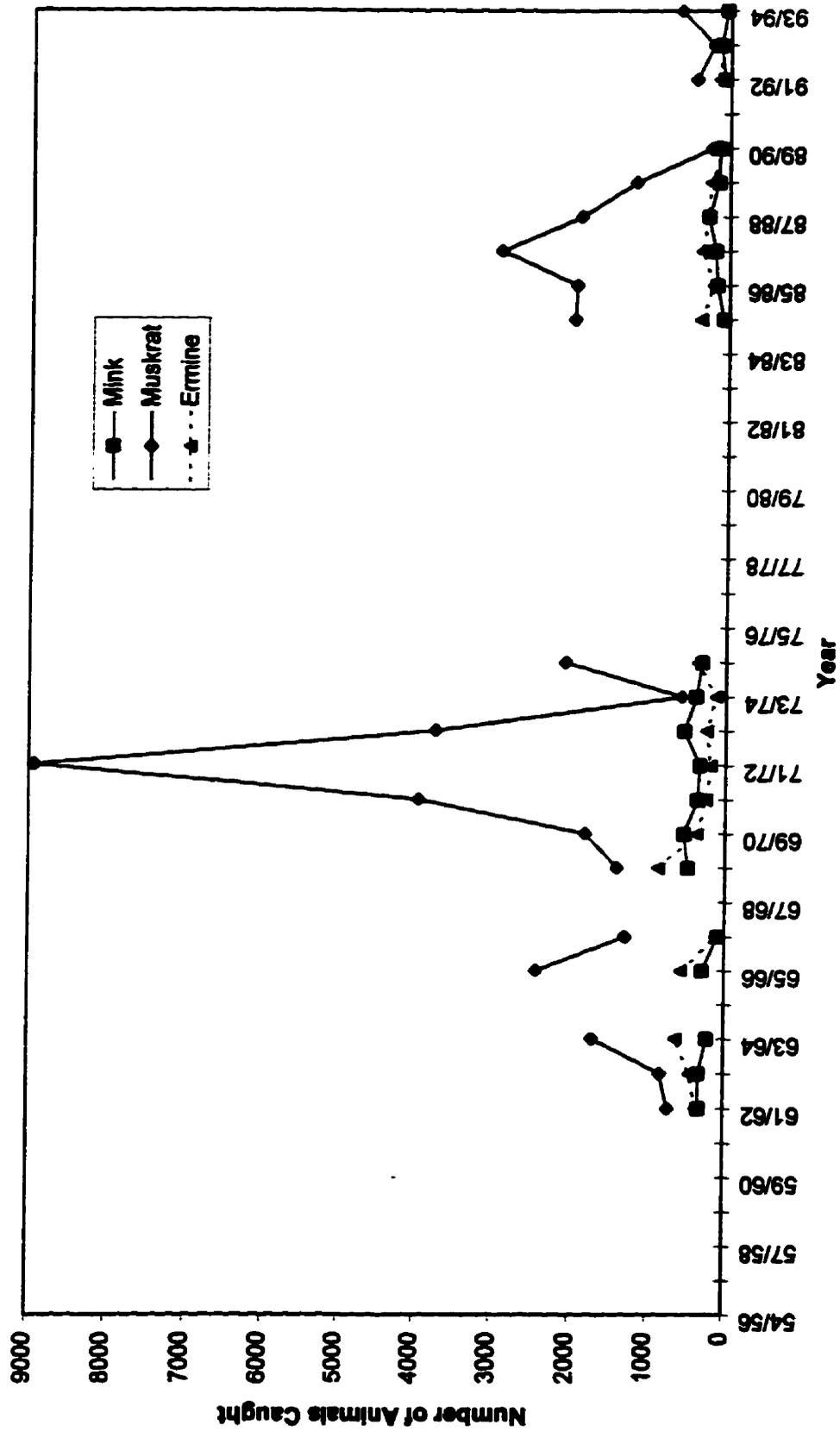


Figure 19. Fur return totals of mink, muskrat and ermine for Duck Mountain Registered Trapline section.

### Fur Production for Hole River Trapline Section

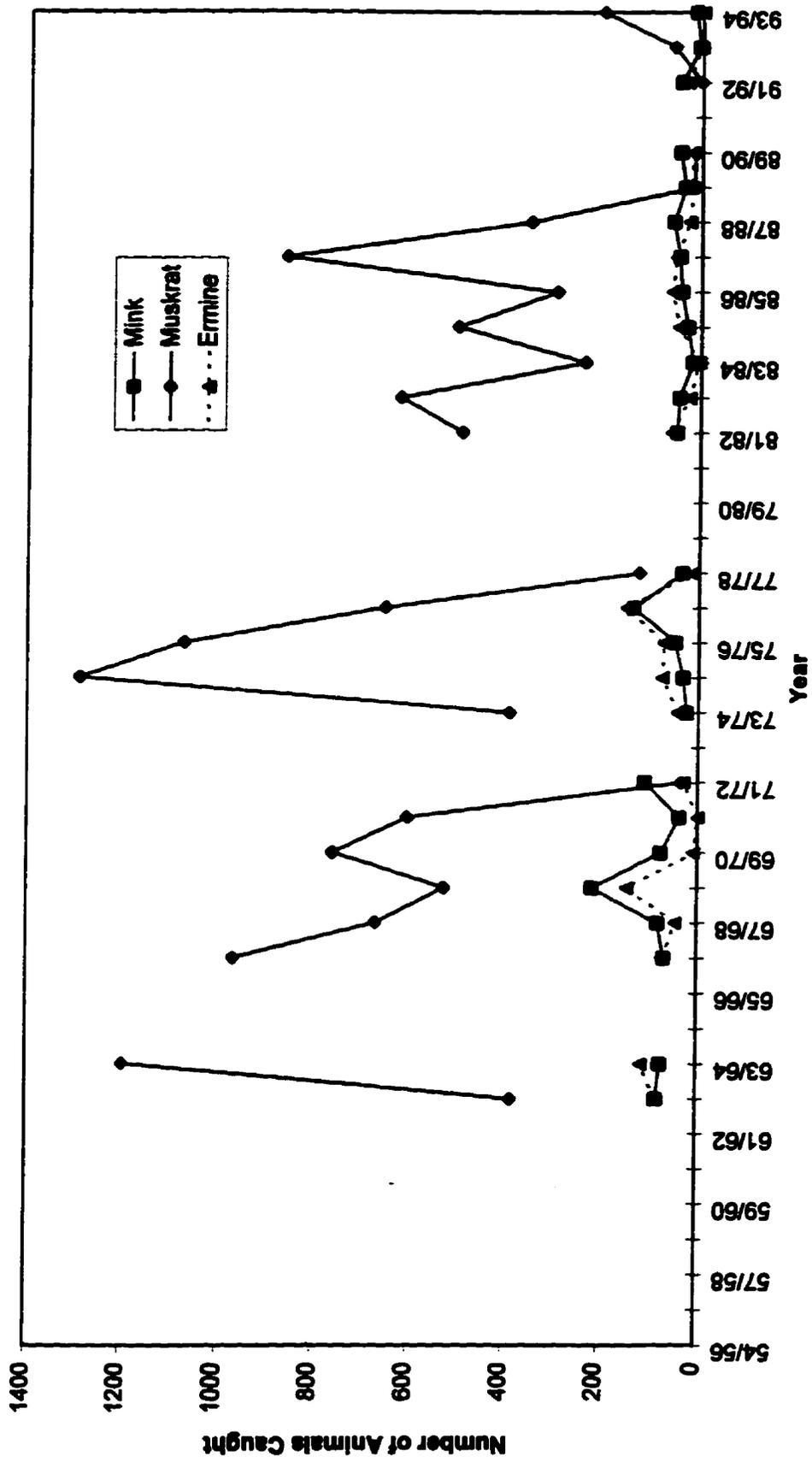


Figure 20. Fur return totals of mink, muskrat and ermine for Hole River registered Trapline section.

### Fur Production for Lac Du Bonnet Trapline Section

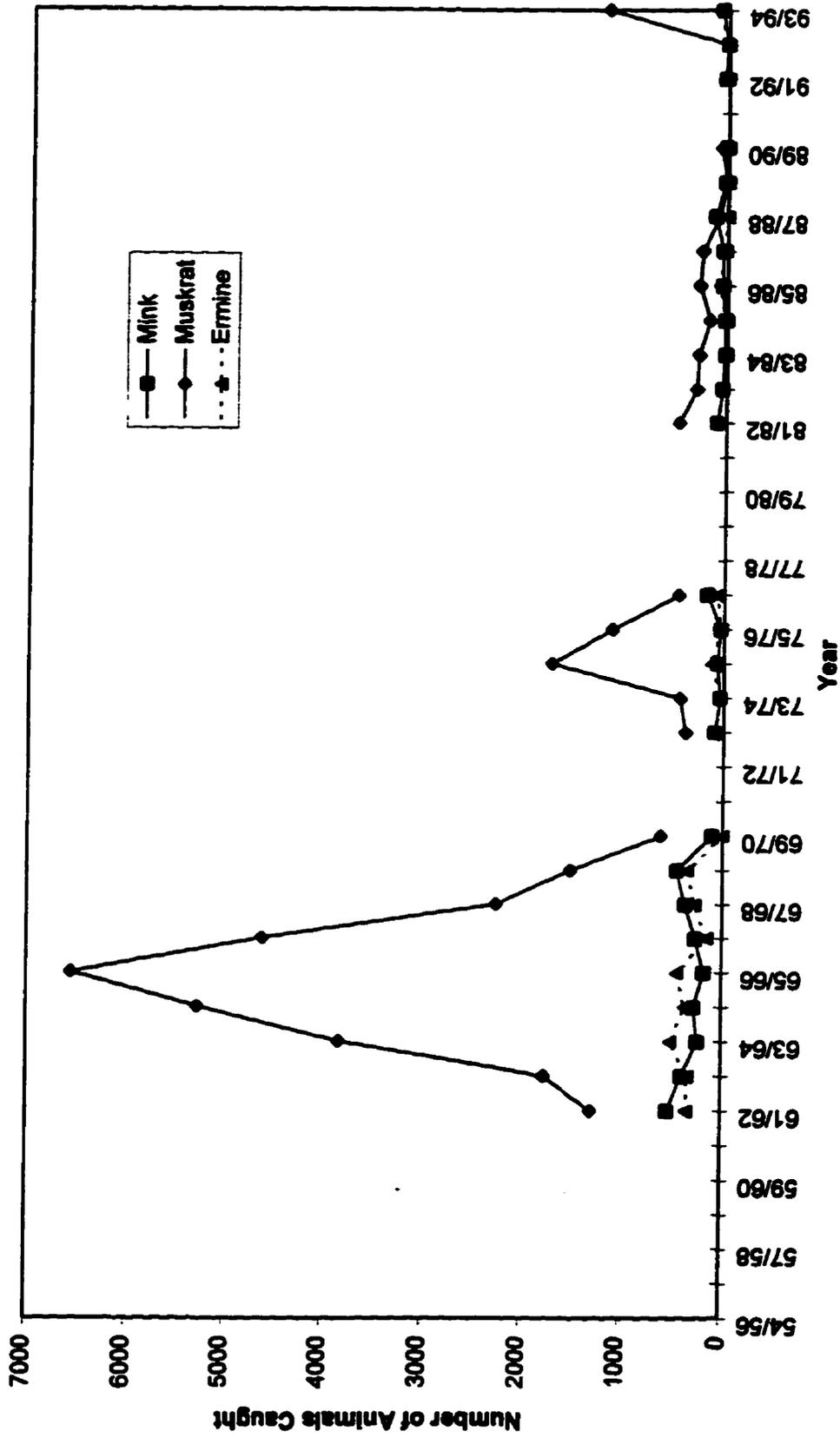


Figure 21. Fur return totals of mink, muskrat and ermine for Lac Du Bonnet Registered Trapline section.

### Fur Production for Little Grand Rapids Trapline Section

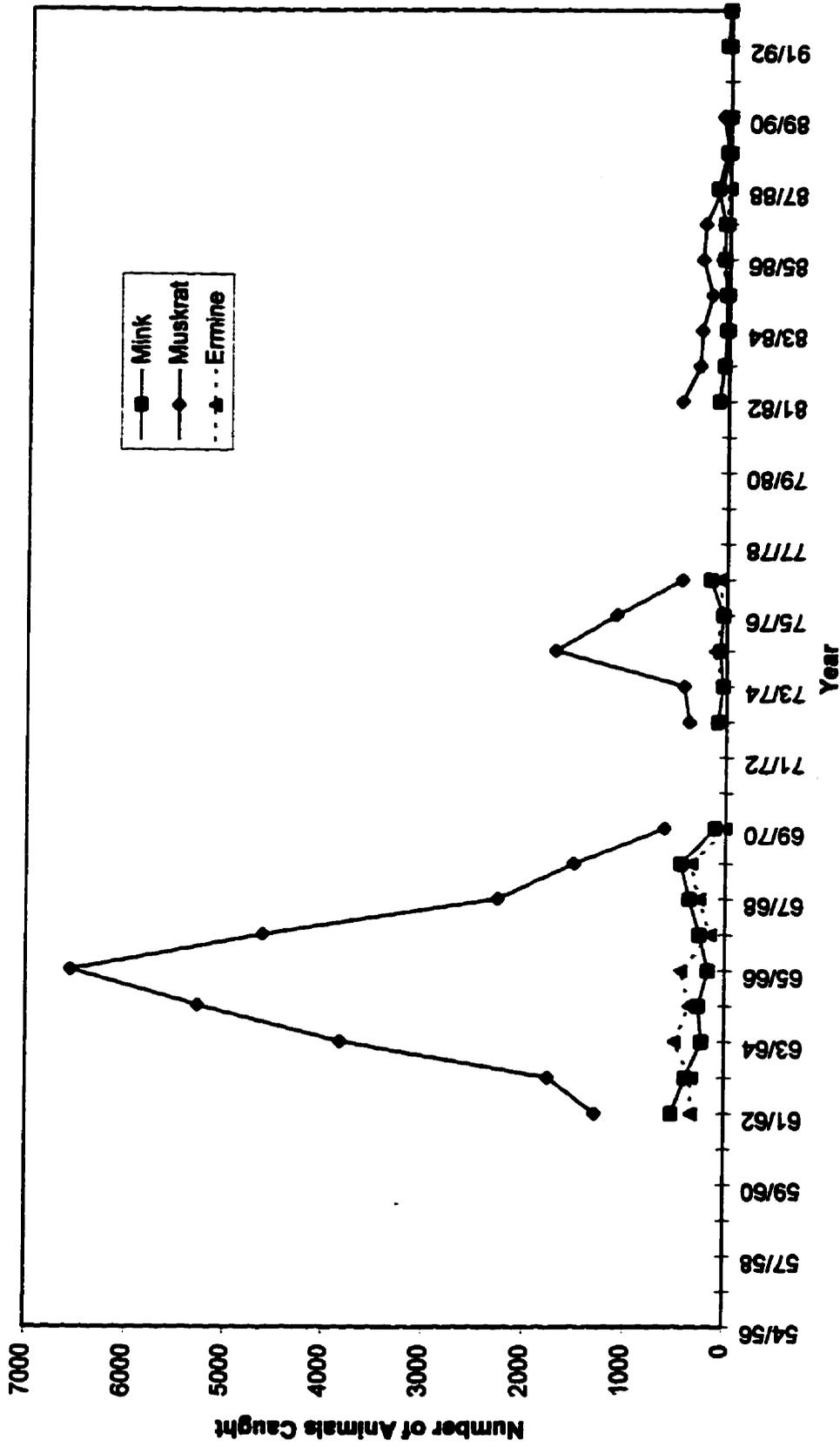


Figure 22. Fur return totals of mink, muskrat and ermine for Little Grand Rapids Registered Trapline section.

### Fur Production for Paingassi Trapline Section

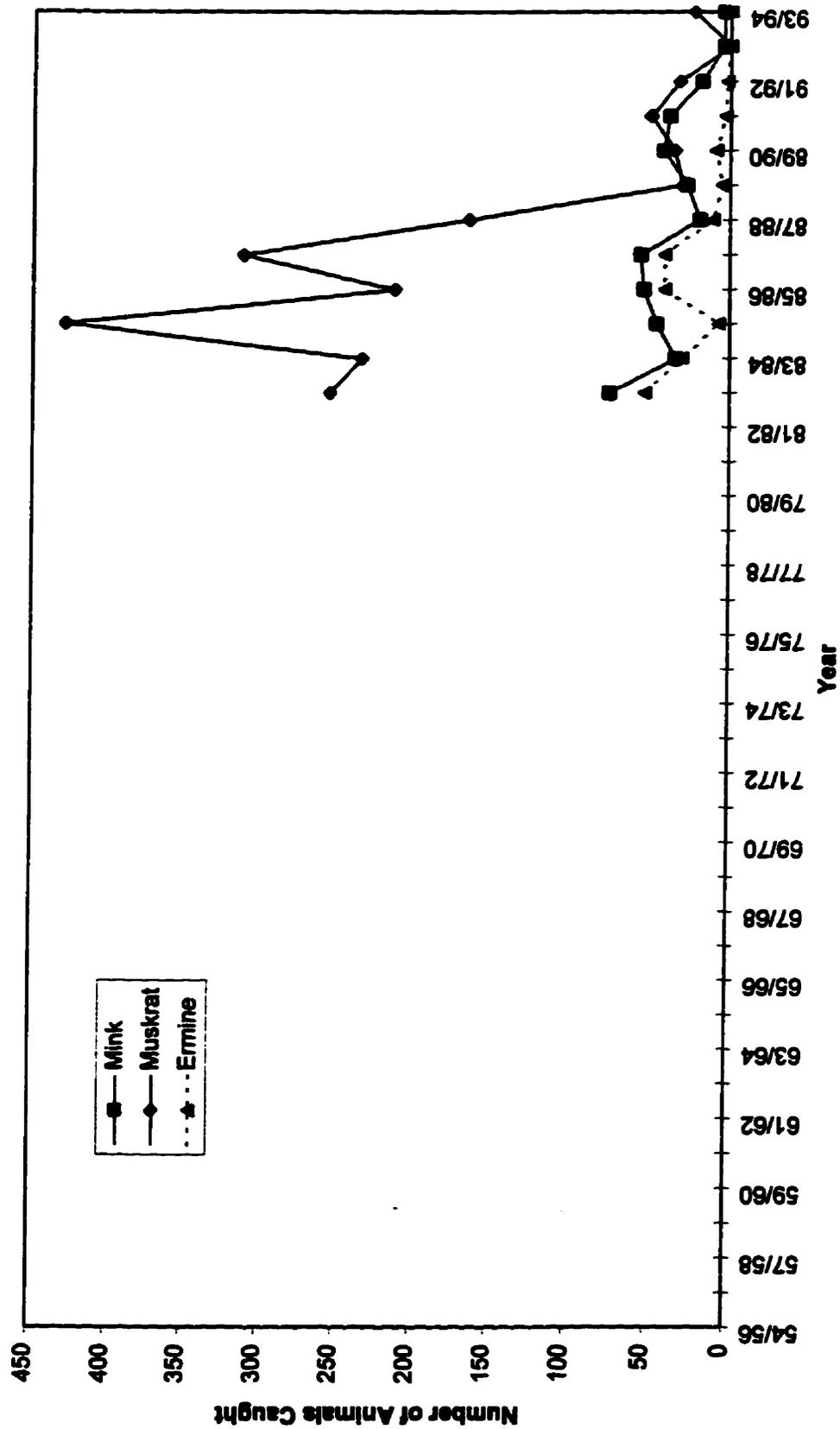


Figure 23. Fur return totals of mink, muskrat and ermine for Paingassi Registered Trapline section.

### Fur Production for Whiteshell Trapline Section

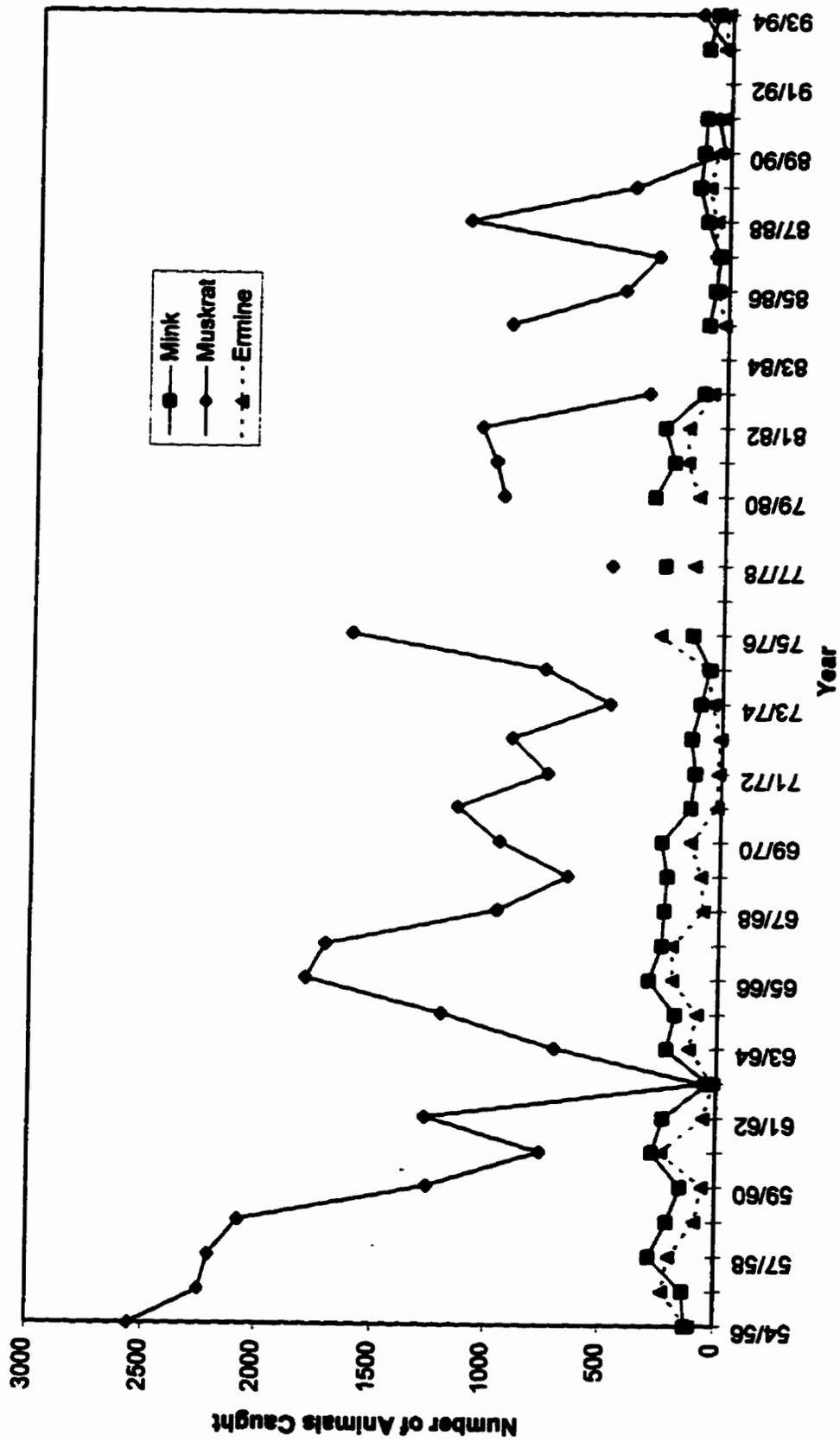


Figure 24. Fur return totals of mink, muskrat and ermine for Whiteshell Registered Trapline section.

Table 5. Transformed (Log10) fur return totals of mink, muskrat and ermine for each Manitoba Registered Trapline section.

Year	Berens River							Bloodvein											
	Mink	Mink + 2	Log Mink+2	Muskrat	Muskrat + 2	Log Muskrat+2	Ermine	Ermine + 2	Log Ermine+2	Mink	Mink + 2	Log Mink+2	Muskrat	Muskrat + 2	Log Muskrat+2	Ermine	Ermine + 2	Log Ermine+2	
54/56																			
56/57																			
57/58																			
58/59																			
59/60																			
60/61																			
61/62										133	135	2.13	250	252	2.4	104	106	2.03	
62/63									61	63	1.8	726	728	2.86	95	97	1.99		
63/64									47	49	1.69	1018	1020	3.01	95	97	1.99		
64/65									37	39	1.59	1577	1579	3.2	89	91	1.96		
65/66									68	70	1.85	1362	1364	3.13	201	203	2.31		
66/67									31	33	1.52	1711	1713	3.23	55	57	1.76		
67/68									87	89	1.95	660	662	2.82	121	123	2.09		
68/69									250	252	2.4	492	494	2.69	154	156	2.19		
69/70									111	113	2.05	607	609	2.78	39	41	1.61		
70/71																			
71/72	72	74	1.87	179	181	2.26	1	3	0.48	148	150	2.18	115	117	2.07	20	22	1.34	
72/73	65	67	1.83	200	202	2.31	32	34	1.53	46	48	1.68	136	138	2.14	77	79	1.9	
73/74	24	26	1.41	131	133	2.12	14	16	1.2	13	15	1.18	120	122	2.09	4	6	0.78	
74/75	43	45	1.65	1884	1886	3.28	95	97	1.99	30	32	1.51	559	561	2.75	112	114	2.06	

75/76	32	34	1.53	1117	1119	3.05	87	89	1.95	75/76	32	34	1.53	496	498	2.7	127	129	2.11
76/77	134	136	2.13	474	476	2.68	57	59	1.77	76/77	92	94	1.97	315	317	2.5	132	134	2.13
77/78	52	54	1.73	553	555	2.74	9	11	1.04	77/78									
78/79	268	270	2.43	977	979	2.99	90	92	1.96	78/79									
79/80										79/80									
80/81										80/81									
81/82										81/82	62	64	1.81	39	41	1.61	54	56	1.75
82/83										82/83	11	13	1.11	81	83	1.92	36	38	1.58
83/84	45	47	1.67	658	660	2.82	29	31	1.49	83/84	16	18	1.26	182	184	2.26	9	11	1.04
84/85	21	23	1.36	491	493	2.69	26	28	1.45	84/85	9	11	1.04	192	194	2.29	24	26	1.41
85/86	38	40	1.6	316	318	2.5	93	95	1.98	85/86	23	25	1.4	76	78	1.89	83	85	1.93
86/87	70	72	1.86	202	204	2.31	55	57	1.76	86/87	23	25	1.4	305	307	2.49	52	54	1.73
87/88	56	58	1.76	498	500	2.7	95	97	1.99	87/88	31	33	1.52	93	95	1.98	52	54	1.73
88/89	36	38	1.58	98	100	2	19	21	1.32	88/89	34	36	1.56	25	27	1.43	68	70	1.85
89/90	46	48	1.68	8	10	1	1	3	0.48	89/90	23	25	1.4	14	16	1.2	24	26	1.41
90/91										90/91									
91/92	10	12	1.08	5	7	0.85	5	7	0.85	91/92	32	34	1.53	8	10	1	44	46	1.66
92/93	15	17	1.23	27	29	1.46	17	19	1.28	92/93	15	17	1.23	27	29	1.46	16	18	1.26
93/94	2	4	0.6	27	29	1.46	6	8	0.9	93/94	8	10	1	125	127	2.1	46	48	1.68

		Duck Mountain							Hole River										
Year	Mink	Mink + 2	Log Mink+2	Muskat	Muskat + 2	Log Muskrat+2	Ermine	Ermine + 2	Log Ermine+2	Year	Mink	Mink + 2	Log Mink+2	Muskat	Muskat + 2	Log Muskrat+2	Ermine	Ermine + 2	Log Ermine+2
54/56										54/56									
56/57										56/57									
57/58										57/58									
58/59										58/59									
59/60										59/60									
60/61										60/61									
61/62	325	327	2.51	729	731	2.86	358	360	2.56	61/62									
62/63	330	332	2.52	828	830	2.92	445	447	2.65	62/63	82	84	1.92	384	388	2.59	83	85	1.93
63/64	226	228	2.36	1711	1713	3.23	636	638	2.8	63/64	74	76	1.88	1195	1197	3.08	113	115	2.06
64/65										64/65									
65/66	288	290	2.46	2436	2438	3.39	568	570	2.76	65/66									
66/67	95	97	1.99	1297	1299	3.11	115	117	2.07	66/67	68	70	1.85	967	969	2.99	72	74	1.87
67/68										67/68	81	83	1.92	670	672	2.83	45	47	1.67
68/69	488	490	2.69	1406	1408	3.15	875	877	2.94	68/69	216	218	2.34	527	529	2.72	144	146	2.16
69/70	539	541	2.73	1816	1818	3.26	375	377	2.58	69/70	76	78	1.89	760	762	2.88	9	11	1.04
70/71	364	366	2.56	3951	3953	3.6	255	257	2.41	70/71	38	40	1.6	604	606	2.78	0	2	0.3
71/72	339	341	2.53	8927	8929	3.95	199	201	2.3	71/72	109	111	2.05	34	36	1.56	30	32	1.51
72/73	538	540	2.73	3733	3735	3.57	255	257	2.41	72/73									
73/74	388	390	2.59	579	581	2.76	132	134	2.13	73/74	24	26	1.41	390	392	2.59	43	45	1.65
74/75	313	315	2.5	2086	2088	3.32	370	372	2.57	74/75	32	34	1.53	1288	1290	3.11	75	77	1.89

75/76										75/76	48	50	1.7	1071	1073	3.03	72	74	1.87
76/77										76/77	133	135	2.13	652	654	2.82	147	149	2.17
77/78										77/78	35	37	1.57	122	124	2.09	14	16	1.2
78/79										78/79									
79/80										79/80									
80/81										80/81									
81/82										81/82	48	50	1.7	494	496	2.7	59	61	1.79
82/83										82/83	44	46	1.66	623	625	2.8	23	25	1.4
83/84										83/84	17	19	1.28	237	239	2.38	4	6	0.78
84/85	73	75	1.88	1995	1997	3.3	370	372	2.57	84/85	28	30	1.48	504	506	2.7	45	47	1.67
85/86	161	163	2.21	1970	1972	3.29	209	211	2.32	85/86	40	42	1.62	296	298	2.47	59	61	1.79
86/87	183	185	2.27	2935	2937	3.47	360	362	2.56	86/87	44	46	1.66	862	864	2.94	51	53	1.72
87/88	272	274	2.44	1920	1922	3.28	287	289	2.46	87/88	57	59	1.77	351	353	2.55	25	27	1.43
88/89	147	149	2.17	1217	1219	3.09	244	246	2.39	88/89	34	36	1.56	15	17	1.23	20	22	1.34
89/90	135	137	2.14	237	239	2.38	84	86	1.93	89/90	44	46	1.66	14	16	1.2	19	21	1.32
90/91										90/91									
91/92	74	76	1.88	437	439	2.64	139	141	2.15	91/92	42	44	1.64	3	5	0.7	30	32	1.51
92/93	122	124	2.09	216	218	2.34	107	109	2.04	92/93	6	8	0.9	57	59	1.77	3	5	0.7
93/94	46	48	1.68	638	640	2.81	52	54	1.73	93/94	13	15	1.18	200	202	2.31	0	2	0.3

		Lac Du Bonnet								Little Grand Rapids										
Year	Mink	Mink + 2	Log Mink+2	Muskat	Muskat + 2	Log Muskrat+2	Ermine	Ermine + 2	Log Ermine+2	Year	Mink	Mink + 2	Log Mink+2	Muskat	Muskat + 2	Log Muskrat+2	Ermine	Ermine + 2	Log Ermine+2	
54/56										54/56										
56/57										56/57										
57/58										57/58										
58/59										58/59										
59/60										59/60										
60/61										60/61										
61/62										61/62										
62/63	191	193	2.29	215	217	2.34	359	361	2.56	62/63	527	529	2.72	1292	1294	3.11	333	335	2.53	
63/64	303	305	2.48	850	852	2.93	582	584	2.77	63/64	387	389	2.59	1759	1761	3.25	328	330	2.52	
64/65	186	188	2.27	1220	1222	3.09	421	423	2.63	64/65	228	230	2.36	3832	3834	3.58	503	505	2.7	
65/66										65/66	267	269	2.43	5279	5281	3.72	353	355	2.55	
66/67	106	108	2.03	501	503	2.7	411	413	2.62	66/67	171	173	2.24	6555	6557	3.82	440	442	2.65	
67/68	161	163	2.21	497	499	2.7	125	127	2.1	67/68	258	260	2.41	4613	4615	3.66	153	155	2.19	
68/69	208	210	2.32	233	235	2.37	178	180	2.26	68/69	358	361	2.56	2271	2273	3.36	267	269	2.43	
69/70	184	186	2.27	428	430	2.63	72	74	1.87	69/70	446	448	2.65	1512	1514	3.18	344	346	2.54	
70/71	161	163	2.21	590	592	2.77	51	53	1.72	70/71	108	110	2.04	612	614	2.79	7	9	0.95	
71/72	74	76	1.88	545	547	2.74	15	17	1.23	71/72										
72/73	176	178	2.25	303	305	2.48	85	87	1.94	72/73										
73/74	90	92	1.96	692	694	2.84	125	127	2.1	73/74	88	90	1.95	369	371	2.57	85	87	1.94	
74/75	60	62	1.79	728	730	2.86	122	124	2.09	74/75	39	41	1.61	424	426	2.63	38	40	1.6	

75/76	112	114	2.06	2381	2383	3.38	405	407	2.61	75/76	66	68	1.83	1708	1710	3.23	122	124	2.09
76/77	196	198	2.3	1553	1555	3.19	207	209	2.32	76/77	38	40	1.6	1107	1109	3.04	33	35	1.54
77/78	349	351	2.55	515	517	2.71	431	433	2.64	77/78	169	171	2.23	448	450	2.65	72	74	1.87
78/79	53	55	1.74	308	310	2.49	30	32	1.51	78/79									
79/80	490	492	2.69	674	676	2.83	415	417	2.62	79/80									
80/81										80/81									
81/82	233	235	2.37	674	676	2.83	253	255	2.41	81/82									
82/83	173	175	2.24	1689	1691	3.23	106	108	2.03	82/83	94	96	1.98	460	462	2.66	102	104	2.02
83/84	141	143	2.16	873	875	2.94	110	112	2.05	83/84	44	46	1.66	289	291	2.46	45	47	1.67
84/85	85	87	1.94	1211	1213	3.08	197	199	2.3	84/85	20	22	1.34	272	274	2.44	10	12	1.08
85/86	126	128	2.11	521	523	2.72	216	218	2.34	85/86	24	26	1.41	171	173	2.24	11	13	1.11
86/87	137	139	2.14	1415	1417	3.15	153	155	2.19	86/87	50	52	1.72	269	271	2.43	78	80	1.9
87/88	230	232	2.37	993	995	3	270	272	2.43	87/88	45	47	1.67	245	247	2.39	26	28	1.45
88/89	245	247	2.39	128	130	2.11	189	191	2.28	88/89	122	124	2.09	87	89	1.95	8	10	1
89/90	119	121	2.08	62	64	1.81	77	79	1.9	89/90	26	28	1.45	5	7	0.85	4	6	0.78
90/91										90/91	19	21	1.32	68	70	1.85	2	4	0.6
91/92	186	188	2.27	293	295	2.47	109	111	2.05	91/92									
92/93	45	47	1.67	98	100	2	16	18	1.26	92/93	34	36	1.56	17	19	1.28	9	11	1.04
93/94	67	69	1.84	1186	1188	3.07	108	110	2.04	93/94	9	11	1.04	0	2	0.3	10	12	1.08

Year	Paunggassi						Whiteshell											
	Mink	Mink + 2	Log Mink+2	Muskat	Muskat + 2	Log Musktrat+2	Ermine	Ermine + 2	Log Ermine+2	Mink	Mink + 2	Log Mink+2	Musktrat	Musktrat + 2	Log Musktrat+2	Ermine	Ermine + 2	Log Ermine+2
54/56										119	121	2.08	2557	2559	3.41	105	107	2.03
56/57									130	132	2.12	2249	2251	3.35	223	225	2.35	
57/58									279	281	2.45	2205	2207	3.34	193	195	2.29	
58/59									202	204	2.31	2074	2076	3.32	85	87	1.94	
59/60									145	147	2.17	1261	1263	3.1	55	57	1.76	
60/61									271	273	2.44	763	765	2.88	229	231	2.36	
61/62									225	227	2.36	1273	1275	3.11	53	55	1.74	
62/63									32	34	1.53	60	62	1.79	12	14	1.15	
63/64									214	216	2.33	706	708	2.85	118	120	2.08	
64/65									179	181	2.26	1208	1210	3.08	86	88	1.94	
65/66									296	298	2.47	1799	1801	3.26	193	195	2.29	
66/67									241	243	2.39	1715	1717	3.23	196	198	2.3	
67/68									233	235	2.37	964	966	2.98	66	68	1.83	
68/69									222	224	2.35	657	659	2.82	77	79	1.9	
69/70									247	249	2.4	958	960	2.98	124	126	2.1	
70/71									126	128	2.11	1148	1150	3.06	16	18	1.26	
71/72									108	110	2.04	752	754	2.88	12	14	1.15	
72/73									127	129	2.11	910	912	2.96	8	10	1	
73/74									88	90	1.95	484	486	2.69	41	43	1.63	
74/75									52	54	1.73	768	770	2.89	62	64	1.81	



### Log of Fur Production for Berens River Trapline Section

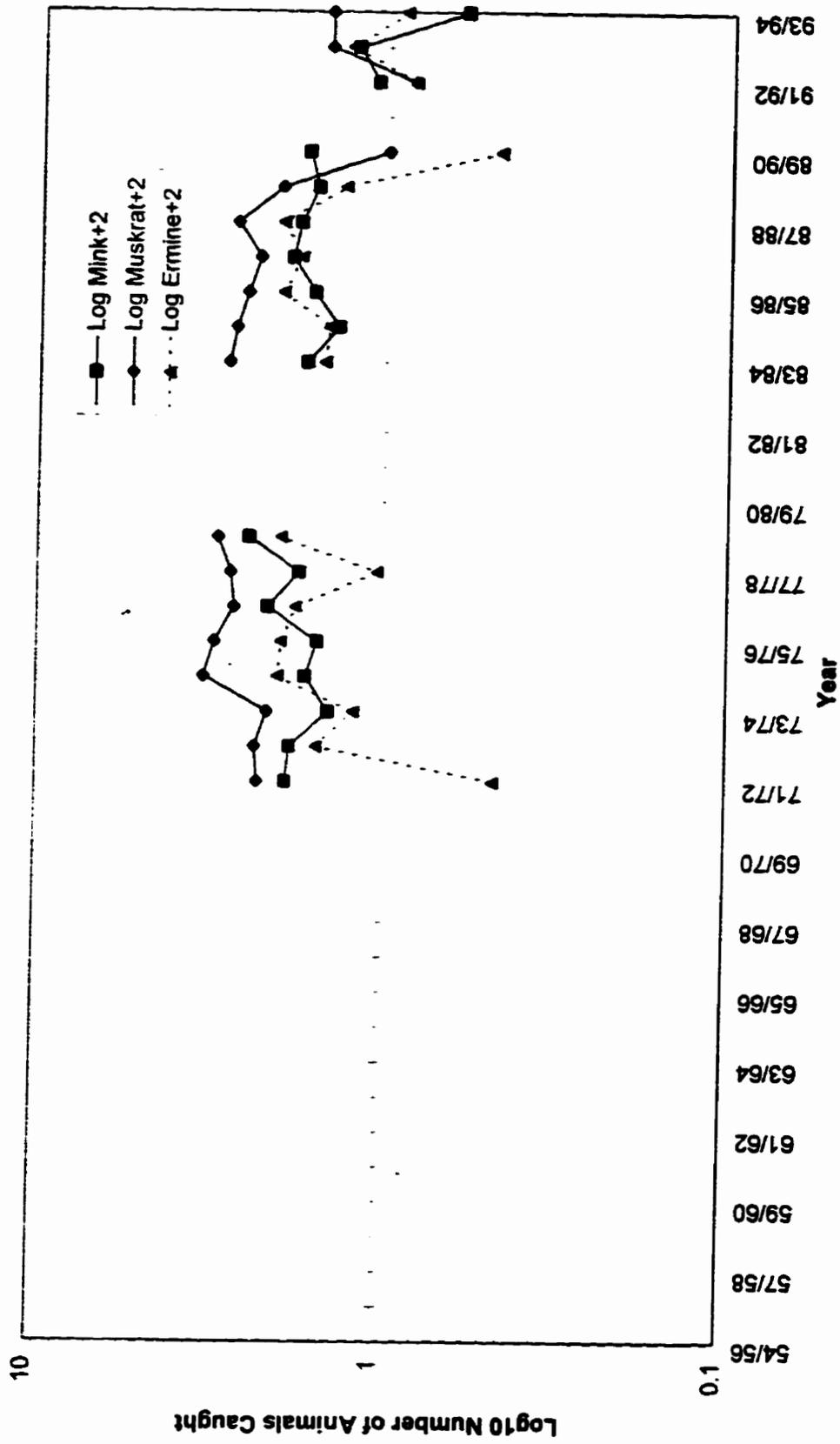


Figure 25. Transformed (Log10) fur return totals of mink, muskrat and ermine for Berens River Registered Trapline section.

### Log of Fur Production for Bloodvein Trapline Section

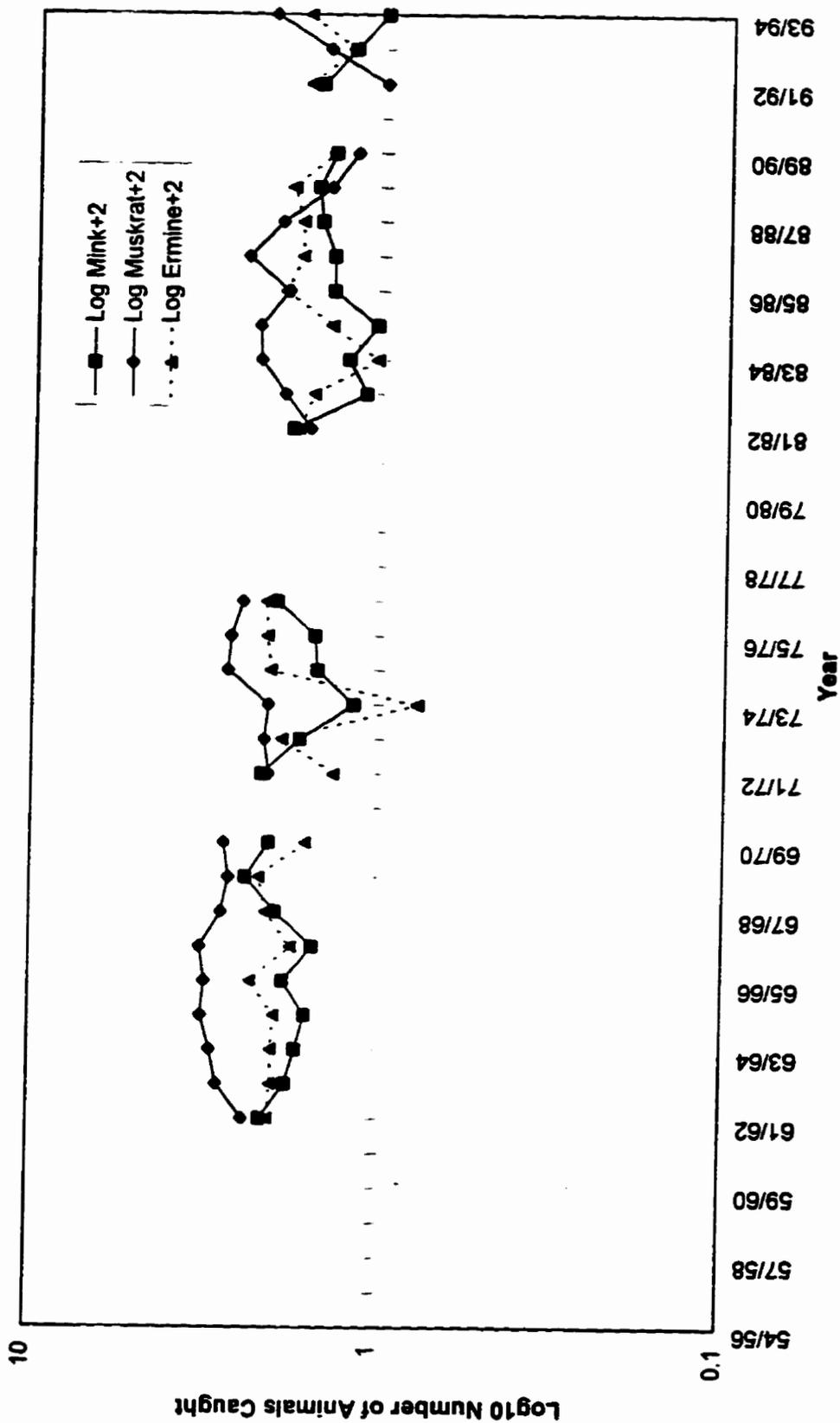


Figure 26. Transformed (Log10) fur return totals of mink, muskrat and ermine for Bloodvein Registered Trapline section.

### Log of Fur Production for Duck Mountain Trapline Section

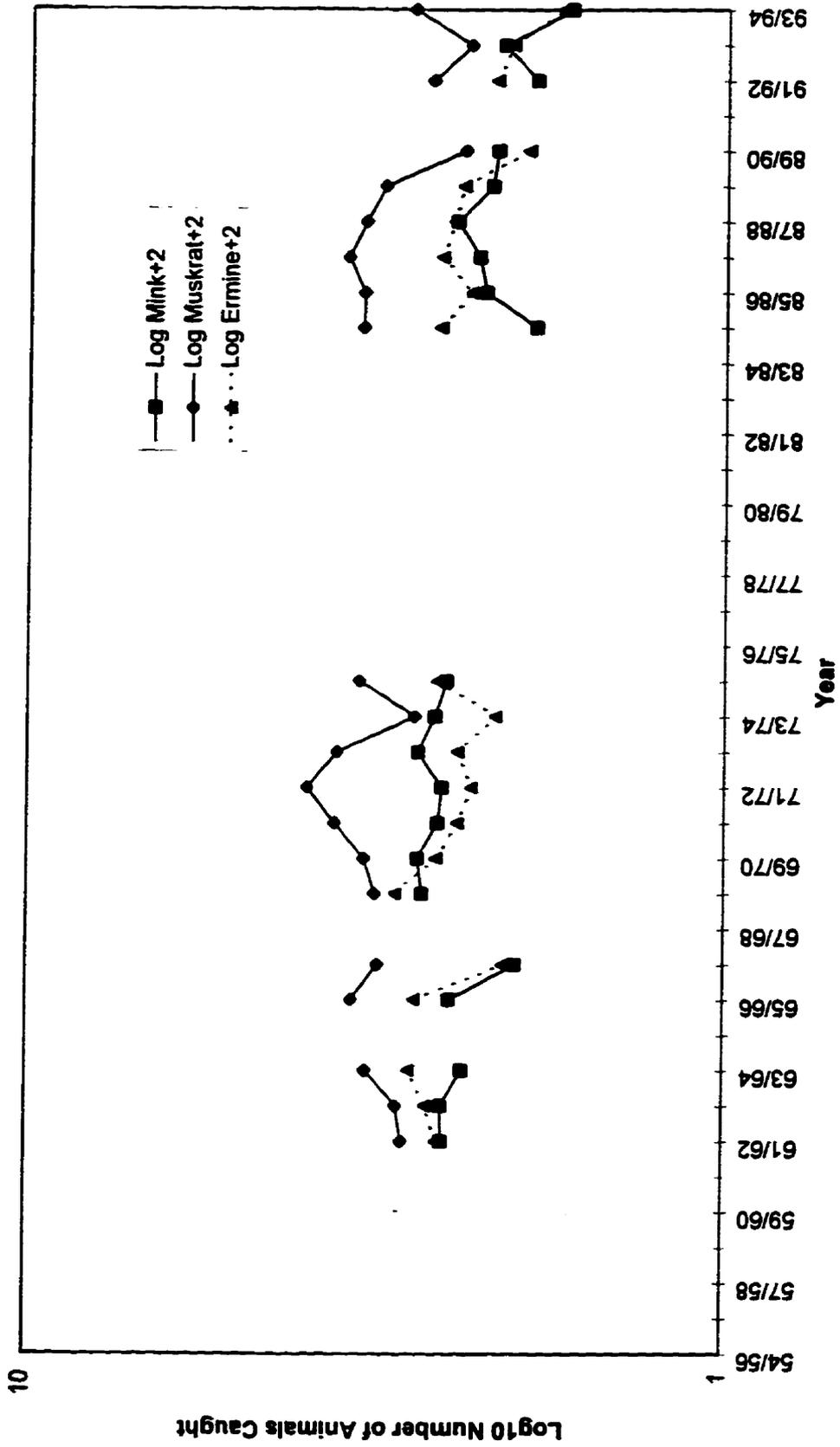


Figure 27. Transformed (Log10) fur return totals of mink, muskrat and ermine for Duck Mountain Registered Trapline section.

### Log of Fur Production for Hole River Trapline Section

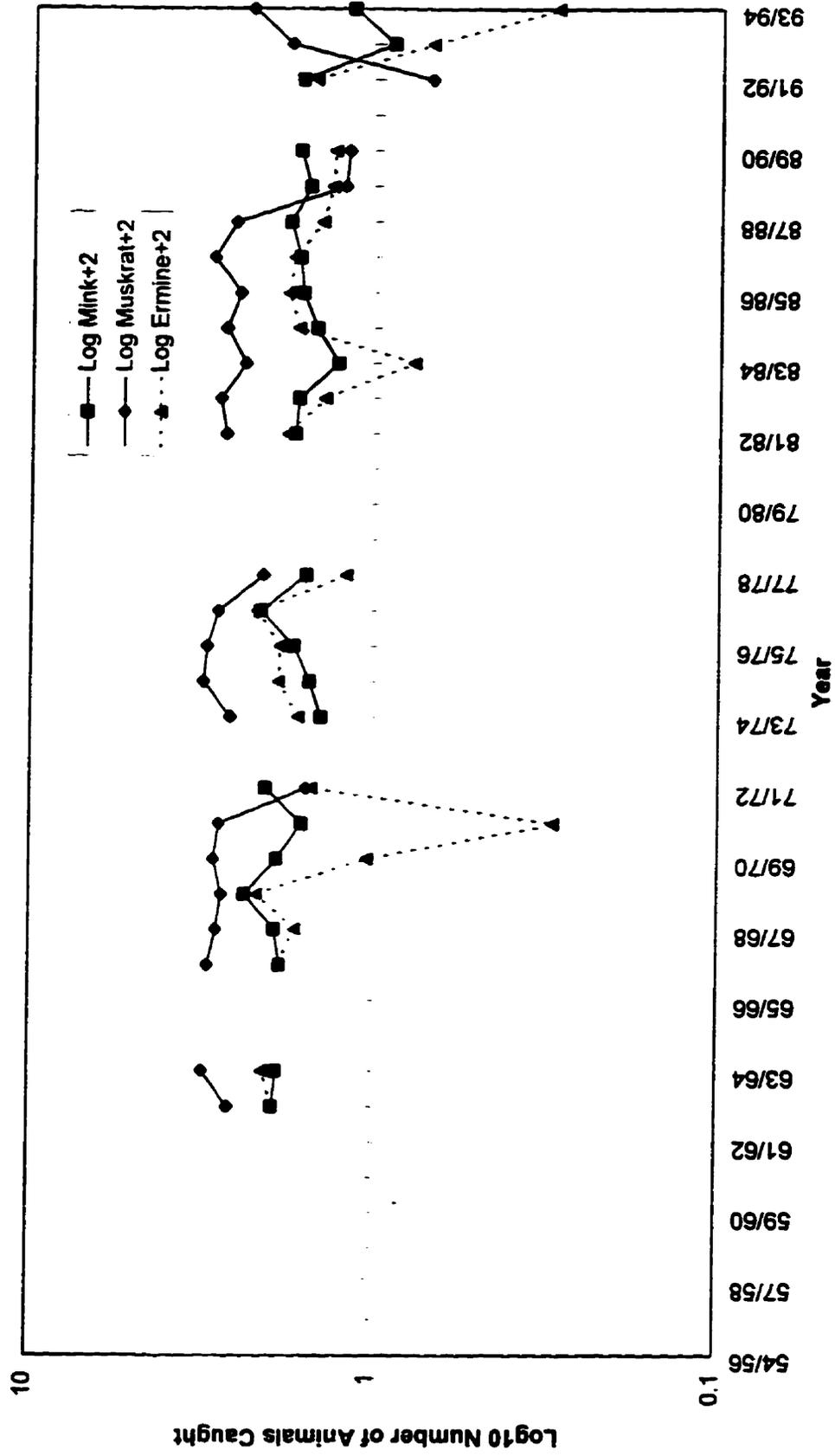


Figure 28. Transformed (Log10) fur return totals of mink, muskrat and ermine for Hole River Registered Trapline section.

Log of Fur Production for Lac Du Bonnet Trapline Section

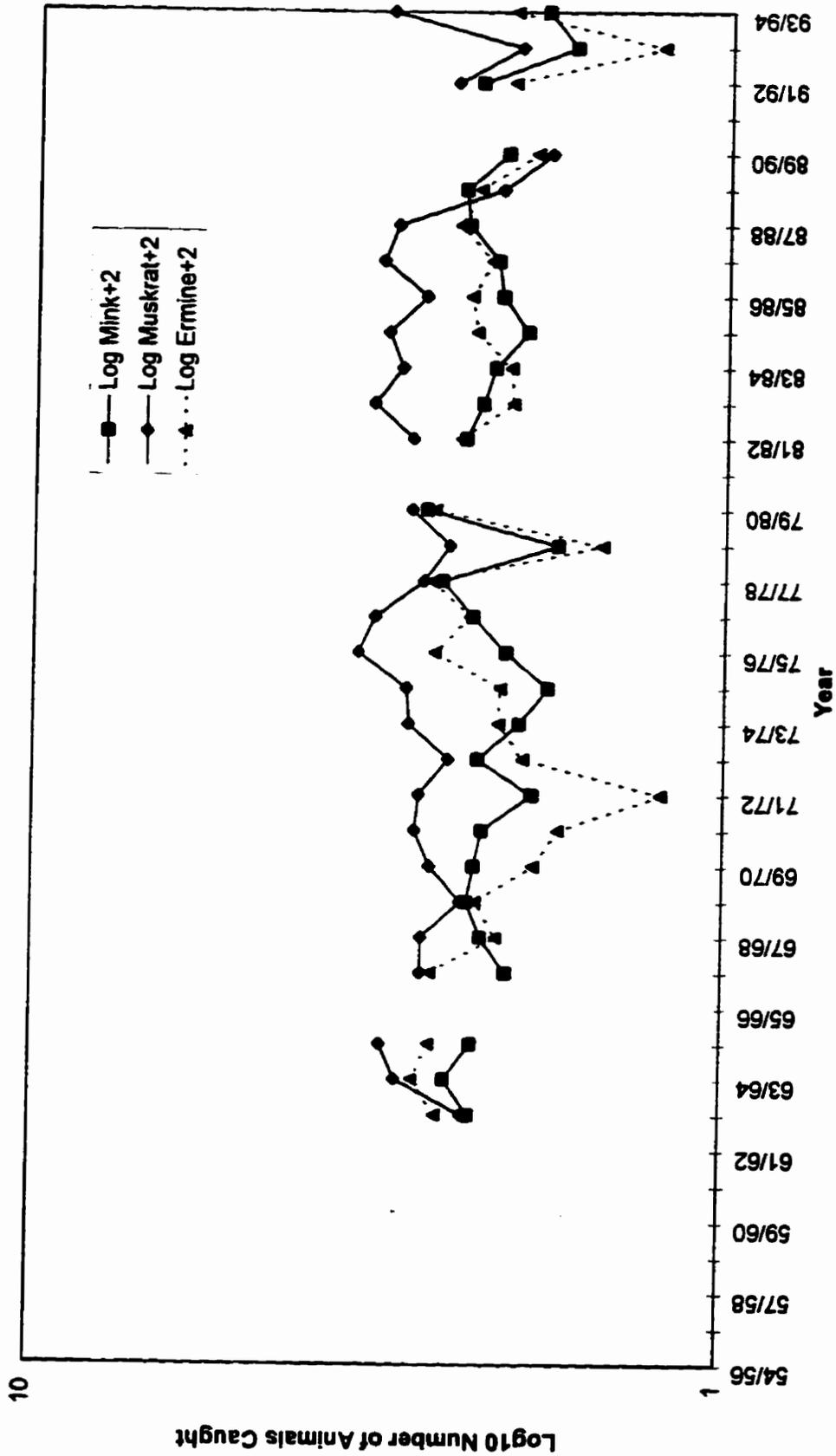


Figure 29. Transformed (Log10) fur return totals of mink, muskrat and ermine for Lac Du Bonnet Registered Trapline section.

### Log of Fur Production for Little Grand Rapids

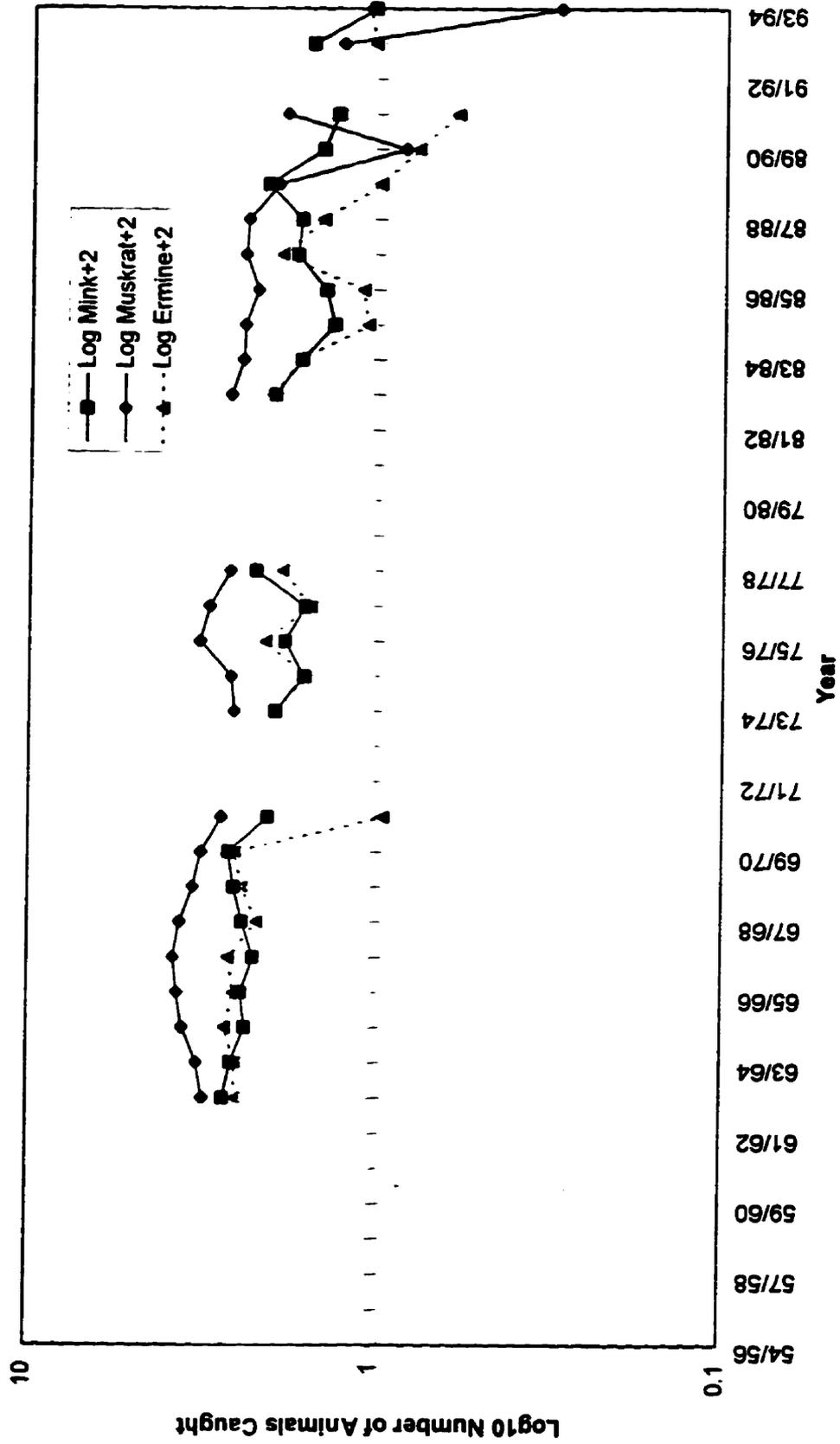


Figure 30. Transformed (Log<sub>10</sub>) fur return totals of mink, muskrat and ermine for Little Grand Rapids Registered Trapline section.

**log of Fur Production for Pauingassi Trapline Section**

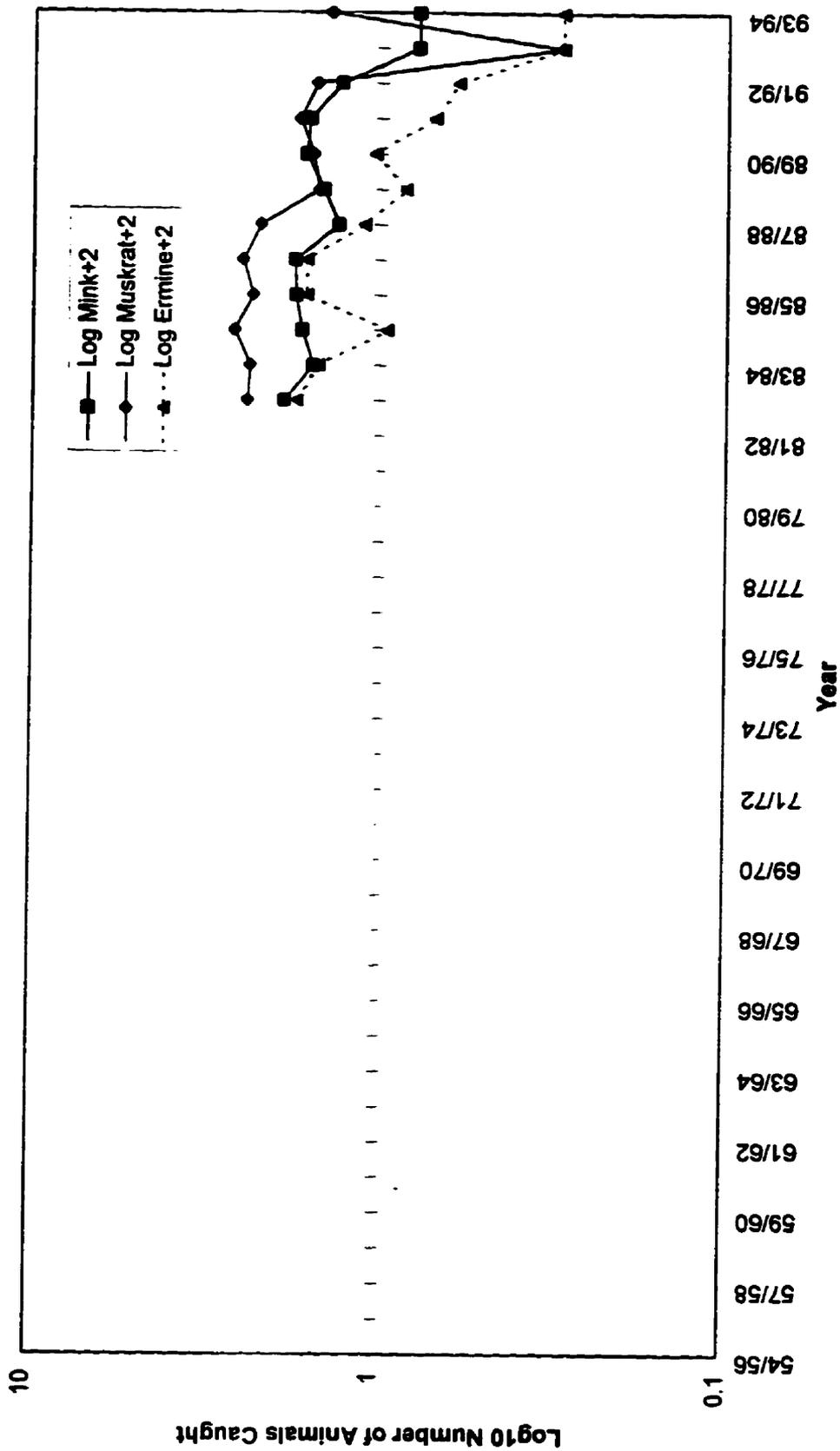


Figure 31. Transformed (Log<sub>10</sub>) fur return totals of mink, muskrat and ermine for Pauingassi Registered Trapline section.

Log of Fur Production for Whiteshell Trapline Section

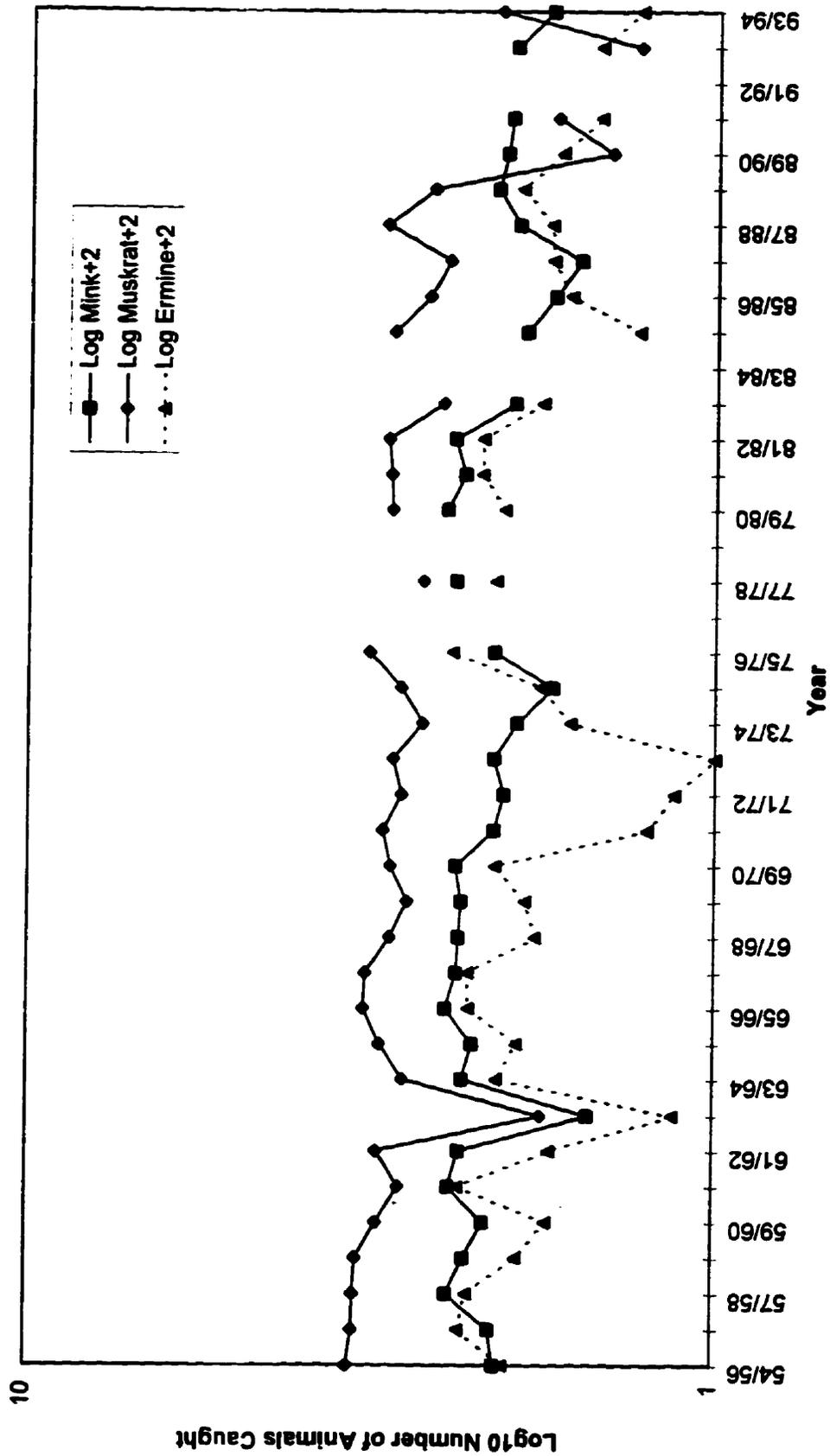
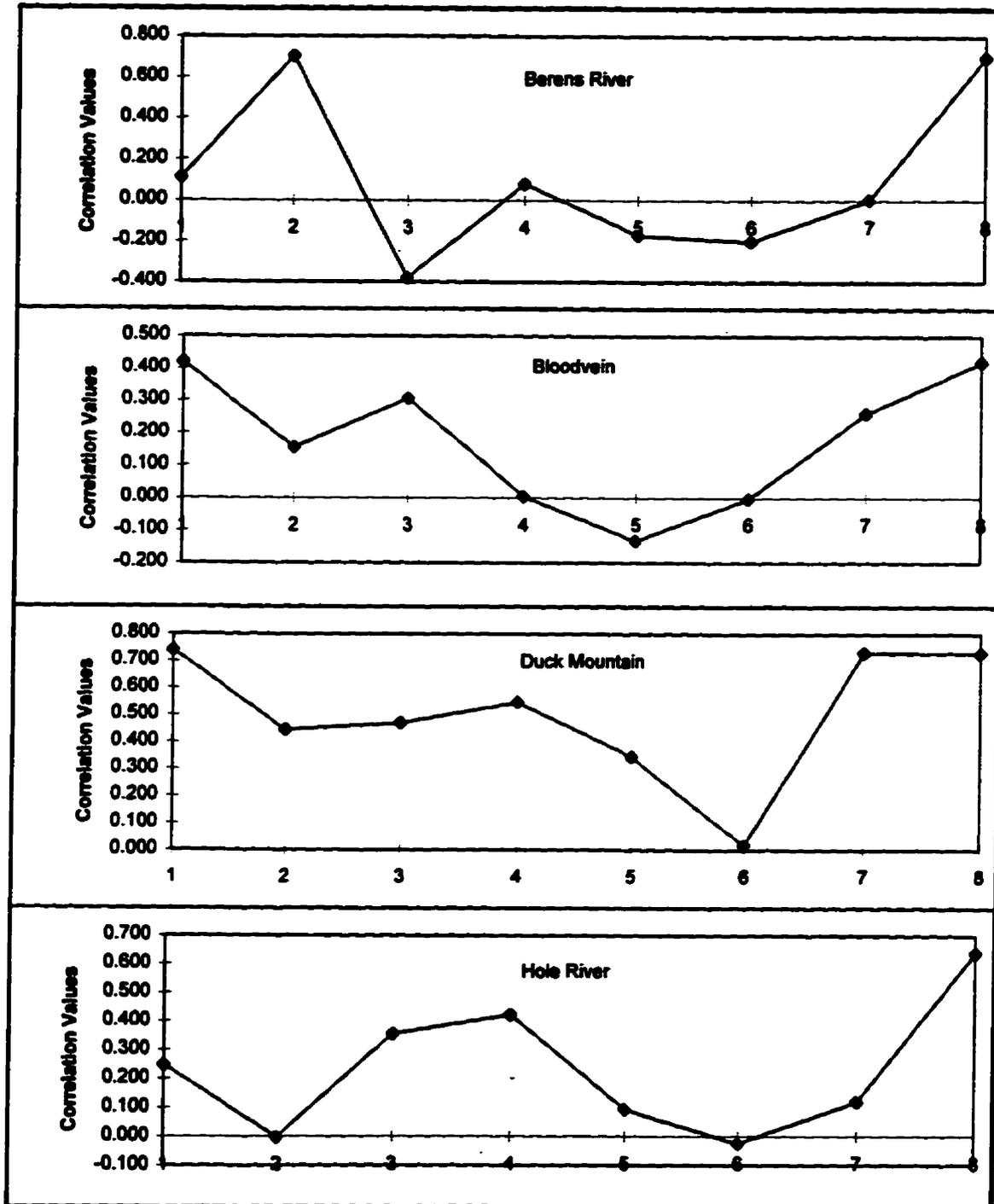


Figure 32. Transformed (Log10) fur return totals of mink, muskrat and ermine for Whiteshell Registered Trapline section.

Table 6. Intraspecific correlation coefficients calculated based on fur returns of mink, muskrat and ermine for each Manitoba Registered Trapline section.

	Berens River	Bloodvein	Duck Mountain	Hole River	Lac du Bonnet	Little Grand Rapids	Paungassi	Whiteshell
<b>Correlation Values for Mink vs Mink</b>								
1 Year out	0.11	0.42	0.74	0.25	-0.10	0.75	0.50	0.47
2 Years out	0.70	0.16	0.44	0.00	0.27	0.60	0.20	0.38
3 Years out	-0.38	0.31	0.47	0.36	0.04	0.59	0.30	0.25
4 Years out	0.08	0.01	0.55	0.42	-0.16	0.48	0.84	0.12
5 Years out	-0.17	-0.13	0.35	0.10	-0.15	0.48	0.44	-0.30
6 Years out	-0.20	0.00	0.02	-0.02	-0.32	0.64	0.11	-0.21
7 Years out	0.00	0.26	0.73	0.12	0.08	0.57	0.08	-0.22
8 Years out	0.70	0.42	0.73	0.64	-0.22	0.69	0.62	0.01
<b>Correlation Values for Muskrats vs Muskrats</b>								
1 Year out	0.35	0.80	0.45	0.34	0.28	0.86	0.67	0.68
2 Years out	0.01	0.62	-0.08	0.14	-0.09	0.57	0.66	0.39
3 Years out	0.11	0.40	-0.07	0.03	-0.13	0.36	0.52	0.38
4 Years out	0.44	0.36	0.02	0.20	-0.02	0.22	0.25	0.26
5 Years out	-0.03	0.14	-0.16	0.04	-0.30	0.21	0.18	0.12
6 Years out	-0.09	0.21	0.12	0.41	-0.27	0.19	0.31	0.16
7 Years out	-0.09	0.08	0.01	0.15	-0.13	0.19	0.18	0.08
8 Years out	0.53	0.31	-0.24	0.22	0.06	0.48	-0.74	0.40
<b>Correlation Values for Ermine vs Ermine</b>								
1 Year out	0.14	0.24	0.33	0.17	0.30	0.72	0.53	0.29
2 Years out	0.07	0.36	0.09	0.05	0.63	0.77	0.10	0.03
3 Years out	-0.25	0.26	0.18	-0.06	0.15	0.79	0.63	0.12
4 Years out	-0.07	0.07	0.28	-0.01	-0.03	0.64	0.73	-0.05
5 Years out	-0.33	-0.10	0.35	0.24	-0.31	0.66	0.39	-0.09
6 Years out	-0.23	-0.05	0.31	0.02	-0.37	0.47	0.19	0.08
7 Years out	-0.02	0.23	0.18	-0.25	-0.32	0.43	0.39	-0.29
8 Years out	-0.30	0.01	-0.23	0.36	-0.52	0.22	0.63	-0.04

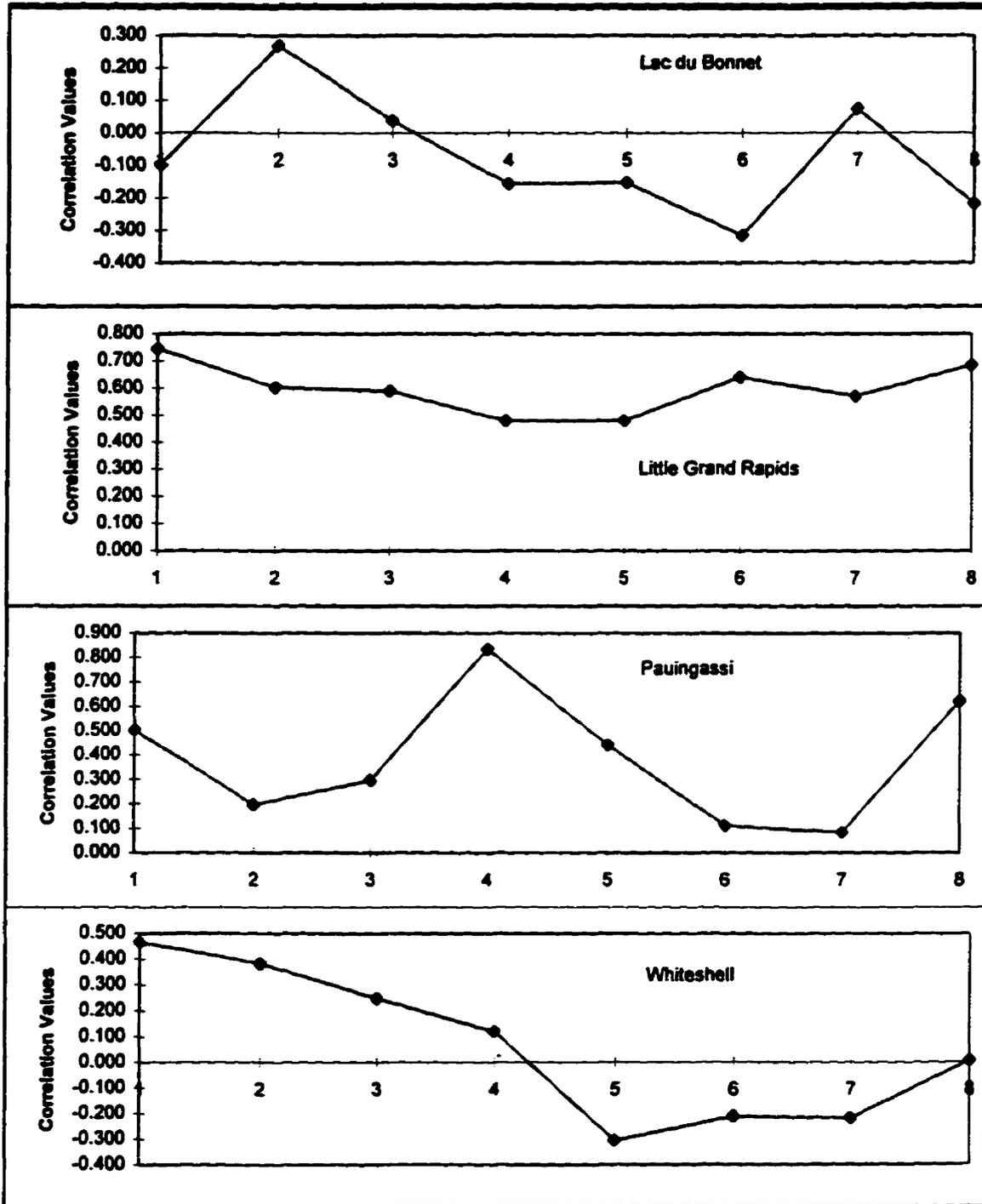
**Correlation Values for Mink vs Mink for Each Trapline Section**



**Number of Years out of Sequence**

Figure 33. Correlogram for intraspecific analysis of Registered Trapline sectional mink fur returns.

**Correlation Values for Mink vs Mink for Each Trapline Section**



**Number of Years out of Sequence**

**Correlation Values for Muskrat vs Muskrat for Each Trapline Section**

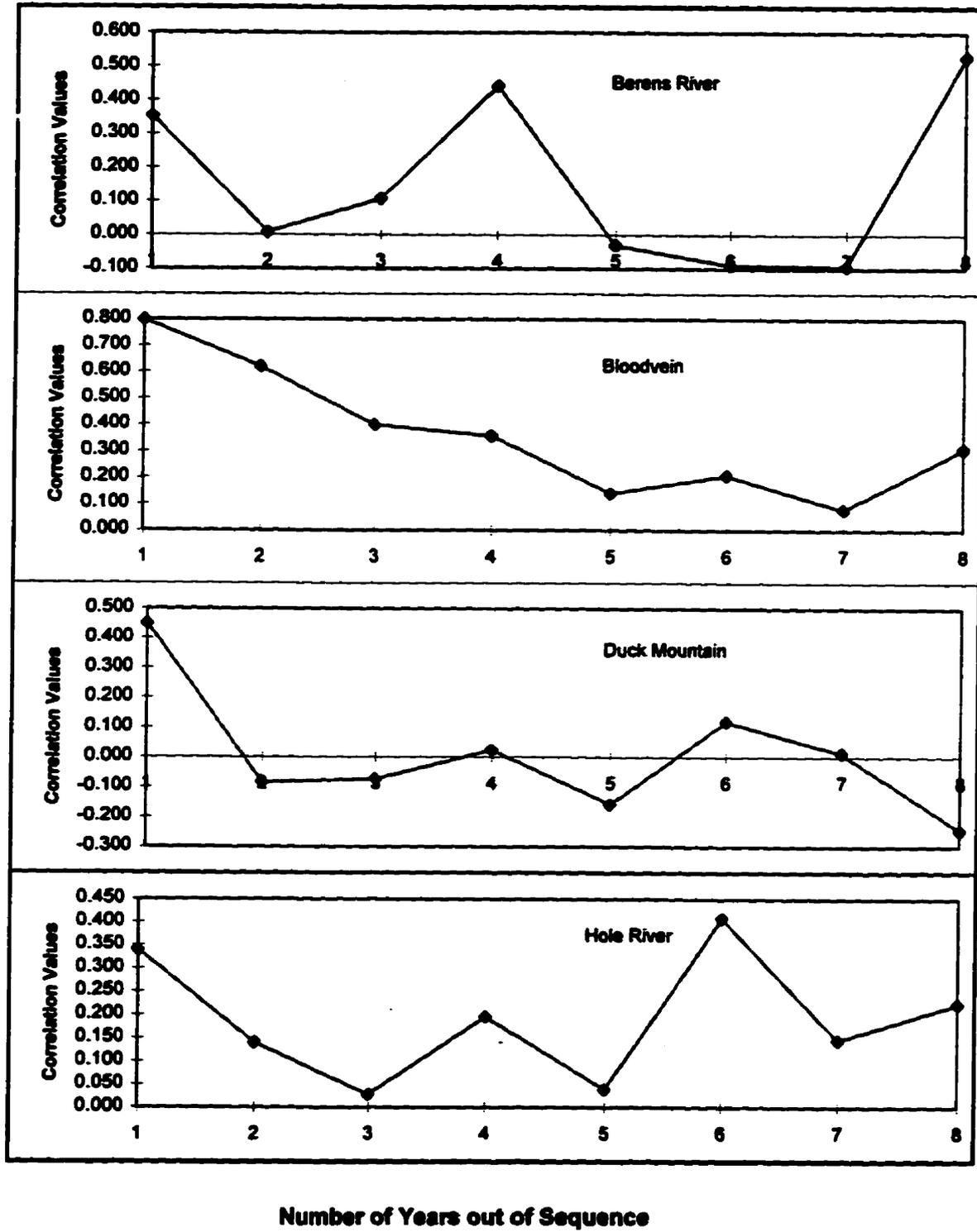
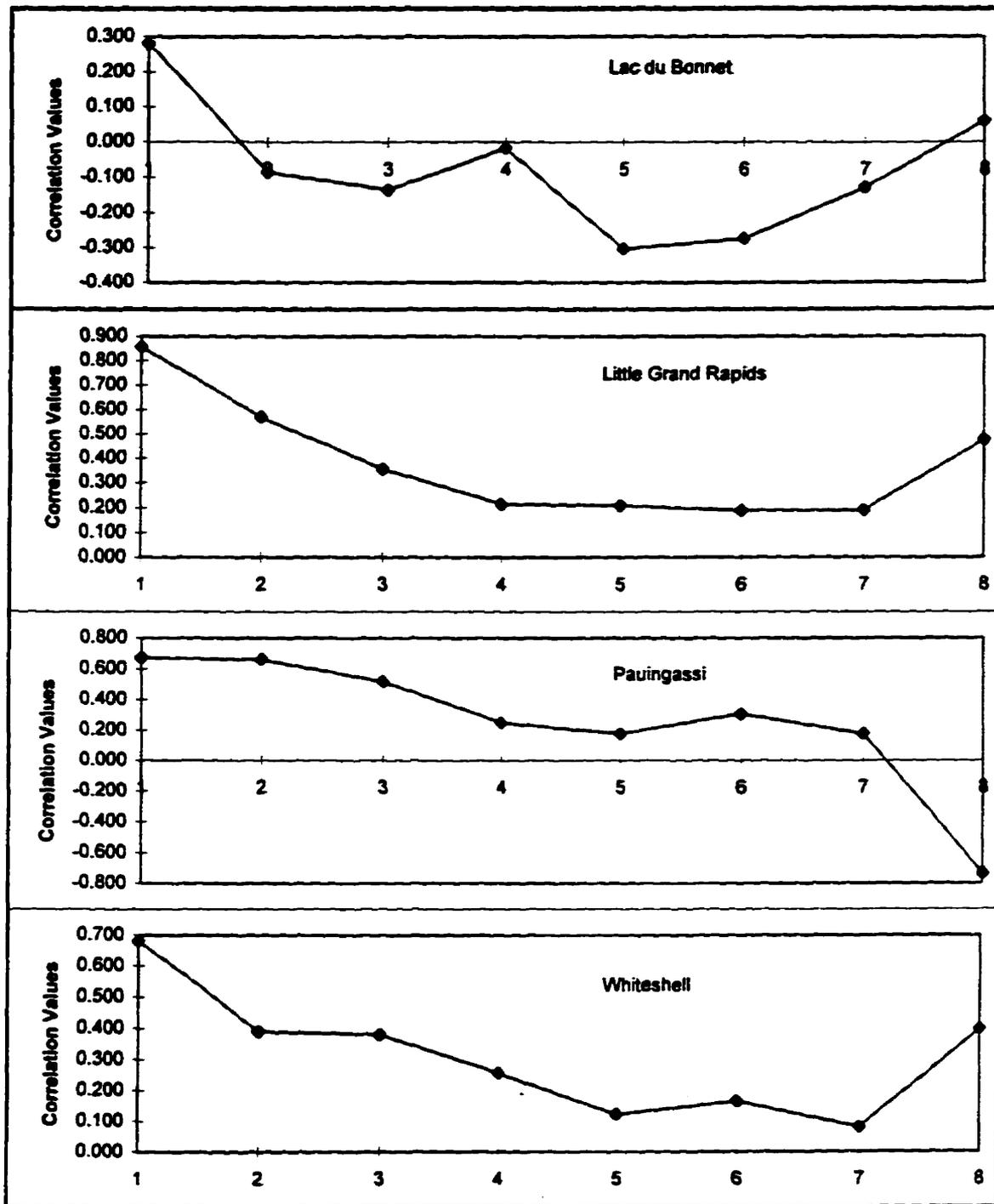


Figure 34. Correlogram for intraspecific analysis of Registered Trapline sectional muskrat fur returns.

**Correlation Values for Muskrat vs Muskrat for Each Trapline Section**



**Number of Years out of Sequence**

**Correlation Values for Ermine vs Ermine for Each Trapline Section**

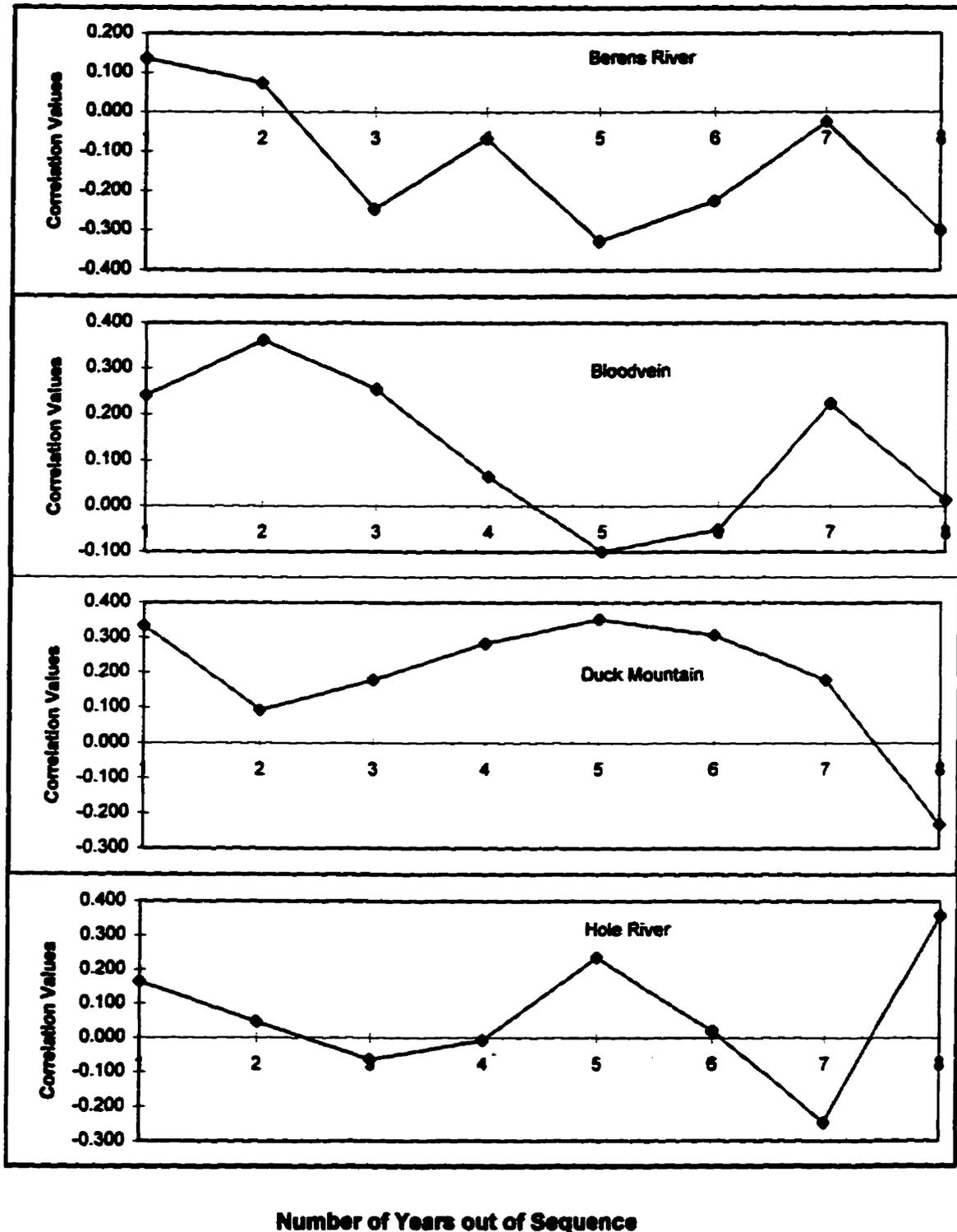
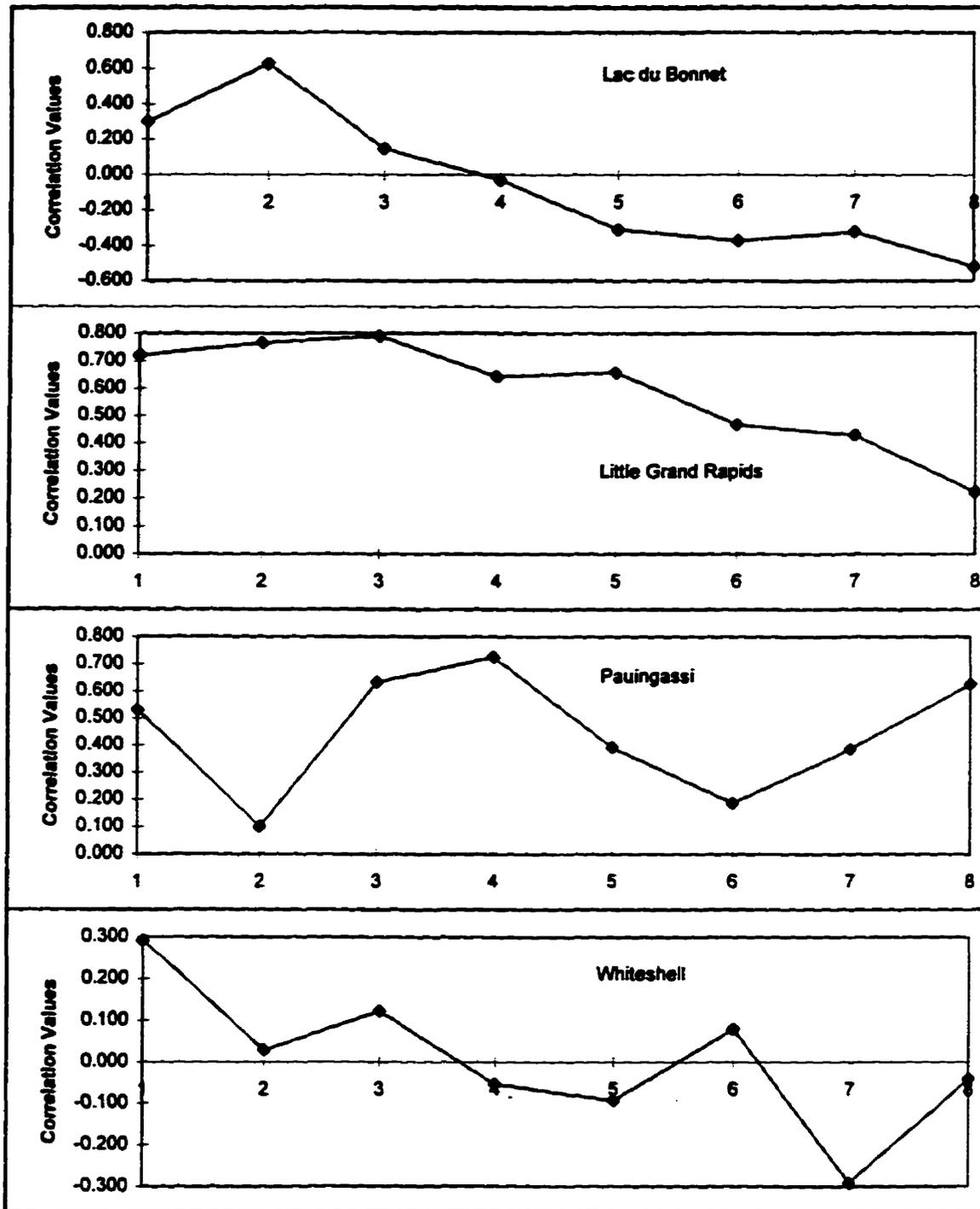


Figure 35. Correlogram for intraspecific analysis of Registered Trapline sectional ermine fur returns.

**Correlation Values for Ermine vs Ermine for Each Trapline Section**

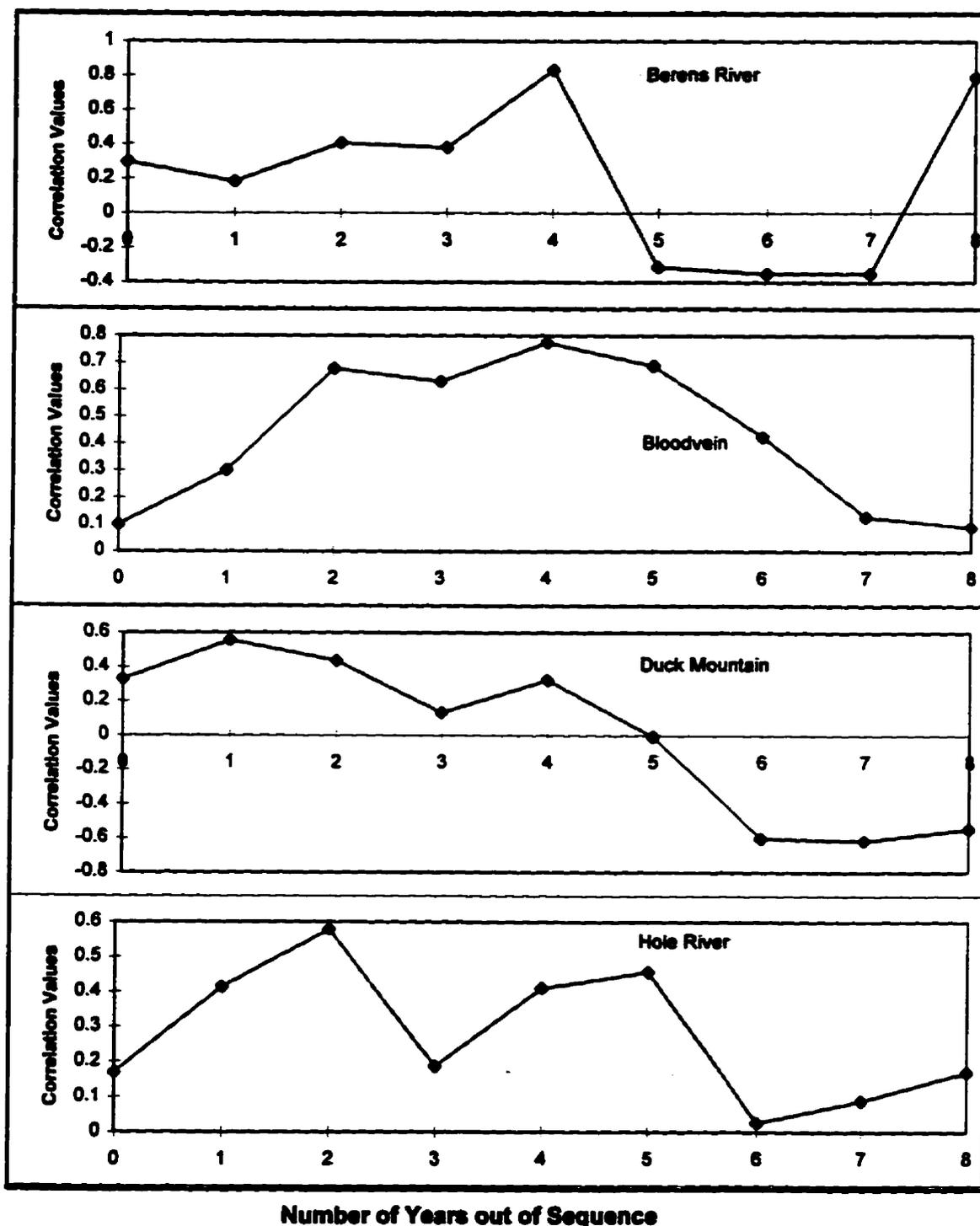


**Number of Years out of Sequence**

Table 7. Interspecific correlation coefficients calculated based on fur return totals of mink, muskrat and ermine for each Manitoba Registered Trapline section.

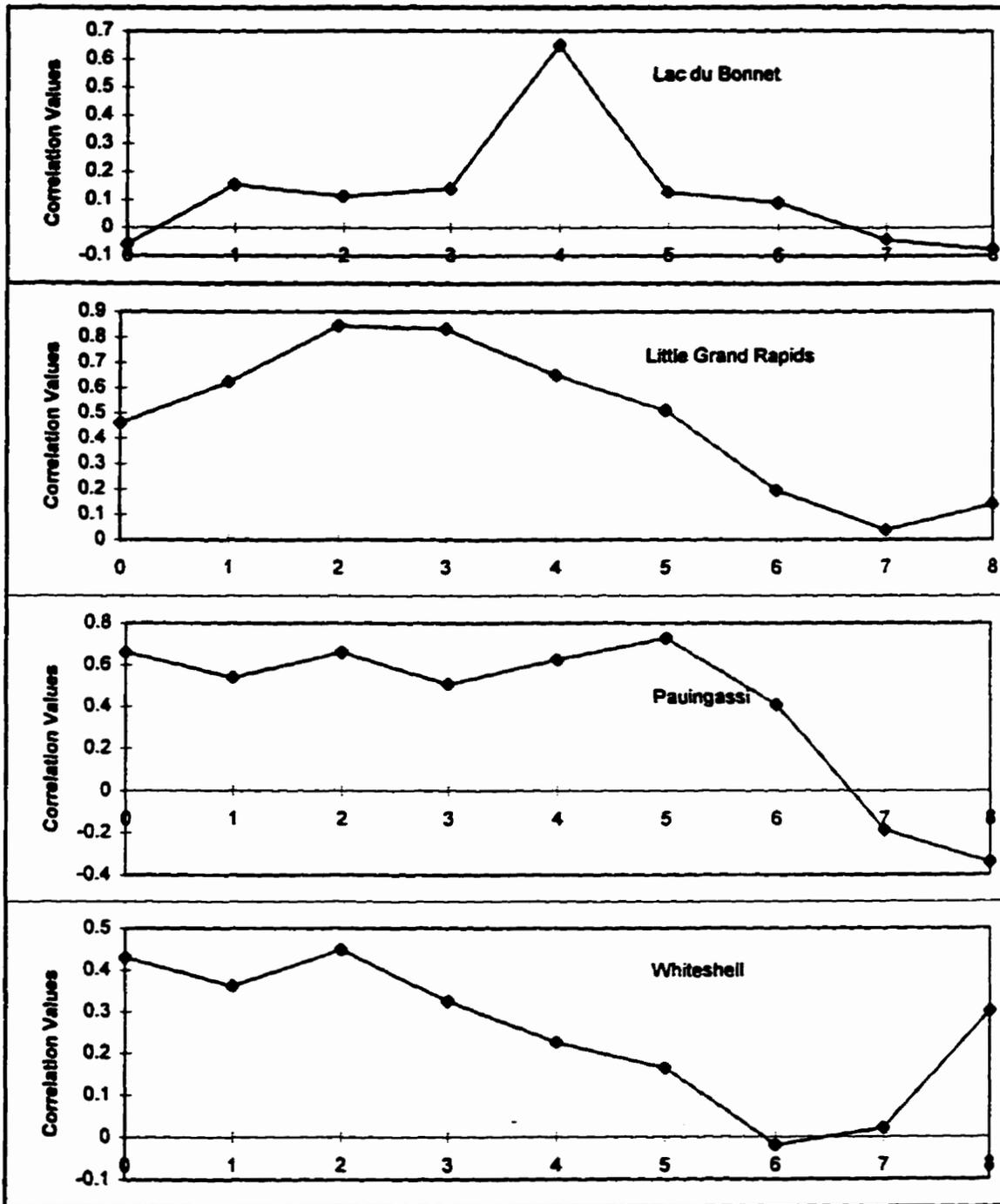
	Berens River	Bloodvein	Duck Mountain	Hole River	Lac du Bonnet	Little Grand Rapids	Pauiingassi	Whiteshell
<b>Correlation Values for Mink vs Muskrats</b>								
Same Year	0.30	0.10	0.33	0.17	-0.06	0.46	0.66	0.43
1 Year out	0.18	0.30	0.56	0.42	0.16	0.62	0.54	0.36
2 Years out	0.41	0.68	0.44	0.58	0.11	0.85	0.66	0.45
3 Years out	0.38	0.63	0.13	0.19	0.14	0.83	0.51	0.33
4 Years out	0.84	0.78	0.32	0.41	0.65	0.65	0.63	0.23
5 Years out	-0.31	0.69	-0.01	0.46	0.13	0.51	0.73	0.17
6 Years out	-0.35	0.43	-0.60	0.03	0.09	0.20	0.41	-0.02
7 Years out	-0.35	0.13	-0.61	0.09	-0.04	0.04	-0.19	0.02
8 Years out	0.79	0.09	-0.54	0.17	-0.08	0.14	-0.34	0.30
<b>Correlation Values for Mink vs Ermine</b>								
Same Year	0.41	0.45	0.46	0.72	0.60	0.77	0.82	0.61
1 Year out	-0.03	0.44	0.35	0.16	0.07	0.68	0.36	0.56
2 Years out	0.39	0.26	0.16	0.17	0.56	0.67	0.29	0.31
3 Years out	0.36	0.73	0.08	0.53	0.05	0.85	0.75	0.43
4 Years out	0.44	0.47	0.64	0.47	0.28	0.71	0.88	0.33
5 Years out	-0.47	0.12	0.58	0.31	-0.11	0.75	0.22	-0.04
6 Years out	-0.38	0.35	0.24	0.10	-0.10	0.53	-0.10	-0.11
7 Years out	-0.51	0.05	0.35	-0.23	-0.13	0.37	0.14	-0.27
8 Years out	0.28	0.01	0.36	0.49	-0.43	0.53	0.69	-0.09
<b>Correlation Values for Muskrats vs Ermine</b>								
Same Year	0.69	0.49	0.05	0.51	0.28	0.78	0.60	0.57
1 Year out	0.00	0.61	-0.03	0.35	0.13	0.82	0.71	0.57
2 Years out	0.03	0.48	0.40	0.32	-0.15	0.87	0.56	0.08
3 Years out	-0.14	0.32	0.69	-0.07	-0.22	0.78	0.37	0.12
4 Years out	-0.12	0.32	0.39	0.02	-0.29	0.56	0.70	0.18
5 Years out	-0.17	0.25	-0.36	-0.10	-0.38	0.50	0.70	0.14
6 Years out	-0.51	0.20	0.21	0.49	-0.04	0.60	-0.42	0.21
7 Years out	-0.52	0.33	0.88	0.28	-0.16	0.62	-0.23	-0.04
8 Years out	0.25	0.29	0.54	0.26	0.11	0.31	0.91	0.03

**Correlation Values for Mink vs Muskrats for Each Trapline Section**



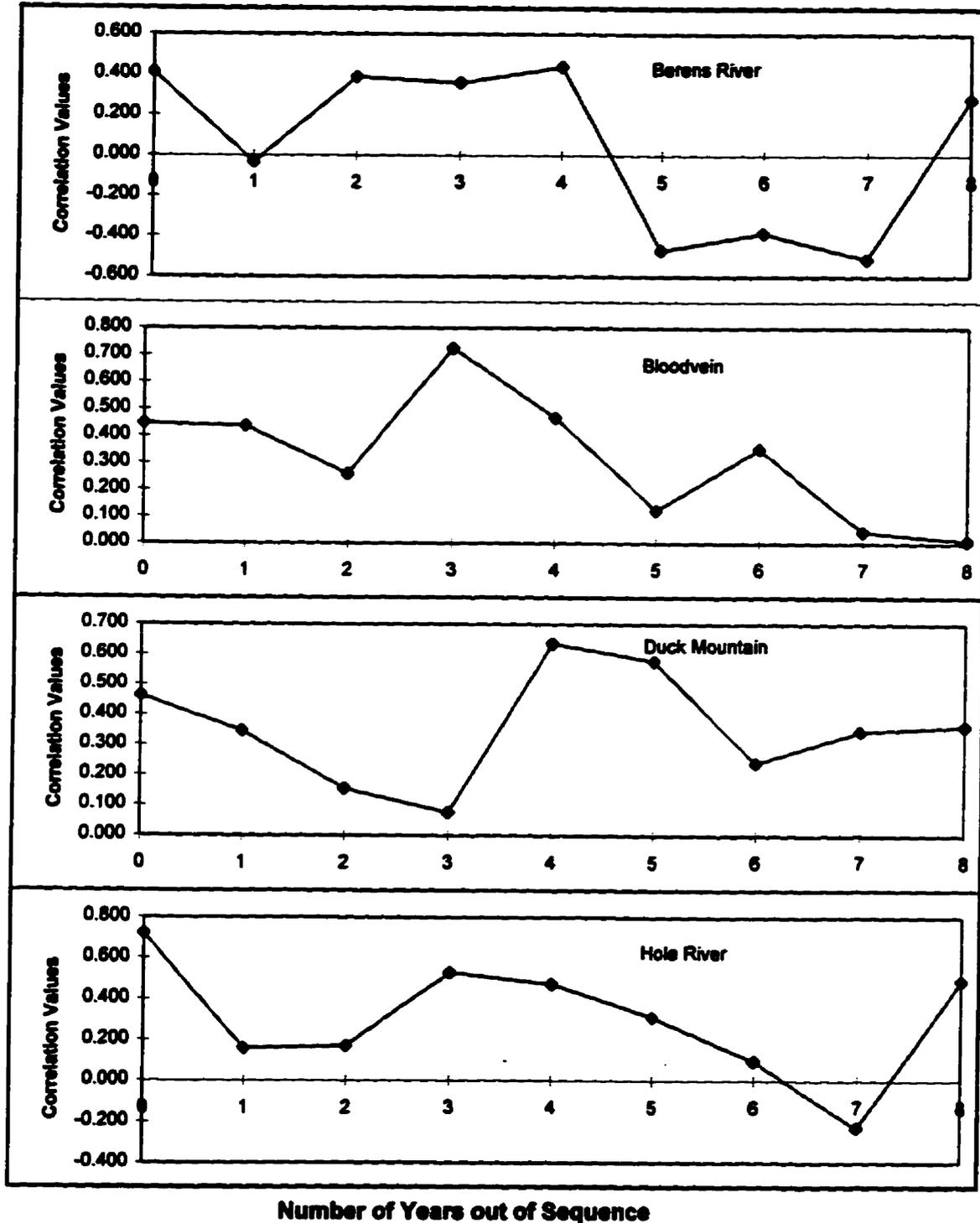
**Figure 36. Correlogram for interspecific analysis of Registered Trapline section fur returns: Mink versus Muskrat.**

**Correlation Values for Mink vs Muskrats for Each Trapline Section**



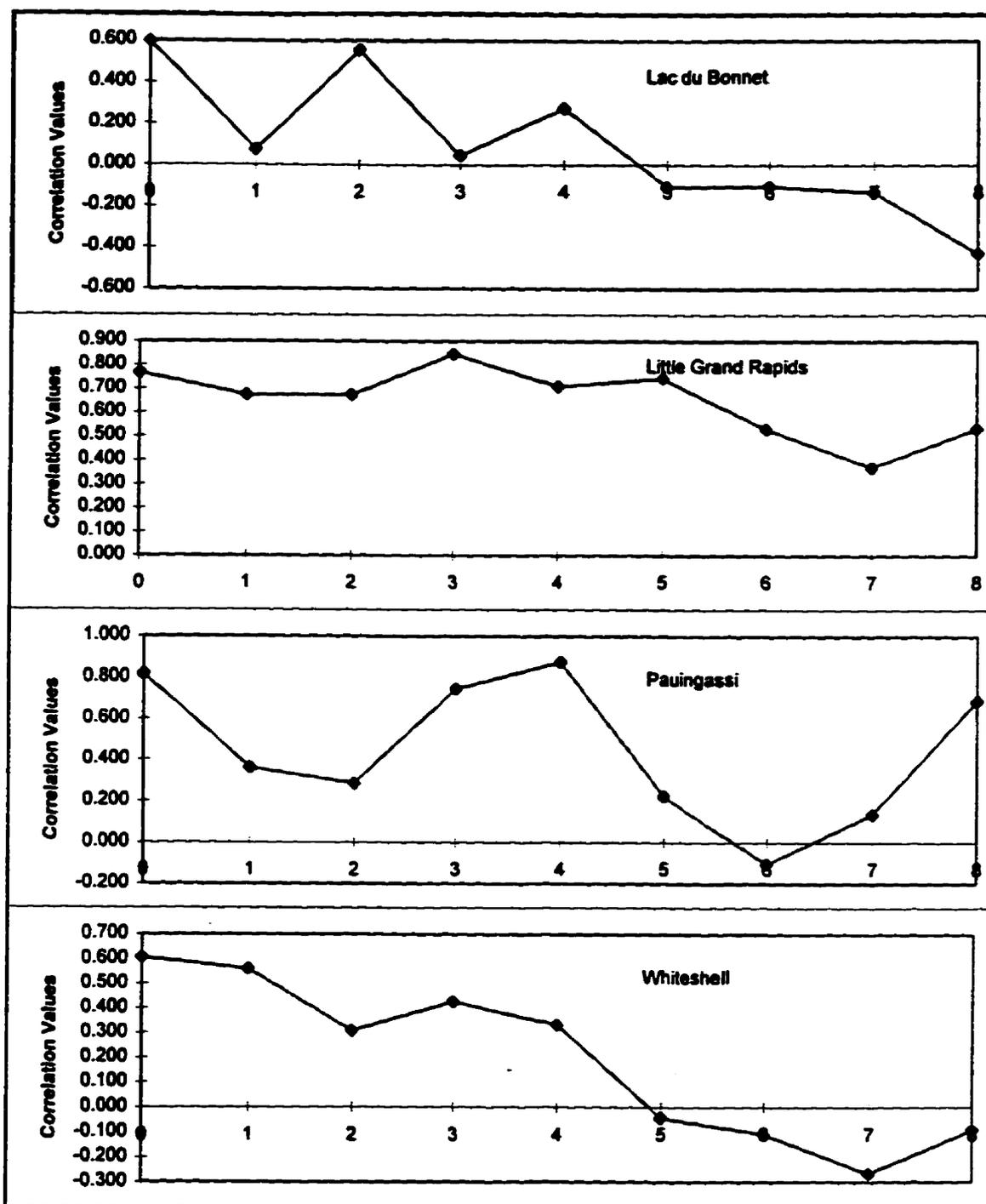
**Number of Years out of Sequence**

**Correlation Values for Mink vs Ermine for Each Trapline Section**



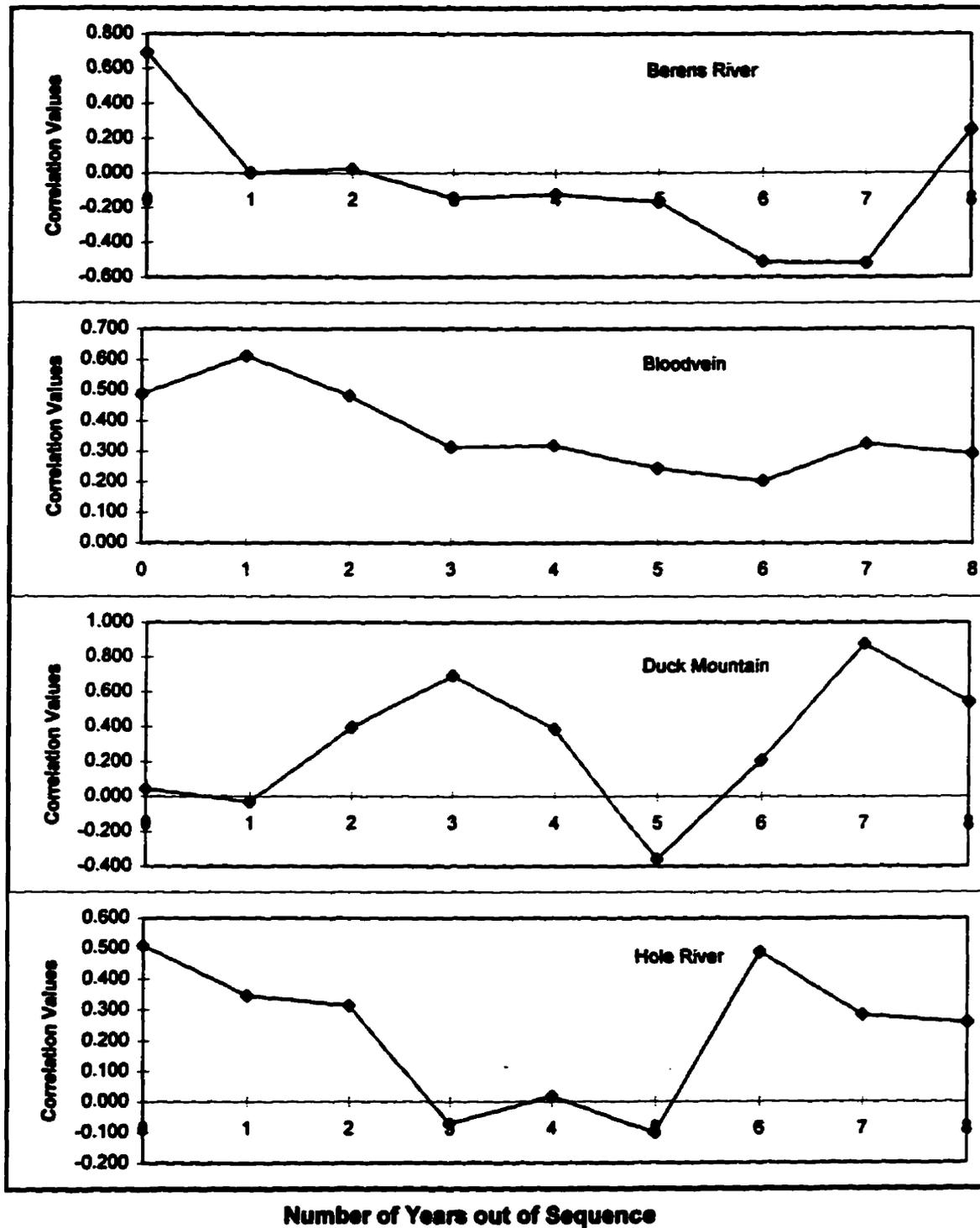
**Figure 37. Correlogram for interspecific analysis of Registered Trapline sectional fur returns: Mink versus Ermine.**

**Correlation Values for Mink vs Ermine for Each Trapline Section**



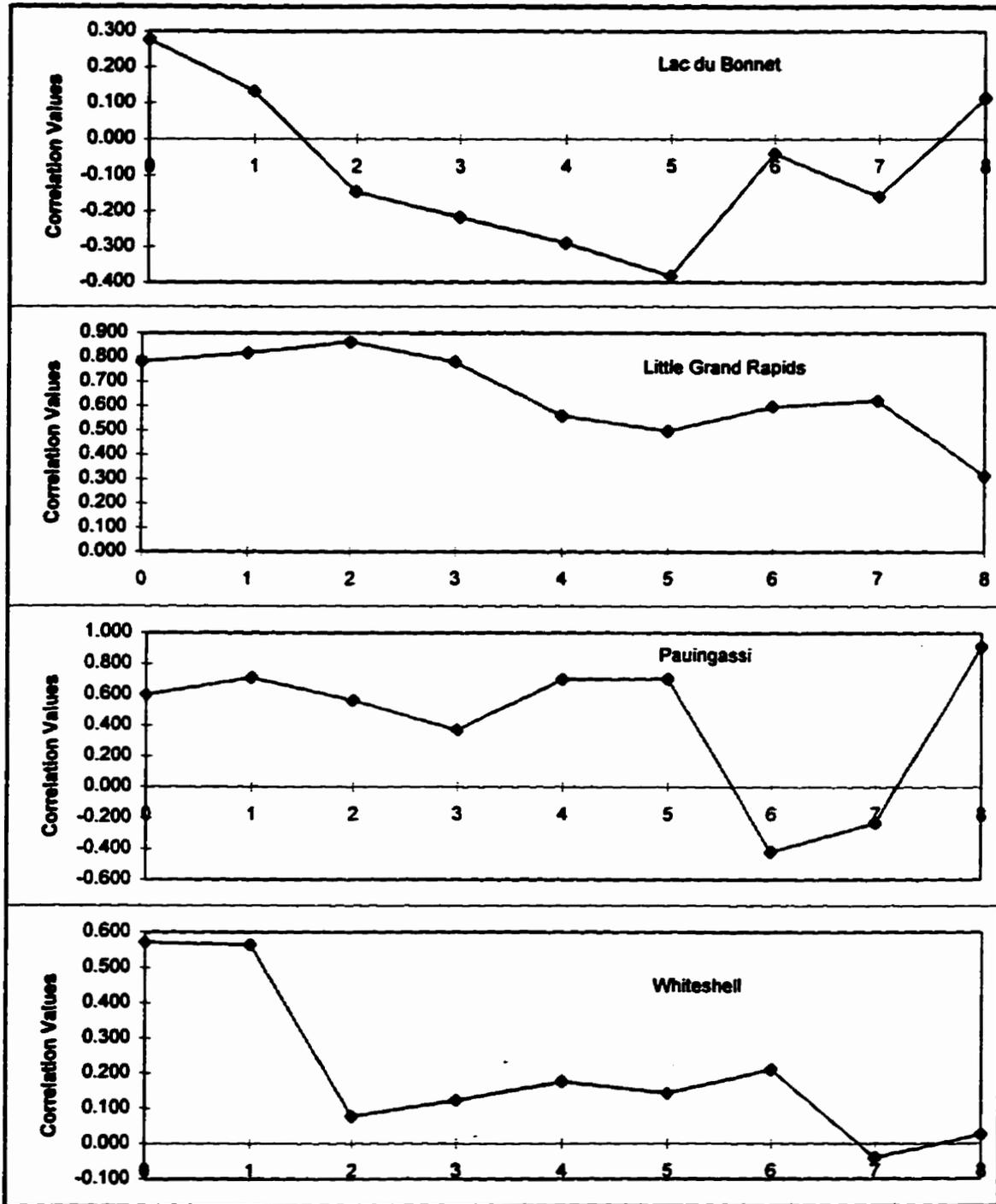
**Number of Years out of Sequence**

**Correlation Values for Muskrat vs Ermine for Each Trapline Section**



**Figure 38. Correlogram for interspecific analysis of Registered Trapline sectional fur returns: Muskrat versus Ermine.**

**Correlation Values for Muskrat vs Ermine for Each Trapline Section**



**Number of Years out of Sequence**

Table 8. Fur return totals of mink, muskrat and ermine for Kenora and Red Lake Registered Trapline regions.

Fur Returns for Northwestern Ontario Trapline Regions							
Kenora				Red Lake			
Year	Mink	Muskrat	Ermine	Year	Mink	Muskrat	Ermine
54/55				54/55			
55/56				55/56			
56/57				56/57			
57/58				57/58			
58/59				58/59			
59/60				59/60			
60/61				60/61			
61/62				61/62			
62/63				62/63			
63/64				63/64			
64/65	123	485	44	64/65			
65/66	71	915	60	65/66			
66/67	236	798	54	66/67			
67/68	264	517	76	67/68			
68/69	186	525	40	68/69			
69/70	151	848	10	69/70			
70/71	109	494	0	70/71			
71/72	101	154	2	71/72			
72/73	52	~	0	72/73			
73/74	70	~	0	73/74	107	1137	113
74/75	49	~	0	74/75	170	2986	261
75/76	51	~	0	75/76	243	2360	93
76/77	181	~	0	76/77	375	1007	268
77/78	102	~	0	77/78	597	1524	312
78/79	170	~	0	78/79	852	2146	278
79/80	166	~	0	79/80	767	2581	277
80/81	190	1	2	80/81	750	3249	298
81/82	99	31	33	81/82	459	1159	297
82/83	54	~	10	82/83	342	1812	167
83/84	37	~	7	83/84	231	1109	37
84/85	28	~	5	84/85	223	1076	130
85/86	58	~	23	85/86	405	770	225
86/87	122	~	25	86/87	309	604	57
87/88	221	~	31	87/88	676	684	95
88/89	91	~	4	88/89	287	185	248
89/90	77	~	2	89/90	206	340	39
90/91	11	~	0	90/91	127	47	14
91/92	18	~	0	91/92	136	118	6
92/93	17	~	2	92/93			
93/94	26	~	0	93/94			
94/95	44	~	5	94/95			
95/96	19	~	6	95/96			

### Fur Production for Kenora Region Trappines

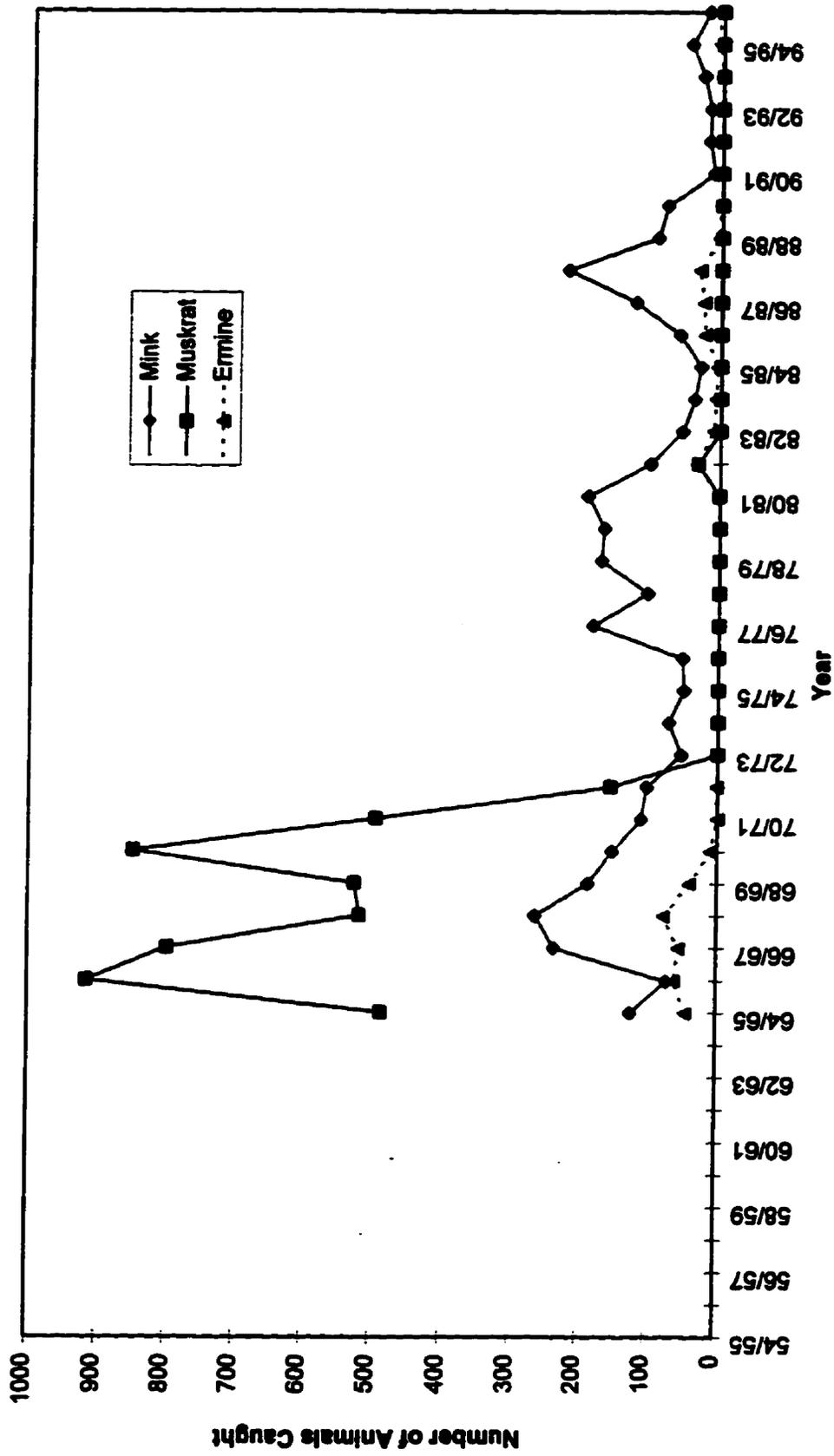


Figure 40. Fur return totals of mink, muskrat and ermine for Kenora Registered Trapping region.

### Fur Production for Red Lake Region Traplines

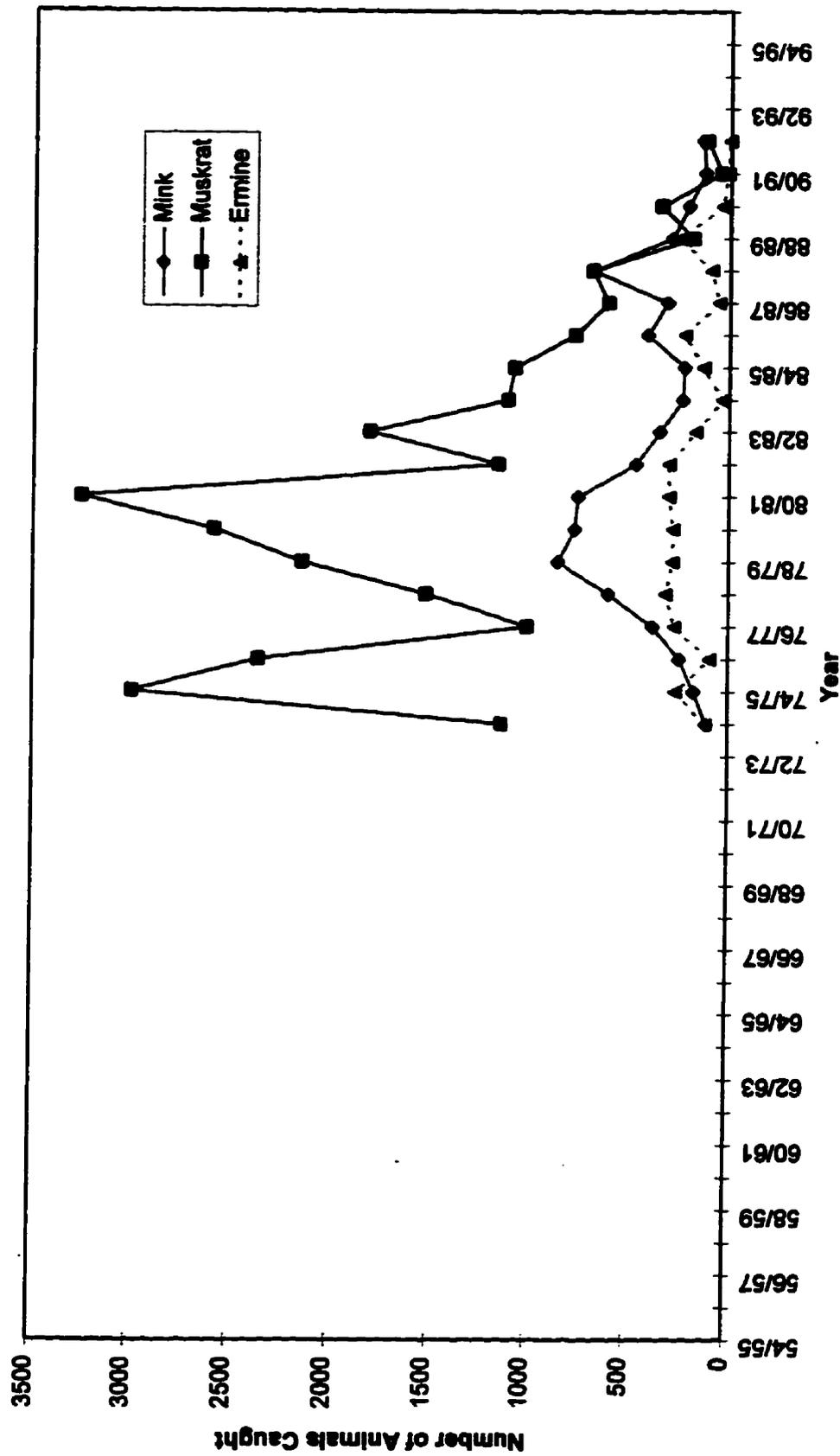


Figure 41. Fur return totals of mink, muskrat and ermine for Red Lake Registered Trapline region.



76/77	181	183	2.26	~			0	2	0.3	76/77	375	377	2.6	1007	1009	3.0	268	270	2.4
77/78	102	104	2.02	~			0	2	0.3	77/78	597	599	2.8	1524	1526	3.2	312	314	2.5
78/79	170	172	2.24	~			0	2	0.3	78/79	852	854	2.9	2148	2148	3.3	278	280	2.4
79/80	166	168	2.23	~			0	2	0.3	79/80	767	769	2.9	2581	2583	3.4	277	279	2.4
80/81	190	192	2.28	1	3	0.48	2	4	0.6	80/81	750	752	2.9	3249	3251	3.5	298	300	2.5
81/82	99	101	2	31	33	1.52	33	35	1.54	81/82	459	461	2.7	1159	1161	3.1	297	299	2.5
82/83	54	56	1.75	~			10	12	1.08	82/83	342	344	2.5	1812	1814	3.3	167	169	2.2
83/84	37	39	1.59	~			7	9	0.95	83/84	231	233	2.4	1109	1111	3.0	37	39	1.6
84/85	28	30	1.48	~			5	7	0.85	84/85	223	225	2.4	1076	1078	3.0	130	132	2.1
85/86	58	60	1.78	~			23	25	1.4	85/86	405	407	2.6	770	772	2.9	225	227	2.4
86/87	122	124	2.09	~			25	27	1.43	86/87	309	311	2.5	604	606	2.8	57	59	1.8
87/88	221	223	2.35	~			31	33	1.52	87/88	676	678	2.8	684	686	2.8	95	97	2.0
88/89	91	93	1.97	~			4	6	0.78	88/89	287	289	2.5	185	187	2.3	248	250	2.4
89/90	77	79	1.9	~			2	4	0.6	89/90	206	208	2.3	340	342	2.5	39	41	1.6
90/91	11	13	1.11	~			0	2	0.3	90/91	127	129	2.1	47	49	1.7	14	16	1.2
91/92	18	20	1.3	~			0	2	0.3	91/92	136	138	2.1	118	120	2.1	6	8	0.9
92/93	17	19	1.28	~			2	4	0.6	92/93									
93/94	26	28	1.45	~			0	2	0.3	93/94									
94/95	44	46	1.66	~			5	7	0.85	94/95									
95/96	19	21	1.32	~			6	8	0.9	95/96									

### Log of Fur Production for Kenora Region Traplines

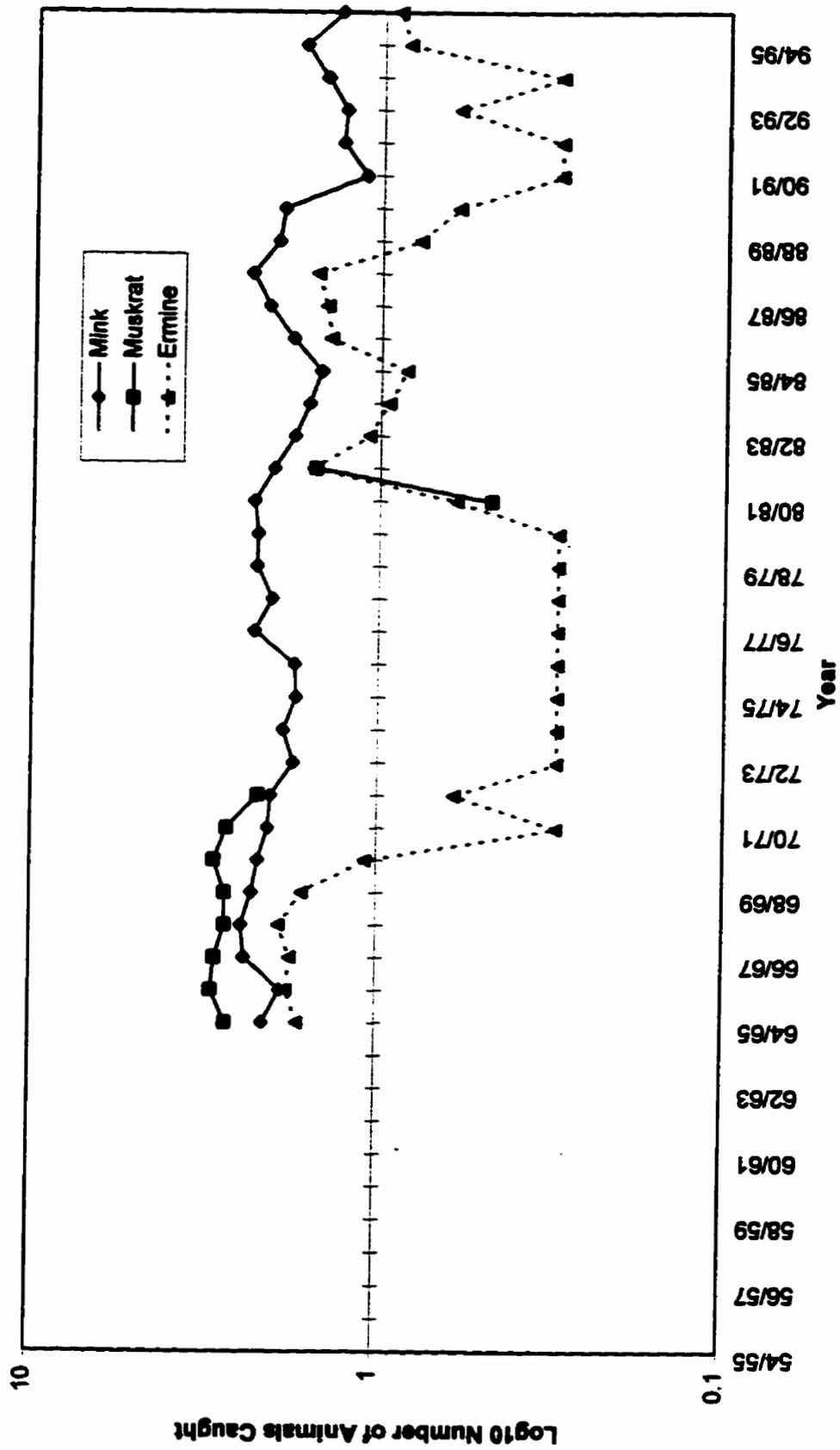


Figure 42. Transformed (Log10) fur return totals of mink, muskrat and ermine for Kenora Registered Trapline region.

### Log of Fur Production for Red Lake Region Traplines

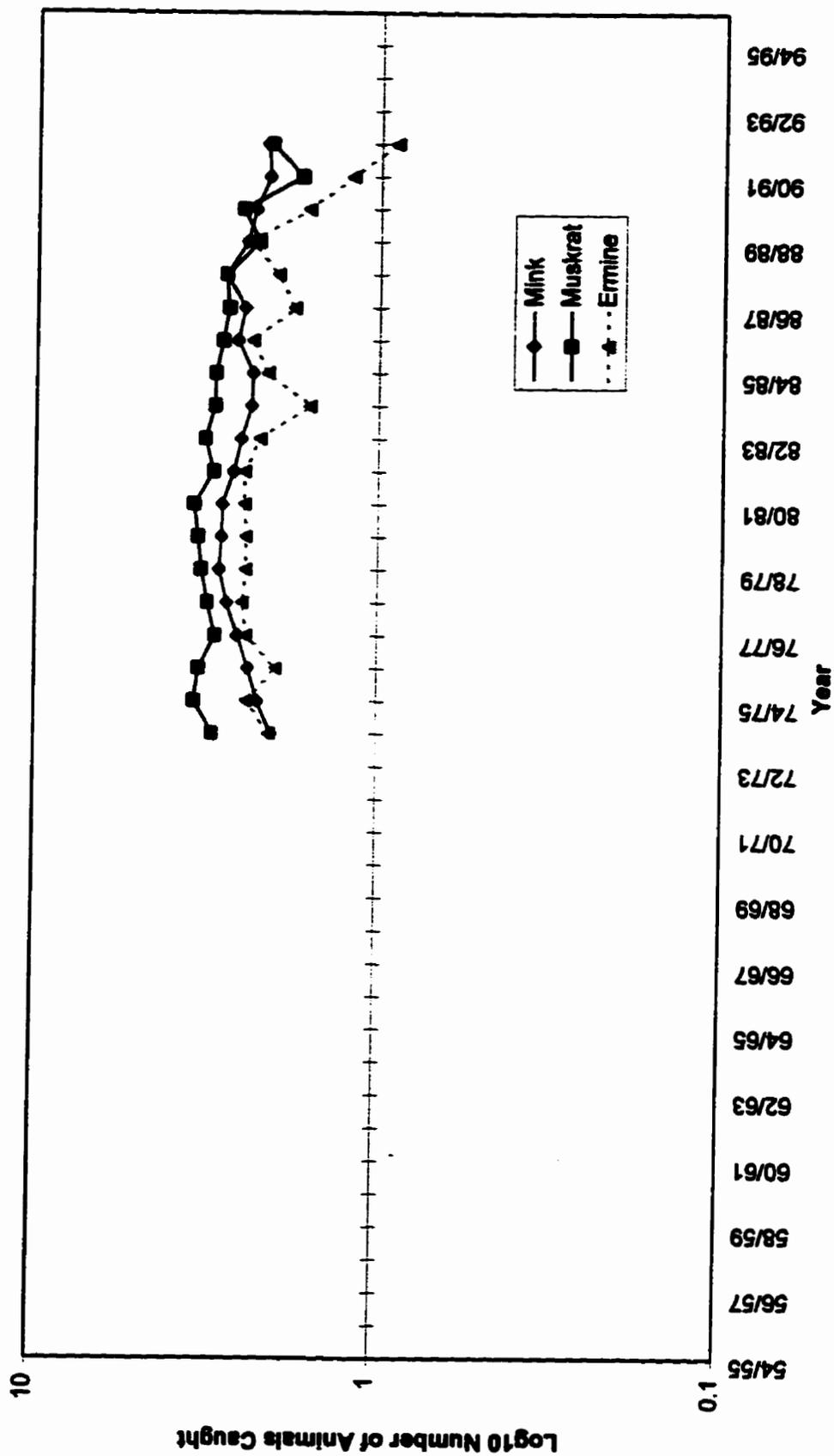


Figure 43. Transformed (Log<sub>10</sub>) fur return totals of mink, muskrat and ermine for Red Lake Registered Trapline region.

**Table 10. Intraspecific correlation coefficients calculated based on fur return totals of mink, muskrat and ermine for Kenora and Red Lake Registered Trapline regions.**

Correlation Values for Northwestern Ontario Trapline Regions						
	Mink vs Mink		Muskrat vs Muskrat		Ermine vs Ermine	
	Kenora	Red Lake	Kenora	Red Lake	Kenora	Red Lake
1 Year Out	0.63	0.68	n/a	0.61	0.41	0.43
2 Years Out	0.37	0.34	n/a	0.49	0.11	0.23
3 Years Out	-0.04	-0.22	n/a	0.44	-0.20	0.33
4 Years Out	-0.17	-0.55	n/a	0.42	-0.03	0.27
5 Years Out	-0.22	-0.48	n/a	0.49	-0.08	-0.06
6 Years Out	0.03	-0.35	n/a	0.27	-0.01	-0.14
7 Years Out	0.48	0.08	n/a	0.01	-0.47	0.22
8 Years Out	0.43	0.34	n/a	0.17	-0.49	0.29
9 Years Out	0.56	0.40	n/a	-0.14	-0.48	-0.16
10 Years Out	0.29	-0.02	n/a	-0.16	-0.37	-0.31

### Correlation Values for Kenora Trapline Region

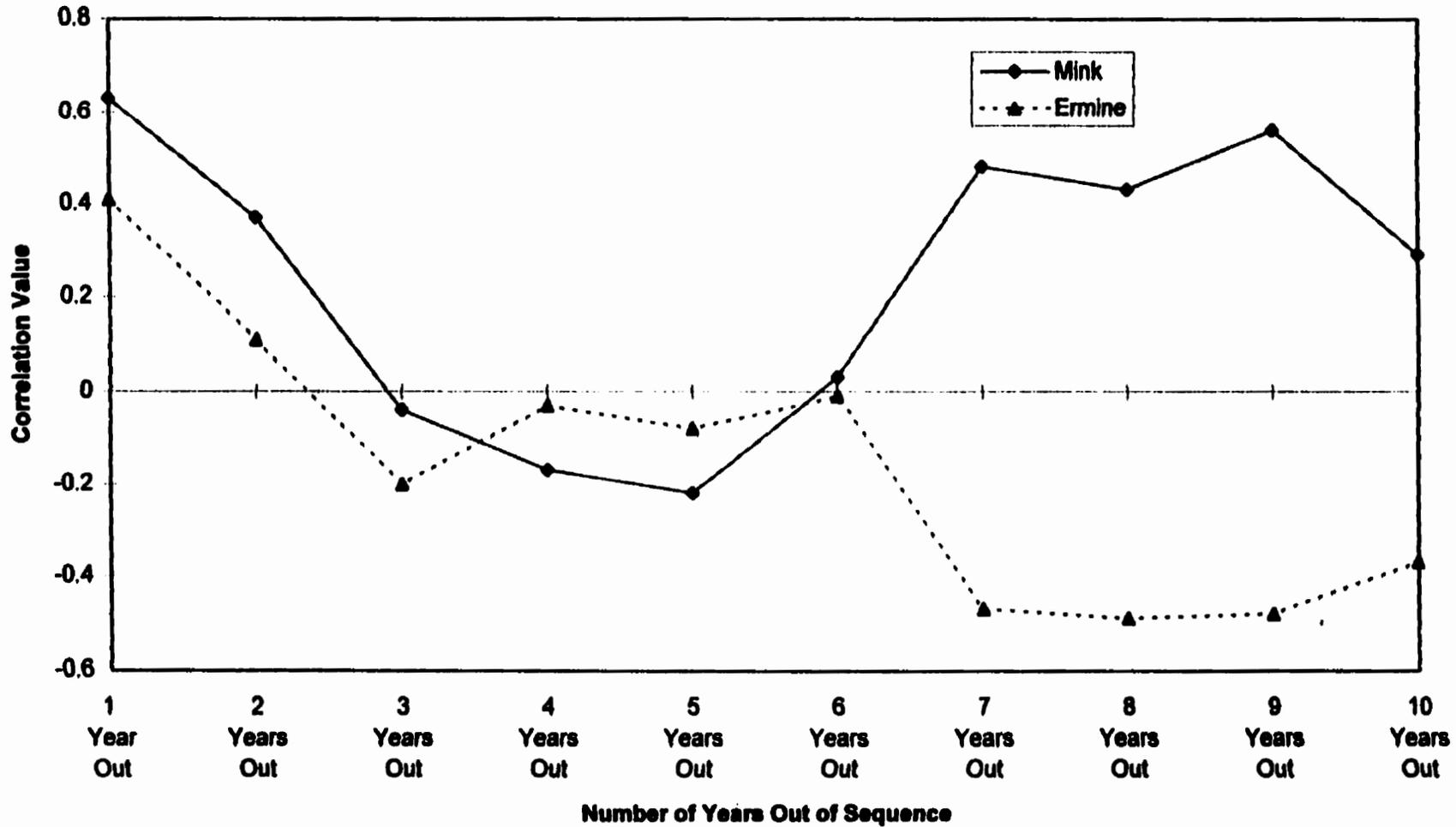


Figure 44. Correlogram for intraspecific analysis of mink and ermine fur return totals for Kenora Registered Trapline region.

### Correlation Values for Red Lake Trapline Region

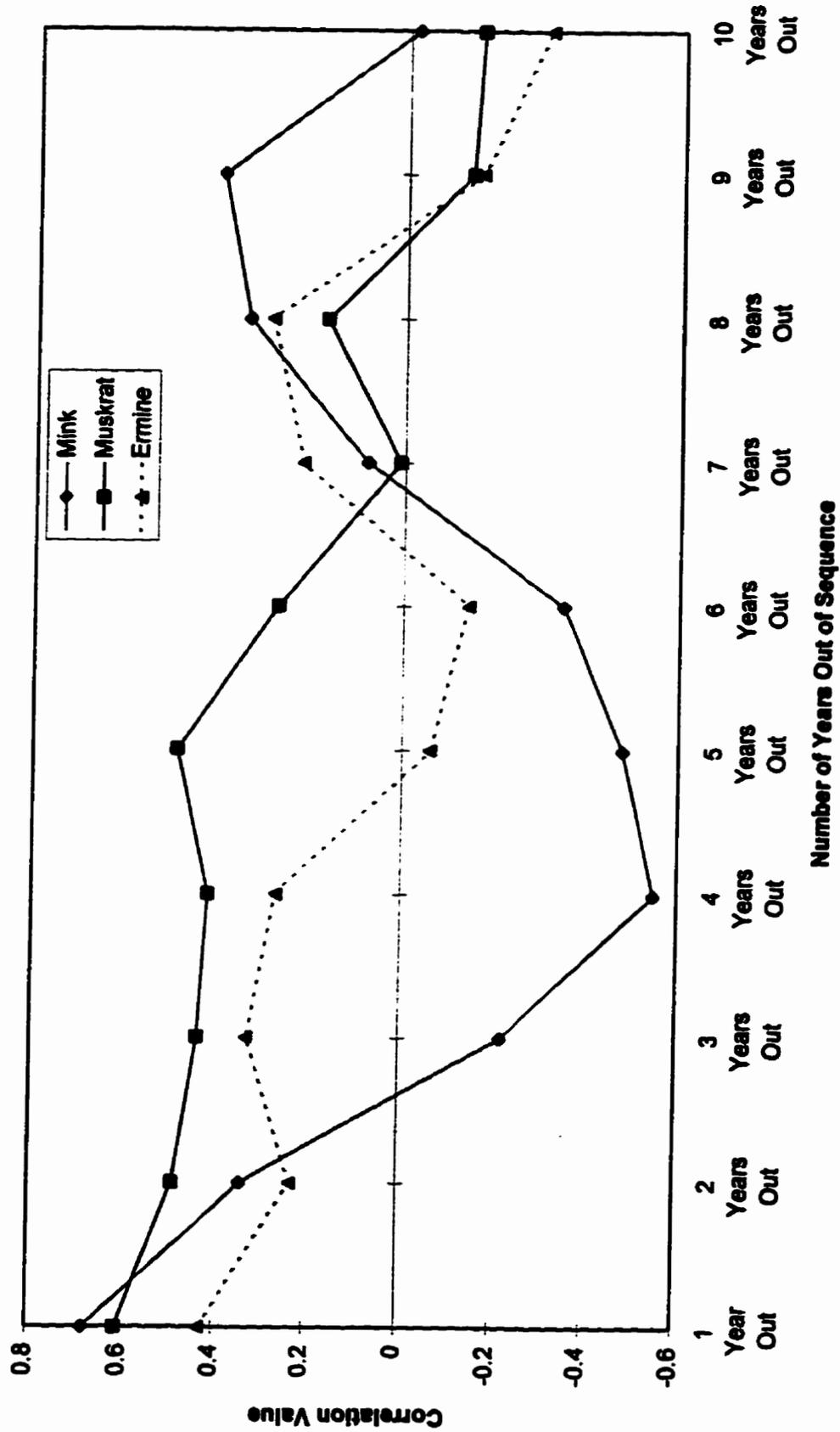


Figure 45. Correlogram for intraspecific analysis of mink, muskrat and ermine fur return totals for Red Lake Registered Trapline region.



	Section A				Section B				Section C				Section D				Section E		
78/79	343	1011	101	78/79	291	578	121	78/79	179	326	47	78/79	77	100	9	78/79	128	0	0
79/80	401	771	90	79/80	223	893	154	79/80	108	286	18	79/80	45	216	13	79/80	149	0	0
80/81	302	921	65	80/81	279	1017	163	80/81	130	366	63	80/81	89	460	15	80/81	139	0	2
81/82	196	277	126	81/82	195	242	100	81/82	39	151	52	81/82	32	233	31	81/82	86	31	15
82/83	131	333	71	82/83	99	594	67	82/83	68	495	22	82/83	47	264	15	82/83	38	0	2
83/84	85	338	19	83/84	56	320	8	83/84	68	179	8	83/84	15	100	3	83/84	34	0	6
84/85	101	361	63	84/85	65	336	42	84/85	42	183	19	84/85	9	126	6	84/85	27	0	4
85/86	238	223	118	85/86	110	262	55	85/86	50	116	57	85/86	17	135	29	85/86	46	0	19
86/87	151	120	16	86/87	113	145	25	86/87	31	199	10	86/87	14	28	6	86/87	121	0	25
87/88	327	357	59	87/88	236	245	32	87/88	108	80	4	87/88	14	2	0	87/88	212	0	34
88/89	159	77	124	88/89	60	66	96	88/89	61	19	21	88/89	8	23	9	88/89	90	0	2
89/90	84	23	36	89/90	38	269	0	89/90	47	33	3	89/90	47	15	0	89/90	67	0	2
90/91	50	0	3	90/91	28	21	2	90/91	44	26	9	90/91	5	0	0	90/91	11	0	0
91/92	76	0	6	91/92	41	117	0	91/92	19	1	0	91/92	0	0	0	91/92	18	0	0
92/93				92/93				92/93				92/93				92/93	17	0	2
93/94				93/94				93/94				93/94				93/94	26	0	0
94/95				94/95				94/95				94/95				94/95	44	0	5
95/96				95/96				95/96				95/96				95/96	19	0	6

Fur Production for NorthWestern Ontario Section A

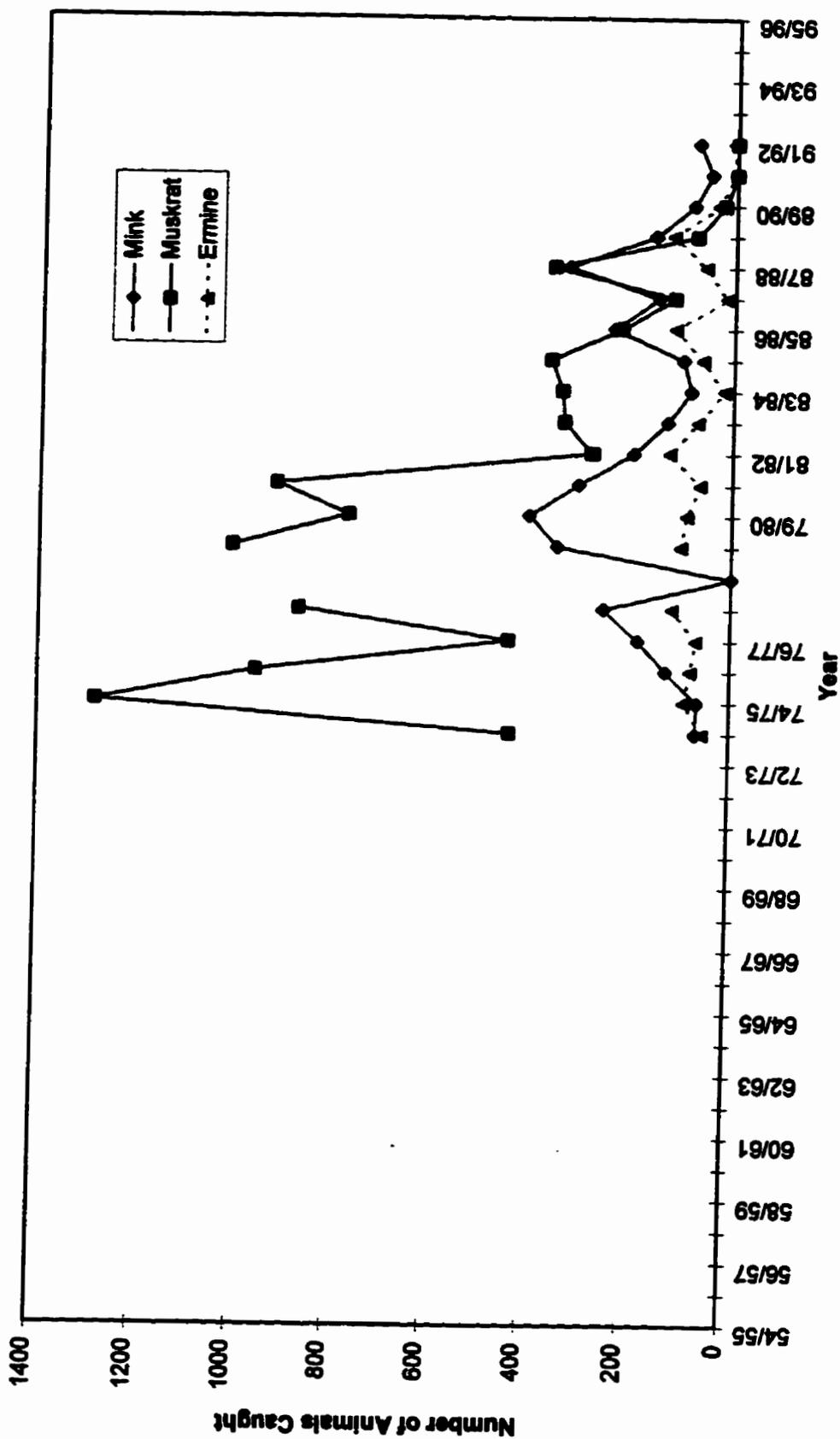


Figure 46. Fur return totals of mink, muskrat and ermine for Registered Traps within Northwestern Ontario section A.

**Fur Production for NorthWestern Ontario Section B**

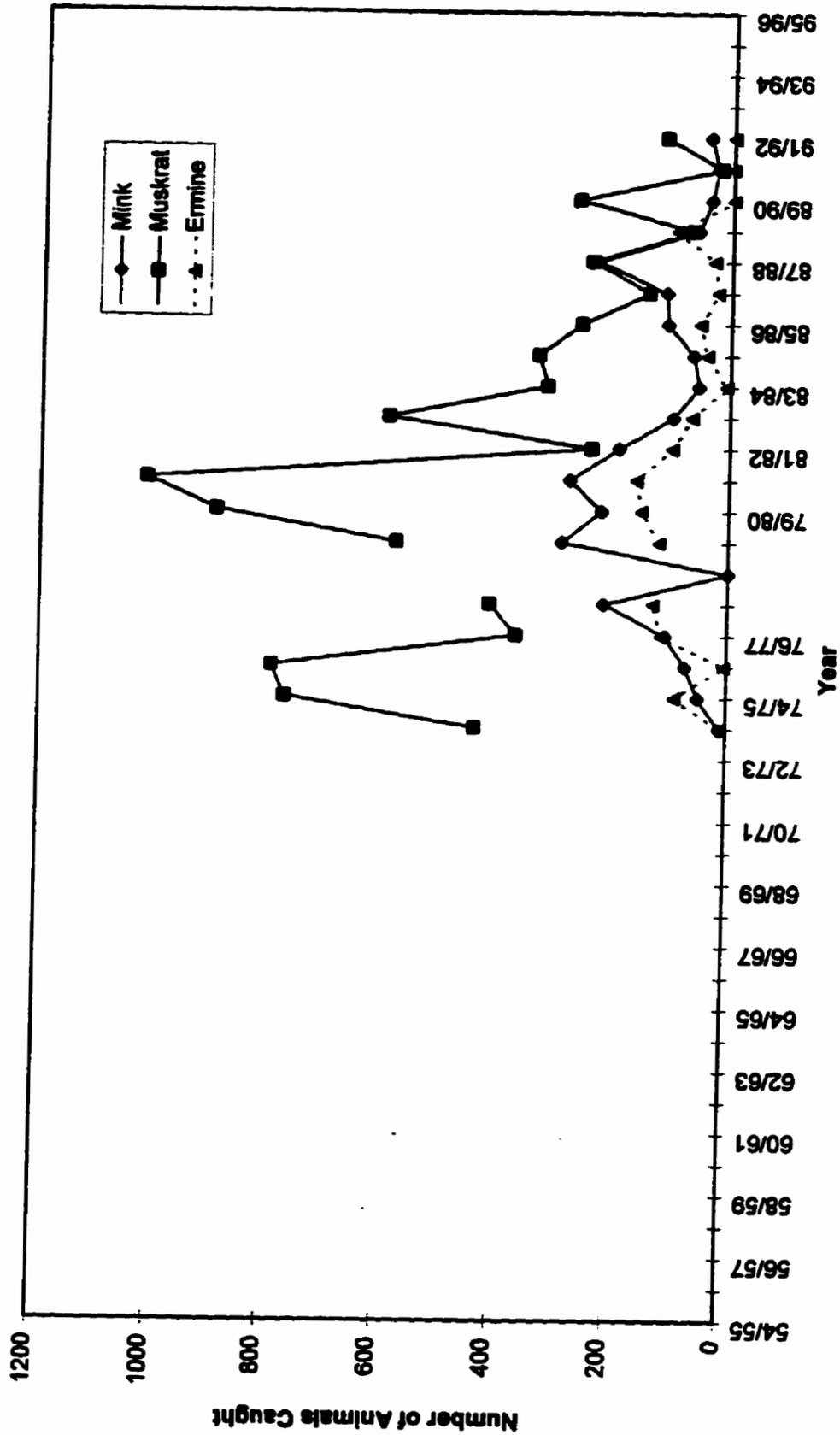


Figure 47. Fur return totals of mink, muskrat and ermine for Registered Traplines within Northwestern Ontario section B.

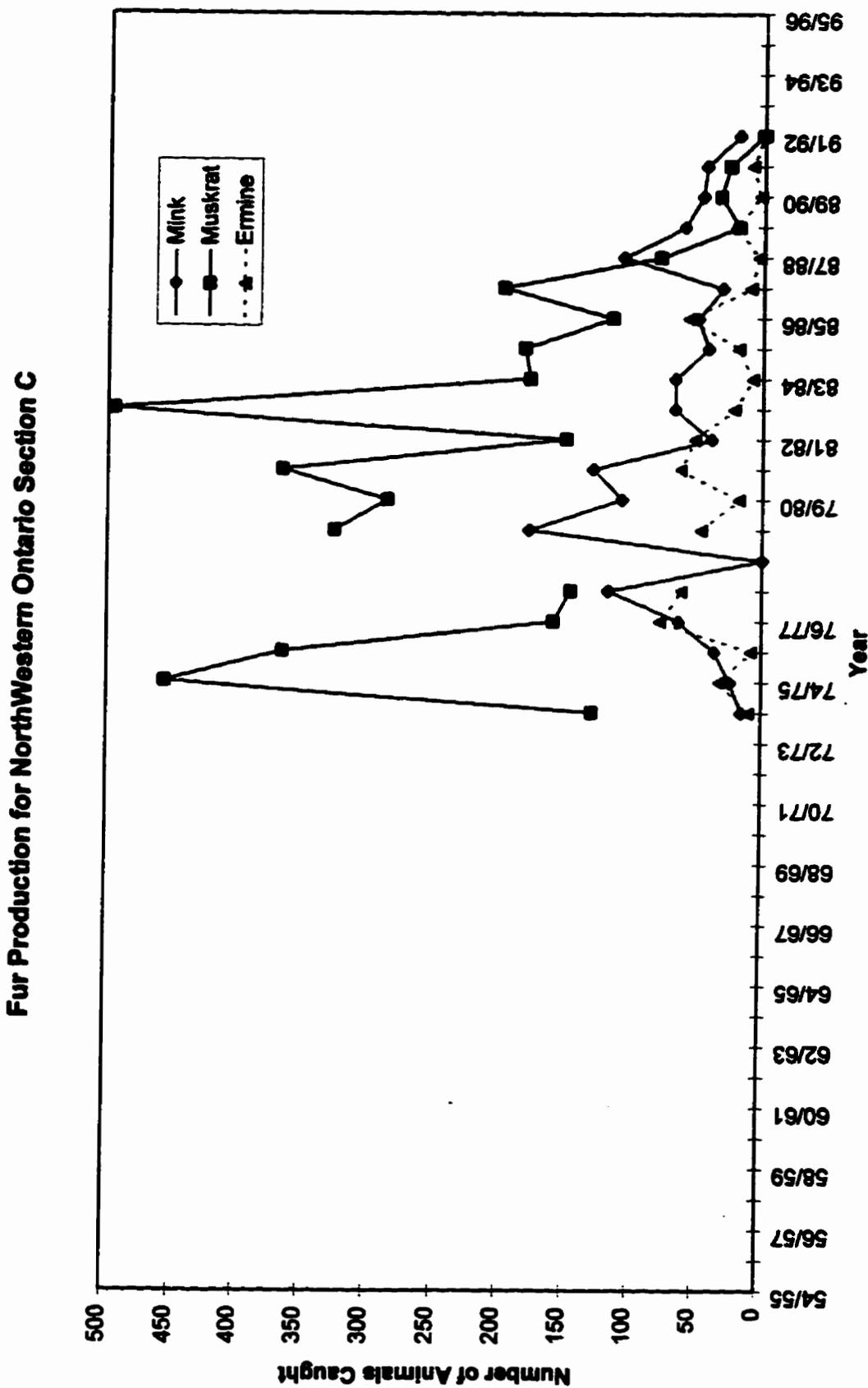


Figure 48. Fur return totals of mink, muskrat and ermine for Registered Traplines within NorthWestern Ontario section C.

**Fur Production for NorthWestern Ontario Section D**

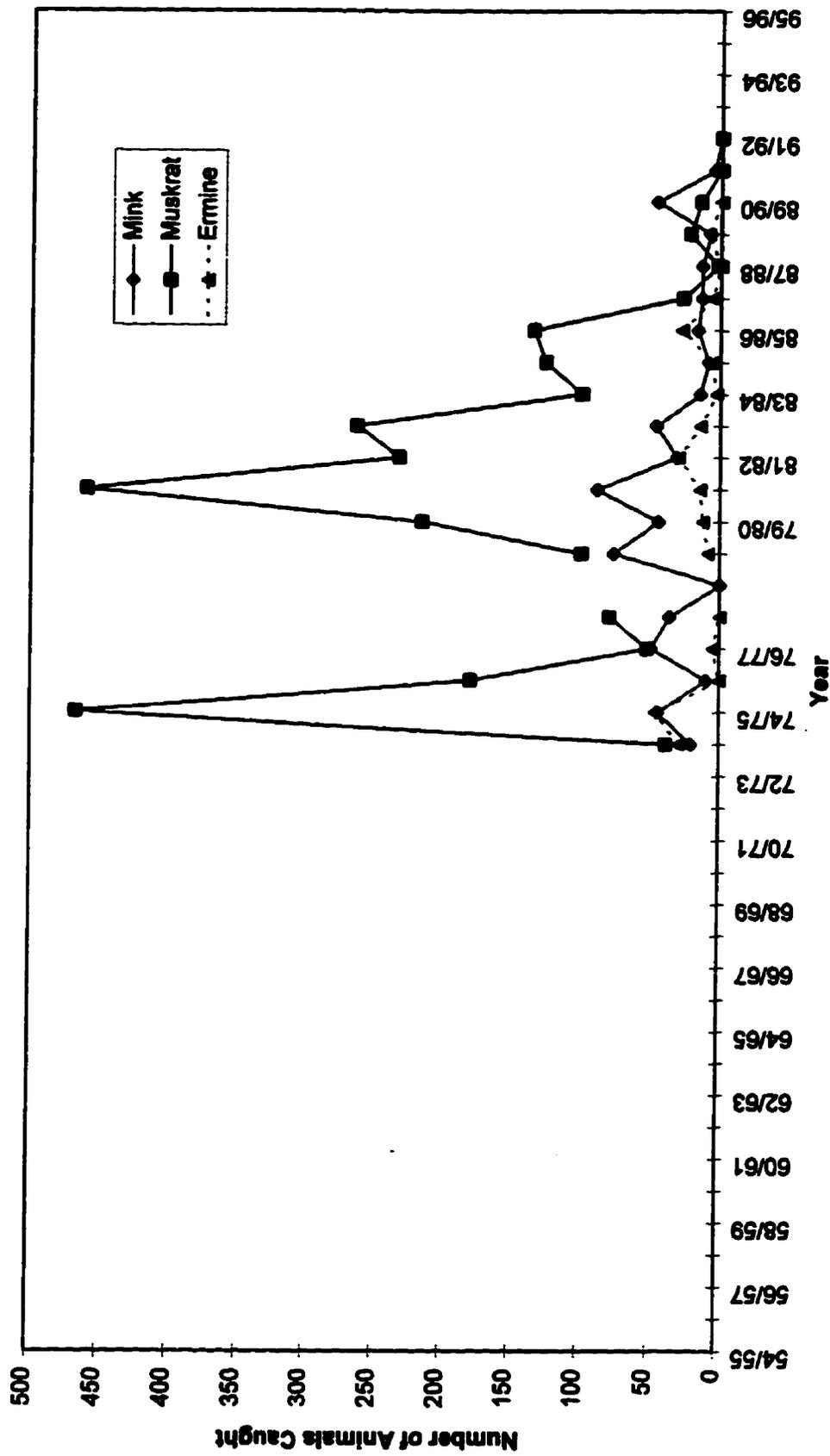


Figure 49. Fur return totals of mink, muskrat and ermine for Registered Traplines within NorthWestern Ontario section D.

### Fur Production for NorthWestern Ontario Section E

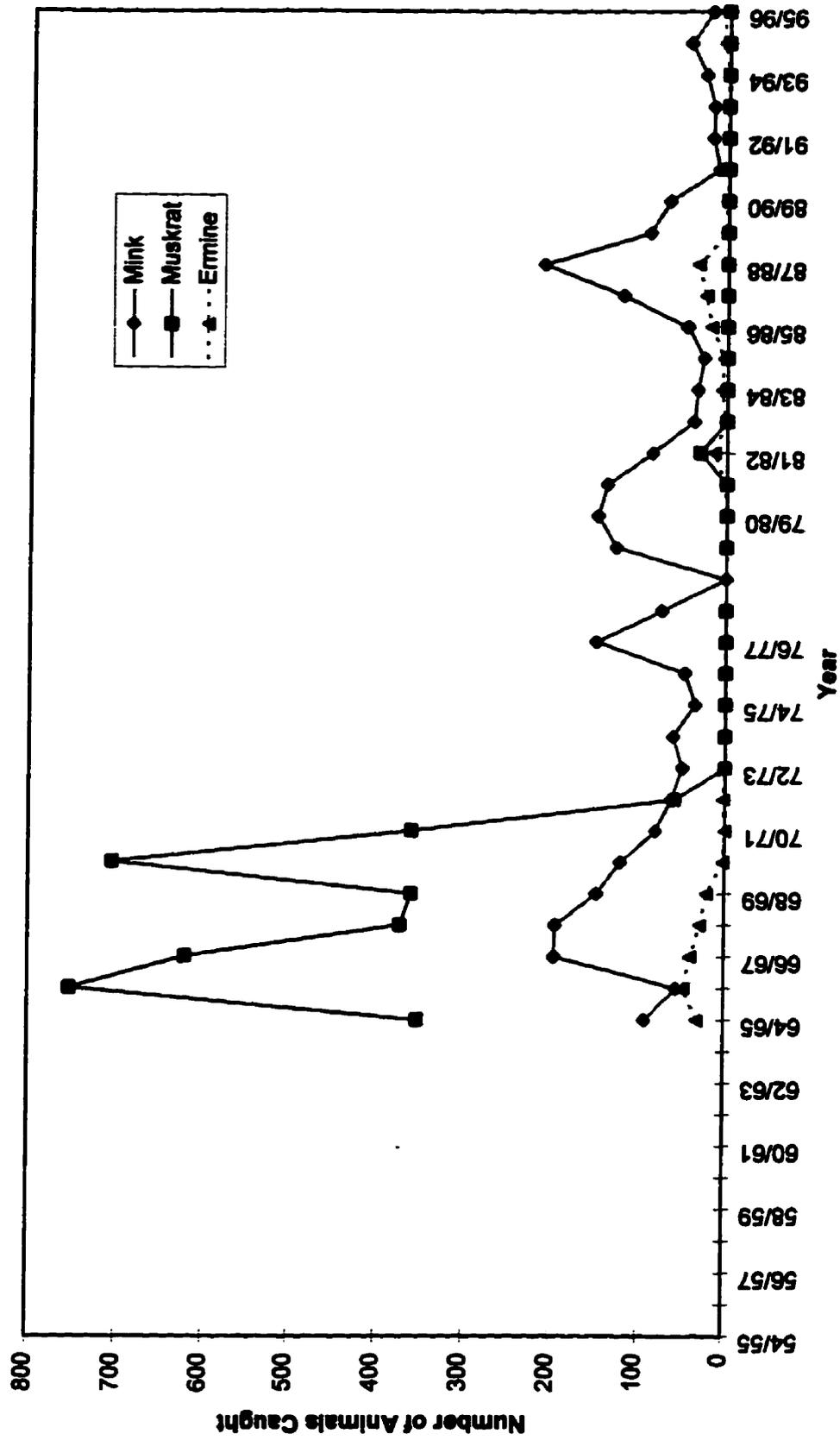


Figure 50. Fur return totals of mink, muskrat and ermine for Registered Traplines within Northwestern Ontario section E.

Table 12. Intraspecific correlation coefficients calculated on fur return totals of mink, muskrat and ermine for Northwestern Ontario sections A - E.

Correlation Totals for Northwestern Ontario Sections															
	Section A			Section B			Section C			Section D			Section E		
	Mink	Muskkrat	Ermine												
1 Year Out	0.63	0.63	0.14	0.65	0.51	0.51	0.49	0.34	0.26	0.23	0.36	0.26	0.57	0.81	0.76
2 Years Out	0.23	0.54	-0.31	0.30	0.38	0.42	0.27	0.38	0.07	0.22	0.22	0.19	0.22	0.66	0.54
3 Years Out	-0.35	0.69	0.35	-0.14	0.31	0.16	-0.21	0.27	0.03	-0.08	0.70	0.19	-0.08	0.70	0.19
4 Years Out	-0.63	0.55	0.37	-0.50	0.37	-0.03	-0.43	0.55	0.47	-0.33	0.70	-0.03	-0.33	0.43	-0.19
5 Years Out	-0.53	0.56	-0.36	-0.45	0.51	-0.22	-0.29	0.05	0.16	-0.19	0.25	-0.19	-0.27	0.25	-0.19
6 Years Out	-0.23	0.51	-0.09	-0.23	0.07	-0.20	-0.48	0.05	-0.36	-0.07	0.10	-0.33	0.04	0.10	-0.33
7 Years Out	0.26	0.20	0.66	0.00	0.08	-0.20	-0.12	0.01	-0.13	0.26	0.20	-0.33	0.14	-0.13	-0.34
8 Years Out	0.62	0.46	0.10	0.08	0.01	0.26	0.00	0.31	0.22	0.08	0.01	-0.34	0.14	-0.13	-0.34
9 Years Out	0.45	0.49	-0.40	0.30	0.07	-0.07	0.34	-0.42	0.26	0.30	0.07	-0.07	0.37	-0.14	-0.36
10 Years Out	-0.03	0.30	0.20	-0.06	-0.01	-0.18	0.33	-0.05	-0.46	-0.06	-0.01	-0.18	0.45	-0.09	-0.38

Correlation Values for Northwestern Ontario Section - A

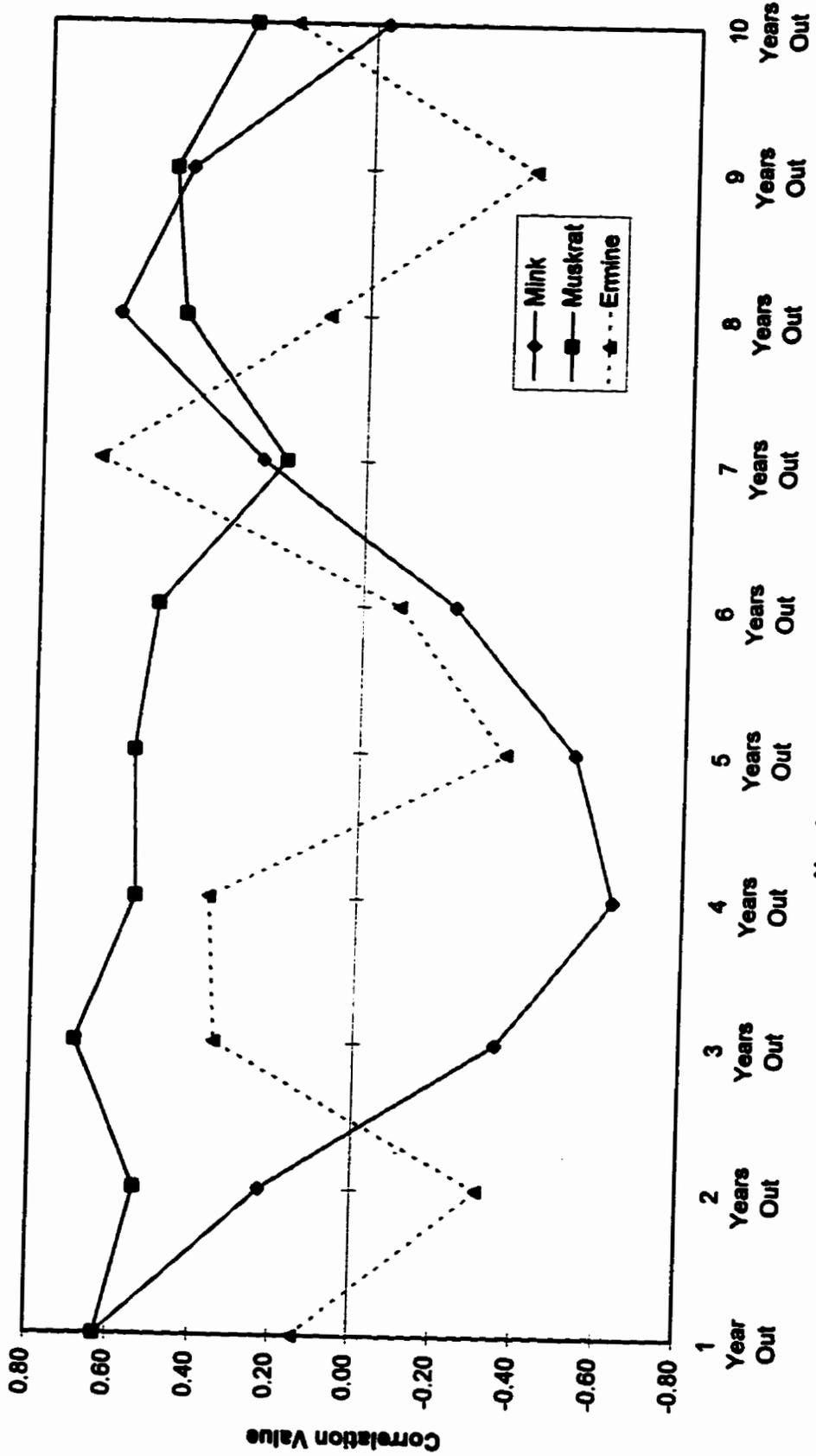
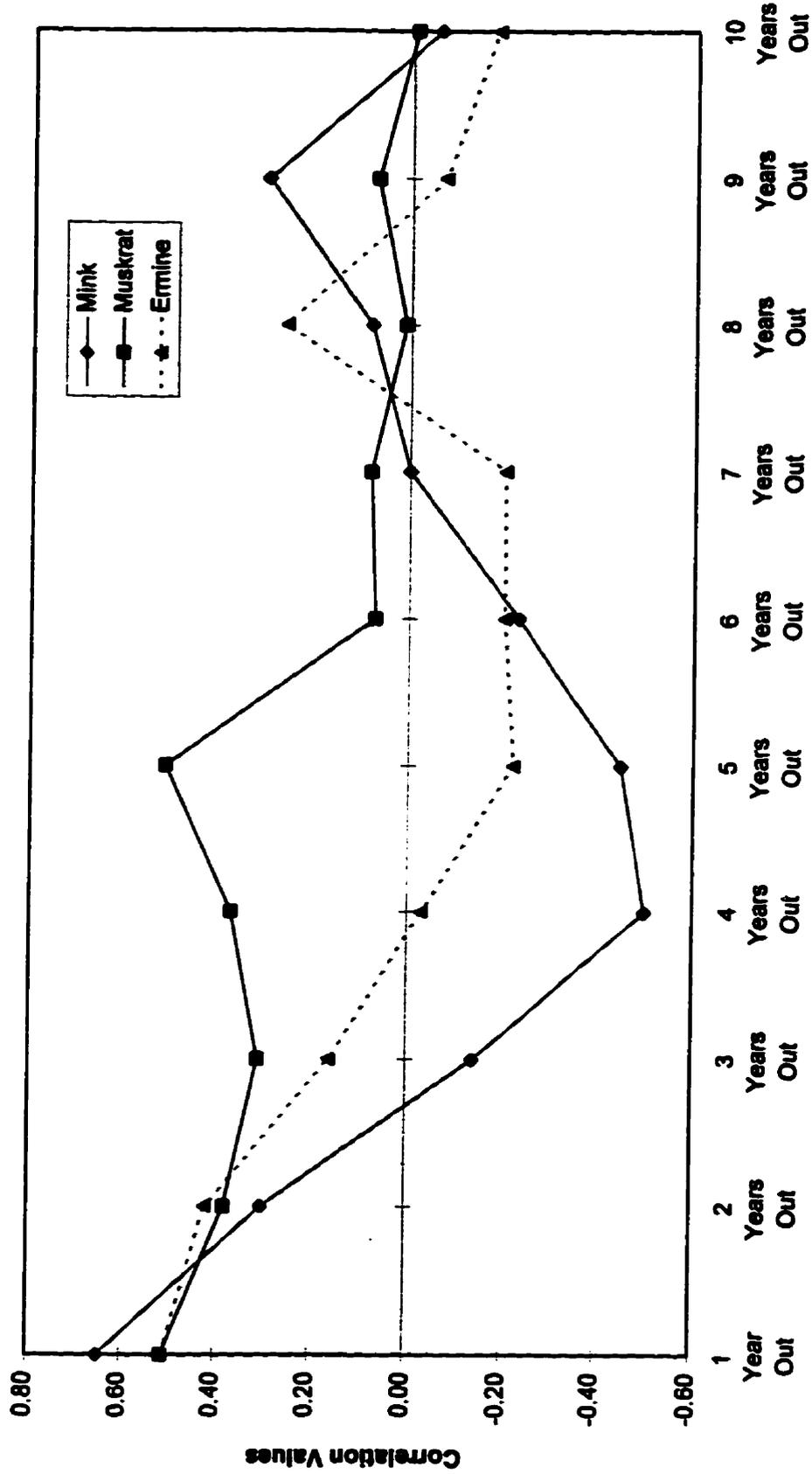


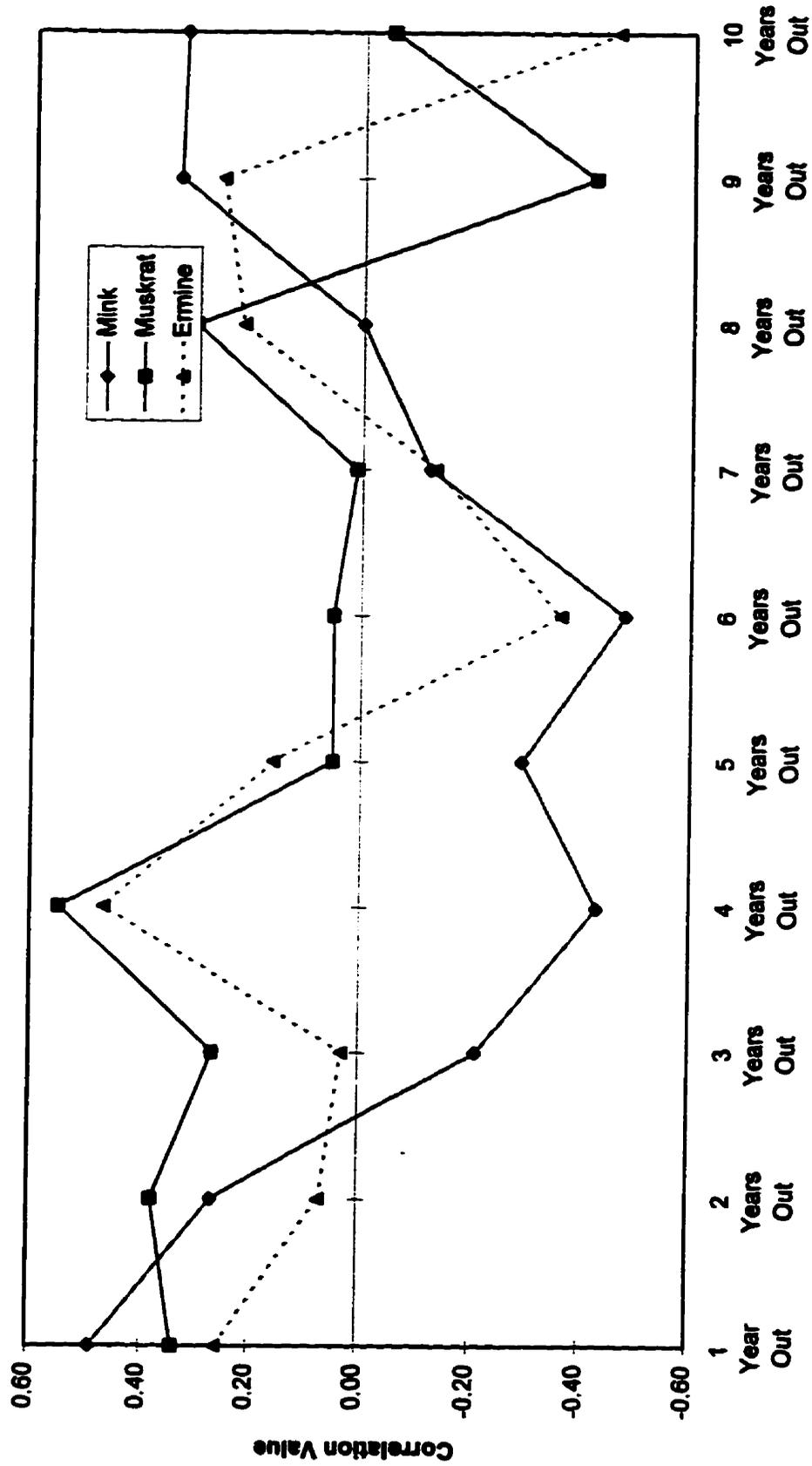
Figure 51. Correlogram for intraspecific analysis of mink, muskrat and ermine fur return totals for Registered Trapplines within Northwestern Ontario section A.

**Correlation Values for Northwestern Ontario Section - B**



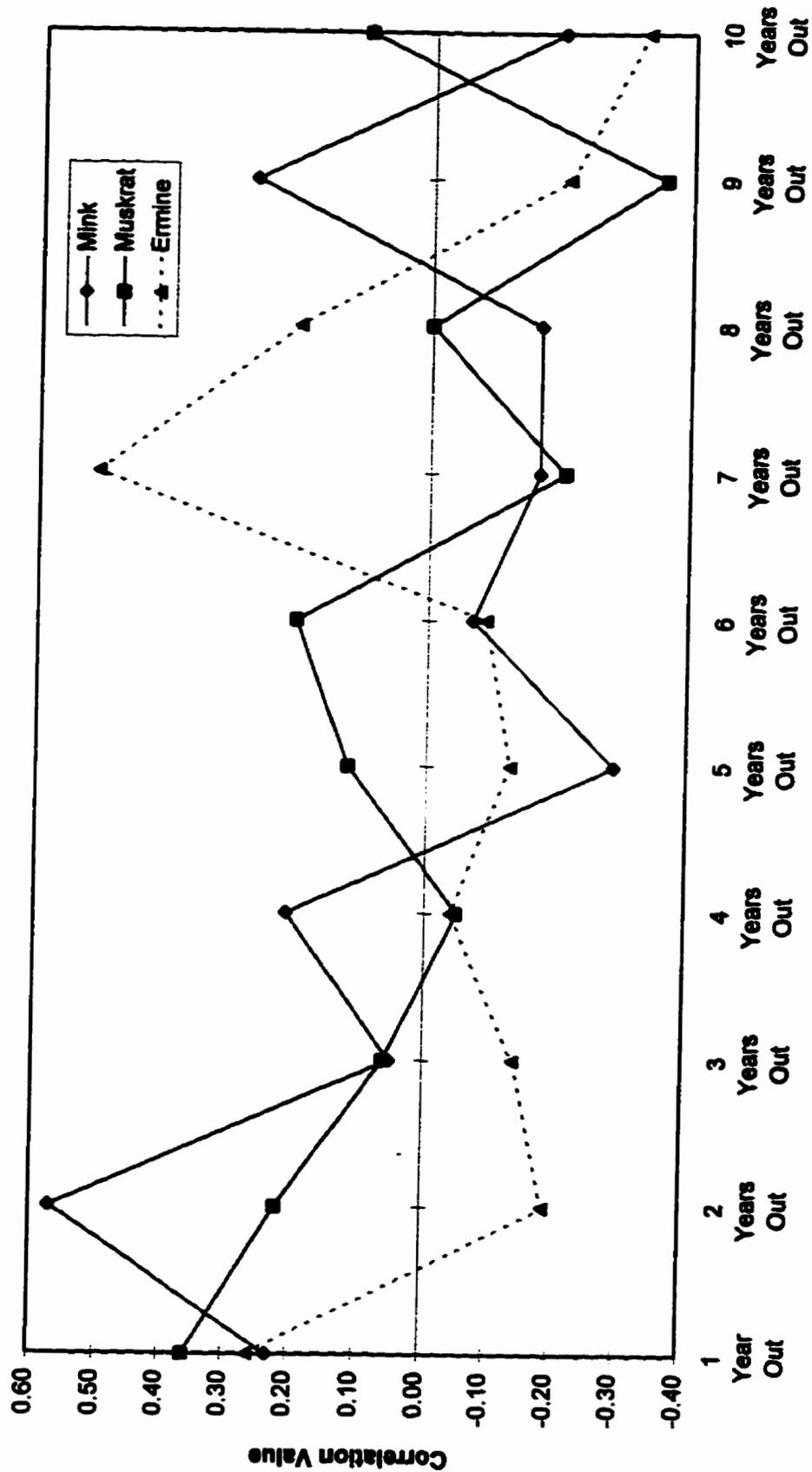
**Figure 52. Correlogram for intraspecific analysis of mink, muskrat and ermine fur return totals for Registered Trappelines within Northwestern Ontario section B.**

**Correlation Values for Northwestern Ontario Section - C**



**Figure 53. Correlogram for intraspecific analysis of mink, muskrat and ermine fur return totals for Registered Traps within Northwestern Ontario section C.**

**Correlation Values for Northwestern Ontario Section - D**



**Figure 54. Correlogram for intraspecific analysis of mink, muskrat and ermine fur return totals for Registered Traps within Northwestern Ontario section D.**

Correlation Values for Northwestern Ontario Section - E

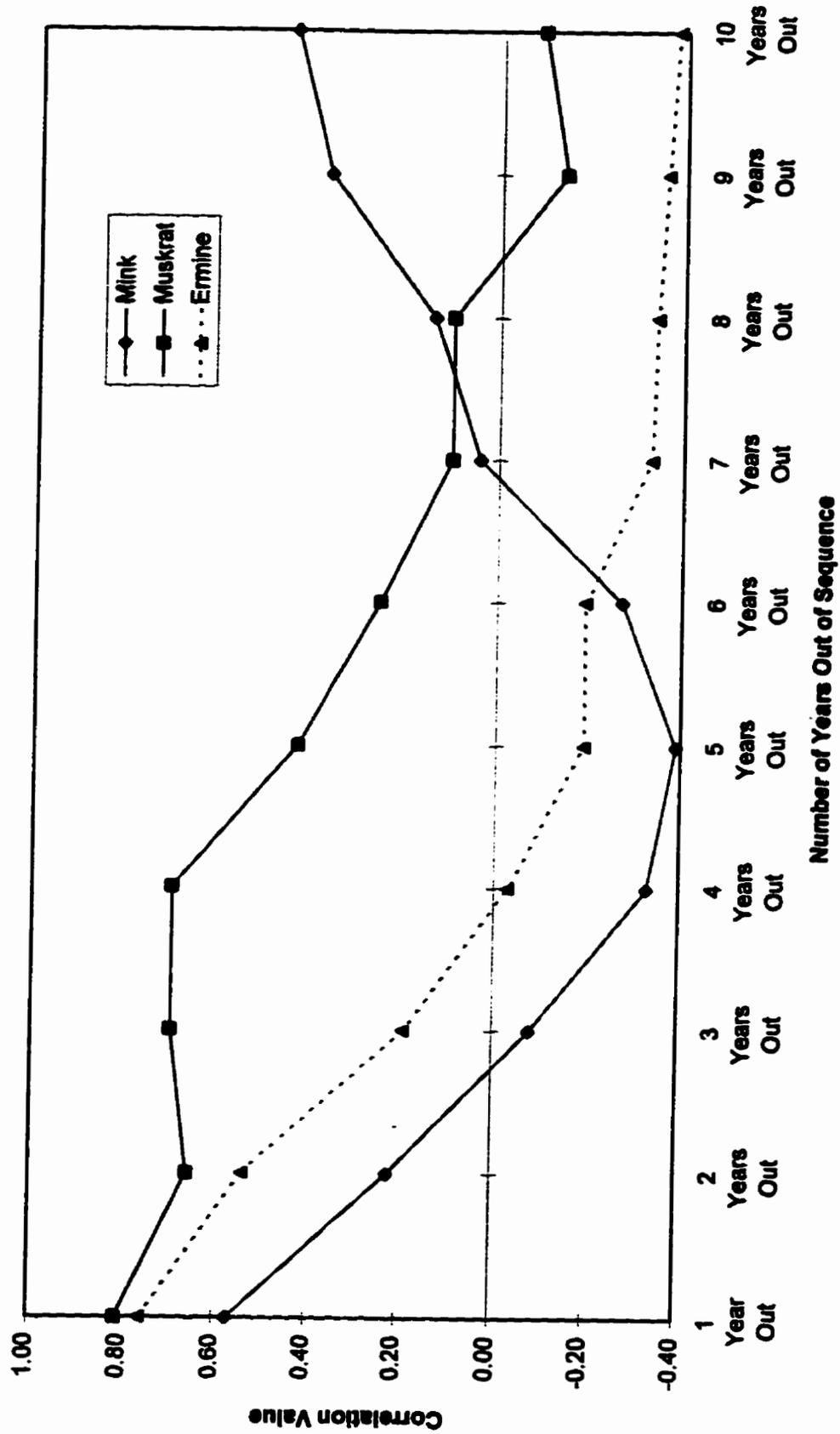


Figure 55. Correlogram for intraspecific analysis of mink, muskrat and ermine fur return totals for Registered Traps within Northwestern Ontario section E.

**Appendix 1. Intra- and interspecific correlation coefficients calculated for provincial mink, muskrat and ermine fur returns: 1919/20 - 1993/94**

Correlation Values for Provincial Totals of Mink between 1919/20 - 1993/94										
Year	Mink	Mink 1 year out	Mink	Mink 2 years out	Mink	Mink 3 years out	Mink	Mink 4 years out	Mink	Mink 5 years out
1919/20	16779		16779		16779		16779		16779	
1920/21	14120	16779	14120		14120		14120		14120	
1921/22	29233	14120	29233	16779	29233		29233		29233	
1922/23	19531	29233	19531	14120	19531	16779	19531		19531	
1923/24	28120	19531	28120	29233	28120	14120	28120	16779	28120	
1924/25	12712	28120	12712	19531	12712	29233	12712	14120	12712	16779
1925/26	16355	12712	16355	28120	16355	19531	16355	29233	16355	14120
1926/27	10748	16355	10748	12712	10748	28120	10748	19531	10748	29233
1927/28	9833	10748	9833	16355	9833	12712	9833	28120	9833	19531
1928/29	11308	9833	11308	10748	11308	16355	11308	12712	11308	28120
1929/30	10729	11308	10729	9833	10729	10748	10729	16355	10729	12712
1930/31	11701	10729	11701	11308	11701	9833	11701	10748	11701	16355
1931/32	12941	11701	12941	10729	12941	11308	12941	9833	12941	10748
1932/33	20860	12941	20860	11701	20860	10729	20860	11308	20860	9833
1933/34	28888	20860	28888	12941	28888	11701	28888	10729	28888	11308
1934/35	21493	28888	21493	20860	21493	12941	21493	11701	21493	10729
1935/36	17037	21493	17037	28888	17037	20860	17037	12941	17037	11701
1936/37	15083	17037	15083	21493	15083	28888	15083	20860	15083	12941
1937/38	11021	15083	11021	17037	11021	21493	11021	28888	11021	20860
1938/39	13894	11021	13894	15083	13894	17037	13894	21493	13894	28888
1939/40	17676	13894	17676	11021	17676	15083	17676	17037	17676	21493
1940/41	26382	17676	26382	13894	26382	11021	26382	15083	26382	17037
1941/42	28712	26382	28712	17676	28712	13894	28712	11021	28712	15083
1942/43	18356	28712	18356	26382	18356	17676	18356	13894	18356	11021
1943/44	21067	18356	21067	28712	21067	26382	21067	17676	21067	13894
1944/45	15338	21067	15338	18356	15338	28712	15338	26382	15338	17676
1945/46	12801	15338	12801	21067	12801	18356	12801	28712	12801	26382
1946/47	15850	12801	15850	15338	15850	21067	15850	18356	15850	28712
1947/48	18778	15850	18778	12801	18778	15338	18778	21067	18778	18356
1948/49	22932	18778	22932	15850	22932	12801	22932	15338	22932	21067
1949/50	29456	22932	29456	18778	29456	15850	29456	12801	29456	15338
1950/51	25212	29456	25212	22932	25212	18778	25212	15850	25212	12801
1951/52	26056	25212	26056	29456	26056	22932	26056	18778	26056	15850
1952/53	26401	26056	26401	25212	26401	29456	26401	22932	26401	18778
1953/54	18432	26401	18432	26056	18432	25212	18432	29456	18432	22932
1954/55	17579	18432	17579	26401	17579	26056	17579	25212	17579	29456
1955/56	15384	17579	15384	18432	15384	26401	15384	26056	15384	25212
1956/57	27041	15384	27041	17579	27041	18432	27041	26401	27041	26056
1957/58	37854	27041	37854	15384	37854	17579	37854	18432	37854	26401
1958/59	27397	37854	27397	27041	27397	15384	27397	17579	27397	18432



Correlation Values for Provincial Totals of Mink between 1919/20 - 1993/94										
Year	Mink	Mink 6 years out	Mink	Mink 7 years out	Mink	Mink 8 years out	Mink	Mink 9 years out	Mink	Mink 10 years out
1919/20	16779		16779		16779		16779		16779	
1920/21	14120		14120		14120		14120		14120	
1921/22	29233		29233		29233		29233		29233	
1922/23	19531		19531		19531		19531		19531	
1923/24	28120		28120		28120		28120		28120	
1924/25	12712		12712		12712		12712		12712	
1925/26	16355	16779	16355		16355		16355		16355	
1926/27	10748	14120	10748	16779	10748		10748		10748	
1927/28	9833	29233	9833	14120	9833	16779	9833		9833	
1928/29	11308	19531	11308	29233	11308	14120	11308	16779	11308	
1929/30	10729	28120	10729	19531	10729	29233	10729	14120	10729	16779
1930/31	11701	12712	11701	28120	11701	19531	11701	29233	11701	14120
1931/32	12941	16355	12941	12712	12941	28120	12941	19531	12941	29233
1932/33	20860	10748	20860	16355	20860	12712	20860	28120	20860	19531
1933/34	28888	9833	28888	10748	28888	16355	28888	12712	28888	28120
1934/35	21493	11308	21493	9833	21493	10748	21493	16355	21493	12712
1935/36	17037	10729	17037	11308	17037	9833	17037	10748	17037	16355
1936/37	15083	11701	15083	10729	15083	11308	15083	9833	15083	10748
1937/38	11021	12941	11021	11701	11021	10729	11021	11308	11021	9833
1938/39	13894	20860	13894	12941	13894	11701	13894	10729	13894	11308
1939/40	17676	28888	17676	20860	17676	12941	17676	11701	17676	10729
1940/41	26382	21493	26382	28888	26382	20860	26382	12941	26382	11701
1941/42	28712	17037	28712	21493	28712	28888	28712	20860	28712	12941
1942/43	18356	15083	18356	17037	18356	21493	18356	28888	18356	20860
1943/44	21067	11021	21067	15083	21067	17037	21067	21493	21067	28888
1944/45	15338	13894	15338	11021	15338	15083	15338	17037	15338	21493
1945/46	12801	17676	12801	13894	12801	11021	12801	15083	12801	17037
1946/47	15850	26382	15850	17676	15850	13894	15850	11021	15850	15083
1947/48	18778	28712	18778	26382	18778	17676	18778	13894	18778	11021
1948/49	22932	18356	22932	28712	22932	26382	22932	17676	22932	13894
1949/50	29456	21067	29456	18356	29456	28712	29456	26382	29456	17676
1950/51	25212	15338	25212	21067	25212	18356	25212	28712	25212	26382
1951/52	26056	12801	26056	15338	26056	21067	26056	18356	26056	28712
1952/53	26401	15850	26401	12801	26401	15338	26401	21067	26401	18356
1953/54	18432	18778	18432	15850	18432	12801	18432	15338	18432	21067
1954/55	17579	22932	17579	18778	17579	15850	17579	12801	17579	15338
1955/56	15384	29456	15384	22932	15384	18778	15384	15850	15384	12801
1956/57	27041	25212	27041	29456	27041	22932	27041	18778	27041	15850
1957/58	37854	26056	37854	25212	37854	29456	37854	22932	37854	18778
1958/59	27397	26401	27397	26056	27397	25212	27397	29456	27397	22932



Correlation Values for Provincial Totals of Mink between 1919/20 - 1969/70										
Year	Mink	Mink 1 year out	Mink	Mink 2 years out	Mink	Mink 3 years out	Mink	Mink 4 years out	Mink	Mink 5 years out
1919/20	16779		16779		16779		16779		16779	
1920/21	14120	16779	14120		14120		14120		14120	
1921/22	29233	14120	29233	16779	29233		29233		29233	
1922/23	19531	29233	19531	14120	19531	16779	19531		19531	
1923/24	28120	19531	28120	29233	28120	14120	28120	16779	28120	
1924/25	12712	28120	12712	19531	12712	29233	12712	14120	12712	16779
1925/26	16355	12712	16355	28120	16355	19531	16355	29233	16355	14120
1926/27	10748	16355	10748	12712	10748	28120	10748	19531	10748	29233
1927/28	9833	10748	9833	16355	9833	12712	9833	28120	9833	19531
1928/29	11308	9833	11308	10748	11308	16355	11308	12712	11308	28120
1929/30	10729	11308	10729	9833	10729	10748	10729	16355	10729	12712
1930/31	11701	10729	11701	11308	11701	9833	11701	10748	11701	16355
1931/32	12941	11701	12941	10729	12941	11308	12941	9833	12941	10748
1932/33	20860	12941	20860	11701	20860	10729	20860	11308	20860	9833
1933/34	28888	20860	28888	12941	28888	11701	28888	10729	28888	11308
1934/35	21493	28888	21493	20860	21493	12941	21493	11701	21493	10729
1935/36	17037	21493	17037	28888	17037	20860	17037	12941	17037	11701
1936/37	15083	17037	15083	21493	15083	28888	15083	20860	15083	12941
1937/38	11021	15083	11021	17037	11021	21493	11021	28888	11021	20860
1938/39	13894	11021	13894	15083	13894	17037	13894	21493	13894	28888
1939/40	17676	13894	17676	11021	17676	15083	17676	17037	17676	21493
1940/41	26382	17676	26382	13894	26382	11021	26382	15083	26382	17037
1941/42	28712	26382	28712	17676	28712	13894	28712	11021	28712	15083
1942/43	18356	28712	18356	26382	18356	17676	18356	13894	18356	11021
1943/44	21067	18356	21067	28712	21067	26382	21067	17676	21067	13894
1944/45	15338	21067	15338	18356	15338	28712	15338	26382	15338	17676
1945/46	12801	15338	12801	21067	12801	18356	12801	28712	12801	26382
1946/47	15850	12801	15850	15338	15850	21067	15850	18356	15850	28712
1947/48	18778	15850	18778	12801	18778	15338	18778	21067	18778	18356
1948/49	22932	18778	22932	15850	22932	12801	22932	15338	22932	21067
1949/50	29456	22932	29456	18778	29456	15850	29456	12801	29456	15338
1950/51	25212	29456	25212	22932	25212	18778	25212	15850	25212	12801
1951/52	26056	25212	26056	29456	26056	22932	26056	18778	26056	15850
1952/53	26401	26056	26401	25212	26401	29456	26401	22932	26401	18778
1953/54	18432	26401	18432	26056	18432	25212	18432	29456	18432	22932
1954/55	17579	18432	17579	26401	17579	26056	17579	25212	17579	29456
1955/56	15384	17579	15384	18432	15384	26401	15384	26056	15384	25212
1956/57	27041	15384	27041	17579	27041	18432	27041	26401	27041	26056
1957/58	37854	27041	37854	15384	37854	17579	37854	18432	37854	26401
1958/59	27397	37854	27397	27041	27397	15384	27397	17579	27397	18432



Correlation Values for Provincial Totals of Mink between 1919/20 - 1969/70										
Year	Mink	Mink 6 years out	Mink	Mink 7 years out	Mink	Mink 8 years out	Mink	Mink 9 years out	Mink	Mink 10 years out
1919/20	16779		16779		16779		16779		16779	
1920/21	14120		14120		14120		14120		14120	
1921/22	29233		29233		29233		29233		29233	
1922/23	19531		19531		19531		19531		19531	
1923/24	28120		28120		28120		28120		28120	
1924/25	12712		12712		12712		12712		12712	
1925/26	16355	16779	16355		16355		16355		16355	
1926/27	10748	14120	10748	16779	10748		10748		10748	
1927/28	9833	29233	9833	14120	9833	16779	9833		9833	
1928/29	11308	19531	11308	29233	11308	14120	11308	16779	11308	
1929/30	10729	28120	10729	19531	10729	29233	10729	14120	10729	16779
1930/31	11701	12712	11701	28120	11701	19531	11701	29233	11701	14120
1931/32	12941	16355	12941	12712	12941	28120	12941	19531	12941	29233
1932/33	20860	10748	20860	16355	20860	12712	20860	28120	20860	19531
1933/34	28888	9833	28888	10748	28888	16355	28888	12712	28888	28120
1934/35	21493	11308	21493	9833	21493	10748	21493	16355	21493	12712
1935/36	17037	10729	17037	11308	17037	9833	17037	10748	17037	16355
1936/37	15083	11701	15083	10729	15083	11308	15083	9833	15083	10748
1937/38	11021	12941	11021	11701	11021	10729	11021	11308	11021	9833
1938/39	13894	20860	13894	12941	13894	11701	13894	10729	13894	11308
1939/40	17676	28888	17676	20860	17676	12941	17676	11701	17676	10729
1940/41	26382	21493	26382	28888	26382	20860	26382	12941	26382	11701
1941/42	28712	17037	28712	21493	28712	28888	28712	20860	28712	12941
1942/43	18356	15083	18356	17037	18356	21493	18356	28888	18356	20860
1943/44	21067	11021	21067	15083	21067	17037	21067	21493	21067	28888
1944/45	15338	13894	15338	11021	15338	15083	15338	17037	15338	21493
1945/46	12801	17676	12801	13894	12801	11021	12801	15083	12801	17037
1946/47	15850	26382	15850	17676	15850	13894	15850	11021	15850	15083
1947/48	18778	28712	18778	26382	18778	17676	18778	13894	18778	11021
1948/49	22932	18356	22932	28712	22932	26382	22932	17676	22932	13894
1949/50	29456	21067	29456	18356	29456	28712	29456	26382	29456	17676
1950/51	25212	15338	25212	21067	25212	18356	25212	28712	25212	26382
1951/52	26056	12801	26056	15338	26056	21067	26056	18356	26056	28712
1952/53	26401	15850	26401	12801	26401	15338	26401	21067	26401	18356
1953/54	18432	18778	18432	15850	18432	12801	18432	15338	18432	21067
1954/55	17579	22932	17579	18778	17579	15850	17579	12801	17579	15338
1955/56	15384	29456	15384	22932	15384	18778	15384	15850	15384	12801
1956/57	27041	25212	27041	29456	27041	22932	27041	18778	27041	15850
1957/58	37854	26056	37854	25212	37854	29456	37854	22932	37854	18778
1958/59	27397	26401	27397	26056	27397	25212	27397	29456	27397	22932

1959/60	27594	18432	27594	26401	27594	26056	27594	25212	27594	29456
1960/61	30679	17579	30679	18432	30679	26401	30679	26056	30679	25212
1961/62	22559	15384	22559	17579	22559	18432	22559	26401	22559	26056
1962/63	18408	27041	18408	15384	18408	17579	18408	18432	18408	26401
1963/64	16412	37854	16412	27041	16412	15384	16412	17579	16412	18432
1964/65	17291	27397	17291	37854	17291	27041	17291	15384	17291	17579
1965/66	15778	27594	15778	27397	15778	37854	15778	27041	15778	15384
1966/67	20099	30679	20099	27594	20099	27397	20099	37854	20099	27041
1967/68	25874	22559	25874	30679	25874	27594	25874	27397	25874	37854
1968/69	33104	18408	33104	22559	33104	30679	33104	27594	33104	27397
1969/70	21522	16412	21522	18408	21522	22559	21522	30679	21522	27594
		17291		16412		18408		22559		30679
		15778		17291		16412		18408		22559
		20099		15778		17291		16412		18408
		25874		20099		15778		17291		16412
		33104		25874		20099		15778		17291
		21522		33104		25874		20099		15778
				21522		33104		25874		20099
	-0.0792374					21522		33104		25874
			0.20180319					21522		33104
					0.43729984					21522
							0.39566648			
									0.37673279	



Correlation Values for Provincial Totals of Mink between 1970/70 - 1993/94										
Year	Mink	Mink 6 years out	Mink	Mink 7 years out	Mink	Mink 8 years out	Mink	Mink 9 years out	Mink	Mink 10 years out
1970/71	9592		9592		9592		9592		9592	
1971/72	10686		10686		10686		10686		10686	
1972/73	20368		20368		20368		20368		20368	
1973/74	10904		10904		10904		10904		10904	
1974/75	12420		12420		12420		12420		12420	
1975/76	11961		11961		11961		11961		11961	
1976/77	22379	9592	22379		22379		22379		22379	
1977/78	19408	10686	19408	9592	19408		19408		19408	
1978/79	20284	20368	20284	10686	20284	9592	20284		20284	
1979/80	24869	10904	24869	20368	24869	10686	24869	9592	24869	
1980/81	19721	12420	19721	10904	19721	20368	19721	10686	19721	9592
1981/82	14994	11961	14994	12420	14994	10904	14994	20368	14994	10686
1982/83	9910	22379	9910	11961	9910	12420	9910	10904	9910	20368
1983/84	7314	19408	7314	22379	7314	11961	7314	12420	7314	10904
1984/85	11976	20284	11976	19408	11976	22379	11976	11961	11976	12420
1985/86	20105	24869	20105	20284	20105	19408	20105	22379	20105	11961
1986/87	15311	19721	15311	24869	15311	20284	15311	19408	15311	22379
1987/88	18681	14994	18681	19721	18681	24869	18681	20284	18681	19408
1988/89	12514	9910	12514	14994	12514	19721	12514	24869	12514	20284
1989/90	11922	7314	11922	9910	11922	14994	11922	19721	11922	24869
1990/91	4002	11976	4002	7314	4002	9910	4002	14994	4002	19721
1991/92	6309	20105	6309	11976	6309	7314	6309	9910	6309	14994
1992/93	6475	15311	6475	20105	6475	11976	6475	7314	6475	9910
1993/94	5073	18681	5073	15311	5073	20105	5073	11976	5073	7314
		12514		18681		15311		20105		11976
		11922		12514		18681		15311		20105
		4002		11922		12514		18681		15311
		6309		4002		11922		12514		18681
		6475		6309		4002		11922		12514
		5073		6475		6309		4002		11922
				5073		6475		6309		4002
	-0.21148844					5073		6475		6309
			0.13184107					5073		6475
					0.24589309					5073
							0.28855355			
									0.07329322	

Correlation Values for Provincial Totals of Muskrats between 1919/20 - 1993/94								
Year	Muskrat	Muskrat 1 Year out	Muskrat	Muskrat 2 Years out	Muskrat	Muskrat 3 Years out	Muskrat	Muskrat 4 Years out
1919/20	518288		518288		518288		518288	
1920/21	396180	518288	396180		396180		396180	
1921/22	511529	396180	511529	518288	511529		511529	
1922/23	602100	511529	602100	396180	602100	518288	602100	
1923/24	554716	602100	554716	511529	554716	396180	554716	518288
1924/25	306906	554716	306906	602100	306906	511529	306906	396180
1925/26	441623	306906	441623	554716	441623	602100	441623	511529
1926/27	226841	441623	226841	306906	226841	554716	226841	602100
1927/28	213866	226841	213866	441623	213866	306906	213866	554716
1928/29	236398	213866	236398	226841	236398	441623	236398	306906
1929/30	251986	236398	251986	213866	251986	226841	251986	441623
1930/31	300624	251986	300624	236398	300624	213866	300624	226841
1931/32	441378	300624	441378	251986	441378	236398	441378	213866
1932/33	421799	441378	421799	300624	421799	251986	421799	236398
1933/34	385060	421799	385060	441378	385060	300624	385060	251986
1934/35	321828	385060	321828	421799	321828	441378	321828	300624
1935/36	271885	321828	271885	385060	271885	421799	271885	441378
1936/37	324820	271885	324820	321828	324820	385060	324820	421799
1937/38	285440	324820	285440	271885	285440	321828	285440	385060
1938/39	374896	285440	374896	324820	374896	271885	374896	321828
1939/40	682375	374896	682375	285440	682375	324820	682375	271885
1940/41	659928	682375	659928	374896	659928	285440	659928	324820
1941/42	331362	659928	331362	682375	331362	374896	331362	285440
1942/43	280838	331362	280838	659928	280838	682375	280838	374896
1943/44	581862	280838	581862	331362	581862	659928	581862	682375
1944/45	855724	581862	855724	280838	855724	331362	855724	659928
1945/46	958099	855724	958099	581862	958099	280838	958099	331362
1946/47	808692	958099	808692	855724	808692	581862	808692	280838
1947/48	822998	808692	822998	958099	822998	855724	822998	581862
1948/49	930330	822998	930330	808692	930330	958099	930330	855724
1949/50	796456	930330	796456	822998	796456	808692	796456	958099
1950/51	679899	796456	679899	930330	679899	822998	679899	808692
1951/52	599794	679899	599794	796456	599794	930330	599794	822998
1952/53	721114	599794	721114	679899	721114	796456	721114	930330
1953/54	790472	721114	790472	599794	790472	679899	790472	796456
1954/55	1288120	790472	1288120	721114	1288120	599794	1288120	679899
1955/56	1462472	1288120	1462472	790472	1462472	721114	1462472	599794
1956/57	1003186	1462472	1003186	1288120	1003186	790472	1003186	721114
1957/58	680891	1003186	680891	1462472	680891	1288120	680891	790472



Correlation Values for Provincial Totals of Muskrats between 1919/20 - 1993/94								
Year	Muskrat	Muskrat 5 Years out	Muskrat	Muskrat 6 Years out	Muskrat	Muskrat 7 Years out	Muskrat	Muskrat 8 Years out
1919/20	518288		518288		518288		518288	
1920/21	396180		396180		396180		396180	
1921/22	511529		511529		511529		511529	
1922/23	602100		602100		602100		602100	
1923/24	554716		554716		554716		554716	
1924/25	306906	518288	306906		306906		306906	
1925/26	441623	396180	441623	518288	441623		441623	
1926/27	226841	511529	226841	396180	226841	518288	226841	
1927/28	213866	602100	213866	511529	213866	396180	213866	518288
1928/29	236398	554716	236398	602100	236398	511529	236398	396180
1929/30	251986	306906	251986	554716	251986	602100	251986	511529
1930/31	300624	441623	300624	306906	300624	554716	300624	602100
1931/32	441378	226841	441378	441623	441378	306906	441378	554716
1932/33	421799	213866	421799	226841	421799	441623	421799	306906
1933/34	385060	236398	385060	213866	385060	226841	385060	441623
1934/35	321828	251986	321828	236398	321828	213866	321828	226841
1935/36	271885	300624	271885	251986	271885	236398	271885	213866
1936/37	324820	441378	324820	300624	324820	251986	324820	236398
1937/38	285440	421799	285440	441378	285440	300624	285440	251986
1938/39	374896	385060	374896	421799	374896	441378	374896	300624
1939/40	682375	321828	682375	385060	682375	421799	682375	441378
1940/41	659928	271885	659928	321828	659928	385060	659928	421799
1941/42	331362	324820	331362	271885	331362	321828	331362	385060
1942/43	280838	285440	280838	324820	280838	271885	280838	321828
1943/44	581862	374896	581862	285440	581862	324820	581862	271885
1944/45	855724	682375	855724	374896	855724	285440	855724	324820
1945/46	958099	659928	958099	682375	958099	374896	958099	285440
1946/47	808692	331362	808692	659928	808692	682375	808692	374896
1947/48	822998	280838	822998	331362	822998	659928	822998	682375
1948/49	930330	581862	930330	280838	930330	331362	930330	659928
1949/50	796456	855724	796456	581862	796456	280838	796456	331362
1950/51	679899	958099	679899	855724	679899	581862	679899	280838
1951/52	599794	808692	599794	958099	599794	855724	599794	581862
1952/53	721114	822998	721114	808692	721114	958099	721114	855724
1953/54	790472	930330	790472	822998	790472	808692	790472	958099
1954/55	1288120	796456	1288120	930330	1288120	822998	1288120	808692
1955/56	1462472	679899	1462472	796456	1462472	930330	1462472	822998
1956/57	1003186	599794	1003186	679899	1003186	796456	1003186	930330
1957/58	680891	721114	680891	599794	680891	679899	680891	796456



Correlation Values for Provincial Totals of Muskrats between 1919/20 - 1993/94						
Year	Muskrat	Muskrat 9 Years out	Muskrat	Muskrat 10 Years out		
1919/20	518288		518288			
1920/21	396180		396180			
1921/22	511529		511529			
1922/23	602100		602100			
1923/24	554716		554716			
1924/25	306906		306906			
1925/26	441623		441623			
1926/27	226841		226841			
1927/28	213866		213866			
1928/29	236398	518288	236398			
1929/30	251986	396180	251986	518288		
1930/31	300624	511529	300624	396180		
1931/32	441378	602100	441378	511529		
1932/33	421799	554716	421799	602100		
1933/34	385060	306906	385060	554716		
1934/35	321828	441623	321828	306906		
1935/36	271885	226841	271885	441623		
1936/37	324820	213866	324820	226841		
1937/38	285440	236398	285440	213866		
1938/39	374896	251986	374896	236398		
1939/40	682375	300624	682375	251986		
1940/41	659928	441378	659928	300624		
1941/42	331362	421799	331362	441378		
1942/43	280838	385060	280838	421799		
1943/44	581862	321828	581862	385060		
1944/45	855724	271885	855724	321828		
1945/46	958099	324820	958099	271885		
1946/47	808692	285440	808692	324820		
1947/48	822998	374896	822998	285440		
1948/49	930330	682375	930330	374896		
1949/50	796456	659928	796456	682375		
1950/51	679899	331362	679899	659928		
1951/52	599794	280838	599794	331362		
1952/53	721114	581862	721114	280838		
1953/54	790472	855724	790472	581862		
1954/55	1288120	958099	1288120	855724		
1955/56	1462472	808692	1462472	958099		
1956/57	1003186	822998	1003186	808692		
1957/58	680891	930330	680891	822998		

1958/59	360287	796456	360287	930330					
1959/60	214542	679899	214542	796456					
1960/61	338037	599794	338037	679899					
1961/62	166323	721114	166323	599794					
1962/63	140618	790472	140618	721114					
1963/64	249067	1288120	249067	790472					
1964/65	348098	1462472	348098	1288120					
1965/66	589290	1003186	589290	1462472					
1966/67	387875	680891	387875	1003186					
1967/68	442268	360287	442268	680891					
1968/69	294116	214542	294116	360287					
1969/70	250212	338037	250212	214542					
1970/71	388714	166323	388714	338037					
1971/72	472579	140618	472579	166323					
1972/73	247175	249067	247175	140618					
1973/74	122182	348098	122182	249067					
1974/75	285557	589290	285557	348098					
1975/76	411393	387875	411393	589290					
1976/77	399333	442268	399333	387875					
1977/78	203664	294116	203664	442268					
1978/79	161551	250212	161551	294116					
1979/80	328704	388714	328704	250212					
1980/81	396366	472579	396366	388714					
1981/82	144065	247175	144065	472579					
1982/83	168047	122182	168047	247175					
1983/84	235980	285557	235980	122182					
1984/85	181123	411393	181123	285557					
1985/86	108395	399333	108395	411393					
1986/87	215681	203664	215681	399333					
1987/88	236156	161551	236156	203664					
1988/89	40457	328704	40457	161551					
1989/90	13103	396366	13103	328704					
1990/91	10255	144065	10255	396366					
1991/92	15068	168047	15068	144065					
1992/93	22732	235980	22732	168047					
1993/94	56256	181123	56256	235980					
		108395		181123					
		215681		108395					
		236156		215681					
		40457		236156					
		13103		40457					
		10255		13103					
		15068		10255					
		22732		15068					
		56256		22732					
				56256					
	0.345316561								
			0.320391264						

Correlation Values for Provincial Totals of Muskrats between 1919/20 - 1969/70								
Year	Muskrat	Muskrat 1 Year out	Muskrat	Muskrat 2 Years out	Muskrat	Muskrat 3 Years out	Muskrat	Muskrat 4 Years out
1919/20	518288		518288		518288		518288	
1920/21	396180	518288	396180		396180		396180	
1921/22	511529	396180	511529	518288	511529		511529	
1922/23	602100	511529	602100	396180	602100	518288	602100	
1923/24	554716	602100	554716	511529	554716	396180	554716	518288
1924/25	306906	554716	306906	602100	306906	511529	306906	396180
1925/26	441623	306906	441623	554716	441623	602100	441623	511529
1926/27	226841	441623	226841	306906	226841	554716	226841	602100
1927/28	213866	226841	213866	441623	213866	306906	213866	554716
1928/29	236398	213866	236398	226841	236398	441623	236398	306906
1929/30	251986	236398	251986	213866	251986	226841	251986	441623
1930/31	300624	251986	300624	236398	300624	213866	300624	226841
1931/32	441378	300624	441378	251986	441378	236398	441378	213866
1932/33	421799	441378	421799	300624	421799	251986	421799	236398
1933/34	385060	421799	385060	441378	385060	300624	385060	251986
1934/35	321828	385060	321828	421799	321828	441378	321828	300624
1935/36	271885	321828	271885	385060	271885	421799	271885	441378
1936/37	324820	271885	324820	321828	324820	385060	324820	421799
1937/38	285440	324820	285440	271885	285440	321828	285440	385060
1938/39	374896	285440	374896	324820	374896	271885	374896	321828
1939/40	682375	374896	682375	285440	682375	324820	682375	271885
1940/41	659928	682375	659928	374896	659928	285440	659928	324820
1941/42	331362	659928	331362	682375	331362	374896	331362	285440
1942/43	280838	331362	280838	659928	280838	682375	280838	374896
1943/44	581862	280838	581862	331362	581862	659928	581862	682375
1944/45	855724	581862	855724	280838	855724	331362	855724	659928
1945/46	958099	855724	958099	581862	958099	280838	958099	331362
1946/47	808692	958099	808692	855724	808692	581862	808692	280838
1947/48	822998	808692	822998	958099	822998	855724	822998	581862
1948/49	930330	822998	930330	808692	930330	958099	930330	855724
1949/50	796456	930330	796456	822998	796456	808692	796456	958099
1950/51	679899	796456	679899	930330	679899	822998	679899	808692
1951/52	599794	679899	599794	796456	599794	930330	599794	822998
1952/53	721114	599794	721114	679899	721114	796456	721114	930330
1953/54	790472	721114	790472	599794	790472	679899	790472	796456
1954/55	1288120	790472	1288120	721114	1288120	599794	1288120	679899
1955/56	1462472	1288120	1462472	790472	1462472	721114	1462472	599794
1956/57	1003186	1462472	1003186	1288120	1003186	790472	1003186	721114
1957/58	680891	1003186	680891	1462472	680891	1288120	680891	790472



Correlation Values for Provincial Totals of Muskrats between 1919/20 - 1969/70								
Year	Muskrat	Muskrat 5 Years out	Muskrat	Muskrat 6 Years out	Muskrat	Muskrat 7 Years out	Muskrat	Muskrat 8 Years out
1919/20	518288		518288		518288		518288	
1920/21	396180		396180		396180		396180	
1921/22	511529		511529		511529		511529	
1922/23	602100		602100		602100		602100	
1923/24	554716		554716		554716		554716	
1924/25	306906	518288	306906		306906		306906	
1925/26	441623	396180	441623	518288	441623		441623	
1926/27	226841	511529	226841	396180	226841	518288	226841	
1927/28	213866	602100	213866	511529	213866	396180	213866	518288
1928/29	236398	554716	236398	602100	236398	511529	236398	396180
1929/30	251986	306906	251986	554716	251986	602100	251986	511529
1930/31	300624	441623	300624	306906	300624	554716	300624	602100
1931/32	441378	226841	441378	441623	441378	306906	441378	554716
1932/33	421799	213866	421799	226841	421799	441623	421799	306906
1933/34	385060	236398	385060	213866	385060	226841	385060	441623
1934/35	321828	251986	321828	236398	321828	213866	321828	226841
1935/36	271885	300624	271885	251986	271885	236398	271885	213866
1936/37	324820	441378	324820	300624	324820	251986	324820	236398
1937/38	285440	421799	285440	441378	285440	300624	285440	251986
1938/39	374896	385060	374896	421799	374896	441378	374896	300624
1939/40	682375	321828	682375	385060	682375	421799	682375	441378
1940/41	659928	271885	659928	321828	659928	385060	659928	421799
1941/42	331362	324820	331362	271885	331362	321828	331362	385060
1942/43	280838	285440	280838	324820	280838	271885	280838	321828
1943/44	581862	374896	581862	285440	581862	324820	581862	271885
1944/45	855724	682375	855724	374896	855724	285440	855724	324820
1945/46	958099	659928	958099	682375	958099	374896	958099	285440
1946/47	808692	331362	808692	659928	808692	682375	808692	374896
1947/48	822998	280838	822998	331362	822998	659928	822998	682375
1948/49	930330	581862	930330	280838	930330	331362	930330	659928
1949/50	796456	855724	796456	581862	796456	280838	796456	331362
1950/51	679899	958099	679899	855724	679899	581862	679899	280838
1951/52	599794	808692	599794	958099	599794	855724	599794	581862
1952/53	721114	822998	721114	808692	721114	958099	721114	855724
1953/54	790472	930330	790472	822998	790472	808692	790472	958099
1954/55	1288120	796456	1288120	930330	1288120	822998	1288120	808692
1955/56	1462472	679899	1462472	796456	1462472	930330	1462472	822998
1956/57	1003186	599794	1003186	679899	1003186	796456	1003186	930330
1957/58	680891	721114	680891	599794	680891	679899	680891	796456



Correlation Values for Provincial Totals of Muskrats between 1919/20 - 1969/70						
Year	Muskrat	Muskrat 9 Years out	Muskrat	Muskrat 10 Years out		
1919/20	518288		518288			
1920/21	396180		396180			
1921/22	511529		511529			
1922/23	602100		602100			
1923/24	554716		554716			
1924/25	306906		306906			
1925/26	441623		441623			
1926/27	226841		226841			
1927/28	213866		213866			
1928/29	236398	518288	236398			
1929/30	251986	396180	251986	518288		
1930/31	300624	511529	300624	396180		
1931/32	441378	602100	441378	511529		
1932/33	421799	554716	421799	602100		
1933/34	385060	306906	385060	554716		
1934/35	321828	441623	321828	306906		
1935/36	271885	226841	271885	441623		
1936/37	324820	213866	324820	226841		
1937/38	285440	236398	285440	213866		
1938/39	374896	251986	374896	236398		
1939/40	682375	300624	682375	251986		
1940/41	659928	441378	659928	300624		
1941/42	331362	421799	331362	441378		
1942/43	280838	385060	280838	421799		
1943/44	581862	321828	581862	385060		
1944/45	855724	271885	855724	321828		
1945/46	958099	324820	958099	271885		
1946/47	808692	285440	808692	324820		
1947/48	822998	374896	822998	285440		
1948/49	930330	682375	930330	374896		
1949/50	796456	659928	796456	682375		
1950/51	679899	331362	679899	659928		
1951/52	599794	280838	599794	331362		
1952/53	721114	581862	721114	280838		
1953/54	790472	855724	790472	581862		
1954/55	1288120	958099	1288120	855724		
1955/56	1462472	808692	1462472	958099		
1956/57	1003186	822998	1003186	808692		
1957/58	680891	930330	680891	822998		

1958/59	360287	796456	360287	930330			
1959/60	214542	679899	214542	796456			
1960/61	338037	599794	338037	679899			
1961/62	166323	721114	166323	599794			
1962/63	140618	790472	140618	721114			
1963/64	249067	1288120	249067	790472			
1964/65	348098	1462472	348098	1288120			
1965/66	589290	1003186	589290	1462472			
1966/67	387875	680891	387875	1003186			
1967/68	442268	360287	442268	680891			
1968/69	294116	214542	294116	360287			
1969/70	250212	338037	250212	214542			
		166323		338037			
		140618		166323			
		249067		140618			
		348098		249067			
		589290		348098			
		387875		589290			
		442268		387875			
		294116		442268			
		250212		294116			
				250212			
	0.127873827						
			0.084938194				





Correlation Values for Provincial Totals of Muskrats between 1970/71 - 1993/94						
Year	Muskrat	Muskrat 9 Years out	Muskrat	Muskrat 10 Years out		
1970/71	388714		388714			
1971/72	472579		472579			
1972/73	247175		247175			
1973/74	122182		122182			
1974/75	285557		285557			
1975/76	411393		411393			
1976/77	399333		399333			
1977/78	203664		203664			
1978/79	161551		161551			
1979/80	328704	388714	328704			
1980/81	396366	472579	396366	388714		
1981/82	144065	247175	144065	472579		
1982/83	168047	122182	168047	247175		
1983/84	235980	285557	235980	122182		
1984/85	181123	411393	181123	285557		
1985/86	108395	399333	108395	411393		
1986/87	215681	203664	215681	399333		
1987/88	236156	161551	236156	203664		
1988/89	40457	328704	40457	161551		
1989/90	13103	396366	13103	328704		
1990/91	10255	144065	10255	396366		
1991/92	15068	168047	15068	144065		
1992/93	22732	235980	22732	168047		
1993/94	56256	181123	56256	235980		
		108395		181123		
		215681		108395		
		236156		215681		
		40457		236156		
		13103		40457		
		10255		13103		
		15068		10255		
		22732		15068		
		56256		22732		
				56256		
	0.387999367					
			0.202164495			

Correlation Values for Provincial Totals of Ermine between 1919/20 - 1993/94								
Year	Ermine	Ermine 1 Year out	Ermine	Ermine 2 Years out	Ermine	Ermine 3 Years out	Ermine	Ermine 4 Years out
1919/20	118168		118168		118168		118168	
1920/21	69664	118168	69664		69664		69664	
1921/22	67318	69664	67318	118168	67318		67318	
1922/23	38210	67318	38210	69664	38210	118168	38210	
1923/24	63054	38210	63054	67318	63054	69664	63054	118168
1924/25	56807	63054	56807	38210	56807	67318	56807	69664
1925/26	84492	56807	84492	63054	84492	38210	84492	67318
1926/27	87892	84492	87892	56807	87892	63054	87892	38210
1927/28	88852	87892	88852	84492	88852	56807	88852	63054
1928/29	108789	88852	108789	87892	108789	84492	108789	56807
1929/30	110094	108789	110094	88852	110094	87892	110094	84492
1930/31	71833	110094	71833	108789	71833	88852	71833	87892
1931/32	88838	71833	88838	110094	88838	108789	88838	88852
1932/33	72529	88838	72529	71833	72529	110094	72529	108789
1933/34	116992	72529	116992	88838	116992	71833	116992	110094
1934/35	80748	116992	80748	72529	80748	88838	80748	71833
1935/36	56187	80748	56187	116992	56187	72529	56187	88838
1936/37	137672	56187	137672	80748	137672	116992	137672	72529
1937/38	113648	137672	113648	56187	113648	80748	113648	116992
1938/39	72523	113648	72523	137672	72523	56187	72523	80748
1939/40	103932	72523	103932	113648	103932	137672	103932	56187
1940/41	136027	103932	136027	72523	136027	113648	136027	137672
1941/42	150193	136027	150193	103932	150193	72523	150193	113648
1942/43	113080	150193	113080	136027	113080	103932	113080	72523
1943/44	155567	113080	155567	150193	155567	136027	155567	103932
1944/45	124815	155567	124815	113080	124815	150193	124815	136027
1945/46	109613	124815	109613	155567	109613	113080	109613	150193
1946/47	103656	109613	103656	124815	103656	155567	103656	113080
1947/48	91600	103656	91600	109613	91600	124815	91600	155567
1948/49	99705	91600	99705	103656	99705	109613	99705	124815
1949/50	152800	99705	152800	91600	152800	103656	152800	109613
1950/51	69556	152800	69556	99705	69556	91600	69556	103656
1951/52	79049	69556	79049	152800	79049	99705	79049	91600
1952/53	105230	79049	105230	69556	105230	152800	105230	99705
1953/54	62578	105230	62578	79049	62578	69556	62578	152800
1954/55	70090	62578	70090	105230	70090	79049	70090	69556
1955/56	95641	70090	95641	62578	95641	105230	95641	79049
1956/57	66950	95641	66950	70090	66950	62578	66950	105230
1957/58	61002	66950	61002	95641	61002	70090	61002	62578
1958/59	43236	61002	43236	66950	43236	95641	43236	70090



Correlation Values for Provincial Totals of Ermine between 1919/20 - 1993/94								
Year	Ermine	Ermine 5 Years out	Ermine	Ermine 6 Years out	Ermine	Ermine 7 Years out	Ermine	Ermine 8 Years out
1919/20	118168		118168		118168		118168	
1920/21	69664		69664		69664		69664	
1921/22	67318		67318		67318		67318	
1922/23	38210		38210		38210		38210	
1923/24	63054		63054		63054		63054	
1924/25	56807	118168	56807		56807		56807	
1925/26	84492	69664	84492	118168	84492		84492	
1926/27	87892	67318	87892	69664	87892	118168	87892	
1927/28	88852	38210	88852	67318	88852	69664	88852	118168
1928/29	108789	63054	108789	38210	108789	67318	108789	69664
1929/30	110094	56807	110094	63054	110094	38210	110094	67318
1930/31	71833	84492	71833	56807	71833	63054	71833	38210
1931/32	88838	87892	88838	84492	88838	56807	88838	63054
1932/33	72529	88852	72529	87892	72529	84492	72529	56807
1933/34	116992	108789	116992	88852	116992	87892	116992	84492
1934/35	80748	110094	80748	108789	80748	88852	80748	87892
1935/36	56187	71833	56187	110094	56187	108789	56187	88852
1936/37	137672	88838	137672	71833	137672	110094	137672	108789
1937/38	113648	72529	113648	88838	113648	71833	113648	110094
1938/39	72523	116992	72523	72529	72523	88838	72523	71833
1939/40	103932	80748	103932	116992	103932	72529	103932	88838
1940/41	136027	56187	136027	80748	136027	116992	136027	72529
1941/42	150193	137672	150193	56187	150193	80748	150193	116992
1942/43	113080	113648	113080	137672	113080	56187	113080	80748
1943/44	155567	72523	155567	113648	155567	137672	155567	56187
1944/45	124815	103932	124815	72523	124815	113648	124815	137672
1945/46	109613	136027	109613	103932	109613	72523	109613	113648
1946/47	103656	150193	103656	136027	103656	103932	103656	72523
1947/48	91600	113080	91600	150193	91600	136027	91600	103932
1948/49	99705	155567	99705	113080	99705	150193	99705	136027
1949/50	152800	124815	152800	155567	152800	113080	152800	150193
1950/51	69556	109613	69556	124815	69556	155567	69556	113080
1951/52	79049	103656	79049	109613	79049	124815	79049	155567
1952/53	105230	91600	105230	103656	105230	109613	105230	124815
1953/54	62578	99705	62578	91600	62578	103656	62578	109613
1954/55	70090	152800	70090	99705	70090	91600	70090	103656
1955/56	95641	69556	95641	152800	95641	99705	95641	91600
1956/57	66950	79049	66950	69556	66950	152800	66950	99705
1957/58	61002	105230	61002	79049	61002	69556	61002	152800
1958/59	43236	62578	43236	105230	43236	79049	43236	69556



Correlation Values for Provincial Totals of Ermine between 1919/20 - 1993/94						
Year	Ermine	Ermine 9 Years out	Ermine	Ermine 10 Years out		
1919/20	118168		118168			
1920/21	69664		69664			
1921/22	67318		67318			
1922/23	38210		38210			
1923/24	63054		63054			
1924/25	56807		56807			
1925/26	84492		84492			
1926/27	87892		87892			
1927/28	88852		88852			
1928/29	108789	118168	108789			
1929/30	110094	69664	110094	118168		
1930/31	71833	67318	71833	69664		
1931/32	88838	38210	88838	67318		
1932/33	72529	63054	72529	38210		
1933/34	116992	56807	116992	63054		
1934/35	80748	84492	80748	56807		
1935/36	56187	87892	56187	84492		
1936/37	137672	88852	137672	87892		
1937/38	113648	108789	113648	88852		
1938/39	72523	110094	72523	108789		
1939/40	103932	71833	103932	110094		
1940/41	136027	88838	136027	71833		
1941/42	150193	72529	150193	88838		
1942/43	113080	116992	113080	72529		
1943/44	155567	80748	155567	116992		
1944/45	124815	56187	124815	80748		
1945/46	109613	137672	109613	56187		
1946/47	103656	113648	103656	137672		
1947/48	91600	72523	91600	113648		
1948/49	99705	103932	99705	72523		
1949/50	152800	136027	152800	103932		
1950/51	69556	150193	69556	136027		
1951/52	79049	113080	79049	150193		
1952/53	105230	155567	105230	113080		
1953/54	62578	124815	62578	155567		
1954/55	70090	109613	70090	124815		
1955/56	95641	103656	95641	109613		
1956/57	66950	91600	66950	103656		
1957/58	61002	99705	61002	91600		
1958/59	43236	152800	43236	99705		

1959/60	45205	69556	45205	152800		
1960/61	31725	79049	31725	69556		
1961/62	29600	105230	29600	79049		
1962/63	27970	62578	27970	105230		
1963/64	24527	70090	24527	62578		
1964/65	41794	95641	41794	70090		
1965/66	32034	66950	32034	95641		
1966/67	13354	61002	13354	66950		
1967/68	26394	43236	26394	61002		
1968/69	23325	45205	23325	43236		
1969/70	10613	31725	10613	45205		
1970/71	5043	29600	5043	31725		
1971/72	3765	27970	3765	29600		
1972/73	10133	24527	10133	27970		
1973/74	5869	41794	5869	24527		
1974/75	18205	32034	18205	41794		
1975/76	12930	13354	12930	32034		
1976/77	16938	26394	16938	13354		
1977/78	10998	23325	10998	26394		
1978/79	14859	10613	14859	23325		
1979/80	21314	5043	21314	10613		
1980/81	15520	3765	15520	5043		
1981/82	9878	10133	9878	3765		
1982/83	5991	5869	5991	10133		
1983/84	5221	18205	5221	5869		
1984/85	10649	12930	10649	18205		
1985/86	9011	16938	9011	12930		
1986/87	9550	10998	9550	16938		
1987/88	10961	14859	10961	10998		
1988/89	6439	21314	6439	14859		
1989/90	2462	15520	2462	21314		
1990/91	1402	9878	1402	15520		
1991/92	1932	5991	1932	9878		
1992/93	2020	5221	2020	5991		
1993/94	2844	10649	2844	5221		
		9011		10649		
		9550		9011		
		10961		9550		
		6439		10961		
		2462		6439		
		1402		2462		
		1932		1402		
		2020		1932		
		2844		2020		
				2844		
	0.697690427					
			0.668223816			

Correlation Values for Provincial Totals of Ermine between 1919/20 - 1969/70								
Year	Ermine	Ermine 1 Year out	Ermine	Ermine 2 Years out	Ermine	Ermine 3 Years out	Ermine	Ermine 4 Years out
1919/20	118168		118168		118168		118168	
1920/21	69664	118168	69664		69664		69664	
1921/22	67318	69664	67318	118168	67318		67318	
1922/23	38210	67318	38210	69664	38210	118168	38210	
1923/24	63054	38210	63054	67318	63054	69664	63054	118168
1924/25	56807	63054	56807	38210	56807	67318	56807	69664
1925/26	84492	56807	84492	63054	84492	38210	84492	67318
1926/27	87892	84492	87892	56807	87892	63054	87892	38210
1927/28	88852	87892	88852	84492	88852	56807	88852	63054
1928/29	108789	88852	108789	87892	108789	84492	108789	56807
1929/30	110094	108789	110094	88852	110094	87892	110094	84492
1930/31	71833	110094	71833	108789	71833	88852	71833	87892
1931/32	88838	71833	88838	110094	88838	108789	88838	88852
1932/33	72529	88838	72529	71833	72529	110094	72529	108789
1933/34	116992	72529	116992	88838	116992	71833	116992	110094
1934/35	80748	116992	80748	72529	80748	88838	80748	71833
1935/36	56187	80748	56187	116992	56187	72529	56187	88838
1936/37	137672	56187	137672	80748	137672	116992	137672	72529
1937/38	113648	137672	113648	56187	113648	80748	113648	116992
1938/39	72523	113648	72523	137672	72523	56187	72523	80748
1939/40	103932	72523	103932	113648	103932	137672	103932	56187
1940/41	136027	103932	136027	72523	136027	113648	136027	137672
1941/42	150193	136027	150193	103932	150193	72523	150193	113648
1942/43	113080	150193	113080	136027	113080	103932	113080	72523
1943/44	155567	113080	155567	150193	155567	136027	155567	103932
1944/45	124815	155567	124815	113080	124815	150193	124815	136027
1945/46	109613	124815	109613	155567	109613	113080	109613	150193
1946/47	103656	109613	103656	124815	103656	155567	103656	113080
1947/48	91600	103656	91600	109613	91600	124815	91600	155567
1948/49	99705	91600	99705	103656	99705	109613	99705	124815
1949/50	152800	99705	152800	91600	152800	103656	152800	109613
1950/51	69556	152800	69556	99705	69556	91600	69556	103656
1951/52	79049	69556	79049	152800	79049	99705	79049	91600
1952/53	105230	79049	105230	69556	105230	152800	105230	99705
1953/54	62578	105230	62578	79049	62578	69556	62578	152800
1954/55	70090	62578	70090	105230	70090	79049	70090	69556
1955/56	95641	70090	95641	62578	95641	105230	95641	79049
1956/57	66950	95641	66950	70090	66950	62578	66950	105230
1957/58	61002	66950	61002	95641	61002	70090	61002	62578
1958/59	43236	61002	43236	66950	43236	95641	43236	70090



Correlation Values for Provincial Totals of Ermine between 1919/20 - 1969/70								
Year	Ermine	Ermine 5 Years out	Ermine	Ermine 6 Years out	Ermine	Ermine 7 Years out	Ermine	Ermine 8 Years out
1919/20	118168		118168		118168		118168	
1920/21	69664		69664		69664		69664	
1921/22	67318		67318		67318		67318	
1922/23	38210		38210		38210		38210	
1923/24	63054		63054		63054		63054	
1924/25	56807	118168	56807		56807		56807	
1925/26	84492	69664	84492	118168	84492		84492	
1926/27	87892	67318	87892	69664	87892	118168	87892	
1927/28	88852	38210	88852	67318	88852	69664	88852	118168
1928/29	108789	63054	108789	38210	108789	67318	108789	69664
1929/30	110094	56807	110094	63054	110094	38210	110094	67318
1930/31	71833	84492	71833	56807	71833	63054	71833	38210
1931/32	88838	87892	88838	84492	88838	56807	88838	63054
1932/33	72529	88852	72529	87892	72529	84492	72529	56807
1933/34	116992	108789	116992	88852	116992	87892	116992	84492
1934/35	80748	110094	80748	108789	80748	88852	80748	87892
1935/36	56187	71833	56187	110094	56187	108789	56187	88852
1936/37	137672	88838	137672	71833	137672	110094	137672	108789
1937/38	113648	72529	113648	88838	113648	71833	113648	110094
1938/39	72523	116992	72523	72529	72523	88838	72523	71833
1939/40	103932	80748	103932	116992	103932	72529	103932	88838
1940/41	136027	56187	136027	80748	136027	116992	136027	72529
1941/42	150193	137672	150193	56187	150193	80748	150193	116992
1942/43	113080	113648	113080	137672	113080	56187	113080	80748
1943/44	155567	72523	155567	113648	155567	137672	155567	56187
1944/45	124815	103932	124815	72523	124815	113648	124815	137672
1945/46	109613	136027	109613	103932	109613	72523	109613	113648
1946/47	103656	150193	103656	136027	103656	103932	103656	72523
1947/48	91600	113080	91600	150193	91600	136027	91600	103932
1948/49	99705	155567	99705	113080	99705	150193	99705	136027
1949/50	152800	124815	152800	155567	152800	113080	152800	150193
1950/51	69556	109613	69556	124815	69556	155567	69556	113080
1951/52	79049	103656	79049	109613	79049	124815	79049	155567
1952/53	105230	91600	105230	103656	105230	109613	105230	124815
1953/54	62578	99705	62578	91600	62578	103656	62578	109613
1954/55	70090	152800	70090	99705	70090	91600	70090	103656
1955/56	95641	69556	95641	152800	95641	99705	95641	91600
1956/57	66950	79049	66950	69556	66950	152800	66950	99705
1957/58	61002	105230	61002	79049	61002	69556	61002	152800
1958/59	43236	62578	43236	105230	43236	79049	43236	69556



Correlation Values for Provincial Totals of Ermine between 1919/20 - 1969/70						
Year	Ermine	Ermine 9 Years out	Ermine	Ermine 10 Years out		
1919/20	118168		118168			
1920/21	69664		69664			
1921/22	67318		67318			
1922/23	38210		38210			
1923/24	63054		63054			
1924/25	56807		56807			
1925/26	84492		84492			
1926/27	87892		87892			
1927/28	88852		88852			
1928/29	108789	118168	108789			
1929/30	110094	69664	110094	118168		
1930/31	71833	67318	71833	69664		
1931/32	88838	38210	88838	67318		
1932/33	72529	63054	72529	38210		
1933/34	116992	56807	116992	63054		
1934/35	80748	84492	80748	56807		
1935/36	56187	87892	56187	84492		
1936/37	137672	88852	137672	87892		
1937/38	113648	108789	113648	88852		
1938/39	72523	110094	72523	108789		
1939/40	103932	71833	103932	110094		
1940/41	136027	88838	136027	71833		
1941/42	150193	72529	150193	88838		
1942/43	113080	116992	113080	72529		
1943/44	155567	80748	155567	116992		
1944/45	124815	56187	124815	80748		
1945/46	109613	137672	109613	56187		
1946/47	103656	113648	103656	137672		
1947/48	91600	72523	91600	113648		
1948/49	99705	103932	99705	72523		
1949/50	152800	136027	152800	103932		
1950/51	69556	150193	69556	136027		
1951/52	79049	113080	79049	150193		
1952/53	105230	155567	105230	113080		
1953/54	62578	124815	62578	155567		
1954/55	70090	109613	70090	124815		
1955/56	95641	103656	95641	109613		
1956/57	66950	91600	66950	103656		
1957/58	61002	99705	61002	91600		
1958/59	43236	152800	43236	99705		

1959/60	45205	69556	45205	152800			
1960/61	31725	79049	31725	69556			
1961/62	29600	105230	29600	79049			
1962/63	27970	62578	27970	105230			
1963/64	24527	70090	24527	62578			
1964/65	41794	95641	41794	70090			
1965/66	32034	66950	32034	95641			
1966/67	13354	61002	13354	66950			
1967/68	26394	43236	26394	61002			
1968/69	23325	45205	23325	43236			
1969/70	10613	31725	10613	45205			
		29600		31725			
		27970		29600			
		24527		27970			
		41794		24527			
		32034		41794			
		13354		32034			
		26394		13354			
		23325		26394			
		10613		23325			
				10613			
	0.278956344						
			0.188212884				





Correlation Values for Provincial Totals of Ermine between 1970/71 - 1993/94						
Year	Ermine	Ermine 9 Years out	Ermine	Ermine 10 Years out		
1970/71	5043		5043			
1971/72	3765		3765			
1972/73	10133		10133			
1973/74	5869		5869			
1974/75	18205		18205			
1975/76	12930		12930			
1976/77	16938		16938			
1977/78	10998		10998			
1978/79	14859		14859			
1979/80	21314	5043	21314			
1980/81	15520	3765	15520	5043		
1981/82	9878	10133	9878	3765		
1982/83	5991	5869	5991	10133		
1983/84	5221	18205	5221	5869		
1984/85	10649	12930	10649	18205		
1985/86	9011	16938	9011	12930		
1986/87	9550	10998	9550	16938		
1987/88	10961	14859	10961	10998		
1988/89	6439	21314	6439	14859		
1989/90	2462	15520	2462	21314		
1990/91	1402	9878	1402	15520		
1991/92	1932	5991	1932	9878		
1992/93	2020	5221	2020	5991		
1993/94	2844	10649	2844	5221		
		9011		10649		
		9550		9011		
		10961		9550		
		6439		10961		
		2462		6439		
		1402		2462		
		1932		1402		
		2020		1932		
		2844		2020		
				2844		
	-0.20910015					
			-0.111576725			

Correlation Values for Provincial Totals of Mink vs Muskrat between 1919/20 - 1993/94								
Year	Mink	Muskrat Same Year	Mink	Muskrat 1 Year Out	Mink	Muskrat 2 Years Out	Mink	Muskrat 3 Years Out
1919/20	16779	518288	16779		16779		16779	
1920/21	14120	396180	14120	518288	14120		14120	
1921/22	29233	511529	29233	396180	29233	518288	29233	
1922/23	19531	602100	19531	511529	19531	396180	19531	518288
1923/24	28120	554716	28120	602100	28120	511529	28120	396180
1924/25	12712	306906	12712	554716	12712	602100	12712	511529
1925/26	16355	441623	16355	306906	16355	554716	16355	602100
1926/27	10748	226841	10748	441623	10748	306906	10748	554716
1927/28	9833	213866	9833	226841	9833	441623	9833	306906
1928/29	11308	236398	11308	213866	11308	226841	11308	441623
1929/30	10729	251986	10729	236398	10729	213866	10729	226841
1930/31	11701	300624	11701	251986	11701	236398	11701	213866
1931/32	12941	441378	12941	300624	12941	251986	12941	236398
1932/33	20860	421799	20860	441378	20860	300624	20860	251986
1933/34	28888	385060	28888	421799	28888	441378	28888	300624
1934/35	21493	321828	21493	385060	21493	421799	21493	441378
1935/36	17037	271885	17037	321828	17037	385060	17037	421799
1936/37	15083	324820	15083	271885	15083	321828	15083	385060
1937/38	11021	285440	11021	324820	11021	271885	11021	321828
1938/39	13894	374896	13894	285440	13894	324820	13894	271885
1939/40	17676	682375	17676	374896	17676	285440	17676	324820
1940/41	26382	659928	26382	682375	26382	374896	26382	285440
1941/42	28712	331362	28712	659928	28712	682375	28712	374896
1942/43	18356	280838	18356	331362	18356	659928	18356	682375
1943/44	21067	581862	21067	280838	21067	331362	21067	659928
1944/45	15338	855724	15338	581862	15338	280838	15338	331362
1945/46	12801	958099	12801	855724	12801	581862	12801	280838
1946/47	15850	808692	15850	958099	15850	855724	15850	581862
1947/48	18778	822998	18778	808692	18778	958099	18778	855724
1948/49	22932	930330	22932	822998	22932	808692	22932	958099
1949/50	29456	796456	29456	930330	29456	822998	29456	808692
1950/51	25212	679899	25212	796456	25212	930330	25212	822998
1951/52	26056	599794	26056	679899	26056	796456	26056	930330
1952/53	26401	721114	26401	599794	26401	679899	26401	796456
1953/54	18432	790472	18432	721114	18432	599794	18432	679899
1954/55	17579	1288120	17579	790472	17579	721114	17579	599794
1955/56	15384	1462472	15384	1288120	15384	790472	15384	721114
1956/57	27041	1003186	27041	1462472	27041	1288120	27041	790472
1957/58	37854	680891	37854	1003186	37854	1462472	37854	1288120



Correlation Values for Provincial Totals of Mink vs Muskrat between 1919/20 - 1993/9								
Year	Mink	Muskrat 4 Years Out	Mink	Muskrat 5 Years Out	Mink	Muskrat 6 Years Out	Mink	Muskrat 7 Years Out
1919/20	16779		16779		16779		16779	
1920/21	14120		14120		14120		14120	
1921/22	29233		29233		29233		29233	
1922/23	19531		19531		19531		19531	
1923/24	28120	518288	28120		28120		28120	
1924/25	12712	396180	12712	518288	12712		12712	
1925/26	16355	511529	16355	396180	16355	518288	16355	
1926/27	10748	602100	10748	511529	10748	396180	10748	518288
1927/28	9833	554716	9833	602100	9833	511529	9833	396180
1928/29	11308	306906	11308	554716	11308	602100	11308	511529
1929/30	10729	441623	10729	306906	10729	554716	10729	602100
1930/31	11701	226841	11701	441623	11701	306906	11701	554716
1931/32	12941	213866	12941	226841	12941	441623	12941	306906
1932/33	20860	236398	20860	213866	20860	226841	20860	441623
1933/34	28888	251986	28888	236398	28888	213866	28888	226841
1934/35	21493	300624	21493	251986	21493	236398	21493	213866
1935/36	17037	441378	17037	300624	17037	251986	17037	236398
1936/37	15083	421799	15083	441378	15083	300624	15083	251986
1937/38	11021	385060	11021	421799	11021	441378	11021	300624
1938/39	13894	321828	13894	385060	13894	421799	13894	441378
1939/40	17676	271885	17676	321828	17676	385060	17676	421799
1940/41	26382	324820	26382	271885	26382	321828	26382	385060
1941/42	28712	285440	28712	324820	28712	271885	28712	321828
1942/43	18356	374896	18356	285440	18356	324820	18356	271885
1943/44	21067	682375	21067	374896	21067	285440	21067	324820
1944/45	15338	659928	15338	682375	15338	374896	15338	285440
1945/46	12801	331362	12801	659928	12801	682375	12801	374896
1946/47	15850	280838	15850	331362	15850	659928	15850	682375
1947/48	18778	581862	18778	280838	18778	331362	18778	659928
1948/49	22932	855724	22932	581862	22932	280838	22932	331362
1949/50	29456	958099	29456	855724	29456	581862	29456	280838
1950/51	25212	808692	25212	958099	25212	855724	25212	581862
1951/52	26056	822998	26056	808692	26056	958099	26056	855724
1952/53	26401	930330	26401	822998	26401	808692	26401	958099
1953/54	18432	796456	18432	930330	18432	822998	18432	808692
1954/55	17579	679899	17579	796456	17579	930330	17579	822998
1955/56	15384	599794	15384	679899	15384	796456	15384	930330
1956/57	27041	721114	27041	599794	27041	679899	27041	796456
1957/58	37854	790472	37854	721114	37854	599794	37854	679899



Correlation Values for Provincial Totals of Mink vs Muskrat between 1919/20 - 1993/94						
Year	Mink	Muskrat 8 Years Out	Mink	Muskrat 9 Years Out	Mink	Muskrat 10 Years Out
1919/20	16779		16779		16779	
1920/21	14120		14120		14120	
1921/22	29233		29233		29233	
1922/23	19531		19531		19531	
1923/24	28120		28120		28120	
1924/25	12712		12712		12712	
1925/26	16355		16355		16355	
1926/27	10748		10748		10748	
1927/28	9833	518288	9833		9833	
1928/29	11308	396180	11308	518288	11308	
1929/30	10729	511529	10729	396180	10729	518288
1930/31	11701	602100	11701	511529	11701	396180
1931/32	12941	554716	12941	602100	12941	511529
1932/33	20860	306906	20860	554716	20860	602100
1933/34	28888	441623	28888	306906	28888	554716
1934/35	21493	226841	21493	441623	21493	306906
1935/36	17037	213866	17037	226841	17037	441623
1936/37	15083	236398	15083	213866	15083	226841
1937/38	11021	251986	11021	236398	11021	213866
1938/39	13894	300624	13894	251986	13894	236398
1939/40	17676	441378	17676	300624	17676	251986
1940/41	26382	421799	26382	441378	26382	300624
1941/42	28712	385060	28712	421799	28712	441378
1942/43	18356	321828	18356	385060	18356	421799
1943/44	21067	271885	21067	321828	21067	385060
1944/45	15338	324820	15338	271885	15338	321828
1945/46	12801	285440	12801	324820	12801	271885
1946/47	15850	374896	15850	285440	15850	324820
1947/48	18778	682375	18778	374896	18778	285440
1948/49	22932	659928	22932	682375	22932	374896
1949/50	29456	331362	29456	659928	29456	682375
1950/51	25212	280838	25212	331362	25212	659928
1951/52	26056	581862	26056	280838	26056	331362
1952/53	26401	855724	26401	581862	26401	280838
1953/54	18432	958099	18432	855724	18432	581862
1954/55	17579	808692	17579	958099	17579	855724
1955/56	15384	822998	15384	808692	15384	958099
1956/57	27041	930330	27041	822998	27041	808692
1957/58	37854	796456	37854	930330	37854	822998

1958/59	27397	679899	27397	796456	27397	930330
1959/60	27594	599794	27594	679899	27594	796456
1960/61	30679	721114	30679	599794	30679	679899
1961/62	22559	790472	22559	721114	22559	599794
1962/63	18408	1288120	18408	790472	18408	721114
1963/64	16412	1462472	16412	1288120	16412	790472
1964/65	17291	1003186	17291	1462472	17291	1288120
1965/66	15778	680891	15778	1003186	15778	1462472
1966/67	20099	360287	20099	680891	20099	1003186
1967/68	25874	214542	25874	360287	25874	680891
1968/69	33104	338037	33104	214542	33104	360287
1969/70	21522	166323	21522	338037	21522	214542
1970/71	9592	140618	9592	166323	9592	338037
1971/72	10686	249067	10686	140618	10686	166323
1972/73	20368	348098	20368	249067	20368	140618
1973/74	10904	589290	10904	348098	10904	249067
1974/75	12420	387875	12420	589290	12420	348098
1975/76	11961	442268	11961	387875	11961	589290
1976/77	22379	294116	22379	442268	22379	387875
1977/78	19408	250212	19408	294116	19408	442268
1978/79	20284	388714	20284	250212	20284	294116
1979/80	24869	472579	24869	388714	24869	250212
1980/81	19721	247175	19721	472579	19721	388714
1981/82	14994	122182	14994	247175	14994	472579
1982/83	9910	285557	9910	122182	9910	247175
1983/84	7314	411393	7314	285557	7314	122182
1984/85	11976	399333	11976	411393	11976	285557
1985/86	20105	203664	20105	399333	20105	411393
1986/87	15311	161551	15311	203664	15311	399333
1987/88	18681	328704	18681	161551	18681	203664
1988/89	12514	396366	12514	328704	12514	161551
1989/90	11922	144065	11922	396366	11922	328704
1990/91	4002	168047	4002	144065	4002	396366
1991/92	6309	235980	6309	168047	6309	144065
1992/93	6475	181123	6475	235980	6475	168047
1993/94	5073	108395	5073	181123	5073	235980
		215681		108395		181123
		236156		215681		108395
		40457		236156		215681
		13103		40457		236156
		10255		13103		40457
		15068		10255		13103
		22732		15068		10255
		56256		22732		15068
				56256		22732
	0.269520284					56256
			0.31298092			
					0.337723466	

Correlation Values for Provincial Totals of Mink vs Muskrat between 1919/20 - 1969/70								
Year	Mink	Muskrat Same Year	Mink	Muskrat 1 Year Out	Mink	Muskrat 2 Years Out	Mink	Muskrat 3 Years Out
1919/20	16779	518288	16779		16779		16779	
1920/21	14120	396180	14120	518288	14120		14120	
1921/22	29233	511529	29233	396180	29233	518288	29233	
1922/23	19531	602100	19531	511529	19531	396180	19531	518288
1923/24	28120	554716	28120	602100	28120	511529	28120	396180
1924/25	12712	306906	12712	554716	12712	602100	12712	511529
1925/26	16355	441623	16355	306906	16355	554716	16355	602100
1926/27	10748	226841	10748	441623	10748	306906	10748	554716
1927/28	9833	213866	9833	226841	9833	441623	9833	306906
1928/29	11308	236398	11308	213866	11308	226841	11308	441623
1929/30	10729	251986	10729	236398	10729	213866	10729	226841
1930/31	11701	300624	11701	251986	11701	236398	11701	213866
1931/32	12941	441378	12941	300624	12941	251986	12941	236398
1932/33	20860	421799	20860	441378	20860	300624	20860	251986
1933/34	28888	385060	28888	421799	28888	441378	28888	300624
1934/35	21493	321828	21493	385060	21493	421799	21493	441378
1935/36	17037	271885	17037	321828	17037	385060	17037	421799
1936/37	15083	324820	15083	271885	15083	321828	15083	385060
1937/38	11021	285440	11021	324820	11021	271885	11021	321828
1938/39	13894	374896	13894	285440	13894	324820	13894	271885
1939/40	17676	682375	17676	374896	17676	285440	17676	324820
1940/41	26382	659928	26382	682375	26382	374896	26382	285440
1941/42	28712	331362	28712	659928	28712	682375	28712	374896
1942/43	18356	280838	18356	331362	18356	659928	18356	682375
1943/44	21067	581862	21067	280838	21067	331362	21067	659928
1944/45	15338	855724	15338	581862	15338	280838	15338	331362
1945/46	12801	958099	12801	855724	12801	581862	12801	280838
1946/47	15850	808692	15850	958099	15850	855724	15850	581862
1947/48	18778	822998	18778	808692	18778	958099	18778	855724
1948/49	22932	930330	22932	822998	22932	808692	22932	958099
1949/50	29456	796456	29456	930330	29456	822998	29456	808692
1950/51	25212	679899	25212	796456	25212	930330	25212	822998
1951/52	26056	599794	26056	679899	26056	796456	26056	930330
1952/53	26401	721114	26401	599794	26401	679899	26401	796456
1953/54	18432	790472	18432	721114	18432	599794	18432	679899
1954/55	17579	1288120	17579	790472	17579	721114	17579	599794
1955/56	15384	1462472	15384	1288120	15384	790472	15384	721114
1956/57	27041	1003186	27041	1462472	27041	1288120	27041	790472
1957/58	37854	680891	37854	1003186	37854	1462472	37854	1288120



Correlation Values for Provincial Totals of Mink vs Muskrat between 1919/20 - 1969/70								
Year	Mink	Muskrat 4 Years Out	Mink	Muskrat 5 Years Out	Mink	Muskrat 6 Years Out	Mink	Muskrat 7 Years Out
1919/20	16779		16779		16779		16779	
1920/21	14120		14120		14120		14120	
1921/22	29233		29233		29233		29233	
1922/23	19531		19531		19531		19531	
1923/24	28120	518288	28120		28120		28120	
1924/25	12712	396180	12712	518288	12712		12712	
1925/26	16355	511529	16355	396180	16355	518288	16355	
1926/27	10748	602100	10748	511529	10748	396180	10748	518288
1927/28	9833	554716	9833	602100	9833	511529	9833	396180
1928/29	11308	306906	11308	554716	11308	602100	11308	511529
1929/30	10729	441623	10729	306906	10729	554716	10729	602100
1930/31	11701	226841	11701	441623	11701	306906	11701	554716
1931/32	12941	213866	12941	226841	12941	441623	12941	306906
1932/33	20860	236398	20860	213866	20860	226841	20860	441623
1933/34	28888	251986	28888	236398	28888	213866	28888	226841
1934/35	21493	300624	21493	251986	21493	236398	21493	213866
1935/36	17037	441378	17037	300624	17037	251986	17037	236398
1936/37	15083	421799	15083	441378	15083	300624	15083	251986
1937/38	11021	385060	11021	421799	11021	441378	11021	300624
1938/39	13894	321828	13894	385060	13894	421799	13894	441378
1939/40	17676	271885	17676	321828	17676	385060	17676	421799
1940/41	26382	324820	26382	271885	26382	321828	26382	385060
1941/42	28712	285440	28712	324820	28712	271885	28712	321828
1942/43	18356	374896	18356	285440	18356	324820	18356	271885
1943/44	21067	682375	21067	374896	21067	285440	21067	324820
1944/45	15338	659928	15338	682375	15338	374896	15338	285440
1945/46	12801	331362	12801	659928	12801	682375	12801	374896
1946/47	15850	280838	15850	331362	15850	659928	15850	682375
1947/48	18778	581862	18778	280838	18778	331362	18778	659928
1948/49	22932	855724	22932	581862	22932	280838	22932	331362
1949/50	29456	958099	29456	855724	29456	581862	29456	280838
1950/51	25212	808692	25212	958099	25212	855724	25212	581862
1951/52	26056	822998	26056	808692	26056	958099	26056	855724
1952/53	26401	930330	26401	822998	26401	808692	26401	958099
1953/54	18432	796456	18432	930330	18432	822998	18432	808692
1954/55	17579	679899	17579	796456	17579	930330	17579	822998
1955/56	15384	599794	15384	679899	15384	796456	15384	930330
1956/57	27041	721114	27041	599794	27041	679899	27041	796456
1957/58	37854	790472	37854	721114	37854	599794	37854	679899



Correlation Values for Provincial Totals of Mink vs Muskrat between 1919/20 - 1969/70						
Year	Mink	Muskrat 8 Years Out	Mink	Muskrat 9 Years Out	Mink	Muskrat 10 Years Out
1919/20	16779		16779		16779	
1920/21	14120		14120		14120	
1921/22	29233		29233		29233	
1922/23	19531		19531		19531	
1923/24	28120		28120		28120	
1924/25	12712		12712		12712	
1925/26	16355		16355		16355	
1926/27	10748		10748		10748	
1927/28	9833	518288	9833		9833	
1928/29	11308	396180	11308	518288	11308	
1929/30	10729	511529	10729	396180	10729	518288
1930/31	11701	602100	11701	511529	11701	396180
1931/32	12941	554716	12941	602100	12941	511529
1932/33	20860	306906	20860	554716	20860	602100
1933/34	28888	441623	28888	306906	28888	554716
1934/35	21493	226841	21493	441623	21493	306906
1935/36	17037	213866	17037	226841	17037	441623
1936/37	15083	236398	15083	213866	15083	226841
1937/38	11021	251986	11021	236398	11021	213866
1938/39	13894	300624	13894	251986	13894	236398
1939/40	17676	441378	17676	300624	17676	251986
1940/41	26382	421799	26382	441378	26382	300624
1941/42	28712	385060	28712	421799	28712	441378
1942/43	18356	321828	18356	385060	18356	421799
1943/44	21067	271885	21067	321828	21067	385060
1944/45	15338	324820	15338	271885	15338	321828
1945/46	12801	285440	12801	324820	12801	271885
1946/47	15850	374896	15850	285440	15850	324820
1947/48	18778	682375	18778	374896	18778	285440
1948/49	22932	659928	22932	682375	22932	374896
1949/50	29456	331362	29456	659928	29456	682375
1950/51	25212	280838	25212	331362	25212	659928
1951/52	26056	581862	26056	280838	26056	331362
1952/53	26401	855724	26401	581862	26401	280838
1953/54	18432	958099	18432	855724	18432	581862
1954/55	17579	808692	17579	958099	17579	855724
1955/56	15384	822998	15384	808692	15384	958099
1956/57	27041	930330	27041	822998	27041	808692
1957/58	37854	796456	37854	930330	37854	822998

1958/59	27397	679899	27397	796456	27397	930330		
1959/60	27594	599794	27594	679899	27594	796456		
1960/61	30679	721114	30679	599794	30679	679899		
1961/62	22559	790472	22559	721114	22559	599794		
1962/63	18408	1288120	18408	790472	18408	721114		
1963/64	16412	1462472	16412	1288120	16412	790472		
1964/65	17291	1003186	17291	1462472	17291	1288120		
1965/66	15778	680891	15778	1003186	15778	1462472		
1966/67	20099	360287	20099	680891	20099	1003186		
1967/68	25874	214542	25874	360287	25874	680891		
1968/69	33104	338037	33104	214542	33104	360287		
1969/70	21522	166323	21522	338037	21522	214542		
		140618		166323		338037		
		249067		140618		166323		
		348098		249067		140618		
		589290		348098		249067		
		387875		589290		348098		
		442268		387875		589290		
		294116		442268		387875		
		250212		294116		442268		
				250212		294116		
						250212		
	0.048956786							
			0.062125596					
					0.128058741			





Correlation Values for Provincial Totals of Mink vs Muskrat between 1970/71 - 1993/94						
Year	Mink	Muskrat 8 Years Out	Mink	Muskrat 9 Years Out	Mink	Muskrat 10 Years Out
1970/71	9592		9592		9592	
1971/72	10686		10686		10686	
1972/73	20368		20368		20368	
1973/74	10904		10904		10904	
1974/75	12420		12420		12420	
1975/76	11961		11961		11961	
1976/77	22379		22379		22379	
1977/78	19408		19408		19408	
1978/79	20284	388714	20284		20284	
1979/80	24869	472579	24869	388714	24869	
1980/81	19721	247175	19721	472579	19721	388714
1981/82	14994	122182	14994	247175	14994	472579
1982/83	9910	285557	9910	122182	9910	247175
1983/84	7314	411393	7314	285557	7314	122182
1984/85	11976	399333	11976	411393	11976	285557
1985/86	20105	203664	20105	399333	20105	411393
1986/87	15311	161551	15311	203664	15311	399333
1987/88	18681	328704	18681	161551	18681	203664
1988/89	12514	396366	12514	328704	12514	161551
1989/90	11922	144065	11922	396366	11922	328704
1990/91	4002	168047	4002	144065	4002	396366
1991/92	6309	235980	6309	168047	6309	144065
1992/93	6475	181123	6475	235980	6475	168047
1993/94	5073	108395	5073	181123	5073	235980
		215681		108395		181123
		236156		215681		108395
		40457		236156		215681
		13103		40457		236156
		10255		13103		40457
		15068		10255		13103
		22732		15068		10255
		56256		22732		15068
				56256		22732
	0.40063021					56256
			0.566055884			
					0.470372986	

Correlation Values for Provincial Totals of Mink vs Ermine between 1919/20 - 1993/								
Year	Mink	Ermine Same Year	Mink	Ermine 1 Year Out	Mink	Ermine 2 Years Out	Mink	Ermine 3 Years Out
1919/20	16779	118168	16779		16779		16779	
1920/21	14120	69664	14120	118168	14120		14120	
1921/22	29233	67318	29233	69664	29233	118168	29233	
1922/23	19531	38210	19531	67318	19531	69664	19531	118168
1923/24	28120	63054	28120	38210	28120	67318	28120	69664
1924/25	12712	56807	12712	63054	12712	38210	12712	67318
1925/26	16355	84492	16355	56807	16355	63054	16355	38210
1926/27	10748	87892	10748	84492	10748	56807	10748	63054
1927/28	9833	88852	9833	87892	9833	84492	9833	56807
1928/29	11308	108789	11308	88852	11308	87892	11308	84492
1929/30	10729	110094	10729	108789	10729	88852	10729	87892
1930/31	11701	71833	11701	110094	11701	108789	11701	88852
1931/32	12941	88838	12941	71833	12941	110094	12941	108789
1932/33	20860	72529	20860	88838	20860	71833	20860	110094
1933/34	28888	116992	28888	72529	28888	88838	28888	71833
1934/35	21493	80748	21493	116992	21493	72529	21493	88838
1935/36	17037	56187	17037	80748	17037	116992	17037	72529
1936/37	15083	137672	15083	56187	15083	80748	15083	116992
1937/38	11021	113648	11021	137672	11021	56187	11021	80748
1938/39	13894	72523	13894	113648	13894	137672	13894	56187
1939/40	17676	103932	17676	72523	17676	113648	17676	137672
1940/41	26382	136027	26382	103932	26382	72523	26382	113648
1941/42	28712	150193	28712	136027	28712	103932	28712	72523
1942/43	18356	113080	18356	150193	18356	136027	18356	103932
1943/44	21067	155567	21067	113080	21067	150193	21067	136027
1944/45	15338	124815	15338	155567	15338	113080	15338	150193
1945/46	12801	109613	12801	124815	12801	155567	12801	113080
1946/47	15850	103656	15850	109613	15850	124815	15850	155567
1947/48	18778	91600	18778	103656	18778	109613	18778	124815
1948/49	22932	99705	22932	91600	22932	103656	22932	109613
1949/50	29456	152800	29456	99705	29456	91600	29456	103656
1950/51	25212	69556	25212	152800	25212	99705	25212	91600
1951/52	26056	79049	26056	69556	26056	152800	26056	99705
1952/53	26401	105230	26401	79049	26401	69556	26401	152800
1953/54	18432	62578	18432	105230	18432	79049	18432	69556
1954/55	17579	70090	17579	62578	17579	105230	17579	79049
1955/56	15384	95641	15384	70090	15384	62578	15384	105230
1956/57	27041	66950	27041	95641	27041	70090	27041	62578
1957/58	37854	61002	37854	66950	37854	95641	37854	70090



Correlation Values for Provincial Totals of Mink vs Ermine between 1919/20 - 1993								
Year	Mink	Ermine 4 Years Out	Mink	Ermine 5 Years Out	Mink	Ermine 6 Years Out	Mink	Ermine 7 Years Out
1919/20	16779		16779		16779		16779	
1920/21	14120		14120		14120		14120	
1921/22	29233		29233		29233		29233	
1922/23	19531		19531		19531		19531	
1923/24	28120	118168	28120		28120		28120	
1924/25	12712	69664	12712	118168	12712		12712	
1925/26	16355	67318	16355	69664	16355	118168	16355	
1926/27	10748	38210	10748	67318	10748	69664	10748	118168
1927/28	9833	63054	9833	38210	9833	67318	9833	69664
1928/29	11308	56807	11308	63054	11308	38210	11308	67318
1929/30	10729	84492	10729	56807	10729	63054	10729	38210
1930/31	11701	87892	11701	84492	11701	56807	11701	63054
1931/32	12941	88852	12941	87892	12941	84492	12941	56807
1932/33	20860	108789	20860	88852	20860	87892	20860	84492
1933/34	28888	110094	28888	108789	28888	88852	28888	87892
1934/35	21493	71833	21493	110094	21493	108789	21493	88852
1935/36	17037	88838	17037	71833	17037	110094	17037	108789
1936/37	15083	72529	15083	88838	15083	71833	15083	110094
1937/38	11021	116992	11021	72529	11021	88838	11021	71833
1938/39	13894	80748	13894	116992	13894	72529	13894	88838
1939/40	17676	56187	17676	80748	17676	116992	17676	72529
1940/41	26382	137672	26382	56187	26382	80748	26382	116992
1941/42	28712	113648	28712	137672	28712	56187	28712	80748
1942/43	18356	72523	18356	113648	18356	137672	18356	56187
1943/44	21067	103932	21067	72523	21067	113648	21067	137672
1944/45	15338	136027	15338	103932	15338	72523	15338	113648
1945/46	12801	150193	12801	136027	12801	103932	12801	72523
1946/47	15850	113080	15850	150193	15850	136027	15850	103932
1947/48	18778	155567	18778	113080	18778	150193	18778	136027
1948/49	22932	124815	22932	155567	22932	113080	22932	150193
1949/50	29456	109613	29456	124815	29456	155567	29456	113080
1950/51	25212	103656	25212	109613	25212	124815	25212	155567
1951/52	26056	91600	26056	103656	26056	109613	26056	124815
1952/53	26401	99705	26401	91600	26401	103656	26401	109613
1953/54	18432	152800	18432	99705	18432	91600	18432	103656
1954/55	17579	69556	17579	152800	17579	99705	17579	91600
1955/56	15384	79049	15384	69556	15384	152800	15384	99705
1956/57	27041	105230	27041	79049	27041	69556	27041	152800
1957/58	37854	62578	37854	105230	37854	79049	37854	69556



Correlation Values for Provincial Totals of Mink vs Ermine between 1919/20 - 1993/94						
Year	Mink	Ermine 8 Years Out	Mink	Ermine 9 Years Out	Mink	Ermine 10 Years Out
1919/20	16779		16779		16779	
1920/21	14120		14120		14120	
1921/22	29233		29233		29233	
1922/23	19531		19531		19531	
1923/24	28120		28120		28120	
1924/25	12712		12712		12712	
1925/26	16355		16355		16355	
1926/27	10748		10748		10748	
1927/28	9833	118168	9833		9833	
1928/29	11308	69664	11308	118168	11308	
1929/30	10729	67318	10729	69664	10729	118168
1930/31	11701	38210	11701	67318	11701	69664
1931/32	12941	63054	12941	38210	12941	67318
1932/33	20860	56807	20860	63054	20860	38210
1933/34	28888	84492	28888	56807	28888	63054
1934/35	21493	87892	21493	84492	21493	56807
1935/36	17037	88852	17037	87892	17037	84492
1936/37	15083	108789	15083	88852	15083	87892
1937/38	11021	110094	11021	108789	11021	88852
1938/39	13894	71833	13894	110094	13894	108789
1939/40	17676	88838	17676	71833	17676	110094
1940/41	26382	72529	26382	88838	26382	71833
1941/42	28712	116992	28712	72529	28712	88838
1942/43	18356	80748	18356	116992	18356	72529
1943/44	21067	56187	21067	80748	21067	116992
1944/45	15338	137672	15338	56187	15338	80748
1945/46	12801	113648	12801	137672	12801	56187
1946/47	15850	72523	15850	113648	15850	137672
1947/48	18778	103932	18778	72523	18778	113648
1948/49	22932	136027	22932	103932	22932	72523
1949/50	29456	150193	29456	136027	29456	103932
1950/51	25212	113080	25212	150193	25212	136027
1951/52	26056	155567	26056	113080	26056	150193
1952/53	26401	124815	26401	155567	26401	113080
1953/54	18432	109613	18432	124815	18432	155567
1954/55	17579	103656	17579	109613	17579	124815
1955/56	15384	91600	15384	103656	15384	109613
1956/57	27041	99705	27041	91600	27041	103656
1957/58	37854	152800	37854	99705	37854	91600

1958/59	27397	69556	27397	152800	27397	99705
1959/60	27594	79049	27594	69556	27594	152800
1960/61	30679	105230	30679	79049	30679	69556
1961/62	22559	62578	22559	105230	22559	79049
1962/63	18408	70090	18408	62578	18408	105230
1963/64	16412	95641	16412	70090	16412	62578
1964/65	17291	66950	17291	95641	17291	70090
1965/66	15778	61002	15778	66950	15778	95641
1966/67	20099	43236	20099	61002	20099	66950
1967/68	25874	45205	25874	43236	25874	61002
1968/69	33104	31725	33104	45205	33104	43236
1969/70	21522	29600	21522	31725	21522	45205
1970/71	9592	27970	9592	29600	9592	31725
1971/72	10686	24527	10686	27970	10686	29600
1972/73	20368	41794	20368	24527	20368	27970
1973/74	10904	32034	10904	41794	10904	24527
1974/75	12420	13354	12420	32034	12420	41794
1975/76	11961	26394	11961	13354	11961	32034
1976/77	22379	23325	22379	26394	22379	13354
1977/78	18408	10613	18408	23325	18408	26394
1978/79	20284	5043	20284	10613	20284	23325
1979/80	24869	3765	24869	5043	24869	10613
1980/81	19721	10133	19721	3765	19721	5043
1981/82	14994	5869	14994	10133	14994	3765
1982/83	9910	18205	9910	5869	9910	10133
1983/84	7314	12930	7314	18205	7314	5869
1984/85	11976	16938	11976	12930	11976	18205
1985/86	20105	10998	20105	16938	20105	12930
1986/87	15311	14859	15311	10998	15311	16938
1987/88	18681	21314	18681	14859	18681	10998
1988/89	12514	15520	12514	21314	12514	14859
1989/90	11922	9878	11922	15520	11922	21314
1990/91	4002	5991	4002	9878	4002	15520
1991/92	6309	5221	6309	5991	6309	9878
1992/93	6475	10649	6475	5221	6475	5991
1993/94	5073	9011	5073	10649	5073	5221
		9550		9011		10649
		10961		9550		9011
		6439		10961		9550
		2462		6439		10961
		1402		2462		6439
		1932		1402		2462
		2020		1932		1402
		2844		2020		1932
				2844		2020
	0.458893888					2844
			0.407770229			
					0.403374952	

Correlation Values for Provincial Totals of Mink vs Ermine between 1919/20 - 1969/70								
Year	Mink	Ermine Same Year	Mink	Ermine 1 Year Out	Mink	Ermine 2 Years Out	Mink	Ermine 3 Years Out
1919/20	16779	118168	16779		16779		16779	
1920/21	14120	69664	14120	118168	14120		14120	
1921/22	29233	67318	29233	69664	29233	118168	29233	
1922/23	19531	38210	19531	67318	19531	69664	19531	118168
1923/24	28120	63054	28120	38210	28120	67318	28120	69664
1924/25	12712	56807	12712	63054	12712	38210	12712	67318
1925/26	16355	84492	16355	56807	16355	63054	16355	38210
1926/27	10748	87892	10748	84492	10748	56807	10748	63054
1927/28	9833	88852	9833	87892	9833	84492	9833	56807
1928/29	11308	108789	11308	88852	11308	87892	11308	84492
1929/30	10729	110094	10729	108789	10729	88852	10729	87892
1930/31	11701	71833	11701	110094	11701	108789	11701	88852
1931/32	12941	88838	12941	71833	12941	110094	12941	108789
1932/33	20860	72529	20860	88838	20860	71833	20860	110094
1933/34	28888	116992	28888	72529	28888	88838	28888	71833
1934/35	21493	80748	21493	116992	21493	72529	21493	88838
1935/36	17037	56187	17037	80748	17037	116992	17037	72529
1936/37	15083	137672	15083	56187	15083	80748	15083	116992
1937/38	11021	113648	11021	137672	11021	56187	11021	80748
1938/39	13894	72523	13894	113648	13894	137672	13894	56187
1939/40	17676	103932	17676	72523	17676	113648	17676	137672
1940/41	26382	136027	26382	103932	26382	72523	26382	113648
1941/42	28712	150193	28712	136027	28712	103932	28712	72523
1942/43	18356	113080	18356	150193	18356	136027	18356	103932
1943/44	21067	155567	21067	113080	21067	150193	21067	136027
1944/45	15338	124815	15338	155567	15338	113080	15338	150193
1945/46	12801	109613	12801	124815	12801	155567	12801	113080
1946/47	15850	103656	15850	109613	15850	124815	15850	155567
1947/48	18778	91600	18778	103656	18778	109613	18778	124815
1948/49	22932	99705	22932	91600	22932	103656	22932	109613
1949/50	29456	152800	29456	99705	29456	91600	29456	103656
1950/51	25212	69556	25212	152800	25212	99705	25212	91600
1951/52	26056	79049	26056	69556	26056	152800	26056	99705
1952/53	26401	105230	26401	79049	26401	69556	26401	152800
1953/54	18432	62578	18432	105230	18432	79049	18432	69556
1954/55	17579	70090	17579	62578	17579	105230	17579	79049
1955/56	15384	95641	15384	70090	15384	62578	15384	105230
1956/57	27041	66950	27041	95641	27041	70090	27041	62578
1957/58	37854	61002	37854	66950	37854	95641	37854	70090



Correlation Values for Provincial Totals of Mink vs Ermine between 1919/20 - 1969									
Year	Mink	Ermine 4 Years Out	Mink	Ermine 5 Years Out	Mink	Ermine 6 Years Out	Mink	Ermine 7 Years Out	
1919/20	16779		16779		16779		16779		
1920/21	14120		14120		14120		14120		
1921/22	29233		29233		29233		29233		
1922/23	19531		19531		19531		19531		
1923/24	28120	118168	28120		28120		28120		
1924/25	12712	69664	12712	118168	12712		12712		
1925/26	16355	67318	16355	69664	16355	118168	16355		
1926/27	10748	38210	10748	67318	10748	69664	10748	118168	
1927/28	9833	63054	9833	38210	9833	67318	9833	69664	
1928/29	11308	56807	11308	63054	11308	38210	11308	67318	
1929/30	10729	84492	10729	56807	10729	63054	10729	38210	
1930/31	11701	87892	11701	84492	11701	56807	11701	63054	
1931/32	12941	88852	12941	87892	12941	84492	12941	56807	
1932/33	20860	108789	20860	88852	20860	87892	20860	84492	
1933/34	28888	110094	28888	108789	28888	88852	28888	87892	
1934/35	21493	71833	21493	110094	21493	108789	21493	88852	
1935/36	17037	88838	17037	71833	17037	110094	17037	108789	
1936/37	15083	72529	15083	88838	15083	71833	15083	110094	
1937/38	11021	116992	11021	72529	11021	88838	11021	71833	
1938/39	13894	80748	13894	116992	13894	72529	13894	88838	
1939/40	17676	56187	17676	80748	17676	116992	17676	72529	
1940/41	26382	137672	26382	56187	26382	80748	26382	116992	
1941/42	28712	113648	28712	137672	28712	56187	28712	80748	
1942/43	18356	72523	18356	113648	18356	137672	18356	56187	
1943/44	21067	103932	21067	72523	21067	113648	21067	137672	
1944/45	15338	136027	15338	103932	15338	72523	15338	113648	
1945/46	12801	150193	12801	136027	12801	103932	12801	72523	
1946/47	15850	113080	15850	150193	15850	136027	15850	103932	
1947/48	18778	155567	18778	113080	18778	150193	18778	136027	
1948/49	22932	124815	22932	155567	22932	113080	22932	150193	
1949/50	29456	109613	29456	124815	29456	155567	29456	113080	
1950/51	25212	103656	25212	109613	25212	124815	25212	155567	
1951/52	26056	91600	26056	103656	26056	109613	26056	124815	
1952/53	26401	99705	26401	91600	26401	103656	26401	109613	
1953/54	18432	152800	18432	99705	18432	91600	18432	103656	
1954/55	17579	69556	17579	152800	17579	99705	17579	91600	
1955/56	15384	79049	15384	69556	15384	152800	15384	99705	
1956/57	27041	105230	27041	79049	27041	69556	27041	152800	
1957/58	37854	62578	37854	105230	37854	79049	37854	69556	



Correlation Values for Provincial Totals of Mink vs Ermine between 1919/20 - 1969/70						
Year	Mink	Ermine 8 Years Out	Mink	Ermine 9 Years Out	Mink	Ermine 10 Years Out
1919/20	16779		16779		16779	
1920/21	14120		14120		14120	
1921/22	29233		29233		29233	
1922/23	19531		19531		19531	
1923/24	28120		28120		28120	
1924/25	12712		12712		12712	
1925/26	16355		16355		16355	
1926/27	10748		10748		10748	
1927/28	9833	118168	9833		9833	
1928/29	11308	69664	11308	118168	11308	
1929/30	10729	67318	10729	69664	10729	118168
1930/31	11701	38210	11701	67318	11701	69664
1931/32	12941	63054	12941	38210	12941	67318
1932/33	20860	56807	20860	63054	20860	38210
1933/34	28888	84492	28888	56807	28888	63054
1934/35	21493	87892	21493	84492	21493	56807
1935/36	17037	88852	17037	87892	17037	84492
1936/37	15083	108789	15083	88852	15083	87892
1937/38	11021	110094	11021	108789	11021	88852
1938/39	13894	71833	13894	110094	13894	108789
1939/40	17676	88838	17676	71833	17676	110094
1940/41	26382	72529	26382	88838	26382	71833
1941/42	28712	116992	28712	72529	28712	88838
1942/43	18356	80748	18356	116992	18356	72529
1943/44	21067	56187	21067	80748	21067	116992
1944/45	15338	137672	15338	56187	15338	80748
1945/46	12801	113648	12801	137672	12801	56187
1946/47	15850	72523	15850	113648	15850	137672
1947/48	18778	103932	18778	72523	18778	113648
1948/49	22932	136027	22932	103932	22932	72523
1949/50	29456	150193	29456	136027	29456	103932
1950/51	25212	113080	25212	150193	25212	136027
1951/52	26056	155567	26056	113080	26056	150193
1952/53	26401	124815	26401	155567	26401	113080
1953/54	18432	109613	18432	124815	18432	155567
1954/55	17579	103656	17579	109613	17579	124815
1955/56	15384	91600	15384	103656	15384	109613
1956/57	27041	99705	27041	91600	27041	103656
1957/58	37854	152800	37854	99705	37854	91600

1958/59	27397	69556	27397	152800	27397	99705
1959/60	27594	79049	27594	69556	27594	152800
1960/61	30679	105230	30679	79049	30679	69556
1961/62	22559	62578	22559	105230	22559	79049
1962/63	18408	70090	18408	62578	18408	105230
1963/64	16412	95641	16412	70090	16412	62578
1964/65	17291	66950	17291	95641	17291	70090
1965/66	15778	61002	15778	66950	15778	95641
1966/67	20099	43236	20099	61002	20099	66950
1967/68	25874	45205	25874	43236	25874	61002
1968/69	33104	31725	33104	45205	33104	43236
1969/70	21522	29600	21522	31725	21522	45205
		27970		29600		31725
		24527		27970		29600
		41794		24527		27970
		32034		41794		24527
		13354		32034		41794
		26394		13354		32034
		23325		26394		13354
		10613		23325		26394
				10613		23325
	0.194637893					10613
			0.035945494			
					-0.027971551	







Correlation Values for Provincial Totals of Muskrat vs Ermine between 1919/20 - 1993/9								
Year	Muskrat	Ermine Same Year	Muskrat	Ermine 1 Year Out	Muskrat	Ermine 2 Years Out	Muskrat	Ermine 3 Years Out
1919/20	518288	118168	518288		518288		518288	
1920/21	396180	69664	396180	118168	396180		396180	
1921/22	511529	67318	511529	69664	511529	118168	511529	
1922/23	602100	38210	602100	67318	602100	69664	602100	118168
1923/24	554716	63054	554716	38210	554716	67318	554716	69664
1924/25	306906	56807	306906	63054	306906	38210	306906	67318
1925/26	441623	84492	441623	56807	441623	63054	441623	38210
1926/27	226841	87892	226841	84492	226841	56807	226841	63054
1927/28	213866	88852	213866	87892	213866	84492	213866	56807
1928/29	236398	108789	236398	88852	236398	87892	236398	84492
1929/30	251986	110094	251986	108789	251986	88852	251986	87892
1930/31	300624	71833	300624	110094	300624	108789	300624	88852
1931/32	441378	88838	441378	71833	441378	110094	441378	108789
1932/33	421799	72529	421799	88838	421799	71833	421799	110094
1933/34	385060	116992	385060	72529	385060	88838	385060	71833
1934/35	321828	80748	321828	116992	321828	72529	321828	88838
1935/36	271885	56187	271885	80748	271885	116992	271885	72529
1936/37	324820	137672	324820	56187	324820	80748	324820	116992
1937/38	285440	113648	285440	137672	285440	56187	285440	80748
1938/39	374896	72523	374896	113648	374896	137672	374896	56187
1939/40	682375	103932	682375	72523	682375	113648	682375	137672
1940/41	659928	136027	659928	103932	659928	72523	659928	113648
1941/42	331362	150193	331362	136027	331362	103932	331362	72523
1942/43	280838	113080	280838	150193	280838	136027	280838	103932
1943/44	581862	155567	581862	113080	581862	150193	581862	136027
1944/45	855724	124815	855724	155567	855724	113080	855724	150193
1945/46	958099	109613	958099	124815	958099	155567	958099	113080
1946/47	808692	103656	808692	109613	808692	124815	808692	155567
1947/48	822998	91600	822998	103656	822998	109613	822998	124815
1948/49	930330	99705	930330	91600	930330	103656	930330	109613
1949/50	796456	152800	796456	99705	796456	91600	796456	103656
1950/51	679899	69556	679899	152800	679899	99705	679899	91600
1951/52	599794	79049	599794	69556	599794	152800	599794	99705
1952/53	721114	105230	721114	79049	721114	69556	721114	152800
1953/54	790472	62578	790472	105230	790472	79049	790472	69556
1954/55	1288120	70090	1288120	62578	1288120	105230	1288120	79049
1955/56	1462472	95641	1462472	70090	1462472	62578	1462472	105230
1956/57	1003186	66950	1003186	95641	1003186	70090	1003186	62578
1957/58	680891	61002	680891	66950	680891	95641	680891	70090



Correlation Values for Provincial Totals of Muskrat vs Ermine between 1919/20 - 1993/9								
Year	Muskrat	Ermine 4 Years Out	Muskrat	Ermine 5 Years Out	Muskrat	Ermine 6 Years Out	Muskrat	Ermine 7 Years Out
1919/20	518288		518288		518288		518288	
1920/21	396180		396180		396180		396180	
1921/22	511529		511529		511529		511529	
1922/23	602100		602100		602100		602100	
1923/24	554716	118168	554716		554716		554716	
1924/25	306906	69664	306906	118168	306906		306906	
1925/26	441623	67318	441623	69664	441623	118168	441623	
1926/27	226841	38210	226841	67318	226841	69664	226841	118168
1927/28	213866	63054	213866	38210	213866	67318	213866	69664
1928/29	236398	56807	236398	63054	236398	38210	236398	67318
1929/30	251986	84492	251986	56807	251986	63054	251986	38210
1930/31	300624	87892	300624	84492	300624	56807	300624	63054
1931/32	441378	88852	441378	87892	441378	84492	441378	56807
1932/33	421799	108789	421799	88852	421799	87892	421799	84492
1933/34	385060	110094	385060	108789	385060	88852	385060	87892
1934/35	321828	71833	321828	110094	321828	108789	321828	88852
1935/36	271885	88838	271885	71833	271885	110094	271885	108789
1936/37	324820	72529	324820	88838	324820	71833	324820	110094
1937/38	285440	116992	285440	72529	285440	88838	285440	71833
1938/39	374896	80748	374896	116992	374896	72529	374896	88838
1939/40	682375	56187	682375	80748	682375	116992	682375	72529
1940/41	659928	137672	659928	56187	659928	80748	659928	116992
1941/42	331362	113648	331362	137672	331362	56187	331362	80748
1942/43	280838	72523	280838	113648	280838	137672	280838	56187
1943/44	581862	103932	581862	72523	581862	113648	581862	137672
1944/45	855724	136027	855724	103932	855724	72523	855724	113648
1945/46	958099	150193	958099	136027	958099	103932	958099	72523
1946/47	808692	113080	808692	150193	808692	136027	808692	103932
1947/48	822998	155567	822998	113080	822998	150193	822998	136027
1948/49	930330	124815	930330	155567	930330	113080	930330	150193
1949/50	796456	109613	796456	124815	796456	155567	796456	113080
1950/51	679899	103656	679899	109613	679899	124815	679899	155567
1951/52	599794	91600	599794	103656	599794	109613	599794	124815
1952/53	721114	99705	721114	91600	721114	103656	721114	109613
1953/54	790472	152800	790472	99705	790472	91600	790472	103656
1954/55	1288120	69556	1288120	152800	1288120	99705	1288120	91600
1955/56	1462472	79049	1462472	69556	1462472	152800	1462472	99705
1956/57	1003186	105230	1003186	79049	1003186	69556	1003186	152800
1957/58	680891	62578	680891	105230	680891	79049	680891	69556



Correlation Values for Provincial Totals of Muskrat vs Ermine between 1919/20 - 1993/94						
Year	Muskrat	Ermine 8 Years Out	Muskrat	Ermine 9 Years Out	Muskrat	Ermine 10 Years Out
1919/20	518288		518288		518288	
1920/21	396180		396180		396180	
1921/22	511529		511529		511529	
1922/23	602100		602100		602100	
1923/24	554716		554716		554716	
1924/25	306906		306906		306906	
1925/26	441623		441623		441623	
1926/27	226841		226841		226841	
1927/28	213866	118168	213866		213866	
1928/29	236398	69664	236398	118168	236398	
1929/30	251986	67318	251986	69664	251986	118168
1930/31	300624	38210	300624	67318	300624	69664
1931/32	441378	63054	441378	38210	441378	67318
1932/33	421799	56807	421799	63054	421799	38210
1933/34	385060	84492	385060	56807	385060	63054
1934/35	321828	87892	321828	84492	321828	56807
1935/36	271885	88852	271885	87892	271885	84492
1936/37	324820	108789	324820	88852	324820	87892
1937/38	285440	110094	285440	108789	285440	88852
1938/39	374896	71833	374896	110094	374896	108789
1939/40	682375	88838	682375	71833	682375	110094
1940/41	659928	72529	659928	88838	659928	71833
1941/42	331362	116992	331362	72529	331362	88838
1942/43	280838	80748	280838	116992	280838	72529
1943/44	581862	56187	581862	80748	581862	116992
1944/45	855724	137672	855724	56187	855724	80748
1945/46	958099	113648	958099	137672	958099	56187
1946/47	808692	72523	808692	113648	808692	137672
1947/48	822998	103932	822998	72523	822998	113648
1948/49	930330	136027	930330	103932	930330	72523
1949/50	796456	150193	796456	136027	796456	103932
1950/51	679899	113080	679899	150193	679899	136027
1951/52	599794	155567	599794	113080	599794	150193
1952/53	721114	124815	721114	155567	721114	113080
1953/54	790472	109613	790472	124815	790472	155567
1954/55	1288120	103656	1288120	109613	1288120	124815
1955/56	1462472	91600	1462472	103656	1462472	109613
1956/57	1003186	99705	1003186	91600	1003186	103656
1957/58	680891	152800	680891	99705	680891	91600

1958/59	360287	69556	360287	152800	360287	99705
1959/60	214542	79049	214542	69556	214542	152800
1960/61	338037	105230	338037	79049	338037	69556
1961/62	166323	62578	166323	105230	166323	79049
1962/63	140618	70090	140618	62578	140618	105230
1963/64	249067	95641	249067	70090	249067	62578
1964/65	348098	66950	348098	95641	348098	70090
1965/66	589290	61002	589290	66950	589290	95641
1966/67	387875	43236	387875	61002	387875	66950
1967/68	442268	45205	442268	43236	442268	61002
1968/69	294116	31725	294116	45205	294116	43236
1969/70	250212	29600	250212	31725	250212	45205
1970/71	388714	27970	388714	29600	388714	31725
1971/72	472579	24527	472579	27970	472579	29600
1972/73	247175	41794	247175	24527	247175	27970
1973/74	122182	32034	122182	41794	122182	24527
1974/75	285557	13354	285557	32034	285557	41794
1975/76	411393	26394	411393	13354	411393	32034
1976/77	399333	23325	399333	26394	399333	13354
1977/78	203664	10613	203664	23325	203664	26394
1978/79	161551	5043	161551	10613	161551	23325
1979/80	328704	3765	328704	5043	328704	10613
1980/81	396366	10133	396366	3765	396366	5043
1981/82	144065	5869	144065	10133	144065	3765
1982/83	168047	18205	168047	5869	168047	10133
1983/84	235980	12930	235980	18205	235980	5869
1984/85	181123	16938	181123	12930	181123	18205
1985/86	108395	10998	108395	16938	108395	12930
1986/87	215681	14859	215681	10998	215681	16938
1987/88	236156	21314	236156	14859	236156	10998
1988/89	40457	15520	40457	21314	40457	14859
1989/90	13103	9878	13103	15520	13103	21314
1990/91	10255	5991	10255	9878	10255	15520
1991/92	15068	5221	15068	5991	15068	9878
1992/93	22732	10649	22732	5221	22732	5991
1993/94	56256	9011	56256	10649	56256	5221
		9550		9011		10649
		10961		9550		9011
		6439		10961		9550
		2462		6439		10961
		1402		2462		6439
		1932		1402		2462
		2020		1932		1402
		2844		2020		1932
				2844		2020
	0.630023546					2844
		0.592682329				
				0.603838078		

Correlation Values for Provincial Totals of Muskrat vs Ermine between 1919/20 - 1969/7								
Year	Muskrat	Ermine Same Year	Muskrat	Ermine 1 Year Out	Muskrat	Ermine 2 Years Out	Muskrat	Ermine 3 Years Out
1919/20	518288	118168	518288		518288		518288	
1920/21	396180	69664	396180	118168	396180		396180	
1921/22	511529	67318	511529	69664	511529	118168	511529	
1922/23	602100	38210	602100	67318	602100	69664	602100	118168
1923/24	554716	63054	554716	38210	554716	67318	554716	69664
1924/25	306906	56807	306906	63054	306906	38210	306906	67318
1925/26	441623	84492	441623	56807	441623	63054	441623	38210
1926/27	226841	87892	226841	84492	226841	56807	226841	63054
1927/28	213866	88852	213866	87892	213866	84492	213866	56807
1928/29	236398	108789	236398	88852	236398	87892	236398	84492
1929/30	251986	110094	251986	108789	251986	88852	251986	87892
1930/31	300624	71833	300624	110094	300624	108789	300624	88852
1931/32	441378	88838	441378	71833	441378	110094	441378	108789
1932/33	421799	72529	421799	88838	421799	71833	421799	110094
1933/34	385060	116992	385060	72529	385060	88838	385060	71833
1934/35	321828	80748	321828	116992	321828	72529	321828	88838
1935/36	271885	56187	271885	80748	271885	116992	271885	72529
1936/37	324820	137672	324820	56187	324820	80748	324820	116992
1937/38	285440	113648	285440	137672	285440	56187	285440	80748
1938/39	374896	72523	374896	113648	374896	137672	374896	56187
1939/40	682375	103932	682375	72523	682375	113648	682375	137672
1940/41	659928	136027	659928	103932	659928	72523	659928	113648
1941/42	331362	150193	331362	136027	331362	103932	331362	72523
1942/43	280838	113080	280838	150193	280838	136027	280838	103932
1943/44	581862	155567	581862	113080	581862	150193	581862	136027
1944/45	855724	124815	855724	155567	855724	113080	855724	150193
1945/46	958099	109613	958099	124815	958099	155567	958099	113080
1946/47	808692	103656	808692	109613	808692	124815	808692	155567
1947/48	822998	91600	822998	103656	822998	109613	822998	124815
1948/49	930330	99705	930330	91600	930330	103656	930330	109613
1949/50	796456	152800	796456	99705	796456	91600	796456	103656
1950/51	679899	69556	679899	152800	679899	99705	679899	91600
1951/52	599794	79049	599794	69556	599794	152800	599794	99705
1952/53	721114	105230	721114	79049	721114	69556	721114	152800
1953/54	790472	62578	790472	105230	790472	79049	790472	69556
1954/55	1288120	70090	1288120	62578	1288120	105230	1288120	79049
1955/56	1462472	95641	1462472	70090	1462472	62578	1462472	105230
1956/57	1003186	66950	1003186	95641	1003186	70090	1003186	62578
1957/58	680891	61002	680891	66950	680891	95641	680891	70090



Correlation Values for Provincial Totals of Muskrat vs Ermine between 1919/20 - 1969/7								
Year	Muskrat	Ermine 4 Years Out	Muskrat	Ermine 5 Years Out	Muskrat	Ermine 6 Years Out	Muskrat	Ermine 7 Years Out
1919/20	518288		518288		518288		518288	
1920/21	396180		396180		396180		396180	
1921/22	511529		511529		511529		511529	
1922/23	602100		602100		602100		602100	
1923/24	554716	118168	554716		554716		554716	
1924/25	306906	69664	306906	118168	306906		306906	
1925/26	441623	67318	441623	69664	441623	118168	441623	
1926/27	226841	38210	226841	67318	226841	69664	226841	118168
1927/28	213866	63054	213866	38210	213866	67318	213866	69664
1928/29	236398	56807	236398	63054	236398	38210	236398	67318
1929/30	251986	84492	251986	56807	251986	63054	251986	38210
1930/31	300624	87892	300624	84492	300624	56807	300624	63054
1931/32	441378	88852	441378	87892	441378	84492	441378	56807
1932/33	421799	108789	421799	88852	421799	87892	421799	84492
1933/34	385060	110094	385060	108789	385060	88852	385060	87892
1934/35	321828	71833	321828	110094	321828	108789	321828	88852
1935/36	271885	88838	271885	71833	271885	110094	271885	108789
1936/37	324820	72529	324820	88838	324820	71833	324820	110094
1937/38	285440	116992	285440	72529	285440	88838	285440	71833
1938/39	374896	80748	374896	116992	374896	72529	374896	88838
1939/40	682375	56187	682375	80748	682375	116992	682375	72529
1940/41	659928	137672	659928	56187	659928	80748	659928	116992
1941/42	331362	113648	331362	137672	331362	56187	331362	80748
1942/43	280838	72523	280838	113648	280838	137672	280838	56187
1943/44	581862	103932	581862	72523	581862	113648	581862	137672
1944/45	855724	136027	855724	103932	855724	72523	855724	113648
1945/46	958099	150193	958099	136027	958099	103932	958099	72523
1946/47	808692	113080	808692	150193	808692	136027	808692	103932
1947/48	822998	155567	822998	113080	822998	150193	822998	136027
1948/49	930330	124815	930330	155567	930330	113080	930330	150193
1949/50	796456	109613	796456	124815	796456	155567	796456	113080
1950/51	679899	103656	679899	109613	679899	124815	679899	155567
1951/52	599794	91600	599794	103656	599794	109613	599794	124815
1952/53	721114	99705	721114	91600	721114	103656	721114	109613
1953/54	790472	152800	790472	99705	790472	91600	790472	103656
1954/55	1288120	69556	1288120	152800	1288120	99705	1288120	91600
1955/56	1462472	79049	1462472	69556	1462472	152800	1462472	99705
1956/57	1003186	105230	1003186	79049	1003186	69556	1003186	152800
1957/58	680891	62578	680891	105230	680891	79049	680891	69556



Correlation Values for Provincial Totals of Muskrat vs Ermine between 1919/20 - 1969/70						
Year	Muskrat	Ermine 6 Years Out	Muskrat	Ermine 9 Years Out	Muskrat	Ermine 10 Years Out
1919/20	518288		518288		518288	
1920/21	396180		396180		396180	
1921/22	511529		511529		511529	
1922/23	602100		602100		602100	
1923/24	554716		554716		554716	
1924/25	306906		306906		306906	
1925/26	441623		441623		441623	
1926/27	226841		226841		226841	
1927/28	213866	118168	213866		213866	
1928/29	236398	69664	236398	118168	236398	
1929/30	251986	67318	251986	69664	251986	118168
1930/31	300624	38210	300624	67318	300624	69664
1931/32	441378	63054	441378	38210	441378	67318
1932/33	421799	56807	421799	63054	421799	38210
1933/34	385060	84492	385060	56807	385060	63054
1934/35	321828	87892	321828	84492	321828	56807
1935/36	271885	88852	271885	87892	271885	84492
1936/37	324820	108789	324820	88852	324820	87892
1937/38	285440	110094	285440	108789	285440	88852
1938/39	374896	71833	374896	110094	374896	108789
1939/40	682375	88838	682375	71833	682375	110094
1940/41	659928	72529	659928	88838	659928	71833
1941/42	331362	116992	331362	72529	331362	88838
1942/43	280838	80748	280838	116992	280838	72529
1943/44	581862	56187	581862	80748	581862	116992
1944/45	855724	137672	855724	56187	855724	80748
1945/46	958099	113648	958099	137672	958099	56187
1946/47	808692	72523	808692	113648	808692	137672
1947/48	822998	103932	822998	72523	822998	113648
1948/49	930330	136027	930330	103932	930330	72523
1949/50	796456	150193	796456	136027	796456	103932
1950/51	679899	113080	679899	150193	679899	136027
1951/52	599794	155567	599794	113080	599794	150193
1952/53	721114	124815	721114	155567	721114	113080
1953/54	790472	109613	790472	124815	790472	155567
1954/55	1288120	103656	1288120	109613	1288120	124815
1955/56	1462472	91600	1462472	103656	1462472	109613
1956/57	1003186	99705	1003186	91600	1003186	103656
1957/58	680891	152800	680891	99705	680891	91600

1958/59	360287	69556	360287	152800	360287	99705
1959/60	214542	79049	214542	69556	214542	152800
1960/61	338037	105230	338037	79049	338037	69556
1961/62	166323	62578	166323	105230	166323	79049
1962/63	140618	70090	140618	62578	140618	105230
1963/64	249067	95641	249067	70090	249067	62578
1964/65	348098	66950	348098	95641	348098	70090
1965/66	589290	61002	589290	66950	589290	95641
1966/67	387875	43236	387875	61002	387875	66950
1967/68	442268	45205	442268	43236	442268	61002
1968/69	294116	31725	294116	45205	294116	43236
1969/70	250212	29600	250212	31725	250212	45205
		27970		29600		31725
		24527		27970		29600
		41794		24527		27970
		32034		41794		24527
		13354		32034		41794
		26394		13354		32034
		23325		26394		13354
		10613		23325		26394
				10613		23325
	0.427038517					10613
		0.340909964				
				0.336952165		





Correlation Values for Provincial Totals of Muskrat vs Ermine between 1970/71 - 1993/94						
Year	Muskrat	Ermine 8 Years Out	Muskrat	Ermine 9 Years Out	Muskrat	Ermine 10 Years Out
1970/71	388714		388714		388714	
1971/72	472579		472579		472579	
1972/73	247175		247175		247175	
1973/74	122182		122182		122182	
1974/75	285557		285557		285557	
1975/76	411393		411393		411393	
1976/77	399333		399333		399333	
1977/78	203664		203664		203664	
1978/79	161551	5043	161551		161551	
1979/80	328704	3765	328704	5043	328704	
1980/81	396366	10133	396366	3765	396366	5043
1981/82	144065	5869	144065	10133	144065	3765
1982/83	168047	18205	168047	5869	168047	10133
1983/84	235980	12930	235980	18205	235980	5869
1984/85	181123	16938	181123	12930	181123	18205
1985/86	108395	10998	108395	16938	108395	12930
1986/87	215681	14859	215681	10998	215681	16938
1987/88	236156	21314	236156	14859	236156	10998
1988/89	40457	15520	40457	21314	40457	14859
1989/90	13103	9878	13103	15520	13103	21314
1990/91	10255	5991	10255	9878	10255	15520
1991/92	15068	5221	15068	5991	15068	9878
1992/93	22732	10649	22732	5221	22732	5991
1993/94	56256	9011	56256	10649	56256	5221
		9550		9011		10649
		10961		9550		9011
		6439		10961		9550
		2462		6439		10961
		1402		2462		6439
		1932		1402		2462
		2020		1932		1402
		2844		2020		1932
				2844		2020
	0.156573166					2844
			-0.250605509			
					-0.291367852	

**Appendix 2. Correlation coefficients calculated for provincial mink, muskrat and ermine fur returns versus price per pelt offered: 1919/20 - 1993/94**

**Correlation Values for Provincial Totals of Mink vs Price  
Between 1919/20 - 1993-94**

Year	Mink	Price same year	Mink	Price 1 year out	Mink	Price 2 years out	Mink	Price 3 years out	Mink	Price 4 years out
1919/20	16779	14.48	16779		16779		16779		16779	
1920/21	14120	8.77	14120	14.48	14120		14120		14120	
1921/22	29233	8.63	29233	8.77	29233	14.48	29233		29233	
1922/23	19531	9.15	19531	8.63	19531	8.77	19531	14.48	19531	
1923/24	28120	8.88	28120	9.15	28120	8.63	28120	8.77	28120	14.48
1924/25	12712	8.57	12712	8.88	12712	9.15	12712	8.63	12712	8.77
1925/26	16355	13.00	16355	8.57	16355	8.88	16355	9.15	16355	8.63
1926/27	10748	15.50	10748	13.00	10748	8.57	10748	8.88	10748	9.15
1927/28	9833	16.00	9833	15.50	9833	13.00	9833	8.57	9833	8.88
1928/29	11308	21.75	11308	16.00	11308	15.50	11308	13.00	11308	8.57
1929/30	10729	9.00	10729	21.75	10729	16.00	10729	15.50	10729	13.00
1930/31	11701	6.50	11701	9.00	11701	21.75	11701	16.00	11701	15.50
1931/32	12941	4.96	12941	6.50	12941	9.00	12941	21.75	12941	16.00
1932/33	20860	6.05	20860	4.96	20860	6.50	20860	9.00	20860	21.75
1933/34	28888	7.00	28888	6.05	28888	4.96	28888	6.50	28888	9.00
1934/35	21493	8.00	21493	7.00	21493	6.05	21493	4.96	21493	6.50
1935/36	17037	10.30	17037	8.00	17037	7.00	17037	6.05	17037	4.96
1936/37	15083	15.11	15083	10.30	15083	8.00	15083	7.00	15083	6.05
1937/38	11021	9.50	11021	15.11	11021	10.30	11021	8.00	11021	7.00
1938/39	13894	9.25	13894	9.50	13894	15.11	13894	10.30	13894	8.00
1939/40	17676	9.00	17676	9.25	17676	9.50	17676	15.11	17676	10.30
1940/41	26382	11.00	26382	9.00	26382	9.25	26382	9.50	26382	15.11
1941/42	28712	10.00	28712	11.00	28712	9.00	28712	9.25	28712	9.50
1942/43	18356	12.58	18356	10.00	18356	11.00	18356	9.00	18356	9.25
1943/44	21067	20.80	21067	12.58	21067	10.00	21067	11.00	21067	9.00
1944/45	15338	28.00	15338	20.80	15338	12.58	15338	10.00	15338	11.00
1945/46	12801	40.00	12801	28.00	12801	20.80	12801	12.58	12801	10.00
1946/47	15850	28.00	15850	40.00	15850	28.00	15850	20.80	15850	12.58
1947/48	18778	37.00	18778	28.00	18778	40.00	18778	28.00	18778	20.80
1948/49	22932	27.00	22932	37.00	22932	28.00	22932	40.00	22932	28.00
1949/50	29456	35.00	29456	27.00	29456	37.00	29456	28.00	29456	40.00
1950/51	25212	37.00	25212	35.00	25212	27.00	25212	37.00	25212	28.00
1951/52	26056	28.00	26056	37.00	26056	35.00	26056	27.00	26056	37.00
1952/53	26401	25.48	26401	28.00	26401	37.00	26401	35.00	26401	27.00
1953/54	18432	23.00	18432	25.48	18432	28.00	18432	37.00	18432	35.00
1954/55	17579	27.33	17579	23.00	17579	25.48	17579	28.00	17579	37.00
1955/56	15384	26.33	15384	27.33	15384	23.00	15384	25.48	15384	28.00
1956/57	27041	22.00	27041	26.33	27041	27.33	27041	23.00	27041	25.48
1957/58	37854	18.83	37854	22.00	37854	26.33	37854	27.33	37854	23.00
1958/59	27397	20.66	27397	18.83	27397	22.00	27397	26.33	27397	27.33



Correlation Values for Provincial Totals of Mink vs Price Between 1919/20 - 1993-94								
Year	Mink	Price 5 years out	Mink	Price 6 years out	Mink	Price 7 years out	Mink	Price 8 years out
1919/20	16779		16779		16779		16779	
1920/21	14120		14120		14120		14120	
1921/22	29233		29233		29233		29233	
1922/23	19531		19531		19531		19531	
1923/24	28120		28120		28120		28120	
1924/25	12712	14.48	12712		12712		12712	
1925/26	16355	8.77	16355	14.48	16355		16355	
1926/27	10748	8.63	10748	8.77	10748	14.48	10748	
1927/28	9833	9.15	9833	8.63	9833	8.77	9833	14.48
1928/29	11308	8.88	11308	9.15	11308	8.63	11308	8.77
1929/30	10729	8.57	10729	8.88	10729	9.15	10729	8.63
1930/31	11701	13.00	11701	8.57	11701	8.88	11701	9.15
1931/32	12941	15.50	12941	13.00	12941	8.57	12941	8.88
1932/33	20860	16.00	20860	15.50	20860	13.00	20860	8.57
1933/34	28888	21.75	28888	16.00	28888	15.50	28888	13.00
1934/35	21493	9.00	21493	21.75	21493	16.00	21493	15.50
1935/36	17037	6.50	17037	9.00	17037	21.75	17037	16.00
1936/37	15083	4.96	15083	6.50	15083	9.00	15083	21.75
1937/38	11021	6.05	11021	4.96	11021	6.50	11021	9.00
1938/39	13894	7.00	13894	6.05	13894	4.96	13894	6.50
1939/40	17676	8.00	17676	7.00	17676	6.05	17676	4.96
1940/41	26382	10.30	26382	8.00	26382	7.00	26382	6.05
1941/42	28712	15.11	28712	10.30	28712	8.00	28712	7.00
1942/43	18356	9.50	18356	15.11	18356	10.30	18356	8.00
1943/44	21067	9.25	21067	9.50	21067	15.11	21067	10.30
1944/45	15338	9.00	15338	9.25	15338	9.50	15338	15.11
1945/46	12801	11.00	12801	9.00	12801	9.25	12801	9.50
1946/47	15850	10.00	15850	11.00	15850	9.00	15850	9.25
1947/48	18778	12.58	18778	10.00	18778	11.00	18778	9.00
1948/49	22932	20.80	22932	12.58	22932	10.00	22932	11.00
1949/50	29456	28.00	29456	20.80	29456	12.58	29456	10.00
1950/51	25212	40.00	25212	28.00	25212	20.80	25212	12.58
1951/52	26056	28.00	26056	40.00	26056	28.00	26056	20.80
1952/53	26401	37.00	26401	28.00	26401	40.00	26401	28.00
1953/54	18432	27.00	18432	37.00	18432	28.00	18432	40.00
1954/55	17579	35.00	17579	27.00	17579	37.00	17579	28.00
1955/56	15384	37.00	15384	35.00	15384	27.00	15384	37.00
1956/57	27041	28.00	27041	37.00	27041	35.00	27041	27.00
1957/58	37854	25.48	37854	28.00	37854	37.00	37854	35.00
1958/59	27397	23.00	27397	25.48	27397	28.00	27397	37.00



Correlation Values for Provincial Totals of Mink vs Price										
Between 1919/20 - 1969/70										
Year	Mink	Price same year	Mink	Price 1 year out	Mink	Price 2 years out	Mink	Price 3 years out	Mink	Price 4 years out
1919/20	16779	14.48	16779		16779		16779		16779	
1920/21	14120	8.77	14120	14.48	14120		14120		14120	
1921/22	29233	8.63	29233	8.77	29233	14.48	29233		29233	
1922/23	19531	9.15	19531	8.63	19531	8.77	19531	14.48	19531	
1923/24	28120	8.88	28120	9.15	28120	8.63	28120	8.77	28120	14.48
1924/25	12712	8.57	12712	8.88	12712	9.15	12712	8.63	12712	8.77
1925/26	16355	13.00	16355	8.57	16355	8.88	16355	9.15	16355	8.63
1926/27	10748	15.50	10748	13.00	10748	8.57	10748	8.88	10748	9.15
1927/28	9833	16.00	9833	15.50	9833	13.00	9833	8.57	9833	8.88
1928/29	11308	21.75	11308	16.00	11308	15.50	11308	13.00	11308	8.57
1929/30	10729	9.00	10729	21.75	10729	16.00	10729	15.50	10729	13.00
1930/31	11701	6.50	11701	9.00	11701	21.75	11701	16.00	11701	15.50
1931/32	12941	4.96	12941	6.50	12941	9.00	12941	21.75	12941	16.00
1932/33	20860	6.05	20860	4.96	20860	6.50	20860	9.00	20860	21.75
1933/34	28888	7.00	28888	6.05	28888	4.96	28888	6.50	28888	9.00
1934/35	21493	8.00	21493	7.00	21493	6.05	21493	4.96	21493	6.50
1935/36	17037	10.30	17037	8.00	17037	7.00	17037	6.05	17037	4.96
1936/37	15083	15.11	15083	10.30	15083	8.00	15083	7.00	15083	6.05
1937/38	11021	9.50	11021	15.11	11021	10.30	11021	8.00	11021	7.00
1938/39	13894	9.25	13894	9.50	13894	15.11	13894	10.30	13894	8.00
1939/40	17676	9.00	17676	9.25	17676	9.50	17676	15.11	17676	10.30
1940/41	26382	11.00	26382	9.00	26382	9.25	26382	9.50	26382	15.11
1941/42	28712	10.00	28712	11.00	28712	9.00	28712	9.25	28712	9.50
1942/43	18356	12.58	18356	10.00	18356	11.00	18356	9.00	18356	9.25
1943/44	21067	20.80	21067	12.58	21067	10.00	21067	11.00	21067	9.00
1944/45	15338	28.00	15338	20.80	15338	12.58	15338	10.00	15338	11.00
1945/46	12801	40.00	12801	28.00	12801	20.80	12801	12.58	12801	10.00
1946/47	15850	28.00	15850	40.00	15850	28.00	15850	20.80	15850	12.58
1947/48	18778	37.00	18778	28.00	18778	40.00	18778	28.00	18778	20.80
1948/49	22932	27.00	22932	37.00	22932	28.00	22932	40.00	22932	28.00
1949/50	29456	35.00	29456	27.00	29456	37.00	29456	28.00	29456	40.00
1950/51	25212	37.00	25212	35.00	25212	27.00	25212	37.00	25212	28.00
1951/52	26056	28.00	26056	37.00	26056	35.00	26056	27.00	26056	37.00
1952/53	26401	25.48	26401	28.00	26401	37.00	26401	35.00	26401	27.00
1953/54	18432	23.00	18432	25.48	18432	28.00	18432	37.00	18432	35.00
1954/55	17579	27.33	17579	23.00	17579	25.48	17579	28.00	17579	37.00
1955/56	15384	26.33	15384	27.33	15384	23.00	15384	25.48	15384	28.00
1956/57	27041	22.00	27041	26.33	27041	27.33	27041	23.00	27041	25.48
1957/58	37854	18.83	37854	22.00	37854	26.33	37854	27.33	37854	23.00
1958/59	27397	20.66	27397	18.83	27397	22.00	27397	26.33	27397	27.33



Correlation Values for Provincial Totals of Mink vs Price								
Between 1919/20 - 1969/70								
Year	Mink	Price 5 years out	Mink	Price 6 years out	Mink	Price 7 years out	Mink	Price 8 years out
1919/20	16779		16779		16779		16779	
1920/21	14120		14120		14120		14120	
1921/22	29233		29233		29233		29233	
1922/23	19531		19531		19531		19531	
1923/24	28120		28120		28120		28120	
1924/25	12712	14.48	12712		12712		12712	
1925/26	16355	8.77	16355	14.48	16355		16355	
1926/27	10748	8.63	10748	8.77	10748	14.48	10748	
1927/28	9833	9.15	9833	8.63	9833	8.77	9833	14.48
1928/29	11308	8.88	11308	9.15	11308	8.63	11308	8.77
1929/30	10729	8.57	10729	8.88	10729	9.15	10729	8.63
1930/31	11701	13.00	11701	8.57	11701	8.88	11701	9.15
1931/32	12941	15.50	12941	13.00	12941	8.57	12941	8.88
1932/33	20860	16.00	20860	15.50	20860	13.00	20860	8.57
1933/34	28888	21.75	28888	16.00	28888	15.50	28888	13.00
1934/35	21493	9.00	21493	21.75	21493	16.00	21493	15.50
1935/36	17037	6.50	17037	9.00	17037	21.75	17037	16.00
1936/37	15083	4.96	15083	6.50	15083	9.00	15083	21.75
1937/38	11021	6.05	11021	4.96	11021	6.50	11021	9.00
1938/39	13894	7.00	13894	6.05	13894	4.96	13894	6.50
1939/40	17676	8.00	17676	7.00	17676	6.05	17676	4.96
1940/41	26382	10.30	26382	8.00	26382	7.00	26382	6.05
1941/42	28712	15.11	28712	10.30	28712	8.00	28712	7.00
1942/43	18356	9.50	18356	15.11	18356	10.30	18356	8.00
1943/44	21067	9.25	21067	9.50	21067	15.11	21067	10.30
1944/45	15338	9.00	15338	9.25	15338	9.50	15338	15.11
1945/46	12801	11.00	12801	9.00	12801	9.25	12801	9.50
1946/47	15850	10.00	15850	11.00	15850	9.00	15850	9.25
1947/48	18778	12.58	18778	10.00	18778	11.00	18778	9.00
1948/49	22932	20.80	22932	12.58	22932	10.00	22932	11.00
1949/50	29456	28.00	29456	20.80	29456	12.58	29456	10.00
1950/51	25212	40.00	25212	28.00	25212	20.80	25212	12.58
1951/52	26056	28.00	26056	40.00	26056	28.00	26056	20.80
1952/53	26401	37.00	26401	28.00	26401	40.00	26401	28.00
1953/54	18432	27.00	18432	37.00	18432	28.00	18432	40.00
1954/55	17579	35.00	17579	27.00	17579	37.00	17579	28.00
1955/56	15384	37.00	15384	35.00	15384	27.00	15384	37.00
1956/57	27041	28.00	27041	37.00	27041	35.00	27041	27.00
1957/58	37854	25.48	37854	28.00	37854	37.00	37854	35.00
1958/59	27397	23.00	27397	25.48	27397	28.00	27397	37.00

1959/60	27594	27.33	27594	23.00	27594	25.48	27594	28.00
1960/61	30679	26.33	30679	27.33	30679	23.00	30679	25.48
1961/62	22559	22.00	22559	26.33	22559	27.33	22559	23.00
1962/63	18408	18.83	18408	22.00	18408	26.33	18408	27.33
1963/64	16412	20.66	16412	18.83	16412	22.00	16412	26.33
1964/65	17291	22.33	17291	20.66	17291	18.83	17291	22.00
1965/66	15778	18.92	15778	22.33	15778	20.66	15778	18.83
1966/67	20099	18.33	20099	18.92	20099	22.33	20099	20.66
1967/68	25874	23.33	25874	18.33	25874	18.92	25874	22.33
1968/69	33104	22.33	33104	23.33	33104	18.33	33104	18.92
1969/70	21522	20.00	21522	22.33	21522	23.33	21522	18.33
		20.00		20.00		22.33		23.33
		15.50		20.00		20.00		22.33
		16.00		15.50		20.00		20.00
		17.00		16.00		15.50		20.00
		13.00		17.00		16.00		15.50
				13.00		17.00		16.00
	0.553897032					13.00		17.00
			0.523490527					13.00
					0.479770006			
							0.327880607	



Correlation Values for Provincial Totals of Mink vs Price									
Between 1970/70 - 1993/94									
Year	Mink	Price 5 years out	Mink	Price 6 years out	Mink	Price 7 years out	Mink	Price 8 years out	
1970/71	9592		9592		9592		9592		
1971/72	10686		10686		10686		10686		
1972/73	20368		20368		20368		20368		
1973/74	10904		10904		10904		10904		
1974/75	12420		12420		12420		12420		
1975/76	11961	11.20	11961		11961		11961		
1976/77	22379	19.32	22379	11.20	22379		22379		
1977/78	19408	23.40	19408	19.32	19408	11.20	19408		
1978/79	20284	22.00	20284	23.40	20284	19.32	20284	11.20	
1979/80	24869	13.13	24869	22.00	24869	23.40	24869	19.32	
1980/81	19721	20.00	19721	13.13	19721	22.00	19721	23.40	
1981/82	14994	23.57	14994	20.00	14994	13.13	14994	22.00	
1982/83	9910	23.44	9910	23.57	9910	20.00	9910	13.13	
1983/84	7314	25.00	7314	23.44	7314	23.57	7314	20.00	
1984/85	11976	43.00	11976	25.00	11976	23.44	11976	23.57	
1985/86	20105	39.00	20105	43.00	20105	25.00	20105	23.44	
1986/87	15311	34.50	15311	39.00	15311	43.00	15311	25.00	
1987/88	18681	29.00	18681	34.50	18681	39.00	18681	43.00	
1988/89	12514	28.00	12514	29.00	12514	34.50	12514	39.00	
1989/90	11922	37.00	11922	28.00	11922	29.00	11922	34.50	
1990/91	4002	47.00	4002	37.00	4002	28.00	4002	29.00	
1991/92	6309	54.00	6309	47.00	6309	37.00	6309	28.00	
1992/93	6475	34.00	6475	54.00	6475	47.00	6475	37.00	
1993/94	5073	52.00	5073	34.00	5073	54.00	5073	47.00	
		34.00		52.00		34.00		54.00	
		27.50		34.00		52.00		34.00	
		40.69		27.50		34.00		52.00	
		27.00		40.69		27.50		34.00	
		30.00		27.00		40.69		27.50	
				30.00		27.00		40.69	
	-0.627395839					30.00		27.00	
			-0.524752397					30.00	
					-0.472207381				
							-0.364499052		





Correlation Values for Provincial Totals of Muskrats vs Price									
Between 1919/20 - 1993/94									
Year	Muskrat	Price 5 years out	Muskrat	Price 6 years out	Muskrat	Price 7 years out	Muskrat	Price 8 years out	
1919/20	518288		518288		518288		518288		
1920/21	396180		396180		396180		396180		
1921/22	511529		511529		511529		511529		
1922/23	602100		602100		602100		602100		
1923/24	554716		554716		554716		554716		
1924/25	306906	2.30	306906		306906		306906		
1925/26	441623	1.23	441623	2.30	441623		441623		
1926/27	226841	1.53	226841	1.23	226841	2.30	226841		
1927/28	213866	1.29	213866	1.53	213866	1.23	213866	2.30	
1928/29	236398	1.04	236398	1.29	236398	1.53	236398	1.23	
1929/30	251986	1.01	251986	1.04	251986	1.29	251986	1.53	
1930/31	300624	1.65	300624	1.01	300624	1.04	300624	1.29	
1931/32	441378	2.13	441378	1.65	441378	1.01	441378	1.04	
1932/33	421799	1.50	421799	2.13	421799	1.65	421799	1.01	
1933/34	385060	1.15	385060	1.50	385060	2.13	385060	1.65	
1934/35	321828	0.66	321828	1.15	321828	1.50	321828	2.13	
1935/36	271885	0.60	271885	0.66	271885	1.15	271885	1.50	
1936/37	324820	0.44	324820	0.60	324820	0.66	324820	1.15	
1937/38	285440	0.56	285440	0.44	285440	0.60	285440	0.66	
1938/39	374896	0.70	374896	0.56	374896	0.44	374896	0.60	
1939/40	682375	0.90	682375	0.70	682375	0.56	682375	0.44	
1940/41	659928	1.45	659928	0.90	659928	0.70	659928	0.56	
1941/42	331362	1.34	331362	1.45	331362	0.90	331362	0.70	
1942/43	280838	0.70	280838	1.34	280838	1.45	280838	0.90	
1943/44	581862	0.88	581862	0.70	581862	1.34	581862	1.45	
1944/45	855724	1.27	855724	0.88	855724	0.70	855724	1.34	
1945/46	958099	2.00	958099	1.27	958099	0.88	958099	0.70	
1946/47	808692	2.11	808692	2.00	808692	1.27	808692	0.88	
1947/48	822998	2.88	822998	2.11	822998	2.00	822998	1.27	
1948/49	930330	2.25	930330	2.88	930330	2.11	930330	2.00	
1949/50	796456	2.63	796456	2.25	796456	2.88	796456	2.11	
1950/51	679899	3.50	679899	2.63	679899	2.25	679899	2.88	
1951/52	599794	1.75	599794	3.50	599794	2.63	599794	2.25	
1952/53	721114	2.70	721114	1.75	721114	3.50	721114	2.63	
1953/54	790472	1.37	790472	2.70	790472	1.75	790472	3.50	
1954/55	1E+06	1.70	1E+06	1.37	1E+06	2.70	1E+06	1.75	
1955/56	1E+06	2.20	1E+06	1.70	1E+06	1.37	1E+06	2.70	
1956/57	1E+06	1.45	1E+06	2.20	1E+06	1.70	1E+06	1.37	
1957/58	680891	1.25	680891	1.45	680891	2.20	680891	1.70	
1958/59	360287	0.93	360287	1.25	360287	1.45	360287	2.20	

1959/60	214542	1.27	214542	0.93	214542	1.25	214542	1.45
1960/61	338037	0.93	338037	1.27	338037	0.93	338037	1.25
1961/62	166323	0.90	166323	0.93	166323	1.27	166323	0.93
1962/63	140618	0.67	140618	0.90	140618	0.93	140618	1.27
1963/64	249067	1.01	249067	0.67	249067	0.90	249067	0.93
1964/65	348098	0.87	348098	1.01	348098	0.67	348098	0.90
1965/66	589290	0.79	589290	0.87	589290	1.01	589290	0.67
1966/67	387875	1.14	387875	0.79	387875	0.87	387875	1.01
1967/68	442268	1.77	442268	1.14	442268	0.79	442268	0.87
1968/69	294116	1.50	294116	1.77	294116	1.14	294116	0.79
1969/70	250212	1.52	250212	1.50	250212	1.77	250212	1.14
1970/71	388714	1.72	388714	1.52	388714	1.50	388714	1.77
1971/72	472579	0.88	472579	1.72	472579	1.52	472579	1.50
1972/73	247175	1.01	247175	0.88	247175	1.72	247175	1.52
1973/74	122182	1.55	122182	1.01	122182	0.88	122182	1.72
1974/75	285557	1.45	285557	1.55	285557	1.01	285557	0.88
1975/76	411393	1.57	411393	1.45	411393	1.55	411393	1.01
1976/77	399333	2.01	399333	1.57	399333	1.45	399333	1.55
1977/78	203664	2.64	203664	2.01	203664	1.57	203664	1.45
1978/79	161551	2.80	161551	2.64	161551	2.01	161551	1.57
1979/80	328704	2.62	328704	2.80	328704	2.64	328704	2.01
1980/81	396366	3.62	396366	2.62	396366	2.80	396366	2.64
1981/82	144065	4.27	144065	3.62	144065	2.62	144065	2.80
1982/83	168047	4.61	168047	4.27	168047	3.62	168047	2.62
1983/84	235980	5.90	235980	4.61	235980	4.27	235980	3.62
1984/85	181123	6.60	181123	5.90	181123	4.61	181123	4.27
1985/86	108395	5.80	108395	6.60	108395	5.90	108395	4.61
1986/87	215681	3.05	215681	5.80	215681	6.60	215681	5.90
1987/88	236156	2.97	236156	3.05	236156	5.80	236156	6.60
1988/89	40457	3.20	40457	2.97	40457	3.05	40457	5.80
1989/90	13103	3.25	13103	3.20	13103	2.97	13103	3.05
1990/91	10255	3.15	10255	3.25	10255	3.20	10255	2.97
1991/92	15068	5.00	15068	3.15	15068	3.25	15068	3.20
1992/93	22732	4.10	22732	5.00	22732	3.15	22732	3.25
1993/94	56256	1.40	56256	4.10	56256	5.00	56256	3.15
		1.70		1.40		4.10		5.00
		1.55		1.70		1.40		4.10
		2.09		1.55		1.70		1.40
		2.00		2.09		1.55		1.70
		2.60		2.00		2.09		1.55
				2.60		2.00		2.09
	-0.208096013					2.60		2.00
			-0.254823937					2.60
					-0.244511705			
							-0.247088533	

Correlation Values for Provincial Totals of Muskrats vs Price										
Between 1919/20 - 1969/70										
Year	Muskrat	Price same year	Muskrat	Price 1 year out	Muskrat	Price 2 years out	Muskrat	Price 3 years out	Muskrat	Price 4 years out
1919/20	518288	2.30	518288		518288		518288		518288	
1920/21	396180	1.23	396180	2.30	396180		396180		396180	
1921/22	511529	1.53	511529	1.23	511529	2.30	511529		511529	
1922/23	602100	1.29	602100	1.53	602100	1.23	602100	2.30	602100	
1923/24	554716	1.04	554716	1.29	554716	1.53	554716	1.23	554716	2.30
1924/25	306906	1.01	306906	1.04	306906	1.29	306906	1.53	306906	1.23
1925/26	441623	1.65	441623	1.01	441623	1.04	441623	1.29	441623	1.53
1926/27	226841	2.13	226841	1.65	226841	1.01	226841	1.04	226841	1.29
1927/28	213866	1.50	213866	2.13	213866	1.65	213866	1.01	213866	1.04
1928/29	236398	1.15	236398	1.50	236398	2.13	236398	1.65	236398	1.01
1929/30	251986	0.66	251986	1.15	251986	1.50	251986	2.13	251986	1.65
1930/31	300624	0.60	300624	0.66	300624	1.15	300624	1.50	300624	2.13
1931/32	441378	0.44	441378	0.60	441378	0.66	441378	1.15	441378	1.50
1932/33	421799	0.56	421799	0.44	421799	0.60	421799	0.66	421799	1.15
1933/34	385060	0.70	385060	0.56	385060	0.44	385060	0.60	385060	0.66
1934/35	321828	0.90	321828	0.70	321828	0.56	321828	0.44	321828	0.60
1935/36	271885	1.45	271885	0.90	271885	0.70	271885	0.56	271885	0.44
1936/37	324820	1.34	324820	1.45	324820	0.90	324820	0.70	324820	0.56
1937/38	285440	0.70	285440	1.34	285440	1.45	285440	0.90	285440	0.70
1938/39	374896	0.88	374896	0.70	374896	1.34	374896	1.45	374896	0.90
1939/40	682375	1.27	682375	0.88	682375	0.70	682375	1.34	682375	1.45
1940/41	659928	2.00	659928	1.27	659928	0.88	659928	0.70	659928	1.34
1941/42	331362	2.11	331362	2.00	331362	1.27	331362	0.88	331362	0.70
1942/43	280838	2.88	280838	2.11	280838	2.00	280838	1.27	280838	0.88
1943/44	581862	2.25	581862	2.88	581862	2.11	581862	2.00	581862	1.27
1944/45	855724	2.63	855724	2.25	855724	2.88	855724	2.11	855724	2.00
1945/46	958099	3.50	958099	2.63	958099	2.25	958099	2.88	958099	2.11
1946/47	808692	1.75	808692	3.50	808692	2.63	808692	2.25	808692	2.88
1947/48	822998	2.70	822998	1.75	822998	3.50	822998	2.63	822998	2.25
1948/49	930330	1.37	930330	2.70	930330	1.75	930330	3.50	930330	2.63
1949/50	796456	1.70	796456	1.37	796456	2.70	796456	1.75	796456	3.50
1950/51	679899	2.20	679899	1.70	679899	1.37	679899	2.70	679899	1.75
1951/52	599794	1.45	599794	2.20	599794	1.70	599794	1.37	599794	2.70
1952/53	721114	1.25	721114	1.45	721114	2.20	721114	1.70	721114	1.37
1953/54	790472	0.93	790472	1.25	790472	1.45	790472	2.20	790472	1.70
1954/55	1E+06	1.27	1E+06	0.93	1E+06	1.25	1E+06	1.45	1E+06	2.20
1955/56	1E+06	0.93	1E+06	1.27	1E+06	0.93	1E+06	1.25	1E+06	1.45
1956/57	1E+06	0.90	1E+06	0.93	1E+06	1.27	1E+06	0.93	1E+06	1.25
1957/58	680891	0.67	680891	0.90	680891	0.93	680891	1.27	680891	0.93
1958/59	360287	1.01	360287	0.67	360287	0.90	360287	0.93	360287	1.27



Correlation Values for Provincial Totals of Muskrats vs Price								
Between 1919/20 - 1969/70								
Year	Muskrat	Price 5 years out	Muskrat	Price 6 years out	Muskrat	Price 7 years out	Muskrat	Price 8 years out
1919/20	518288		518288		518288		518288	
1920/21	396180		396180		396180		396180	
1921/22	511529		511529		511529		511529	
1922/23	602100		602100		602100		602100	
1923/24	554716		554716		554716		554716	
1924/25	306906	2.30	306906		306906		306906	
1925/26	441623	1.23	441623	2.30	441623		441623	
1926/27	226841	1.53	226841	1.23	226841	2.30	226841	
1927/28	213866	1.29	213866	1.53	213866	1.23	213866	2.30
1928/29	236398	1.04	236398	1.29	236398	1.53	236398	1.23
1929/30	251986	1.01	251986	1.04	251986	1.29	251986	1.53
1930/31	300624	1.65	300624	1.01	300624	1.04	300624	1.29
1931/32	441378	2.13	441378	1.65	441378	1.01	441378	1.04
1932/33	421799	1.50	421799	2.13	421799	1.65	421799	1.01
1933/34	385060	1.15	385060	1.50	385060	2.13	385060	1.65
1934/35	321828	0.66	321828	1.15	321828	1.50	321828	2.13
1935/36	271885	0.60	271885	0.66	271885	1.15	271885	1.50
1936/37	324820	0.44	324820	0.60	324820	0.66	324820	1.15
1937/38	285440	0.56	285440	0.44	285440	0.60	285440	0.66
1938/39	374896	0.70	374896	0.56	374896	0.44	374896	0.60
1939/40	682375	0.90	682375	0.70	682375	0.56	682375	0.44
1940/41	659928	1.45	659928	0.90	659928	0.70	659928	0.56
1941/42	331362	1.34	331362	1.45	331362	0.90	331362	0.70
1942/43	280838	0.70	280838	1.34	280838	1.45	280838	0.90
1943/44	581862	0.88	581862	0.70	581862	1.34	581862	1.45
1944/45	855724	1.27	855724	0.88	855724	0.70	855724	1.34
1945/46	958099	2.00	958099	1.27	958099	0.88	958099	0.70
1946/47	808692	2.11	808692	2.00	808692	1.27	808692	0.88
1947/48	822998	2.88	822998	2.11	822998	2.00	822998	1.27
1948/49	930330	2.25	930330	2.88	930330	2.11	930330	2.00
1949/50	796456	2.63	796456	2.25	796456	2.88	796456	2.11
1950/51	679899	3.50	679899	2.63	679899	2.25	679899	2.88
1951/52	599794	1.75	599794	3.50	599794	2.63	599794	2.25
1952/53	721114	2.70	721114	1.75	721114	3.50	721114	2.63
1953/54	790472	1.37	790472	2.70	790472	1.75	790472	3.50
1954/55	1E+06	1.70	1E+06	1.37	1E+06	2.70	1E+06	1.75
1955/56	1E+06	2.20	1E+06	1.70	1E+06	1.37	1E+06	2.70
1956/57	1E+06	1.45	1E+06	2.20	1E+06	1.70	1E+06	1.37
1957/58	680891	1.25	680891	1.45	680891	2.20	680891	1.70
1958/59	360287	0.93	360287	1.25	360287	1.45	360287	2.20





Correlation Values for Provincial Totals of Muskrats vs Price Between 1970/71 - 1993/94								
Year	Muskrat	Price 5 years out	Muskrat	Price 6 years out	Muskrat	Price 7 years out	Muskrat	Price 8 years out
1970/71	388714		388714		388714		388714	
1971/72	472579		472579		472579		472579	
1972/73	247175		247175		247175		247175	
1973/74	122182		122182		122182		122182	
1974/75	285557		285557		285557		285557	
1975/76	411393	1.57	411393		411393		411393	
1976/77	399333	2.01	399333	1.57	399333		399333	
1977/78	203664	2.64	203664	2.01	203664	1.57	203664	
1978/79	161551	2.80	161551	2.64	161551	2.01	161551	1.57
1979/80	328704	2.62	328704	2.80	328704	2.64	328704	2.01
1980/81	396366	3.62	396366	2.62	396366	2.80	396366	2.64
1981/82	144065	4.27	144065	3.62	144065	2.62	144065	2.80
1982/83	168047	4.61	168047	4.27	168047	3.62	168047	2.62
1983/84	235980	5.90	235980	4.61	235980	4.27	235980	3.62
1984/85	181123	6.60	181123	5.90	181123	4.61	181123	4.27
1985/86	108395	5.80	108395	6.60	108395	5.90	108395	4.61
1986/87	215681	3.05	215681	5.80	215681	6.60	215681	5.90
1987/88	236156	2.97	236156	3.05	236156	5.80	236156	6.60
1988/89	40457	3.20	40457	2.97	40457	3.05	40457	5.80
1989/90	13103	3.25	13103	3.20	13103	2.97	13103	3.05
1990/91	10255	3.15	10255	3.25	10255	3.20	10255	2.97
1991/92	15068	5.00	15068	3.15	15068	3.25	15068	3.20
1992/93	22732	4.10	22732	5.00	22732	3.15	22732	3.25
1993/94	56256	1.40	56256	4.10	56256	5.00	56256	3.15
		1.70		1.40		4.10		5.00
		1.55		1.70		1.40		4.10
		2.09		1.55		1.70		1.40
		2.00		2.09		1.55		1.70
		2.60		2.00		2.09		1.55
				2.60		2.00		2.09
	-0.263256282					2.60		2.00
			-0.290903055					2.60
					0.025547504			
							-0.040198041	

Correlation Values for Provincial Totals of Ermine vs Price										
Between 1919/20 - 1993/94										
Year	Ermine	Price same year	Ermine	Price 1 year out	Ermine	Price 2 years out	Ermine	Price 3 years out	Ermine	Price 4 years out
1919/2	118168	1.36	118168		118168		118168		118168	
1920/2	69664	0.46	69664	1.36	69664		69664		69664	
1921/2	67318	0.57	67318	0.46	67318	1.36	67318		67318	
1922/2	38210	0.62	38210	0.57	38210	0.46	38210	1.36	38210	
1923/2	63054	0.81	63054	0.62	63054	0.57	63054	0.46	63054	1.36
1924/2	56807	1.14	56807	0.81	56807	0.62	56807	0.57	56807	0.46
1925/2	84492	1.75	84492	1.14	84492	0.81	84492	0.62	84492	0.57
1926/2	87892	1.88	87892	1.75	87892	1.14	87892	0.81	87892	0.62
1927/2	88852	1.75	88852	1.88	88852	1.75	88852	1.14	88852	0.81
1928/2	108789	1.65	108789	1.75	108789	1.88	108789	1.75	108789	1.14
1929/3	110094	0.78	110094	1.65	110094	1.75	110094	1.88	110094	1.75
1930/3	71833	0.70	71833	0.78	71833	1.65	71833	1.75	71833	1.88
1931/3	88838	0.75	88838	0.70	88838	0.78	88838	1.65	88838	1.75
1932/3	72529	0.46	72529	0.75	72529	0.70	72529	0.78	72529	1.65
1933/3	116992	0.65	116992	0.46	116992	0.75	116992	0.70	116992	0.78
1934/3	80748	0.60	80748	0.65	80748	0.46	80748	0.75	80748	0.70
1935/3	56187	0.75	56187	0.60	56187	0.65	56187	0.46	56187	0.75
1936/3	137672	0.10	137672	0.75	137672	0.60	137672	0.65	137672	0.46
1937/3	113648	0.60	113648	0.10	113648	0.75	113648	0.60	113648	0.65
1938/3	72523	0.55	72523	0.60	72523	0.10	72523	0.75	72523	0.60
1939/4	103932	0.66	103932	0.55	103932	0.60	103932	0.10	103932	0.75
1940/4	136027	1.10	136027	0.66	136027	0.55	136027	0.60	136027	0.10
1941/4	150193	1.23	150193	1.10	150193	0.66	150193	0.55	150193	0.60
1942/4	113080	1.72	113080	1.23	113080	1.10	113080	0.66	113080	0.55
1943/4	155567	2.35	155567	1.72	155567	1.23	155567	1.10	155567	0.66
1944/4	124815	2.30	124815	2.35	124815	1.72	124815	1.23	124815	1.10
1945/4	109613	3.05	109613	2.30	109613	2.35	109613	1.72	109613	1.23
1946/4	103656	1.72	103656	3.05	103656	2.30	103656	2.35	103656	1.72
1947/4	91600	2.35	91600	1.72	91600	3.05	91600	2.30	91600	2.35
1948/4	99705	1.55	99705	2.35	99705	1.72	99705	3.05	99705	2.30
1949/5	152800	1.70	152800	1.55	152800	2.35	152800	1.72	152800	3.05
1950/5	69556	2.45	69556	1.70	69556	1.55	69556	2.35	69556	1.72
1951/5	79049	1.70	79049	2.45	79049	1.70	79049	1.55	79049	2.35
1952/5	105230	1.47	105230	1.70	105230	2.45	105230	1.70	105230	1.55
1953/5	62578	1.15	62578	1.47	62578	1.70	62578	2.45	62578	1.70
1954/5	70090	1.87	70090	1.15	70090	1.47	70090	1.70	70090	2.45
1955/5	95641	1.55	95641	1.87	95641	1.15	95641	1.47	95641	1.70
1956/5	66950	1.99	66950	1.55	66950	1.87	66950	1.15	66950	1.47
1957/5	61002	1.59	61002	1.99	61002	1.55	61002	1.87	61002	1.15
1958/5	43236	1.48	43236	1.59	43236	1.99	43236	1.55	43236	1.87



Correlation Values for Provincial Totals of Ermine vs Price								
Between 1919/20 - 1993/94								
Year	Ermine	Price 5 years out	Ermine	Price 6 years out	Ermine	Price 7 years out	Ermine	Price 8 years out
1919/2	118168		118168		118168		118168	
1920/2	69664		69664		69664		69664	
1921/2	67318		67318		67318		67318	
1922/2	38210		38210		38210		38210	
1923/2	63054		63054		63054		63054	
1924/2	56807	1.36	56807		56807		56807	
1925/2	84492	0.46	84492	1.36	84492		84492	
1926/2	87892	0.57	87892	0.46	87892	1.36	87892	
1927/2	88852	0.62	88852	0.57	88852	0.46	88852	1.36
1928/2	108789	0.81	108789	0.62	108789	0.57	108789	0.46
1929/3	110094	1.14	110094	0.81	110094	0.62	110094	0.57
1930/3	71833	1.75	71833	1.14	71833	0.81	71833	0.62
1931/3	88838	1.88	88838	1.75	88838	1.14	88838	0.81
1932/3	72529	1.75	72529	1.88	72529	1.75	72529	1.14
1933/3	116992	1.65	116992	1.75	116992	1.88	116992	1.75
1934/3	80748	0.78	80748	1.65	80748	1.75	80748	1.88
1935/3	56187	0.70	56187	0.78	56187	1.65	56187	1.75
1936/3	137672	0.75	137672	0.70	137672	0.78	137672	1.65
1937/3	113648	0.46	113648	0.75	113648	0.70	113648	0.78
1938/3	72523	0.65	72523	0.46	72523	0.75	72523	0.70
1939/4	103932	0.60	103932	0.65	103932	0.46	103932	0.75
1940/4	136027	0.75	136027	0.60	136027	0.65	136027	0.46
1941/4	150193	0.10	150193	0.75	150193	0.60	150193	0.65
1942/4	113080	0.60	113080	0.10	113080	0.75	113080	0.60
1943/4	155567	0.55	155567	0.60	155567	0.10	155567	0.75
1944/4	124815	0.66	124815	0.55	124815	0.60	124815	0.10
1945/4	109613	1.10	109613	0.66	109613	0.55	109613	0.60
1946/4	103656	1.23	103656	1.10	103656	0.66	103656	0.55
1947/4	91600	1.72	91600	1.23	91600	1.10	91600	0.66
1948/4	99705	2.35	99705	1.72	99705	1.23	99705	1.10
1949/5	152800	2.30	152800	2.35	152800	1.72	152800	1.23
1950/5	69556	3.05	69556	2.30	69556	2.35	69556	1.72
1951/5	79049	1.72	79049	3.05	79049	2.30	79049	2.35
1952/5	105230	2.35	105230	1.72	105230	3.05	105230	2.30
1953/5	62578	1.55	62578	2.35	62578	1.72	62578	3.05
1954/5	70090	1.70	70090	1.55	70090	2.35	70090	1.72
1955/5	95641	2.45	95641	1.70	95641	1.55	95641	2.35
1956/5	66950	1.70	66950	2.45	66950	1.70	66950	1.55
1957/5	61002	1.47	61002	1.70	61002	2.45	61002	1.70
1958/5	43236	1.15	43236	1.47	43236	1.70	43236	2.45

1959/6	45205	1.87	45205	1.15	45205	1.47	45205	1.70
1960/6	31725	1.55	31725	1.87	31725	1.15	31725	1.47
1961/6	29600	1.99	29600	1.55	29600	1.87	29600	1.15
1962/6	27970	1.59	27970	1.99	27970	1.55	27970	1.87
1963/6	24527	1.48	24527	1.59	24527	1.99	24527	1.55
1964/6	41794	1.29	41794	1.48	41794	1.59	41794	1.99
1965/6	32034	1.17	32034	1.29	32034	1.48	32034	1.59
1966/6	13354	1.09	13354	1.17	13354	1.29	13354	1.48
1967/6	26394	1.01	26394	1.09	26394	1.17	26394	1.29
1968/6	23325	1.01	23325	1.01	23325	1.09	23325	1.17
1969/7	10613	2.31	10613	1.01	10613	1.01	10613	1.09
1970/7	5043	2.61	5043	2.31	5043	1.01	5043	1.01
1971/7	3765	1.87	3765	2.61	3765	2.31	3765	1.01
1972/7	10133	1.48	10133	1.87	10133	2.61	10133	2.31
1973/7	5869	2.43	5869	1.48	5869	1.87	5869	2.61
1974/7	18205	0.98	18205	2.43	18205	1.48	18205	1.87
1975/7	12930	0.52	12930	0.98	12930	2.43	12930	1.48
1976/7	16938	0.74	16938	0.52	16938	0.98	16938	2.43
1977/7	10998	1.03	10998	0.74	10998	0.52	10998	0.98
1978/7	14859	1.20	14859	1.03	14859	0.74	14859	0.52
1979/8	21314	0.80	21314	1.20	21314	1.03	21314	0.74
1980/8	15520	0.90	15520	0.80	15520	1.20	15520	1.03
1981/8	9878	1.37	9878	0.90	9878	0.80	9878	1.20
1982/8	5991	1.78	5991	1.37	5991	0.90	5991	0.80
1983/8	5221	3.00	5221	1.78	5221	1.37	5221	0.90
1984/8	10649	2.10	10649	3.00	10649	1.78	10649	1.37
1985/8	9011	1.50	9011	2.10	9011	3.00	9011	1.78
1986/8	9550	2.00	9550	1.50	9550	2.10	9550	3.00
1987/8	10961	2.30	10961	2.00	10961	1.50	10961	2.10
1988/8	6439	2.50	6439	2.30	6439	2.00	6439	1.50
1989/9	2462	2.50	2462	2.50	2462	2.30	2462	2.00
1990/9	1402	3.80	1402	2.50	1402	2.50	1402	2.30
1991/9	1932	2.90	1932	3.80	1932	2.50	1932	2.50
1992/9	2020	3.50	2020	2.90	2020	3.80	2020	2.50
1993/9	2844	2.25	2844	3.50	2844	2.90	2844	3.80
		2.20		2.25		3.50		2.90
		2.85		2.20		2.25		3.50
		3.39		2.85		2.20		2.25
		5.20		3.39		2.85		2.20
		6.30		5.20		3.39		2.85
				6.30		5.20		3.39
	-0.424595019					6.30		5.20
			-0.426685242					6.30
					-0.438396169			
							-0.411608658	

Correlation Values for Provincial Totals of Ermine vs Price										
Between 1919/20 - 1969/70										
Year	Ermine	Price same year	Ermine	Price 1 year out	Ermine	Price 2 years out	Ermine	Price 3 years out	Ermine	Price 4 years out
1919/20	118168	1.36	118168		118168		118168		118168	
1920/21	69664	0.46	69664	1.36	69664		69664		69664	
1921/22	67318	0.57	67318	0.46	67318	1.36	67318		67318	
1922/23	38210	0.62	38210	0.57	38210	0.46	38210	1.36	38210	
1923/24	63054	0.81	63054	0.62	63054	0.57	63054	0.46	63054	1.36
1924/25	56807	1.14	56807	0.81	56807	0.62	56807	0.57	56807	0.46
1925/26	84492	1.75	84492	1.14	84492	0.81	84492	0.62	84492	0.57
1926/27	87892	1.88	87892	1.75	87892	1.14	87892	0.81	87892	0.62
1927/28	88852	1.75	88852	1.88	88852	1.75	88852	1.14	88852	0.81
1928/29	108789	1.65	108789	1.75	108789	1.88	108789	1.75	108789	1.14
1929/30	110094	0.78	110094	1.65	110094	1.75	110094	1.88	110094	1.75
1930/31	71833	0.70	71833	0.78	71833	1.65	71833	1.75	71833	1.88
1931/32	88838	0.75	88838	0.70	88838	0.78	88838	1.65	88838	1.75
1932/33	72529	0.46	72529	0.75	72529	0.70	72529	0.78	72529	1.65
1933/34	116992	0.65	116992	0.46	116992	0.75	116992	0.70	116992	0.78
1934/35	80748	0.60	80748	0.65	80748	0.46	80748	0.75	80748	0.70
1935/36	56187	0.75	56187	0.60	56187	0.65	56187	0.46	56187	0.75
1936/37	137672	0.10	137672	0.75	137672	0.60	137672	0.65	137672	0.46
1937/38	113648	0.60	113648	0.10	113648	0.75	113648	0.60	113648	0.65
1938/39	72523	0.55	72523	0.60	72523	0.10	72523	0.75	72523	0.60
1939/40	103932	0.66	103932	0.55	103932	0.60	103932	0.10	103932	0.75
1940/41	136027	1.10	136027	0.66	136027	0.55	136027	0.60	136027	0.10
1941/42	150193	1.23	150193	1.10	150193	0.66	150193	0.55	150193	0.60
1942/43	113080	1.72	113080	1.23	113080	1.10	113080	0.66	113080	0.55
1943/44	155567	2.35	155567	1.72	155567	1.23	155567	1.10	155567	0.66
1944/45	124815	2.30	124815	2.35	124815	1.72	124815	1.23	124815	1.10
1945/46	109613	3.05	109613	2.30	109613	2.35	109613	1.72	109613	1.23
1946/47	103656	1.72	103656	3.05	103656	2.30	103656	2.35	103656	1.72
1947/48	91600	2.35	91600	1.72	91600	3.05	91600	2.30	91600	2.35
1948/49	99705	1.55	99705	2.35	99705	1.72	99705	3.05	99705	2.30
1949/50	152800	1.70	152800	1.55	152800	2.35	152800	1.72	152800	3.05
1950/51	69556	2.45	69556	1.70	69556	1.55	69556	2.35	69556	1.72
1951/52	79049	1.70	79049	2.45	79049	1.70	79049	1.55	79049	2.35
1952/53	105230	1.47	105230	1.70	105230	2.45	105230	1.70	105230	1.55
1953/54	62578	1.15	62578	1.47	62578	1.70	62578	2.45	62578	1.70
1954/55	70090	1.87	70090	1.15	70090	1.47	70090	1.70	70090	2.45
1955/56	95641	1.55	95641	1.87	95641	1.15	95641	1.47	95641	1.70
1956/57	66950	1.99	66950	1.55	66950	1.87	66950	1.15	66950	1.47
1957/58	61002	1.59	61002	1.99	61002	1.55	61002	1.87	61002	1.15
1958/59	43236	1.48	43236	1.59	43236	1.99	43236	1.55	43236	1.87



Correlation Values for Provincial Totals of Ermine vs Price								
Between 1919/20 - 1969/70								
Year	Ermine	Price 5 years out	Ermine	Price 6 years out	Ermine	Price 7 years out	Ermine	Price 8 years out
1919/20	118168		118168		118168		118168	
1920/21	69664		69664		69664		69664	
1921/22	67318		67318		67318		67318	
1922/23	38210		38210		38210		38210	
1923/24	63054		63054		63054		63054	
1924/25	56807	1.36	56807		56807		56807	
1925/26	84492	0.46	84492	1.36	84492		84492	
1926/27	87892	0.57	87892	0.46	87892	1.36	87892	
1927/28	88852	0.62	88852	0.57	88852	0.46	88852	1.36
1928/29	108789	0.81	108789	0.62	108789	0.57	108789	0.46
1929/30	110094	1.14	110094	0.81	110094	0.62	110094	0.57
1930/31	71833	1.75	71833	1.14	71833	0.81	71833	0.62
1931/32	88838	1.88	88838	1.75	88838	1.14	88838	0.81
1932/33	72529	1.75	72529	1.88	72529	1.75	72529	1.14
1933/34	116992	1.65	116992	1.75	116992	1.88	116992	1.75
1934/35	80748	0.78	80748	1.65	80748	1.75	80748	1.88
1935/36	56187	0.70	56187	0.78	56187	1.65	56187	1.75
1936/37	137672	0.75	137672	0.70	137672	0.78	137672	1.65
1937/38	113648	0.46	113648	0.75	113648	0.70	113648	0.78
1938/39	72523	0.65	72523	0.46	72523	0.75	72523	0.70
1939/40	103932	0.60	103932	0.65	103932	0.46	103932	0.75
1940/41	136027	0.75	136027	0.60	136027	0.65	136027	0.46
1941/42	150193	0.10	150193	0.75	150193	0.60	150193	0.65
1942/43	113080	0.60	113080	0.10	113080	0.75	113080	0.60
1943/44	155567	0.55	155567	0.60	155567	0.10	155567	0.75
1944/45	124815	0.66	124815	0.55	124815	0.60	124815	0.10
1945/46	109613	1.10	109613	0.66	109613	0.55	109613	0.60
1946/47	103656	1.23	103656	1.10	103656	0.66	103656	0.55
1947/48	91600	1.72	91600	1.23	91600	1.10	91600	0.66
1948/49	99705	2.35	99705	1.72	99705	1.23	99705	1.10
1949/50	152800	2.30	152800	2.35	152800	1.72	152800	1.23
1950/51	69556	3.05	69556	2.30	69556	2.35	69556	1.72
1951/52	79049	1.72	79049	3.05	79049	2.30	79049	2.35
1952/53	105230	2.35	105230	1.72	105230	3.05	105230	2.30
1953/54	62578	1.55	62578	2.35	62578	1.72	62578	3.05
1954/55	70090	1.70	70090	1.55	70090	2.35	70090	1.72
1955/56	95641	2.45	95641	1.70	95641	1.55	95641	2.35
1956/57	66950	1.70	66950	2.45	66950	1.70	66950	1.55
1957/58	61002	1.47	61002	1.70	61002	2.45	61002	1.70
1958/59	43236	1.15	43236	1.47	43236	1.70	43236	2.45





Correlation Values for Provincial Totals of Ermine vs Price								
Between 1970/71 - 1993/94								
Year	Ermine	Price 5 years out	Ermine	Price 6 years out	Ermine	Price 7 years out	Ermine	Price 8 years out
1970/71	5043		5043		5043		5043	
1971/72	3765		3765		3765		3765	
1972/73	10133		10133		10133		10133	
1973/74	5869		5869		5869		5869	
1974/75	18205		18205		18205		18205	
1975/76	12930	0.52	12930		12930		12930	
1976/77	16938	0.74	16938	0.52	16938		16938	
1977/78	10998	1.03	10998	0.74	10998	0.52	10998	
1978/79	14859	1.20	14859	1.03	14859	0.74	14859	0.52
1979/80	21314	0.80	21314	1.20	21314	1.03	21314	0.74
1980/81	15520	0.90	15520	0.80	15520	1.20	15520	1.03
1981/82	9878	1.37	9878	0.90	9878	0.80	9878	1.20
1982/83	5991	1.78	5991	1.37	5991	0.90	5991	0.80
1983/84	5221	3.00	5221	1.78	5221	1.37	5221	0.90
1984/85	10649	2.10	10649	3.00	10649	1.78	10649	1.37
1985/86	9011	1.50	9011	2.10	9011	3.00	9011	1.78
1986/87	9550	2.00	9550	1.50	9550	2.10	9550	3.00
1987/88	10961	2.30	10961	2.00	10961	1.50	10961	2.10
1988/89	6439	2.50	6439	2.30	6439	2.00	6439	1.50
1989/90	2462	2.50	2462	2.50	2462	2.30	2462	2.00
1990/91	1402	3.80	1402	2.50	1402	2.50	1402	2.30
1991/92	1932	2.90	1932	3.80	1932	2.50	1932	2.50
1992/93	2020	3.50	2020	2.90	2020	3.80	2020	2.50
1993/94	2844	2.25	2844	3.50	2844	2.90	2844	3.80
		2.20		2.25		3.50		2.90
		2.85		2.20		2.25		3.50
		3.39		2.85		2.20		2.25
		5.20		3.39		2.85		2.20
		6.30		5.20		3.39		2.85
				6.30		5.20		3.39
	-0.851801543					6.30		5.20
			-0.73241325					6.30
					-0.647146068			
							-0.589509706	

**Appendix 3. Mink, muskrat and ermine fur return totals of selected Manitoba Registered Trapline sections**

RTL #	Fur Production for Berens River Trapline Section																			
	1971-1972				1972-1973				1973-1974				1974-1975				1975-1976			
	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine
1	5	6	2	1	6	8	2	3	4	3	19	2	6	5	48	10	8	2	117	5
2	1	8	3	0	2	4	1	1	1	2	12	2	2	1	228	1	3	0	98	2
3	5	0	0	0	6	4	0	0	3	3	1	0	2	2	23	0	6	1	55	5
4	7	2	1	0	9	2	0	0	5	1	0	0	3	5	18	0	6	0	37	0
5	3	8	30	0	3	9	79	0	4	3	0	5	3	2	215	0	~	~	~	~
6	1	0	6	0	1	0	0	0	2	0	8	0	5	5	91	3	5	4	47	0
7	2	0	20	0	3	6	0	0	2	0	0	0	4	3	449	3	~	~	~	~
9	2	0	0	0	2	0	6	0	~	~	~	~	3	2	27	0	3	2	20	0
10	4	1	4	0	3	5	5	0	4	3	20	0	5	7	0	9	7	1	262	0
11	2	0	5	0	3	0	0	0	3	0	5	0	4	0	29	0	4	0	131	8
12	4	2	16	0	3	1	1	0	3	0	24	0	3	0	78	0	1	0	36	0
13	3	3	8	0	4	2	58	0	1	0	0	0	2	0	121	0	5	0	47	0
14	~	~	~	~	2	7	3	0	1	0	28	0	3	1	129	1	~	~	~	~
15	5	0	12	0	3	0	9	0	3	0	7	0	2	0	1	3	6	0	2	0
16	4	7	21	0	5	0	26	0	4	2	0	0	4	0	91	0	5	0	0	0
17	~	~	~	~	2	0	3	0	2	0	6	0	3	2	40	3	2	0	36	0
18	~	~	~	~	2	6	2	0	3	0	0	0	2	0	12	7	1	14	24	52
19	3	0	2	0	4	11	3	28	~	~	~	~	4	4	63	13	4	0	2	0
A-B	4	30	48	0	3	0	1	0	4	7	1	5	5	4	190	27	3	8	178	15
C	1	5	1	0	4	0	1	0	1	0	0	0	4	0	31	15	4	0	25	0
Total	56	72	179	1	70	65	200	32	50	24	131	14	69	43	1884	95	73	32	1117	87

RTL #	1976-1977				1977-1978				1978-1979				1983-1984				1984-1985			
	# trappers	Mink	Muskrat	Fmine	# trappers	Mink	Muskrat	Fmine	# trappers	Mink	Muskrat	Fmine	# trappers	Mink	Muskrat	Fmine	# trappers	Mink	Muskrat	Fmine
1	3	3	12	1	5	7	37	2	10	24	40	11	4	10	128	0	6	101	5	
2	4	9	3	0	2	4	12	0	2	5	50	1	1	0	0	0	1	0	0	
3	1	0	0	0	3	0	3	0	2	20	16	3	2	0	0	0	1	0	3	
4	6	26	10	9	3	7	30	3	9	9	38	0	6	1	25	0	5	1	29	
5	4	24	121	30	3	2	113	0	3	34	39	5	3	1	40	0	1	0	1	
6	2	0	77	0	3	2	21	0	6	52	270	12	2	1	127	0	2	0	4	
7	1	0	2	0	3	1	17	0	1	0	29	5	2	1	55	5	1	0	0	
9	1	0	0	0	1	1	19	0	2	12	47	8	2	0	10	0	2	2	42	
10	3	0	0	2	4	1	18	0	6	10	0	1	6	1	0	0	1	2	85	
11	3	4	12	5	3	12	17	3	8	16	84	6	6	1	4	0	3	1	33	
12	1	0	0	0	4	0	55	0	5	3	31	9	2	5	55	11	~	~	~	
13	4	24	50	0	4	4	89	0	8	10	79	10	5	0	50	0	3	0	33	
14	2	3	55	0	1	5	30	0	~	~	~	~	~	~	~	~	~	~	~	
15	2	1	33	0	3	2	13	0	3	0	12	0	~	~	~	~	1	0	2	
16	4	0	63	0	3	1	25	0	7	10	33	2	4	0	77	1	3	0	84	
17	~	~	~	~	1	0	5	0	5	5	30	0	1	1	19	0	1	0	2	
18	3	11	14	3	2	1	14	1	1	22	13	7	2	2	17	5	2	4	1	
19	2	3	2	0	~	~	~	~	4	4	0	6	1	1	0	0	5	4	41	
A-B	3	26	15	7	4	2	18	0	3	32	0	4	~	~	~	~	~	~	~	
C	3	0	5	0	3	0	17	0	4	0	166	0	~	~	~	~	~	~	~	
20														5	0	1	0	0	33	0
21													4	20	50	7	~	~	~	~
Total	52	134	474	57	55	52	553	9	89	268	977	90	58	45	658	29	58	21	491	26

RTL #	Fur Production for Berens River Trapline Section																			
	1985-1986				1986-1987				1987-1988				1988-1989				1989-1990			
	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine
1	4	9	20	15	3	16	32	13	4	5	6	9	29	4	18	25	3	3	8	0
2	1	0	2	0	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
3	1	0	2	0	1	0	1	0	2	7	17	0	0	2	0	0	0	1	4	0
4	5	3	8	22	5	9	6	15	2	11	12	22	22	2	~	~	2	10	0	0
6	2	4	0	0	1	0	0	0	1	1	105	0	0	~	~	~	~	~	~	~
7	1	0	4	0	1	1	8	0	~	~	~	~	~	~	~	~	~	~	~	~
9	2	1	23	0	2	3	16	1	1	0	0	0	0	~	~	~	~	~	~	~
10	2	0	32	2	1	3	21	0	~	~	~	~	~	~	6	0	0	2	7	0
11	2	3	26	1	2	21	30	9	~	~	~	~	~	1	0	0	0	~	~	~
12	1	0	3	0	3	0	2	0	3	0	104	0	0	~	~	~	~	~	~	~
13	3	0	55	0	1	1	0	0	1	1	15	0	0	1	0	0	0	~	~	~
14	~	~	~	~	1	1	13	0	3	12	93	11	11	~	~	~	~	~	~	~
15	1	0	2	0	~	~	~	~	2	0	0	0	0	1	0	0	0	~	~	~
16	2	1	58	6	3	0	27	0	1	0	13	0	0	1	2	41	0	1	3	0
17	1	0	5	0	1	0	2	0	1	5	8	1	1	~	~	~	~	~	~	~
18	2	4	6	21	2	4	0	17	2	4	15	19	19	2	5	0	8	2	3	0
19	4	13	65	26	2	6	10	0	2	5	108	13	13	~	~	~	~	1	4	0
20	1	0	5	0	1	0	2	0	~	~	~	~	~	~	~	~	~	~	~	~
Open					6	5	32	0	3	5	2	0	0	4	5	32	8	~	~	~
Total	35	38	316	93	36	70	202	55	28	56	498	95	18	36	98	19	12	46	8	1

RTL #	Fur Production for Berens River Trapline Section											
	1991-1992				1992-1993				1993-1994			
	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine
1	3	3	4	0	-	-	-	-	1	0	1	0
4	2	0	0	0	-	-	-	-	-	-	-	-
5	-	-	-	-	1	0	0	0	-	-	-	-
6	-	-	-	-	2	4	12	10	-	-	-	-
7	-	-	-	-	1	0	13	0	-	-	-	-
8	-	-	-	-	3	5	2	0	-	-	-	-
9	1	0	0	0	-	-	-	-	-	-	-	-
10	1	1	0	0	-	-	-	-	1	2	24	0
12	1	0	0	0	-	-	-	-	-	-	-	-
13	1	1	1	0	3	6	0	6	-	-	-	-
14	1	0	0	0	-	-	-	-	-	-	-	-
16	1	0	0	0	-	-	-	-	1	0	0	0
17	-	-	-	-	-	-	-	-	1	0	2	0
18	2	5	0	5	2	0	0	1	1	0	0	6
20	1	0	0	0	-	-	-	-	1	0	0	-
Total	14	10	5	5	12	15	27	17	5	2	27	6

RTL #	Fur Production for Bloodvein Trapline Section																			
	1961-1962			1962-1963			1963-1964			1964-1965			1965-1966							
	# trappers	Mink	Muskkrat	Fmine	# trappers	Mink	Muskkrat	Fmine	# trappers	Mink	Muskkrat	Fmine	# trappers	Mink	Muskkrat	Fmine				
1	3	6	0	0	3	5	82	22	3	6	49	3	2	1	81	6				
2	-	-	-	-	3	5	16	9	3	7	60	22	2	4	55	19				
3	-	-	-	-	-	-	-	-	-	-	-	-	1	4	53	15				
4	2	7	0	3	5	1	33	0	5	3	52	3	4	8	261	10				
5	4	14	45	27	5	6	46	17	5	3	75	4	5	0	86	0				
6	2	0	0	5	1	0	3	1	1	1	27	0	1	0	27	0				
7	4	24	53	25	5	7	33	10	3	1	57	1	6	0	32	0				
8	7	15	64	13	8	23	258	18	12	15	203	21	6	0	192	0				
10	2	7	0	4	2	0	130	0	1	0	2	1	3	1	298	4				
11	7	56	76	15	7	10	75	5	8	6	284	10	8	14	378	25				
12	3	1	12	0	3	0	23	0	3	0	100	0	2	0	84	0				
13/14/15	1	3	0	12	3	4	27	13	4	5	109	30	3	5	30	10				
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Total	35	133	250	104	45	61	726	95	48	47	1018	95	43	37	1577	89	55	68	1362	201

RTL #	Fur Production for Bloodvein Trapline Section																			
	1966-1967				1967-1968				1968-1969				1969-1970				1971-1972			
	# trappers	Mink	Muskrat	Fmine	# trappers	Mink	Muskrat	Fmine	# trappers	Mink	Muskrat	Fmine	# trappers	Mink	Muskrat	Fmine	# trappers	Mink	Muskrat	Fmine
1	2	1	90	0	2	12	36	16	2	12	56	3	2	10	51	2	2	12	0	0
2	3	3	87	6	3	3	46	4	2	13	21	8	3	12	58	3	1	4	0	2
3	3	4	87	3	1	2	12	0	1	25	0	8	1	5	32	0	6	17	29	3
4	1	0	29	0	8	10	66	17	4	18	28	0	3	8	23	0	5	15	6	1
5	5	1	196	9	5	8	96	3	5	54	21	27	3	6	57	1	4	1	1	1
6	1	0	12	0	2	3	16	0	1	0	3	0	~	~	~	~	~	~	~	~
7	8	0	101	2	5	1	18	0	7	21	63	25	7	11	49	1	7	14	4	4
8	6	3	137	10	8	10	80	3	6	18	50	0	3	6	55	0	2	2	4	0
10	4	5	172	4	5	20	75	31	4	14	57	15	4	18	146	31	2	0	0	0
11	5	11	172	10	6	11	160	28	8	53	119	40	6	31	88	0	9	56	65	4
12	2	0	78	0	1	4	45	7	1	2	38	2	1	3	48	0	1	6	0	0
13	3	1	224	0	2	3	0	0	1	5	4	0	1	0	0	0	9	21	6	5
14	1	1	300	11	1	17	0	12	2	13	32	26	1	1	0	1	Combined With RTL#13	Combined With RTL#13	Combined With RTL#13	Combined With RTL#13
16	1	1	26	0	1	1	10	0	1	2	0	0	~	~	~	~	~	~	~	~
Total	45	31	1711	55	50	87	660	121	45	250	492	154	35	111	607	39	48	148	115	20

RTL #	Fur Production for Bloodvein Trapline Section																			
	1972-1973				1973-1974				1974-1975				1975-1976				1976-1977			
	# trappers	Mink	Muskat	Fmline	# trappers	Mink	Muskat	Fmline	# trappers	Mink	Muskat	Fmline	# trappers	Mink	Muskat	Fmline	# trappers	Mink	Muskat	Fmline
1	2	4	6	8	3	4	6	0	3	2	37	21	3	12	28	50	3	8	8	14
2	1	1	4	3	1	0	0	0	1	0	39	0	8	4	208	16	3	14	38	50
3	6	8	38	4	3	1	3	0	1	0	7	2	8	4	208	16	3	14	38	50
4	1	0	0	0	4	0	2	0	3	8	46	18	5	3	17	0	1	7	4	0
5	5	0	2	1	3	1	8	1	4	2	67	13	2	1	41	5	3	12	41	9
6	1	0	0	11	-	-	-	-	3	6	44	6	1	0	0	0	-	-	-	-
7	5	4	9	0	3	2	13	0	4	0	39	12	2	0	38	0	3	10	13	4
8	2	4	0	0	2	0	0	0	4	2	24	5	1	0	0	0	1	1	0	0
10	2	3	61	0	2	0	53	0	4	0	70	0	-	-	-	-	2	0	2	2
11	8	17	9	41	7	5	11	2	5	5	91	26	5	1	80	1	3	6	44	8
12	1	0	2	0	1	0	4	0	4	0	91	0	-	-	-	-	2	4	24	2
13	1	3	5	0	7	0	20	1	4	5	4	9	7	1	41	27	6	20	62	38
14/15	3	2	0	9	5	0	0	0	5	0	0	0	5	0	0	0	4	10	43	28
Open																				
Total	38	46	136	77	36	13	120	4	45	30	559	112	38	32	496	127	34	92	315	132

RTL #	Fur Production for Bloodvein Trapline Section																			
	1981-1982				1982-1983				1983-1984				1984-1985				1985-1986			
	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine
1	4	2	0	7	5	2	3	23	4	6	1	7	4	6	3	13	3	9	5	51
3	1	2	2	2	3	0	0	0	1	1	0	0	2	0	8	3	-	-	-	-
4	5	8	0	0	1	0	0	0	4	1	0	0	5	3	5	1	1	0	17	0
5	5	1	0	1	7	1	32	0	1	0	8	0	-	-	-	-	1	0	2	0
6	-	-	-	-	1	0	0	0	-	-	-	-	-	0	8	0	1	0	0	1
7	2	1	0	4	3	1	0	0	5	2	72	0	2	0	58	0	1	0	34	0
8	4	0	1	0	2	0	0	10	1	1	3	1	1	0	0	1	1	0	0	15
10	2	4	1	7	-	-	-	-	-	-	-	-	1	0	54	6	1	4	3	12
11	6	22	14	2	6	4	25	0	4	1	64	0	4	0	56	0	1	1	10	2
12	3	8	0	6	2	0	18	3	1	0	24	0	-	-	-	-	-	-	-	-
13/14/15	8	14	21	25	4	3	3	0	3	4	10	1	-	-	-	-	1	9	5	2
Total	40	62	39	54	34	11	61	36	24	16	182	9	20	9	192	24	11	23	76	83

RTL #		Fur Production for Bloodvein Trapline Section																			
		1986-1987				1987-1988				1988-1989				1989-1990				1991-1992			
		# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine
1	3	6	9	34	5	7	46	14	1	3	0	1	1	1	0	0	1	1	1	1	1
2	~	~	~	~	1	0	0	0	~	~	~	~	~	~	~	~	~	~	~	~	~
3	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
4	1	0	14	0	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
5	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
6	3	10	15	14	2	7	21	24	2	9	7	36	8	2	15	3	18	2	20	0	32
7	1	0	18	0	1	0	0	0	~	~	~	~	~	~	~	~	~	~	~	~	~
8	1	1	33	4	1	5	0	1	3	1	13	2	~	3	5	7	6	~	3	0	12
10	1	4	22	0	1	0	0	0	~	~	~	~	~	~	~	~	~	~	~	~	~
11	1	0	26	0	1	12	6	2	1	2	0	0	~	~	~	~	~	~	~	~	~
12	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
13	1	0	148	0	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
14	~	~	~	~	2	3	20	11	3	~	~	~	~	~	~	~	~	~	~	~	~
15	1	2	20	0	~	~	~	~	~	15	1	21	~	~	~	~	~	~	~	~	~
Total	13	23	305	52	14	31	93	52	12	34	25	68	8	8	23	14	24	8	32	8	44

RTL #	Fur Production for Bloodvein Trapline Section											
	1992-1993				1993-1994							
	# trappers	Mink	Muskrat	Fmine	# trappers	Mink	Muskrat	Fmine				
4	~	~	~	~	1	0	20	0				
5	1	0	0	0	~	~	~	~				
6	2	4	12	10	2	1	6	30				
7	1	0	13	0	3	1	77	0				
8	3	5	2	0	3	5	11	5				
10	~	~	~	~	1	0	0	0				
11	~	~	~	~	1	0	11	0				
12	~	~	~	~	2	0	0	11				
13	3	6	0	6	2	1	0	0				
<b>Total</b>	<b>10</b>	<b>15</b>	<b>27</b>	<b>16</b>	<b>15</b>	<b>8</b>	<b>125</b>	<b>46</b>				

RTL #	1961-1962				1962-1963				1963-1964				1965-1966				1966-1967				
	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	
1	1	1	1	1	2	6	0	1	4	1	0	4	1	7	28	6	1	1	1	1	
2	1	1	1	1	3	7	5	25	0	3	4	0	25	3	6	44	16	1	1	1	
3	1	1	1	1	3	7	43	3	0	1	0	0	0	11	35	0	1	1	1	1	
4	1	1	1	1	4	26	22	21	32	3	6	29	5	4	34	14	1	1	1	1	
5	1	1	1	1	1	1	0	22	0	1	0	1	1	1	1	1	1	1	1	1	
6	1	1	1	1	1	3	4	14	0	1	0	0	0	1	33	16	1	1	1	1	
7	1	1	1	1	1	0	4	0	30	1	1	25	1	4	66	52	1	1	1	1	
8	1	1	1	1	4	21	87	13	55	1	5	35	1	9	25	9	1	1	1	1	
9	1	1	1	1	1	0	0	0	9	1	0	0	1	0	3	0	1	1	1	1	
10	1	1	1	1	1	4	6	25	9	1	1	33	1	2	34	22	1	1	1	1	
11	1	1	1	1	1	0	0	0	0	2	0	0	2	0	40	0	1	1	1	1	
12	1	5	1	37	1	5	0	34	20	1	1	33	1	3	35	37	1	1	1	1	
13	1	1	1	1	1	13	35	8	71	1	4	4	1	21	95	15	1	1	1	1	
15	1	1	1	1	1	6	7	4	75	1	6	3	1	7	31	5	1	1	1	1	
16	1	22	27	9	1	4	30	14	121	1	17	9	1	14	71	14	1	1	1	31	
17	1	0	0	0	1	0	4	0	2	1	3	7	1	0	0	0	1	1	1	0	
18	1	7	4	16	1	12	22	7	0	1	5	10	1	7	80	20	1	1	1	0	
19	1	4	16	16	1	3	19	22	12	1	4	6	1	4	53	26	1	1	1	13	
20	1	1	1	1	1	9	11	8	19	1	6	7	1	6	7	3	1	1	1	1	
21	1	5	0	27	1	7	6	36	6	1	5	48	1	4	35	0	1	1	1	1	
23	1	1	0	0	1	0	1	10	0	1	0	15	1	0	15	1	1	1	1	1	
24	1	4	3	3	1	0	20	5	44	1	2	20	1	0	66	20	1	1	1	1	
25	2	3	0	8	1	0	0	0	32	1	2	2	1	5	74	3	1	1	1	1	
26	2	4	4	4	1	0	0	0	36	1	8	12	1	2	74	8	1	1	1	1	
	Continued on Next Page				Continued on Next Page				Continued on Next Page				Continued on Next Page				Continued on Next Page				
SubTotals	15	55	55	120	35	134	326	272	573	31	81	573	328	30	117	978	287	4	17	343	44

RTL #	1961-1962 Cont.				1962-1963 Cont.				1963-1964 Cont.				1965-1966 Cont.				1966-1967 Cont.			
	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine
27	1	10	86	5	1	4	28	4	1	3	60	12	1	1	40	5	1	0	68	0
28	1	5	45	2	1	2	15	2	2	10	72	8	1	2	40	0	1	0	234	0
29	1	21	85	10	1	18	26	26	1	13	68	20	1	23	103	20	1	33	405	17
30	1	7	28	2	1	9	34	0	1	7	57	0	~	~	~	~	~	~	~	~
31	1	5	0	3	1	2	10	1	1	1	4	4	1	0	7	0	~	~	~	~
35	1	3	0	6	1	3	0	5	1	0	20	2	~	~	~	~	~	~	~	~
36	1	2	28	0	1	7	7	1	~	~	~	~	~	~	~	~	~	~	~	~
37	1	7	37	4	1	6	32	8	2	6	58	6	1	0	43	0	1	11	45	12
38	2	7	26	4	2	8	42	5	1	8	61	0	1	8	16	7	1	4	8	3
39	1	10	10	5	1	7	29	6	2	3	96	3	1	1	76	1	1	8	0	0
40	1	31	14	11	1	9	25	2	1	13	94	9	2	11	179	0	1	1	46	4
41	1	16	130	11	1	9	84	0	1	12	115	14	1	9	130	18	1	13	136	12
42	1	13	7	11	1	13	8	9	1	6	28	32	1	18	0	14	1	6	12	21
43	1	9	0	0	1	8	0	15	1	6	0	26	1	11	27	4	~	~	~	~
46	1	9	0	0	2	2	6	4	2	0	46	0	1	2	16	0	1	2	0	2
47	1	23	40	65	1	14	80	6	1	15	92	33	1	18	204	65	~	~	~	~
48	1	0	0	0	1	0	0	0	1	1	1	0	1	2	1	2	~	~	~	~
49	1	9	8	11	1	11	12	17	1	7	43	17	1	9	53	31	~	~	~	~
50	1	28	3	22	1	29	13	20	1	12	44	23	1	9	25	26	~	~	~	~
52	1	13	119	32	1	11	46	20	2	7	129	34	1	11	372	29	~	~	~	~
53	1	15	0	0	1	4	0	5	1	1	0	10	1	4	30	6	~	~	~	~
54	1	22	0	24	1	10	0	3	1	8	3	8	1	17	84	14	~	~	~	~
55	1	4	8	9	1	8	5	6	1	5	42	24	1	9	6	17	~	~	~	~
58	1	1	0	1	2	2	0	8	2	1	5	23	2	6	6	22	~	~	~	~
SubTotals	22	234	458	221	24	172	433	141	25	119	938	268	20	145	1275	256	7	45	247	54
Totals	37	289	513	341	59	306	759	413	56	200	1511	596	50	262	2253	543	11	62	590	98

RTL #	Fur Production for Duck Mountain Trapping Section																			
	1968-1969				1969-1970				1970-1971				1971-1972				1972-1973			
	# trappers	Mink	Muskat	Ftmine	# trappers	Mink	Muskat	Ftmine	# trappers	Mink	Muskat	Ftmine	# trappers	Mink	Muskat	Ftmine	# trappers	Mink	Muskat	Ftmine
1	3	7	5	5	2	42	7	18	3	21	39	5	3	15	135	1	3	13	30	5
2	2	6	2	4	1	1	1	2	1	4	11	1	2	5	79	0	2	11	13	1
3	2	10	33	14	2	12	44	9	2	1	99	4	3	1	183	4	2	4	62	0
4	1	18	0	11	1	1	0	4	1	5	400	7	1	3	727	27	1	11	196	6
5	1	31	51	59	1	24	234	47	1	0	770	4	1	25	1721	6	1	60	625	8
6	1	3	20	0	~	~	~	~	1	0	0	0	2	0	330	0	1	0	85	0
7	2	17	85	55	2	46	50	33	2	39	330	6	2	38	647	12	2	18	91	22
8	3	43	59	129	2	45	179	72	4	41	230	43	6	44	208	13	5	30	120	20
9	~	~	~	~	1	9	60	5	1	1	0	0	1	2	500	0	1	2	70	14
10	3	30	105	40	3	22	79	21	2	15	505	3	2	15	1192	25	2	45	467	12
11	1	9	45	15	2	6	20	6	1	0	90	5	1	0	246	2	1	3	80	10
12	1	17	211	9	1	10	180	5	1	7	228	3	1	2	670	0	1	18	281	9
13	1	27	100	34	1	31	164	7	1	27	227	5	1	9	738	15	1	52	168	12
14	1	49	109	92	1	35	107	28	1	24	119	7	1	32	220	9	1	36	320	17
15	2	11	25	9	2	15	85	1	1	7	40	0	2	3	59	1	2	3	1	0
16	1	1	13	16	1	0	37	0	1	5	135	10	1	13	437	15	1	23	187	18
17	1	53	150	206	1	56	6	12	1	53	45	26	1	34	46	25	1	19	160	15
18	2	39	95	17	2	19	50	5	2	4	70	0	2	1	128	0	2	18	7	0
19	2	20	39	22	2	14	45	30	1	11	129	38	1	8	59	7	2	12	100	15
20	1	6	3	4	1	6	0	0	1	3	30	0	1	2	57	1	1	12	30	1
21	2	22	78	8	1	22	29	8	3	7	147	4	2	9	60	0	4	41	395	5
22	1	17	0	15	1	24	18	0	2	17	10	11	2	7	34	0	2	14	125	8
23	1	20	10	9	1	30	22	0	1	14	27	0	1	9	12	0	1	17	2	1
24	1	9	113	39	2	12	230	14	2	28	117	32	2	7	138	20	2	26	0	14

25	1	0	0	0	2	8	75	14	2	2	67	7	2	15	161	0	2	5	50	3
26	2	7	3	10	2	14	28	0	2	1	9	0	1	5	0	0	2	6	0	0
27	1	14	52	45	1	21	46	28	1	12	37	22	1	14	56	0	1	18	40	28
28	2	2	0	8	1	14	20	6	1	15	40	12	1	21	84	16	1	21	28	11
<b>Totals</b>	<b>42</b>	<b>488</b>	<b>1406</b>	<b>875</b>	<b>40</b>	<b>539</b>	<b>1816</b>	<b>375</b>	<b>43</b>	<b>364</b>	<b>3951</b>	<b>255</b>	<b>47</b>	<b>339</b>	<b>8927</b>	<b>199</b>	<b>48</b>	<b>538</b>	<b>3733</b>	<b>255</b>

RTL #	Fur Production for Duck Mountain Trapping Section																			
	1973-1974				1974-1975				1984-1985				1985-1986				1986-1987			
	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine
1	3	20	13	3	3	6	30	11	2	7	9	24	2	9	23	9	2	11	83	38
2	2	0	21	0	2	4	6	0	1	8	22	2	1	7	7	3	2	9	20	3
3	1	17	0	0	1	3	13	9	~	~	~	~	~	2	0	0	1	2	58	2
4	1	0	0	0	1	2	0	17	1	0	76	1	1	7	0	0	2	9	18	14
5	1	30	25	16	2	24	312	26	1	20	207	61	2	30	184	20	1	15	127	20
6	1	0	2	0	1	0	0	0	1	1	57	1	1	3	14	0	1	1	65	1
7	2	21	5	6	2	10	17	80	1	1	0	2	1	4	13	1	1	1	7	9
8	3	16	18	0	3	19	30	95	3	6	30	50	3	14	41	42	3	16	10	55
9	1	2	41	0	2	2	122	0	1	0	1	5	1	0	12	0	2	3	22	0
10	2	39	3	8	2	13	203	34	2	1	12	1	3	15	40	4	2	5	11	0
11	2	0	40	0	2	2	108	27	2	0	211	12	3	7	246	12	3	7	110	14
12	1	18	21	2	1	8	48	13	1	1	187	1	1	2	113	1	2	5	293	6
13	1	33	114	7	1	25	289	32	1	0	456	1	2	10	169	6	2	28	464	13
14	1	77	31	29	1	28	185	47	~	~	~	~	1	1	129	5	1	4	53	16
15	2	0	0	0	2	6	12	0	1	4	24	3	3	3	12	1	1	7	61	10
16	1	12	27	8	1	11	69	54	1	2	44	23	1	2	15	14	1	8	108	39
17	1	15	20	25	1	29	200	189	1	6	56	13	1	15	47	19	2	8	4	11
18	3	3	15	0	3	4	3	1	2	0	135	0	~	~	~	~	2	0	71	0
19	1	13	25	5	2	13	43	8	1	2	49	12	1	1	72	0	2	3	184	9
20	1	9	0	0	2	5	54	0	1	5	53	1	2	5	9	0	2	4	317	2
21	4	20	90	1	4	9	30	3	1	0	103	0	2	0	379	0	2	10	609	8
22	2	3	1	0	2	17	6	3	1	6	59	3	1	3	3	0	1	0	9	0
23	2	6	2	0	2	28	26	40	2	0	3	8	2	2	2	8	2	1	6	2
24	2	9	0	0	1	23	64	28	1	0	0	0	1	4	16	2	1	3	77	6

25	1	4	33	0	1	7	160	6	~	~	~	~	1	1	84	0	1	5	77	9
26	1	1	1	0	1	2	21	7	1	1	39	73	1	4	34	35	1	12	81	61
27	1	8	30	4	2	12	33	32	1	0	20	0	1	1	0	0	1	3	0	6
28	1	12	1	18	1	1	2	33	2	2	142	73	1	9	308	27	1	3	10	6
<b>Totals</b>	<b>45</b>	<b>388</b>	<b>579</b>	<b>132</b>	<b>49</b>	<b>313</b>	<b>2086</b>	<b>795</b>	<b>33</b>	<b>73</b>	<b>1995</b>	<b>370</b>	<b>42</b>	<b>161</b>	<b>1970</b>	<b>209</b>	<b>45</b>	<b>183</b>	<b>2935</b>	<b>360</b>

Fur Production for Duck Mountain Trapping Section

RTL #	1987-1988				1988-1989				1989-1990				1991-1992				1992-1993			
	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine
1	2	18	5	19	3	22	17	23	2	10	0	4	1	2	1	6	3	8	20	4
2	1	5	0	0	~	~	~	~	1	3	0	0	1	2	0	1	~	~	~	~
3	1	1	2	0	1	0	0	0	1	3	0	0	1	2	0	0	1	1	0	0
4	2	7	59	6	2	5	10	3	2	4	21	0	2	2	21	5	2	5	4	3
5	1	23	40	9	1	13	1	1	1	3	2	0	~	~	~	1	8	7	0	
6	1	4	4	0	~	~	~	~	~	~	~	~	1	0	0	0	~	~	~	~
7	1	1	6	3	~	~	~	~	1	0	0	2	~	~	~	~	1	0	0	0
8	3	18	53	53	3	10	8	30	3	17	12	16	4	10	48	3	4	5	10	13
9	1	13	37	5	1	6	8	12	1	5	1	0	1	0	6	0	1	5	2	1
10	2	11	34	9	1	9	16	3	1	5	2	0	1	2	10	9	1	7	2	3
11	3	5	44	11	2	8	112	12	2	10	0	0	2	10	74	9	1	15	0	9
12	2	7	216	12	2	6	385	28	2	3	11	3	1	2	21	14	1	0	9	5
13	2	16	160	3	1	17	147	1	1	9	5	1	1	0	12	1	1	10	25	7
14	2	18	78	37	1	0	0	13	1	2	1	0	~	~	~	~	~	~	~	~
15	1	10	27	12	1	7	1	9	2	0	0	8	1	3	0	1	1	3	0	1
16	1	6	118	25	1	2	3	11	1	4	2	9	1	1	0	0	1	0	1	5
17	2	11	16	4	2	4	3	14	1	10	1	1	1	3	0	0	1	0	0	0
18	1	3	8	6	1	5	0	3	2	12	0	0	~	~	~	~	1	3	2	0
19	2	13	31	2	2	0	36	2	1	2	0	1	1	2	22	14	1	2	4	4
20	2	42	722	18	2	21	142	46	2	4	170	7	2	5	0	0	1	3	0	1
21	2	10	106	4	2	3	290	5	2	14	0	2	3	12	208	23	2	15	60	11
22	1	12	0	0	1	1	0	1	1	0	0	0	1	0	0	0	1	0	0	0
23	2	0	2	1	2	3	8	2	2	1	0	1	2	0	8	4	2	0	0	0
24	1	3	37	4	1	0	19	3	1	0	2	0	1	0	0	1	1	2	0	1

25	1	0	35	1	2	1	4	0	1	0	2	0	1	2	0	0	0	1	1	0	1
26	1	11	12	38	1	1	6	18	1	10	2	19	1	13	4	33	1	11	35	18	
27	2	4	68	5	1	3	1	4	1	2	0	7	1	1	2	15	1	17	35	14	
28	1	0	0	0	~	~	~	~	2	2	3	3	1	0	0	0	2	1	0	6	
<b>Totals</b>	<b>44</b>	<b>272</b>	<b>1920</b>	<b>287</b>	<b>37</b>	<b>147</b>	<b>1217</b>	<b>244</b>	<b>39</b>	<b>135</b>	<b>237</b>	<b>84</b>	<b>33</b>	<b>74</b>	<b>437</b>	<b>139</b>	<b>34</b>	<b>122</b>	<b>216</b>	<b>107</b>	

**Fur Production for Duck Mountain Trapping Section**

RTL #	# trappers	1993-1994			Ermine
		Mink	Muskat	Ermine	
1	2	1	12	5	
2	~	~	~	~	
3	1	0	0	0	
4	1	5	1	0	
5	1	5	20	2	
6	~	~	~	~	
7	1	0	0	0	
8	4	3	13	5	
9	1	2	2	1	
10	~	~	~	~	
11	2	5	158	6	
12	1	0	115	2	
13	3	7	36	6	
14	2	1	19	3	
15	1	0	0	0	
16	2	1	1	2	
17	2	1	5	0	
18	~	~	~	~	
19	1	2	168	3	
20	2	8	17	0	
21	1	0	5	1	
22	1	1	7	0	
23	2	0	4	0	
24	1	0	0	6	



RTL #	Fur Production for Hole River Trapping Section																			
	1962-1963				1963-1964				1966-1967				1967-1968				1968-1969			
	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine
1	4	8	13	8	3	1	94	8	3	4	65	4	4	0	82	0	3	14	20	6
2	2	0	0	0	3	2	47	5	1	8	192	0	3	17	54	7	2	12	2	0
3	5	13	34	0	4	3	102	2	2	17	206	5	3	7	0	0	3	10	7	0
4	3	0	30	0	1	1	66	3	~	~	~	~	5	9	103	5	3	7	9	5
5	4	4	24	16	1	3	36	3	2	0	32	0	4	0	0	0	5	9	31	8
6	2	0	0	0	3	6	122	5	3	1	59	0	4	1	35	1	5	1	51	0
8	4	3	11	10	3	3	23	0	3	0	13	0	2	2	9	1	3	2	0	0
9	1	5	0	7	1	3	58	2	1	1	0	0	1	0	0	0	1	13	9	9
10	2	28	49	22	1	26	133	15	2	8	5	1	1	1	0	2	1	13	9	9
11	3	1	40	0	2	0	12	11	3	5	84	8	6	6	135	11	3	14	67	23
12	6	2	54	0	3	5	1	2	3	7	45	18	5	3	34	4	1	1	0	0
13	5	0	4	0	4	3	58	2	4	4	61	4	5	6	46	1	5	40	107	37
16	2	6	4	12	~	~	~	~	~	~	~	~	~	~	~	~	~	38	124	13
17	4	3	1	0	5	4	54	18	4	6	13	15	5	9	15	9	3	6	0	0
18	2	1	50	2	3	1	108	11	3	7	121	17	3	4	97	4	3	7	22	4
19	2	0	4	0	2	0	0	0	1	0	0	0	3	1	15	0	3	0	0	0
20	2	0	0	0	5	4	116	18	1	0	7	0	2	8	35	0	1	0	0	0
21	2	0	0	0	2	0	43	0	~	~	~	~	1	0	5	0	1	5	0	0
22	2	8	66	6	2	3	62	0	2	0	28	0	2	7	5	0	2	24	69	30
Black Isl.	~	~	~	~	2	6	60	8	1	0	36	0	1	0	0	0	~	~	~	~
Total	57	82	384	83	50	74	1195	113	39	68	967	72	60	81	670	45	50	216	527	144

RTL #	1968-1970				1970-1971				1971-1972				1973-1974				1974-1975			
	# trappers	Mink	Muskat	Furmine	# trappers	Mink	Muskat	Furmine	# trappers	Mink	Muskat	Furmine	# trappers	Mink	Muskat	Furmine	# trappers	Mink	Muskat	Furmine
1	4	3	57	0	5	5	171	0	4	0	0	0	5	1	9	4	8	5	94	22
2	2	18	91	1	2	0	139	0	2	0	0	0	3	0	0	0	3	0	53	4
3	3	0	2	0	1	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0
4	2	0	97	0	1	2	8	0	2	0	0	0	2	3	40	7	1	0	79	0
5	4	0	14	0	1	0	0	0	4	0	0	0	5	0	0	0	2	0	0	0
6	1	0	0	0	~	~	~	~	2	0	0	0	1	0	0	0	2	0	198	0
8	3	0	38	0	2	0	26	0	2	0	0	0	6	0	22	0	1	0	0	0
9	1	15	18	0	1	0	14	0	1	0	22	0	2	0	0	0	1	0	0	0
10	1	16	9	0	1	3	5	0	2	16	0	7	1	0	31	0	1	0	0	0
11	4	2	18	3	2	12	25	0	3	8	3	6	2	2	78	6	2	6	117	7
12	3	0	200	0	3	0	46	0	3	2	0	0	4	0	18	0	2	0	4	0
13	3	3	68	1	4	1	51	0	5	40	5	0	2	0	6	0	3	3	240	10
14/16	~	~	~	~	~	~	~	~	2	30	4	11	2	9	119	15	2	13	408	23
17	~	~	~	~	3	7	36	0	4	9	0	6	6	3	17	2	5	2	26	7
18	5	1	52	2	2	4	68	0	2	4	0	0	3	4	23	5	3	3	62	0
19	1	11	82	2	4	0	13	0	1	0	0	0	1	2	31	4	1	0	0	2
20	3	7	10	0	2	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0
21	1	0	0	0	1	1	1	0	2	0	0	0	2	0	0	0	1	0	0	0
22	1	0	4	0	3	0	1	0	2	0	0	0	1	0	0	0	3	0	7	0
29					1	3	0	0												
Total	42	76	760	9	39	38	604	0	47	109	34	30	51	24	390	43	44	32	1288	75

RTL #	1975-1976				1976-1977				1977-1978				1981-1982				1982-1983			
	# trappers	Mink	Muskkrat	Fermine	# trappers	Mink	Muskkrat	Fermine	# trappers	Mink	Muskkrat	Fermine	# trappers	Mink	Muskkrat	Fermine	# trappers	Mink	Muskkrat	Fermine
1	8	1	148	0	5	6	230	10	2	5	2	0	15	12	143	8	14	11	50	7
2	3	2	116	4	1	9	10	1	2	5	0	1	2	12	1	3	3	1	55	0
3	7	3	175	0	3	2	112	7	1	0	4	0	2	2	2	9	1	0	0	0
4	2	3	63	0	1	14	75	3	1	1	14	0	2	0	145	0	3	0	146	0
5	1	0	23	0	-	-	-	-	1	0	0	0	1	0	0	0	-	-	-	-
6	1	0	0	0	1	0	0	0	-	-	-	-	3	0	0	0	1	0	0	0
8	3	0	2	0	1	3	4	1	-	-	-	-	1	0	0	0	1	0	0	0
9	3	1	13	0	-	-	-	-	1	2	2	0	0	1	0	0	1	1	12	0
10	1	2	5	0	1	2	1	0	1	7	8	3	0	0	0	0	1	0	0	0
11	3	5	82	4	2	10	14	17	1	2	0	0	0	1	0	0	1	0	22	0
12	5	0	28	0	2	5	22	4	1	0	0	0	0	1	0	3	2	1	0	2
13	3	1	158	0	3	11	40	18	1	0	0	0	0	4	4	4	3	3	0	3
14	1	2	189	1	1	19	92	8	2	1	51	3	3	3	49	8	3	4	162	0
16	2	23	49	39	1	33	28	59	1	0	0	0	1	1	92	21	1	11	84	2
17	3	2	6	7	1	3	5	6	1	6	14	2	2	3	5	0	3	4	0	0
18	3	3	13	17	1	6	12	4	2	3	3	2	2	4	1	0	2	0	0	0
19	2	0	0	0	-	-	-	-	2	3	24	2	2	5	52	0	5	7	39	7
20	1	0	0	0	-	-	-	-	-	-	-	-	-	2	0	1	2	0	0	0
21	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	0	3	1	2	2
22	2	0	1	0	2	8	2	0	1	2	0	1	2	0	0	2	2	0	51	0
Total	54	48	1071	72	31	133	652	147	20	35	122	14	56	48	494	59	53	44	623	23

RTL #	1983-1984				1984-1985				1985-1986				1986-1987				1987-1988			
	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine
1	19	1	20	3	11	5	84	1	8	1	108	10	13	21	339	20	11	9	157	6
2	2	0	3	0	1	2	6	0	4	14	68	15	2	9	37	4	2	6	2	0
3	1	1	45	0	3	1	11	1	1	2	1	2	1	0	38	0	~	~	~	~
4	1	1	6	0	4	2	269	0	~	~	~	~	2	0	66	0	~	~	~	~
5	~	~	~	~	4	4	8	22	3	7	4	14	2	4	2	2	2	5	5	10
6	~	~	~	~	1	0	3	7	1	1	1	4	1	1	2	1	1	2	1	1
8	~	~	~	~	~	0	0	0	~	~	~	~	~	~	~	~	~	~	~	~
9	~	~	~	~	2	0	0	0	~	~	~	~	~	~	~	~	~	~	~	~
10	1	0	0	0	1	0	0	0	1	0	0	0	1	1	0	0	1	6	25	2
11	1	2	24	0	2	1	4	0	2	3	3	0	1	0	0	0	2	9	24	2
12	4	2	1	0	6	0	16	0	2	4	0	3	2	3	69	3	2	4	0	3
13	3	2	25	0	6	5	12	6	3	3	64	8	1	0	0	0	1	0	0	0
14	1	4	53	0	~	0	0	0	1	2	0	1	1	3	222	12	1	13	0	0
16	3	0	0	0	3	3	1	0	1	3	38	1	1	0	43	6	1	0	72	0
17	4	2	44	0	3	2	78	0	1	0	1	1	2	2	10	0	~	~	~	~
18	5	0	1	0	7	2	5	1	1	0	8	0	1	0	30	3	2	2	63	1
19	5	2	6	0	4	0	0	0	~	~	~	~	~	~	~	~	~	~	~	~
20	2	0	9	1	1	1	7	7	~	~	~	~	1	0	4	0	1	1	2	0
21	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
22	1	0	0	0	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Total	53	17	237	4	60	28	504	45	29	40	286	59	32	44	862	51	27	57	351	25

RTL #	Fur Production for Hole River Trapping Section																				
	1988-1989				1989-1990				1991-1992				1992-1993				1993-1994				
	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	
1	7	12	10	11	4	11	1	9	1	2	0	0	0	3	1	53	0	3	1	5	0
2	1	1	0	0	1	4	0	0	1	15	0	0	0	1	2	4	0	1	3	11	0
3	-	-	-	-	1	10	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	0	0	-	-	-	-
5	1	0	0	0	2	1	0	3	1	1	0	23	1	1	0	0	3	-	-	-	-
6	-	-	-	-	1	0	0	1	2	2	2	1	-	-	-	-	-	-	-	-	-
8	1	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	1	5	0	1	1	9	0	0	0	2	2	0	0	1	5	0	0
10	1	2	0	1	1	0	1	0	1	3	0	3	0	1	0	0	0	1	0	1	0
11	1	9	4	0	1	8	0	0	1	4	0	0	0	1	1	0	0	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	5	2	0	0	0	-	-	-	-	-	-	88	0
14	1	9	0	5	-	-	-	-	-	-	-	-	-	-	-	-	-	4	0	7	0
16	1	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
17	-	-	-	-	1	3	5	0	1	2	1	0	0	-	-	-	-	-	1	0	0
18	1	0	1	3	1	0	4	1	1	0	0	0	0	-	-	-	-	2	0	54	0
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	1	1	0	0	1	2	0	3	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	1	1	3	4	-	-	-	-	-	1	0	0	0	1	1	24	0
Total	15	34	15	20	16	44	14	19	16	42	3	30	11	6	57	3	15	13	200	0	0

RTL #	Fur Production for Lac du Bonnet Trapping Section																			
	1961-1962				1962-1963				1963-1964				1965-1966				1966-1967			
	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine
2	~	~	~	28	2	6	12	28	2	0	42	3	~	~	~	~	~	~	~	~
3	~	~	~	0	2	0	0	23	2	5	83	23	~	~	~	~	~	~	~	~
4	~	~	~	2	1	15	10	2	1	14	14	4	~	~	~	~	~	~	~	~
6	~	~	~	0	2	0	19	0	2	6	45	3	~	~	~	~	~	~	~	~
7	~	~	~	0	4	0	0	0	4	0	29	0	~	~	~	~	~	~	~	~
8	~	~	~	8	2	17	101	6	2	17	101	6	~	~	~	~	~	~	~	~
9	~	~	~	~	1	~	~	11	1	8	38	11	~	~	~	~	~	~	~	~
10	~	~	~	0	2	0	2	0	2	8	58	3	~	~	~	~	~	~	~	~
11	~	~	~	8	1	47	83	8	1	21	71	13	~	~	~	~	~	~	~	~
13	3	18	36	54	4	11	86	54	4	8	123	66	~	~	~	~	~	~	~	~
14	1	11	10	53	1	13	13	81	1	2	39	81	~	~	~	~	~	~	~	~
15	2	39	24	9	2	9	62	9	1	21	71	16	~	~	~	~	~	~	~	~
16	1	1	2	0	1	1	0	3	2	13	32	14	~	~	~	~	~	~	~	~
17	1	16	1	3	1	14	1	2	1	7	6	13	~	~	~	~	~	~	~	~
18	2	27	24	23	2	16	14	21	2	2	51	0	~	~	~	~	~	~	~	~
19	1	10	16	25	1	19	70	19	1	11	105	38	~	~	~	~	~	~	~	~
20	1	34	0	1	1	4	5	0	2	0	6	3	~	~	~	~	~	~	~	~
21	~	~	~	3	2	1	15	3	3	2	13	0	~	~	~	~	~	~	~	~
23	1	0	0	2	~	4	7	2	~	~	~	~	~	~	~	~	~	~	~	~
26	43	27	58	74	36	38	118	138	~	~	~	~	~	~	~	~	~	~	~	~
27	12	8	44	22	14	15	121	55	~	~	~	~	~	~	~	~	~	~	~	~
28	~	~	~	177	16	59	186	177	~	41	293	124	~	~	~	~	~	~	~	~
Total	68	191	215	359	99	303	850	582	50	186	1220	421	17	106	501	411	19	161	497	125

RTL #	Fur Production for Lac du Bonnet Trapping Section																			
	1967-1968				1968-1969				1969-1970				1970-1971				1971-1972			
	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine
2	2	8	9	2	2	4	56	0												
3	1	9	1	2	2	1	52	1												
4	2	10	9	2	2	10	21	4												
6	3	0	14	0	5	0	18	0												
7	1	2	1	0	1	26	18	5												
8	1	6	0	0	1	8	14	1												
9	1	3	10	0	1	14	7	5												
10	1	7	39	3	2	3	41	5												
11	1	30	15	7	1	36	7	2												
13	-	-	-	-	-	-	-	-												
14	-	-	-	-	-	-	-	-												
15	-	-	-	-	-	-	-	-												
16	-	-	-	-	-	-	-	-												
17	-	-	-	-	-	-	-	-												
18	-	-	-	-	-	-	-	-												
19	-	-	-	-	-	-	-	-												
20	-	-	-	-	-	-	-	-												
21	-	-	-	-	-	-	-	-												
23	-	-	-	-	-	-	-	-												
26	-	-	-	-	-	-	-	-												
27	-	-	-	-	-	-	-	-												
28	14	133	135	147	21	82	194	49												
Total	27	208	233	178	38	184	428	72	26	161	590	51	30	74	545	15	77	176	303	85

RTL #	1972-1973				1973-1974				1974-1975				1975-1976				1976-1977			
	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine
3	1	1	13	0	2	3	21	0	2	2	27	0	4	7	38	0	3	7	17	9
4	2	0	60	4	2	0	0	0	2	0	0	0	2	3	61	0	2	19	18	10
6	2	0	26	0	1	0	0	0	~	~	~	~	~	~	~	~	1	0	5	0
7	1	0	60	10	1	0	0	0	2	4	250	0	1	2	3	12	1	15	12	5
8	3	6	92	9	2	3	15	3	4	1	96	0	~	~	~	~	2	0	2	1
9	2	4	87	10	1	3	60	2	1	6	8	3	1	1	25	0	1	17	27	15
10	1	0	12	0	1	0	0	0	1	0	0	0	1	0	8	0	~	~	~	~
11	1	11	14	5	1	1	3	6	1	17	2	12	1	0	22	0	2	2	5	0
13	2	3	12	5	2	2	15	1	2	0	22	1	4	5	53	36	4	9	43	42
14	1	6	32	23	1	7	69	30	1	7	378	85	2	1	60	44	1	2	24	72
15	2	10	22	14	2	8	18	8	2	1	18	6	1	2	10	3	1	24	25	13
16	~	~	~	~	~	~	~	~	1	4	13	10	2	0	38	2	2	15	17	1
17	1	9	3	18	1	0	10	3	2	1	387	5	1	2	3	1	1	19	8	15
18	2	7	79	5	2	7	120	5	1	10	27	22	~	~	~	~	1	0	3	0
19	1	7	5	2	1	3	13	17	2	0	39	0	1	1	4	3	2	7	0	14
20	1	1	8	0	1	1	0	0	1	0	0	0	2	0	23	0	2	6	5	0
21	2	3	47	0	1	0	58	0	2	0	92	15	~	~	~	~	2	1	2	0
23	1	9	1	0	2	1	3	0	1	0	0	0	1	0	3	0	1	2	1	0
26	~	~	~	~	25	12	90	19	20	42	439	135	19	25	459	48	25	101	90	119
27	~	~	~	~	12	5	88	17	9	4	221	23	8	29	272	25	9	47	113	26
28	18	13	119	20	16	4	145	11	24	13	362	88	14	107	335	18	9	56	98	89
Open													13	11	136	15				
Total	44	90	692	125	77	60	728	122	81	112	2381	405	78	196	1553	207	72	349	515	431

RTL #	1977-1978				1978-1979				1981-1982				1982-1983				1983-1984				
	# Trappers	Mink	Muskat	Fmine	# Trappers	Mink	Muskat	Fmine	# Trappers	Mink	Muskat	Fmine	# Trappers	Mink	Muskat	Fmine	# Trappers	Mink	Muskat	Fmine	
3	1	2	0	2	3	7	1	2	1	5	1	16	1	0	0	0	2	5	6	4	
4	1	1	3	0	1	17	36	20	1	1	1	16	1	2	76	3	1	2	32	2	
6	-	-	-	-	-	0	0	0	-	-	-	-	-	4	0	0	1	0	0	0	
7	1	2	0	0	1	9	9	15	1	3	0	3	1	0	0	2	1	2	0	0	
8	1	0	0	0	2	0	0	0	3	10	4	3	2	3	127	19	2	2	0	0	
9	1	0	0	0	2	1	0	2	2	2	2	2	2	2	36	1	1	2	0	6	
10	-	-	-	-	11	16	1	8	13	3	65	4	5	1	31	1	11	0	0	0	
11	1	1	0	0	1	6	37	0	1	8	82	4	1	3	91	0	1	3	34	0	
13	3	6	41	0	5	13	46	9	3	9	7	12	5	19	11	8	4	4	4	3	
14	2	4	3	10	3	33	15	84	3	12	4	22	3	7	20	13	3	4	11	22	
15	1	10	11	6	2	51	4	29	1	8	10	16	1	5	12	3	1	6	0	1	
16	2	6	10	3	2	12	12	17	3	2	14	1	2	2	0	1	1	0	0	0	
17	2	3	4	2	2	5	15	8	3	1	1	4	3	2	76	4	1	0	0	0	
18	2	2	35	0	2	14	57	7	3	4	164	1	3	0	0	0	2	0	33	0	
19	3	8	10	3	1	13	4	17	1	1	10	0	1	0	1	3	1	0	0	0	
20	2	0	13	0	1	1	3	1	1	0	0	0	2	1	0	1	2	0	8	0	
21	1	2	130	0	2	11	22	3	2	3	3	5	2	18	740	17	2	1	6	0	
23	2	0	2	4	2	25	2	16	2	4	8	3	2	9	16	0	2	11	14	2	
26	-	-	-	-	38	106	194	61	25	70	137	48	25	32	84	10	26	32	441	26	
27	-	-	-	-	19	68	106	26	14	50	21	29	17	30	212	8	12	27	104	15	
28	9	6	46	0	21	82	110	90	22	40	143	82	21	33	156	12	23	20	95	3	
Open																					
Total	35	53	308	30	122	490	674	415	102	233	674	253	105	173	1689	106	123	141	873	110	

RTL #	Fur Production for Lac du Bonnet Trapping Section																				
	1984-1985				1985-1986				1986-1987				1987-1988				1988-1989				
	# Trappers	Mink	Muskat	Fmine	# Trappers	Mink	Muskat	Fmine	# Trappers	Mink	Muskat	Fmine	# Trappers	Mink	Muskat	Fmine	# Trappers	Mink	Muskat	Fmine	
2	2	4	14	1	2	12	4	6	2	2	41	3	2	2	4	2	0	2	2	2	2
3	1	1	11	4	1	4	7	11	1	2	4	12	1	1	1	4	12	1	1	1	1
4	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
6	1	8	1	17	1	15	52	40	1	9	128	10	1	1	18	32	2	2	2	3	0
8	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
9	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
10	5	11	36	10	1	9	98	15	3	3	4	0	5	5	7	118	9	5	8	19	0
11	1	5	1	1	1	2	69	0	1	6	206	1	1	1	0	41	0	1	13	0	0
13	3	4	13	12	3	0	10	0	2	1	43	2	2	2	7	6	6	2	14	1	28
14	3	0	18	34	2	8	4	24	3	0	15	1	3	3	43	9	2	2	0	0	0
15	1	0	0	2	1	0	0	5	1	1	0	0	1	1	4	9	6	1	4	0	12
16	1	2	0	0	1	1	0	0	3	0	0	0	~	~	~	~	~	3	2	1	11
17	1	1	55	0	2	1	1	11	3	4	30	0	2	3	10	6	1	1	0	0	0
18	2	2	78	0	3	1	16	3	1	21	44	22	1	4	23	0	1	21	0	0	0
19	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
20	1	2	9	0	2	1	0	0	2	3	35	0	1	1	8	27	3	1	1	5	4
21	1	0	2	0	1	1	47	8	1	0	43	0	1	0	2	0	1	1	7	1	0
23	1	5	10	14	2	0	1	0	2	4	9	1	1	0	1	2	0	1	9	3	0
26	28	33	490	60	19	33	127	50	17	34	459	48	15	88	344	103	14	98	35	51	6
27	9	1	53	14	7	29	14	13	7	17	140	7	9	24	33	19	4	13	0	0	0
28	11	6	420	28	7	9	71	30	10	15	194	42	10	27	117	62	5	22	45	46	46
Total	72	85	1211	197	57	126	521	216	63	137	1415	153	56	230	993	270	48	245	128	189	189

RTL #	Fur Production for Lac du Bonnet Trapping Section															
	1989-1990				1991-1992				1992-1993				1993-1994			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
3	2	10	0	20	1	0	0	0	1	1	25	0	1	0	0	0
4	2	10	0	20	1	5	20	12	1	1	0	0	1	2	39	15
6	2	10	0	20	1	1	1	1	1	0	0	0	2	0	1	0
7	1	1	7	1	1	11	201	13	1	1	1	1	2	3	153	10
8	1	0	0	3	1	5	20	6	1	1	1	1	2	11	303	9
10	4	2	4	2	3	1	0	0	2	2	0	0	2	1	1	1
11	1	3	11	0	1	7	7	0	1	1	1	1	2	5	0	0
13	3	1	4	13	3	7	0	17	2	3	1	1	2	0	5	4
14	2	0	3	0	2	0	0	0	1	1	1	1	2	0	5	4
15	1	10	0	6	1	10	0	8	1	3	0	0	1	4	0	17
16	2	2	0	6	1	0	0	1	1	1	1	1	3	3	6	12
17	1	1	0	0	2	0	0	0	2	0	0	0	2	1	2	3
18	1	8	0	0	1	20	0	0	1	4	3	0	1	6	12	0
19	1	10	14	1	2	15	1	15	1	3	4	0	1	1	17	7
20	1	3	0	0	1	6	0	0	1	2	0	0	1	2	2	0
21	2	0	0	0	1	0	1	0	1	1	1	1	1	0	8	0
23	2	1	1	1	2	4	0	0	1	2	0	0	2	2	0	2
26	12	47	5	15	11	69	0	20	11	14	12	1	10	11	320	1
27	7	1	0	0	3	2	1	0	3	0	0	0	2	5	0	0
28	10	20	14	10	7	24	42	17	5	11	53	14	5	11	318	28
Total	52	119	62	77	45	186	293	109	32	45	98	16	41	67	1186	108

Fur Production for Little Grand Rapids Trapping Section

RTL #	1961-1962				1962-1963				1963-1964				1964-1965				1965-1966			
	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine
Home Blk	5	13	2	9	4	21	133	21	13	16	370	32	-	-	-	-	-	-	-	-
1	5	29	29	16	5	0	108	0	6	10	262	37	2	8	199	34	2	2	350	37
2	4	33	92	12	4	29	110	20	5	26	384	241	6	99	662	27	5	20	721	60
3	4	58	184	11	6	28	184	25	4	15	398	30	8	17	914	43	8	8	1022	63
4	6	36	44	35	5	18	124	10	4	6	155	6	2	5	127	7	5	6	528	21
5	9	23	19	19	6	28	27	17	6	11	57	6	8	6	284	36	8	20	458	37
6	3	11	17	24	5	12	4	21	5	11	83	10	3	3	140	6	2	6	150	4
7	1	47	21	25	2	16	16	18	2	2	107	22	6	30	320	17	4	7	218	35
8	1	0	0	0	1	7	2	22	1	0	0	0	-	-	-	-	1	0	20	0
9	5	54	170	55	5	17	72	25	4	13	205	21	4	11	298	55	3	12	408	49
10	12	42	103	17	9	22	155	11	9	13	186	8	6	5	126	3	7	12	372	10
11	7	33	131	29	9	19	166	16	9	20	279	17	3	19	106	12	5	17	523	16
12	5	10	136	15	7	35	132	25	7	18	227	10	7	23	610	20	6	26	384	19
13	4	18	67	7	3	12	8	3	3	11	167	4	3	9	234	12	3	11	311	15
14	1	1	33	4	3	9	105	11	3	8	69	5	1	0	74	6	1	4	93	10
15	3	13	14	10	3	28	102	17	4	3	98	5	1	1	68	8	1	2	99	1
16	9	59	129	25	8	55	274	42	8	25	391	23	8	22	704	51	7	17	824	59
17	1	2	31	0	-	-	-	-	2	9	148	15	3	7	383	15	1	1	74	4
7-9-12	6	45	70	20	5	31	37	24	6	11	246	11	-	-	-	-	-	-	-	-
19													1	2	30	1				
Totals	91	527	1292	333	90	387	1759	328	101	228	3832	503	72	267	5279	353	69	171	6555	440

RTL #	1966-1967				1967-1968				1968-1969				1969-1970				1972-1973			
	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine
1	2	3	66	12	1	0	0	0	2	9	25	19	1	0	8	0	1	0	0	0
2	4	13	506	12	6	28	252	14	5	44	136	27	2	4	0	0	6	4	88	2
3	6	31	635	18	7	44	381	29	8	51	204	26	5	8	96	1	6	14	84	10
4	4	5	223	2	5	15	168	10	4	30	103	20	5	13	73	0	5	6	52	13
5	6	17	269	3	7	18	154	11	8	29	200	16	4	4	10	0	3	3	2	0
6	2	7	81	14	2	6	23	1	2	18	30	1	2	4	15	0	1	2	0	0
7	4	32	221	6	6	21	46	19	6	27	30	26	2	7	5	0	2	2	0	4
8	~	~	~	~	~	~	~	~	~	~	~	~	1	10	0	0	2	1	0	13
9	3	11	216	6	4	35	158	29	4	28	33	17	3	9	22	0	5	3	2	7
10	5	12	65	6	7	24	60	7	6	20	6	7	3	4	65	0	6	8	7	4
11	5	20	240	10	5	23	85	24	5	14	123	10	2	3	4	0	5	3	3	1
12	4	14	290	7	6	22	71	34	8	42	92	72	7	8	72	0	4	6	18	0
13	4	17	272	5	4	24	101	17	4	22	59	23	3	3	9	0	3	3	20	5
14	1	4	109	9	1	3	43	10	2	11	82	8	1	0	23	0	1	0	21	4
15	1	6	79	3	1	3	0	0	2	11	3	1	1	2	0	0	1	0	1	0
16	8	41	661	24	7	49	251	27	8	39	303	9	6	13	97	2	7	15	35	2
17	1	21	551	7	4	31	355	25	8	34	73	56	5	16	113	4	5	12	33	20
18	~	~	~	~	1	10	115	10	1	5	7	0	~	~	~	~	1	5	3	0
19	1	4	109	9	1	3	8	0	1	12	3	6	~	~	~	~	1	1	0	0
Totals	61	258	4613	153	75	359	2271	267	84	446	1512	344	53	108	612	7	65	88	369	85

RTL #	Fur Production for Little Grand Rapids Trapping Section																			
	1973-1974				1974-1975				1975-1976				1976-1977				1981-1982			
	# trappers	Mink	Muskkrat	Furmine	# trappers	Mink	Muskkrat	Furmine	# trappers	Mink	Muskkrat	Furmine	# trappers	Mink	Muskkrat	Furmine	# trappers	Mink	Muskkrat	Furmine
1	2	2	2	5	1	0	0	0	1	0	0	0	4	1	27	0	~	~	~	~
2	7	6	46	12	6	8	156	13	3	1	32	0	6	8	45	3	~	~	~	~
3	7	4	13	6	5	7	249	22	4	2	136	0	9	34	83	14	~	~	~	~
4	2	0	113	0	3	0	70	6	3	2	103	0	5	14	49	3	~	~	~	~
5	3	2	12	0	3	3	63	3	3	1	86	0	4	6	16	1	~	~	~	~
6	1	0	0	0	1	0	0	0	2	0	16	0	~	~	~	~	7	11	39	5
7	~	~	~	~	2	4	44	11	2	0	4	0	~	~	~	~	1	17	100	19
8	2	0	2	0	2	0	0	0	2	0	9	0	1	0	0	0	2	2	2	6
9	3	0	5	0	6	2	58	1	5	0	11	0	2	4	11	1	6	25	149	25
10	4	0	0	0	2	2	29	11	3	0	56	0	1	0	4	0	6	5	5	3
11	2	1	0	0	3	5	89	7	1	0	3	0	1	0	3	0	5	5	20	4
12	5	0	15	0	4	10	143	0	5	3	34	0	4	5	8	3	2	6	1	7
13	2	0	0	1	3	7	213	3	3	0	18	0	2	0	1	0	2	3	1	2
14	2	2	46	0	3	3	96	2	2	0	53	0	~	~	~	~	1	0	0	0
15	1	1	5	0	3	0	3	2	3	0	27	0	~	~	~	~	2	2	3	2
16	7	9	63	6	5	5	208	14	7	20	172	17	13	70	115	33	~	~	~	~
17	4	7	85	1	4	7	145	6	8	2	207	0	5	15	41	6	4	12	31	6
18	2	5	10	6	3	2	36	21	1	2	18	1	2	3	15	0	1	6	107	13
19	1	0	7	1	4	1	108	0	3	0	75	2	~	~	~	~	~	~	~	~
Open	~	~	~	~	~	~	~	~	10	5	47	13	11	9	30	8	~	~	~	~
Totals	57	39	424	38	63	66	1708	122	71	38	1107	33	70	169	448	72	41	94	460	102

RTL #	Fur Production for Little Grand Rapids Trapping Section																			
	1982-1983				1983-1984				1984-1985				1985-1986				1986-1987			
	# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine
5	3	5	65	1	3	0	5	0	2	6	7	0	4	2	15	3	3	6	34	0
6	1	7	0	15	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	2	0	16	0	2	1	0	0	0	0	0	0	0	0	0	0
8	2	6	0	20	2	0	0	7	2	2	2	4	2	3	6	70	1	5	10	26
9	3	5	34	6	6	4	42	0	3	0	51	0	3	7	29	0	2	13	18	0
10	8	10	24	3	6	1	57	0	6	4	16	2	6	15	29	0	5	13	7	0
11	2	5	37	0	6	0	30	1	6	2	58	3	5	8	45	1	2	0	12	0
12	7	2	55	0	7	12	27	0	5	0	0	0	5	6	54	2	5	4	59	0
13	0	0	0	0	1	0	25	0	1	0	1	0	2	1	1	0	1	1	4	0
14	2	0	24	0	1	1	19	0	2	0	0	0	2	1	68	0	2	0	19	0
15	5	1	1	0	0	0	0	0	2	1	1	1	2	2	1	0	1	1	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	5	3	49	0	4	1	50	2	5	8	11	1	5	5	21	2	2	1	8	0
18	0	0	0	0	0	0	0	0	3	0	24	0	0	0	0	0	0	0	0	0
Totals	38	44	289	45	39	20	272	10	40	24	171	11	36	50	269	78	28	45	245	26

RTL #	Fur Production for Little Grand Rapids Trapping Section																					
	1987-1988				1988-1989				1989-1990				1991-1992				1992-1993					
	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine		
2	~	~	~	~	2	0	1	0	1	2	5	0	0	3	2	0	0	0	3	1	0	~
5	9	22	12	0	3	3	0	0	1	0	11	0	0	3	2	0	0	0	3	1	0	~
7	2	0	0	0	1	0	0	0	~	~	~	~	~	~	~	~	~	~	~	~	~	~
8	1	1	46	2	1	4	1	1	1	4	0	2	2	1	4	0	9	1	1	2	0	10
9	2	15	5	0	1	0	1	0	~	~	~	~	~	1	3	1	0	~	~	~	~	~
10	10	40	11	1	3	0	1	0	4	5	3	0	0	2	1	3	0	~	~	~	~	~
11	1	8	0	0	4	3	0	3	4	0	9	0	0	5	4	8	0	~	~	~	~	~
12	6	22	5	4	3	5	1	0	2	5	0	0	0	2	6	0	0	~	~	~	~	~
13	1	1	0	0	1	0	0	0	1	0	0	0	0	1	3	0	0	~	~	~	~	~
14	2	0	0	0	~	~	~	~	~	~	40	0	0	~	~	~	~	~	~	~	~	~
15	2	1	1	0	1	0	0	0	2	1	0	0	0	1	0	0	0	~	~	~	~	~
17	5	12	7	1	4	5	0	0	1	1	0	0	0	4	11	5	0	~	~	~	~	~
18	~	~	~	~	1	6	0	0	1	1	0	0	0	1	0	0	0	~	~	~	~	~
Totals	41	122	87	8	25	26	5	4	19	19	68	2	21	34	17	9	9	10	9	9	0	10

RTL #	Fur Production for Paingassi Trapline Section																			
	1981-1982				1982-1983				1983-1984				1984-1985				1985-1986			
	# trappers	Mink	Muskkrat	Fermine	# trappers	Mink	Muskkrat	Fermine	# trappers	Mink	Muskkrat	Fermine	# trappers	Mink	Muskkrat	Fermine	# trappers	Mink	Muskkrat	Fermine
2	8	26	46	17	7	14	163	19	5	18	88	3	3	11	38	8	3	25	62	20
3	7	14	74	17	5	5	47	2	6	17	77	3	5	13	81	8	5	1	62	5
4	3	5	2	1	1	1	12	0	7	2	72	0	4	6	14	7	2	0	30	0
5	~	~	~	~	~	~	~	~	~	~	~	~	1	0	0	2	~	~	~	~
10	~	~	~	~	2	0	1	0	~	~	~	~	~	~	~	~	~	~	~	~
16	9	30	120	15	6	13	5	7	8	9	178	1	12	23	63	16	12	30	158	15
19	3	0	13	3	3	1	6	2	1	0	14	0	1	1	17	0	1	0	0	1
Total	30	75	255	53	24	34	234	30	27	46	429	7	26	54	213	41	23	56	312	41

RTL #		Fur Production for Paingassi Trapline Section																			
		1986-1987				1987-1988				1988-1989				1989-1990				1990-1991			
		# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine
2	1	2	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	2	4	20	0	3	0	2	0	0	5	18	26	5	5	18	15	3	4	5	10	0
4	2	4	12	0	2	1	7	1	1	3	6	4	0	3	3	11	0	1	1	0	0
5	1	0	6	0	1	3	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	9	8	89	6	7	22	10	4	4	9	18	5	4	6	17	22	0	6	10	0	0
19	2	1	23	3	1	1	0	0	0	1	0	0	0	1	0	2	0	1	2	22	2
<b>Total</b>	<b>17</b>	<b>19</b>	<b>165</b>	<b>11</b>	<b>15</b>	<b>27</b>	<b>30</b>	<b>5</b>	<b>9</b>	<b>18</b>	<b>42</b>	<b>35</b>	<b>9</b>	<b>15</b>	<b>38</b>	<b>50</b>	<b>3</b>	<b>13</b>	<b>18</b>	<b>32</b>	<b>2</b>

Fur Production for Paingassi Trapline Section												
RTL #	1992-1993				1993-1994							
	# trappers	Mink	Muskrat	Ermine	# trappers	Mink	Muskrat	Ermine				
2	2	0	0	0	2	2	2	2				
3	3	3	0	0	2	3	23	0				
4	1	0	0	0	2	2	2	2				
16	2	1	0	0	2	2	2	2				
19	1	0	0	0	1	1	0	0				
Total	9	4	0	0	3	4	23	0				

RTL #	Fur Production for Whiteshell Trapline Section																			
	1954-1955				1955-1956				1956-1957				1957-1958				1958-1959			
	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine
GBR 1	1	0	0	0	1	1	8	0	1	0	89	0	1	1	40	0	1	0	1	0
GBR 3	1	0	8	0	1	6	0	16	1	0	0	0	1	0	0	0	1	0	0	0
GBR 4	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
GBR 5	1	0	30	0	1	0	22	0	1	0	30	0	1	0	11	0	1	0	4	0
GBR 6	1	0	0	0	1	0	0	0	1	8	5	5	1	10	0	5	1	1	1	0
GBR 7	1	2	14	0	1	0	13	0	1	0	0	0	1	2	8	4	1	0	0	0
GBR 8	1	2	20	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
GBR 9	1	2	163	0	1	0	84	0	1	7	73	0	1	4	0	0	1	2	33	0
1	1	1	41	0	1	2	1	0	1	7	5	4	1	0	0	0	1	2	6	0
2	1	3	36	5	1	1	44	4	1	9	51	9	1	7	105	3	1	2	8	3
3	1	6	0	0	1	3	0	2	1	11	3	16	1	1	9	1	1	2	0	3
4	1	0	0	0	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
5	1	1	91	0	1	0	0	0	1	13	23	5	1	19	21	6	1	13	2	3
6	1	8	278	7	1	4	148	13	1	3	143	1	1	8	60	0	1	0	20	0
7	1	4	157	0	1	4	157	0	~	~	~	~	~	0	0	0	~	~	~	~
8	1	11	29	1	1	8	135	4	1	7	26	0	1	10	20	0	1	11	20	0
9	1	2	56	1	1	0	0	0	1	2	53	1	1	0	37	0	1	0	1	0
11	1	3	101	0	1	9	170	4	1	25	202	10	1	23	342	6	1	6	55	0
14	1	0	0	0	1	8	177	4	1	5	177	0	1	0	318	0	1	1	161	0
15	1	10	0	12	1	28	9	51	1	19	18	21	1	15	9	6	1	2	20	2
16	1	0	40	0	1	3	0	0	1	0	0	0	1	6	0	0	1	0	2	0
18	1	3	276	0	1	1	224	1	1	4	275	0	1	2	600	4	1	0	654	1
20	1	11	1	0	1	7	3	3	1	25	21	0	1	11	0	0	1	33	26	3
21	1	3	10	14	1	0	20	16	1	6	0	0	1	0	0	0	1	5	12	0

22	1	0	49	0	1	0	45	8	1	5	33	13	1	0	0	0	~	~	~	~
23	1	0	0	0	1	0	0	0	1	0	0	0	1	3	1	3	1	0	0	0
24	1	4	146	14	1	8	242	36	1	15	229	40	1	23	91	20	1	6	39	14
25	1	4	299	18	1	3	204	36	1	12	253	19	1	6	109	7	1	7	16	6
27	1	0	323	24	1	13	238	20	1	35	297	27	1	21	134	13	1	15	47	13
28	1	1	72	0	1	6	55	2	1	2	41	2	1	0	0	0	~	~	~	~
29	1	9	127	3	1	9	127	3	1	3	4	5	1	0	0	0	~	~	~	~
30	1	13	34	6	1	4	11	0	1	25	32	5	1	19	13	3	1	6	3	0
31	1	0	0	0	1	0	25	0	1	11	22	2	1	11	46	2	1	6	13	5
32	1	16	156	0	1	2	87	0	1	20	100	8	1	0	100	2	1	20	100	2
<b>Totals</b>	<b>34</b>	<b>119</b>	<b>2557</b>	<b>105</b>	<b>33</b>	<b>130</b>	<b>2249</b>	<b>223</b>	<b>32</b>	<b>279</b>	<b>2205</b>	<b>193</b>	<b>34</b>	<b>202</b>	<b>2074</b>	<b>85</b>	<b>29</b>	<b>145</b>	<b>1261</b>	<b>55</b>

Fur Production for Whiteshell Trapline Section																				
RTL #	1959-1960				1960-1961				1961-1962				1962-1963				1963-1964			
	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine
GBR 1	1	0	32	0	1	0	63	0	?	?	?	?	1	0	11	0	2	0	33	0
GBR 3	1	1	4	0	1	2	4	2	?	?	?	?	1	0	0	0	1	7	20	1
GBR 4	1	0	0	0	1	0	0	0	?	?	?	?	1	0	0	0	1	0	1	0
GBR 5	1	0	15	3	1	0	12	0	?	?	?	?	1	0	19	6	1	2	57	5
GBR 6	1	11	3	0	1	3	3	2	?	?	?	?	1	13	28	2	1	6	33	1
GBR 7	1	0	5	0	1	0	0	0	?	?	?	?	1	6	26	0	2	2	15	0
GBR 8	1	5	65	6	1	7	54	2	?	?	?	?	1	0	42	0	2	0	43	0
GBR 9	1	9	56	14	1	12	30	0	?	?	?	?	1	5	22	4	1	1	43	3
1	1	10	7	3	1	5	0	0	?	?	?	?	1	5	6	0	2	14	27	2
2	1	11	6	13	1	6	43	0	?	?	?	?	1	10	23	4	2	4	84	1
3	1	4	1	7	1	4	0	0	?	?	?	?	1	2	0	1	1	0	6	0
5	1	16	17	6	1	9	6	0	?	?	?	?	1	7	5	2	1	7	5	7
6	1	1	75	1	1	7	0	7	?	?	?	?	1	3	119	2	1	1	77	0
8	1	6	30	0	1	12	0	2	?	?	?	?	1	10	20	0	1	4	0	0
9	1	3	24	0	1	3	16	0	?	?	?	?	1	3	24	3	1	2	6	0
11	1	24	32	14	1	15	39	0	?	?	?	?	1	12	27	0	1	8	14	0
14	1	4	40	0	1	6	159	0	?	?	?	?	1	11	2	0	2	3	64	0
15	1	19	0	26	1	8	0	0	?	?	?	?	1	29	9	18	1	14	13	8
16	1	7	0	9	1	0	1	0	?	?	?	?	1	0	7	0	1	3	0	0
18	1	5	66	35	1	6	210	2	?	?	?	?	1	2	21	16	1	1	287	22
20	1	7	0	0	1	27	10	0	?	?	?	?	1	20	46	1	1	20	28	0
21	1	6	0	8	1	0	0	0	?	?	?	?	1	3	3	7	1	3	12	5
23	1	9	1	7	1	3	4	0	?	?	?	?	1	3	0	2	2	0	4	0
24	1	25	72	42	1	12	68	4	?	?	?	?	1	5	25	13	1	8	77	0

25	1	13	28	9	1	15	98	16	~	~	~	1	17	126	30	1	17	167	21
27	1	28	75	11	1	10	407	15	~	~	~	1	20	29	5	1	18	44	0
30	1	21	6	8	1	15	4	0	~	~	~	1	11	6	2	1	13	23	4
31	1	12	23	7	1	20	22	0	~	~	~	1	7	20	0	1	5	25	3
32	1	14	60	0	1	18	20	1	~	~	~	1	10	40	0	1	16	0	3
<b>Totals</b>	<b>29</b>	<b>271</b>	<b>763</b>	<b>229</b>	<b>29</b>	<b>225</b>	<b>1273</b>	<b>53</b>	<b>7</b>	<b>32</b>	<b>60</b>	<b>12</b>	<b>29</b>	<b>706</b>	<b>118</b>	<b>36</b>	<b>179</b>	<b>1208</b>	<b>86</b>



25	1	30	177	33	1	29	83	42	1	30	143	38	1	14	35	12	1	27	118	20
27	1	22	14	17	1	24	67	53	1	29	62	4	1	34	32	16	1	19	36	9
30	1	33	15	6	1	14	13	11	1	32	13	2	1	22	4	6	1	34	15	9
31	1	12	25	6	1	8	0	6	1	10	22	3	1	6	0	0	1	0	11	0
32	1	14	90	2	1	16	150	6	1	0	60	0	1	0	1	0	1	8	30	0
<b>Totals</b>	<b>39</b>	<b>296</b>	<b>1799</b>	<b>193</b>	<b>27</b>	<b>241</b>	<b>1715</b>	<b>296</b>	<b>26</b>	<b>233</b>	<b>964</b>	<b>66</b>	<b>26</b>	<b>222</b>	<b>657</b>	<b>77</b>	<b>26</b>	<b>247</b>	<b>958</b>	<b>124</b>

RTL #	1969-1970				1970-1971				1971-1972				1972-1973				1973-1974			
	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine
GBR 1	1	1	20	2	1	0	7	0	1	0	5	1	1	2	6	0	1	0	0	0
GBR 3	1	5	10	1	1	1	14	0	1	7	17	0	1	2	6	0	1	2	35	0
GBR 5	1	0	20	0	1	4	63	0	1	3	78	2	1	2	2	2	1	2	99	24
GBR 6	1	3	0	0	1	0	6	0	1	2	0	0	1	8	4	2	1	3	5	0
GBR 7	1	2	4	0	1	2	0	0	1	4	4	0	1	2	0	0	1	0	2	1
GBR 9	1	7	11	0	1	2	51	0	1	4	2	0	1	2	6	1	1	7	62	2
1	1	0	0	0	1	0	0	0	1	1	0	0	1	0	3	0	1	0	1	0
2	1	3	12	0	1	4	34	0	1	0	39	1	1	0	11	0	1	3	30	4
3	1	2	0	2	1	11	0	0	1	0	0	0	1	2	2	2	1	0	0	0
5	1	5	5	2	1	0	2	0	1	1	0	1	1	2	27	0	1	1	103	6
6	1	0	0	0	1	1	20	0	1	5	27	0	1	1	46	0	1	0	0	0
8	1	7	20	0	1	6	18	0	1	0	100	0	1	0	25	0	1	3	50	0
9	1	1	6	0	1	3	12	0	1	3	12	0	1	4	29	0	1	3	0	0
11	1	18	67	1	1	0	152	1	1	24	135	3	1	15	43	3	1	2	37	0
14	1	0	0	0	1	2	7	0	1	4	3	0	1	2	5	5	1	0	37	0
15	1	16	9	2	1	0	8	0	1	6	0	0	1	12	5	1	1	3	21	1
16	1	0	0	0	1	0	11	0	1	0	12	0	1	2	14	0	1	0	0	0
18	1	1	568	4	1	7	175	5	1	23	382	0	1	2	2	2	1	0	129	0
20	1	4	1	0	1	5	1	0	1	0	0	0	1	2	2	2	1	0	0	0
21	1	5	26	0	1	4	6	0	1	0	0	0	1	4	24	2	1	0	2	0
23	1	1	74	0	1	7	46	0	1	7	16	0	1	7	63	0	1	1	6	1
24	1	1	1	1	1	11	48	5	1	2	2	2	1	2	2	2	1	1	1	1
25	1	16	149	0	1	2	10	0	1	15	9	0	1	5	152	14	1	11	125	17
27	1	0	67	0	1	3	3	1	1	3	2	0	1	14	16	5	1	5	6	1

30	1	22	21	2	1	22	6	0	1	9	2	0	1	3	0	3	1	2	0	0
31	1	3	23	0	1	9	22	0	1	0	0	0	1	3	5	5	1	4	18	5
32	1	4	35	0	1	2	30	0	1	6	65	0	~	~	~	~	~	~	~	~
<b>Totals</b>	<b>26</b>	<b>126</b>	<b>1148</b>	<b>16</b>	<b>27</b>	<b>108</b>	<b>752</b>	<b>12</b>	<b>26</b>	<b>127</b>	<b>910</b>	<b>8</b>	<b>20</b>	<b>88</b>	<b>484</b>	<b>41</b>	<b>25</b>	<b>52</b>	<b>768</b>	<b>62</b>

RTL #	1974-1975				1976-1977				1978-1979				1979-1980				1980-1981			
	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine	# trappers	Mink	Muskat	Fmine
GBR 1	1	3	50	10	1	9	42	10	1	10	45	10	1	7	30	8	1	6	30	0
GBR 3	1	0	15	0	1	6	15	1	1	10	11	2	1	18	17	10	1	8	27	8
GBR 5	1	3	176	26	1	2	12	1	1	1	34	0	1	2	7	1	1	3	36	0
GBR 6	1	5	5	0	1	11	5	5	1	2	1	0	1	11	1	4	1	20	23	10
GBR 7	1	1	16	3	1	0	0	0	1	1	22	0	1	3	7	4	1	4	15	0
GBR 9	1	6	28	2	1	8	32	4	1	9	64	1	1	11	67	2	1	9	38	8
1	1	0	6	0	1	0	5	0	1	0	3	2	1	1	10	0	1	3	19	0
2	1	1	49	4	1	2	10	0	1	0	30	0	1	1	56	0	1	7	56	5
3	1	4	22	0	1	5	26	0	1	2	29	0	1	0	11	0	1	5	17	0
5	1	0	6	6	1	0	0	0	1	3	6	1	1	8	12	13	1	5	46	5
6	1	0	22	0	1	17	24	7	1	5	48	0	1	2	98	6	1	0	99	7
8	1	0	40	0	1	5	26	1	1	67	42	5	1	19	91	10	1	6	40	2
9	1	2	0	0	1	3	0	0	1	2	12	0	1	2	12	0	1	2	15	0
11	1	16	189	16	1	14	21	19	1	22	71	15	1	13	102	15	1	6	23	3
14	1	4	95	11	1	6	65	0	1	5	40	4	1	4	0	0	1	1	10	0
15	1	6	60	12	1	8	10	5	1	15	33	3	1	11	32	2	1	20	59	5
16	1	2	8	0	1	0	2	0	1	0	0	0	1	~	~	~	~	~	~	~
18	1	6	250	4	1	4	33	0	1	2	57	0	1	4	19	2	1	4	26	0
20	1	2	10	12	1	4	10	4	1	14	51	4	1	4	33	4	1	10	19	4
21	1	1	0	0	1	1	0	0	1	8	14	2	1	2	0	0	1	4	22	0
23	1	4	20	25	1	12	6	6	1	17	24	6	1	22	13	14	~	~	~	~
25	1	15	315	64	1	36	19	30	1	38	70	18	1	33	48	15	1	48	23	45
27	1	9	105	35	1	39	43	14	1	42	70	24	1	18	215	23	2	40	286	44
30	1	21	20	28	1	27	6	11	1	20	7	12	1	13	8	5	1	42	12	9
31	1	2	36	7	1	11	12	7	1	2	27	0	1	5	6	22	1	5	16	3
32	1	14	96	4	1	20	60	0	1	2	150	0	1	2	100	0	1	2	104	0
Totals	26	127	1619	269	26	250	484	125	26	299	961	109	25	216	995	160	25	260	1061	158

RTL #	Fur Production for Whiteshell Trapline Section															
	1981-1982				1983-1984				1984-1985				1985-1986			
	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine	# trappers	Mink	Muskat	Ermine
GBR 1	1	1	3	0	2	0	1	0	2	0	1	0	1	0	1	0
GBR 3	2	10	4	4	2	0	4	1	2	0	4	1	2	0	4	1
GBR 5	2	0	31	0	1	0	0	0	1	0	0	0	1	0	0	0
GBR 6	1	5	0	1	2	6	0	5	2	6	0	5	2	6	0	5
GBR 7	2	0	0	1	2	0	0	0	2	0	0	0	2	0	0	0
GBR 9	1	7	54	7	2	1	0	0	2	1	0	0	2	1	0	0
1	1	2	0	1	1	0	0	0	1	0	0	0	1	0	0	0
2	2	5	70	4	2	0	1	0	2	0	2	0	2	0	0	0
3	1	1	22	0	3	8	95	1	1	0	1	0	2	0	0	0
5	1	1	3	0	3	2	12	0	2	3	7	0	2	2	8	2
6	1	4	0	1	5	0	49	0	2	3	0	0	3	2	25	1
7	~	~	~	~	1	2	7	1	~	~	~	~	~	~	74	1
8	3	4	1	0	1	0	12	0	2	1	27	0	1	0	~	~
9	1	0	0	0	3	0	57	0	1	0	0	0	2	0	0	0
11	3	0	100	1	2	0	8	1	2	1	67	5	2	0	47	3
14	2	0	2	0	2	0	0	0	2	0	0	0	1	0	2	0
15	2	6	2	0	2	2	24	0	2	6	59	3	1	2	0	5
18	2	5	1	3	2	2	305	0	2	0	159	0	1	1	3	0
20	1	0	0	1	3	1	4	0	3	2	7	1	1	2	20	0
21	1	0	0	0	1	0	0	0	1	0	0	0	~	~	~	~
23	~	~	~	~	2	1	3	0	2	0	0	0	1	1	3	0
25	1	19	8	12	1	12	42	2	1	11	11	11	1	10	44	18
27	2	6	4	17	2	4	276	5	2	0	51	1	2	8	34	5
30	2	12	4	8	2	40	20	7	2	19	3	13	2	7	22	19

31	1	3	21	1	1	1	2	14	1	1	1	0	0	1	0	13	0		
32	1	0	0	0	1	1	1	5	0	2	1	13	1						
33	2	2	0	0															
<b>Totals</b>	<b>39</b>	<b>93</b>	<b>330</b>	<b>62</b>	<b>42</b>	<b>78</b>	<b>936</b>	<b>18</b>	<b>45</b>	<b>52</b>	<b>441</b>	<b>42</b>	<b>28</b>	<b>37</b>	<b>295</b>	<b>54</b>			

RTL #	Fur Production for Whiteshell Trapline Section																					
	1986-1987				1987-1988				1988-1989				1989-1990				1991-1992					
	# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine	# trappers	Mink	Muskkrat	Ermine		
1	1	1	9	0	1	4	4	1	3	7	0	1	1	3	7	0	1	1	3	7	0	1
2	2	3	0	1	1	4	4	1	3	7	0	1	1	3	7	0	1	1	3	7	0	1
3	1	2	24	8	2	4	8	6	2	8	2	3	2	2	8	2	3	2	2	8	2	3
4	1	4	2	6	1	8	5	3	1	8	1	1	1	1	8	1	1	1	1	8	1	1
5	2	0	0	0	1	0	4	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0
6	2	0	9	1	1	8	10	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	1	1	5	0	1	0	2	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	2	1	162	2	2	2	42	6	1	0	0	0	0	2	4	0	0	2	3	6	0	2
9	1	1	54	0	3	2	2	0	2	4	0	0	0	3	6	0	0	3	6	0	0	2
10	2	3	103	1	1	0	3	0	1	3	1	0	0	1	0	0	0	1	0	0	0	0
11	2	1	88	0	2	4	18	2	1	1	1	1	1	1	0	0	0	1	1	0	0	0
12	2	0	314	0	2	6	70	1	1	1	1	1	1	1	0	20	0	0	0	0	0	0
14	1	1	10	0	2	3	83	3	3	8	0	4	0	2	4	0	0	2	4	0	0	0
15	2	1	4	0	1	0	28	1	1	3	1	0	0	1	0	0	0	1	0	0	0	0
16	2	1	7	0	1	0	5	0	1	1	1	0	0	1	0	0	0	1	0	0	0	0
17	1	1	7	0	1	3	0	0	1	1	1	1	1	1	0	0	0	1	0	0	0	0
18	2	1	187	2	2	18	26	11	2	13	13	6	6	1	12	7	6	2	0	0	0	0
19	2	34	22	15	2	23	7	21	1	16	1	13	1	1	16	0	8	2	0	0	0	0
20	1	3	30	2	1	12	12	4	1	7	4	2	2	1	7	5	0	1	3	1	1	1
21	1	2	2	0	2	1	3	0	2	0	2	8	1	1	0	2	0	1	5	5	5	5
22	1	1	5	0	1	4	0	0	1	4	0	0	0	1	2	1	0	1	0	0	0	0
23	2	4	45	6	1	1	5	0	1	0	0	0	0	2	7	1	0	2	5	0	0	0
24	1	2	6	0	1	3	8	0	1	9	0	0	0	1	1	1	1	1	1	1	1	1
25	1	15	34	10	1	16	32	20	1	11	0	6	1	1	26	12	8	1	3	2	0	0
27	1	2	4	1	1	3	26	2	1	6	0	4	1	1	1	0	0	1	6	0	0	3
Totals	35	89	1126	55	34	125	403	85	26	108	25	48	26	100	51	29	29	94	18	18	29	29

Fur Production for Whiteshell Trapline Section											
RTL #	1993-1994										
	# trappers	Mink	Muskat	Furmine							
1	1	1	7	5							
2	1	0	0	1							
3	3	4	4	5							
4	1	0	3	0							
5	2	0	0	0							
6	1	1	8	0							
7	2	0	1	0							
8	2	7	10	4							
9	1	0	6	0							
11	2	0	0	0							
12	1	0	19	0							
14	4	0	4	0							
16	2	0	6	0							
17	1	0	0	0							
18	2	0	6	0							
19	1	16	9	1							
20	1	0	8	0							
21	1	5	0	0							
22	1	0	0	0							
23	1	0	0	0							
24	1	1	5	0							
25	1	20	23	2							
<b>Totals</b>	<b>33</b>	<b>55</b>	<b>119</b>	<b>18</b>							

**Appendix 4. Intra- and interspecific correlation coefficients calculated for mink, muskrat and ermine fur return totals of selected Manitoba Registered Trapline sections**



93/94	2	15	2	10	2	2	46	2	36	2	56	2	70	2	38
		2		15					46		36		56		70
				2			10				46		36		56
	0.1120862						15		10				46		36
			0.7063167				2		15		10				46
					-0.3801981				2		15		10		
						0.0819845					2		15		10
								-0.1696327					2		15
										-0.1186394					2
												0.003898			
															0.7014885

Correlation Values for Muskrats from Berens River Trapline Section												
Year	Muskrat	Muskrat 1 year out	Muskrat 2 years out	Muskrat 3 years out	Muskrat 4 years out	Muskrat 5 years out	Muskrat 6 years out	Muskrat 7 years out	Muskrat 8 years out	Muskrat	Muskrat	Muskrat 8 years out
71/72	179									179	179	
72/73	200	179								200	200	
73/74	131	200	179							131	131	
74/75	1884	131	200	179						1884	1884	
75/76	1117	1884	131	200	179					1117	1117	
76/77	474	1117	1884	131	200	179				474	474	
77/78	553	474	1117	1884	131	200	179			553	553	
78/79	977	553	474	1117	1884	131	200	179		977	977	
79/80		977	553	474	1117	1884	131	200				179
80/81			977	553	474	1117	1884	131				200
81/82				977	553	474	1117	1884				131
82/83					977	553	474	1117				1884
83/84	658				977	553	474	1117				1884
84/85	491	658			977	553	474	1117		658	658	1117
85/86	316	491	658		977	553	474	1117		491	491	1117
86/87	202	316	491	658	977	553	474	1117		316	316	1117
87/88	498	202	316	491	658	977	553	474		202	202	1117
88/89	98	498	202	316	491	658	977	553		498	498	1117
89/90	8	98	202	316	491	658	977	553		8	8	1117
90/91		8	498	202	316	491	658	977				1117







**Correlation Values for Mink vs Muskrat from Berens River Trapline Section**

Year	Mink	Muskrat	Mink	Muskrat 1 year out	Mink	Muskrat 2 years out	Mink	Muskrat 3 years out	Mink	Muskrat 4 years out	Mink	Muskrat 5 years out	Mink	Muskrat 6 years out	Mink	Muskrat 7 years out	Mink	Muskrat 8 years out	
71/72	72	179	72		72		72		72		72		72		72		72		72
72/73	65	200	65	179	65		65		65		65		65		65		65		65
73/74	24	131	24	200	24	179	24		24		24		24		24		24		24
74/75	43	1884	43	131	43	200	43	179	43		43		43		43		43		43
75/76	32	1117	32	1884	32	131	32	200	32	179	32		32		32		32		32
76/77	134	474	134	1117	134	1884	134	131	134	200	134	179	134		134		134		134
77/78	52	553	52	474	52	1117	52	1884	52	131	52	200	52	179	52		52		52
78/79	268	977	268	553	268	474	268	1117	268	1884	268	131	268	200	268	179	268		268
79/80				977		553		474		1117		1884		131		200			179
80/81						977		553		474		1117		1884		131			200
81/82								977		553		474		1117		1884			131
82/83										977		553		474		1117			1884
83/84	45	658	45		45		45		45		45	977	45	553	45	474	45	1117	1884
84/85	21	491	21	658	21		21		21		21		21	977	21	553	21	474	131
85/86	38	316	38	491	38	658	38		38		38		38		38	977	38	553	200
86/87	70	202	70	316	70	491	70	658	70		70		70		70		70	553	179
87/88	56	498	56	202	56	316	56	491	56	658	56		56		56		56	553	131
88/89	36	98	36	498	36	202	36	316	36	491	36	658	36		36		36	553	70
89/90	46	8	46	98	46	498	46	202	46	316	46	491	46	658	46		46	553	56
90/91				8		98		498		202		316		491		658		553	46



**Correlation Values for Mink vs Ermine from Berens River Trapline Section**

Year	Mink	Ermine	Mink	Ermine 1 year out	Mink	Ermine 2 years out	Mink	Ermine 3 years out	Mink	Ermine 4 years out	Mink	Ermine 5 years out	Mink	Ermine 6 years out	Mink	Ermine 7 years out	Mink	Ermine 8 years out	
71/72	72	1	72		72		72		72		72		72		72		72		72
72/73	65	32	65	1	65		65		65		65		65		65		65		65
73/74	24	14	24	32	24	1	24		24		24		24		24		24		24
74/75	43	95	43	14	43	32	43	1	43		43		43		43		43		43
75/76	32	87	32	95	32	14	32	32	32	1	32		32		32		32		32
76/77	134	57	134	87	134	95	134	14	134	32	134	1	134		134		134		134
77/78	52	9	52	57	52	87	52	95	52	14	52	32	52	1	52		52		52
78/79	268	90	268	9	268	57	268	87	268	95	268	14	268	32	268	1	268		268
79/80				90		9		57		87		95		14		32		1	
80/81						90		9		57		87		95		14		32	
81/82								90		9		57		87		95		14	
82/83										90		9		57		87		95	
83/84	45	29	45		45		45		45		45	90	45	9	45	57	45	87	90
84/85	21	26	21	29	21		21		21		21	90	21	90	21	9	21	57	90
85/86	38	93	38	26	38	29	38		38		38		38		38	90	38	9	90
86/87	70	55	70	93	70	26	70	29	70		70		70		70		70	9	90
87/88	56	95	56	55	56	93	56	26	56	29	56		56		56		56	9	90
88/89	36	19	36	95	36	55	36	93	36	26	36	29	36		36		36	9	90
89/90	46	1	46	19	46	95	46	55	46	93	46	26	46	29	46		46	9	90
90/91				1		19		95		55		93		26		29		46	
91/92	10	5	10		10	1	10	19	10	95	10	55	10	93	10	26	10	46	29

92/93	15	17	15	5	15		15	1	15	19	15	95	15	55	15	93	15	26
93/94	2	6	2	17	2	5	2		2	1	2	19	2	95	2	55	2	93
				6		17		5				1		19		95		55
						6		17		5				1		19		95
	0.411664		-0.0320265					6		17		5				1		19
					0.3887379					6		17		5				1
							0.3586293					6		17		5		
								0.4382827						6		17		5
											-0.4704746					6		17
													-0.3830435					6
															-0.5120143			
																		0.2804228

**Correlation Values for Muskrats vs Ermine from Berens River Trapline Section**

Year	Muskrat	Ermine	Ermine 1 year out	Muskrat	Ermine 2 years out	Muskrat	Ermine 3 years out	Muskrat	Ermine 4 years out	Muskrat	Ermine 5 years out	Muskrat	Ermine 6 years out	Muskrat	Ermine 7 years out	Muskrat	Ermine 8 years out
71/72	179	1		179				179		179		179		179		179	
72/73	200	32	1	200				200		200		200		200		200	
73/74	131	14	32	131	1			131		131		131		131		131	
74/75	1884	95	14	1884	32	1	1	1884		1884		1884		1884		1884	
75/76	1117	87	95	1117	14	32	32	1117	1	1117		1117		1117		1117	
76/77	474	57	87	474	95	14	14	474	32	474	1	474		474		474	
77/78	553	9	57	553	87	95	95	553	14	553	32	553	1	553		553	
78/79	977	90	9	977	57	87	87	977	95	977	14	977	32	977	1	977	
79/80			90		9	57	57		87		95	14			32		1
80/81					90		9		57		87	95			14		32
81/82							90		9		57	87			95		14
82/83									90		9	57			87		95
83/84	658	29		658				658		658	90	9		658	57	658	87
84/85	491	26	29	491				491		491	90	90		491	9	491	57
85/86	316	93	26	316	29			316		316				316	90	316	9
86/87	202	55	93	202	26	29		202		202				202		202	90
87/88	498	95	55	498	93	26		498	29	498				498		498	
88/89	98	19	95	98	55	93		98	26	98	29			98		98	
89/90	8	1	95	8	95	55		8	93	8	26			8		8	
90/91			19		19	95			55		93				29		
91/92	5	5	1	5	1	19		5	95	5	55			5	26	5	29

92/93	27	17	27	5	27		27	1	27	19	27	95	27	55	27	93	27	26
93/94	27	6	27	17	27	5	27		27	1	27	19	27	95	27	55	27	93
				6		17		5				1		19		95		55
						6		17		5				1		19		95
	0.6915412		0.004462					6		17		5				1		19
					0.0261919			6		17		5						1
							-0.1413379				6		17		5			5
									-0.1221683				6		17			5
											-0.1666486				6			17
													-0.5129553					6
															-0.5189873			
																		0.2468814

Year	Correlation Values for Mink from Bloodvein Trapline Section															
	Mink	Mink 1 year out	Mink	Mink 2 years out	Mink	Mink 3 years out	Mink	Mink 4 years out	Mink	Mink 5 years out	Mink	Mink 6 years out	Mink	Mink 7 years out	Mink	Mink 8 years out
61/62	133		133		133		133		133		133		133		133	
62/63	61	133	61		61		61		61		61		61		61	
63/64	47	61	47	133	47		47		47		47		47		47	
64/65	37	47	37	61	37	133	37		37		37		37		37	
65/66	68	37	68	47	68	61	68	133	68		68		68		68	
66/67	31	68	31	37	31	47	31	61	31	133	31		31		31	
67/68	87	31	87	68	87	37	87	47	87	61	87	133	87		87	
68/69	250	87	250	31	250	68	250	37	250	47	250	61	250	133	250	
69/70	111	250	111	87	111	31	111	68	111	37	111	47	111	61	111	133
70/71		111		250		87		31		68		37		47		61
71/72	148		148	111	148	250	148	87	148	31	148	68	148	37	148	47
72/73	46	148	46		46	111	46	250	46	87	46	31	46	68	46	37
73/74	13	46	13	148	13		13	111	13	250	13	87	13	31	13	68
74/75	30	13	30	46	30	148	30		30	111	30	250	30	87	30	31
75/76	32	30	32	13	32	46	32	148	32		32	111	32	250	32	87
76/77	92	32	92	30	92	13	92	46	92	148	92		92	111	92	250
77/78		92		32		30		13		46		148				111
78/79				92		32		30		13		46		148		
79/80						92		32		30		13		46		148
80/81								92		32		30		13		46
81/82	62		62		62		62		62	92	62	32	62	30	62	13
82/83	11	62	11		11		11		11		11	92	11	32	11	30



Correlation Values for Muskrat from Bloodvein Trapline Section																
Year	Muskat	Muskat 1 year out	Muskat	Muskat 2 years out	Muskat	Muskat 3 years out	Muskat	Muskat 4 years out	Muskat	Muskat 5 years out	Muskat	Muskat 6 years out	Muskat	Muskat 7 years out	Muskat	Muskat 8 years out
61/62	250		250		250		250		250		250		250		250	
62/63	726	250	726		726		726		726		726		726		726	
63/64	1018	726	1018	250	1018		1018		1018		1018		1018		1018	
64/65	1577	1018	1577	726	1577	250	1577		1577		1577		1577		1577	
65/66	1362	1577	1362	1018	1362	726	1362	250	1362		1362		1362		1362	
66/67	1711	1362	1711	1577	1711	1018	1711	726	1711	250	1711		1711		1711	
67/68	660	1711	660	1362	660	1577	660	1018	660	726	660	250	660		660	
68/69	492	660	492	1711	492	1362	492	1577	492	1018	492	726	492	250	492	
69/70	607	492	607	660	607	1711	607	1362	607	1577	607	1018	607	726	607	250
70/71		607		492		660		1711		1362		1577		1018		726
71/72	115		115	607	115	492	115	660	115	1711	115	1362	115	1577	115	1018
72/73	136	115	136		136	607	136	492	136	660	136	1711	136	1362	136	1577
73/74	120	136	120	115	120		120	607	120	492	120	660	120	1711	120	1362
74/75	559	120	559	136	559	115	559		559	607	559	492	559	660	559	1711
75/76	496	559	496	120	496	136	496	115	496		496	607	496	492	496	660
76/77	315	496	315	559	315	120	315	136	315	115	315		315	607	315	492
77/78		315		496		559		120		136		115				607
78/79				315		496		559		120		136		115		
79/80						315		496		559		120		136		115
80/81								315		496		559		120		136

81/82	39		39		39		39		39	315	39	496	39	559	39	120
82/83	81	39	81		81		81		81		81	315	81	496	81	559
83/84	182	81	182	39	182		182		182		182		182	315	182	496
84/85	192	182	192	81	192	39	192		192		192		192		192	315
85/86	76	192	76	182	76	81	76	39	76		76		76		76	
86/87	305	76	305	192	305	182	305	81	305	39	305		305		305	
87/88	93	305	93	76	93	192	93	182	93	81	93	39	93		93	
88/89	25	93	25	305	25	76	25	192	25	182	25	81	25	39	25	
89/90	14	25	14	93	14	305	14	76	14	192	14	182	14	81	14	39
90/91		14		25		93		305		76		192		182		81
91/92	8		8	14	8	25	8	93	8	305	8	76	8	192	8	182
92/93	27	8	27		27	14	27	25	27	93	27	305	27	76	27	192
93/94	125	27	125	8	125		125	14	125	25	125	93	125	305	125	76
		125		27		8				14		25		93		305
				125		27		8				14		25		93
	0.7994721					125		27		8				14		25
			0.6197923					125		27		8				14
					0.4004081					125		27		8		
							0.3576221					125		27		8
									0.1413447					125		27
											0.2088059					125
													0.0778945			
																0.3100908



82/83	36	54	36		36		36		36		36	132	36	127	36	112
83/84	9	36	9	54	9		9		9		9		9	132	9	127
84/85	24	9	24	36	24	54	24		24		24		24		24	132
85/86	83	24	83	9	83	36	83	54	83		83		83		83	
86/87	52	83	52	24	52	9	52	36	52	54	52		52		52	
87/88	52	52	52	83	52	24	52	9	52	36	52	54	52		52	
88/89	68	52	68	52	68	83	68	24	68	9	68	36	68	54	68	
89/90	24	68	24	52	24	52	24	83	24	24	24	9	24	36	24	54
90/91		24		68		52		52		83		24		9		36
91/92	44		44	24	44	68	44	52	44	52	44	83	44	24	44	9
92/93	16	44	16		16	24	16	68	16	52	16	52	16	83	16	24
93/94	46	16	46	44	46		46	24	46	68	46	52	46	52	46	83
		46		16		44				24		68		52		52
				46		16		44				24		68		52
	0.240858					46		16		44				24		68
			0.361513					46		16						24
					0.2553353					46						
							0.0651523									44
									-0.0996314					16		16
														46		46
												-0.051071				
													0.2246876			
																0.013864

**Correlation Values of Mink vs Muskrat for Bloodvein Trapline Section**

Year	Mink	Muskrat	Mink	Muskrat 1 year out	Mink	Muskrat 2 years out	Mink	Muskrat 3 years out	Mink	Muskrat 4 years out	Mink	Muskrat 5 years out	Mink	Muskrat 6 years out	Mink	Muskrat 7 years out	Mink	Muskrat 8 years out	
61/62	133	250	133		133		133		133		133		133		133		133		133
62/63	61	726	61	250	61		61		61		61		61		61		61		61
63/64	47	1018	47	726	47	250	47		47		47		47		47		47		47
64/65	37	1577	37	1018	37	726	37	250	37		37		37		37		37		37
65/66	68	1362	68	1577	68	1018	68	726	68	250	68		68		68		68		68
66/67	31	1711	31	1362	31	1577	31	1018	31	726	31	250	31		31		31		31
67/68	87	660	87	1711	87	1362	87	1577	87	1018	87	726	87	250	87		87		87
68/69	250	492	250	660	250	1711	250	1362	250	1577	250	1018	250	726	250	250	250		250
69/70	111	607	111	492	111	660	111	1711	111	1362	111	1577	111	1018	111	726	111		111
70/71				607		492		660		1711		1362		1577		1018			726
71/72	148	115	148		148	607	148	492	148	660	148	1711	148	1362	148	1577	148		1018
72/73	46	136	46	115	46		46	607	46	492	46	660	46	1711	46	1362	46		1577
73/74	13	120	13	136	13	115	13		13	607	13	492	13	660	13	1711	13		1362
74/75	30	559	30	120	30	136	30	115	30		30	607	30	492	30	660	30		1711
75/76	32	496	32	559	32	120	32	136	32	115	32		32	607	32	492	32		660
76/77	92	315	92	496	92	559	92	120	92	136	92	115	92		92	607	92		492
77/78				315		496		559		120		136		115					607
78/79						315		496		559		120		136		115			
79/80								315		496		559		120		136			115
80/81										315		496		559		120			136

81/82	62	39	62		62		62		62		62	315	62	496	62	559	62	120
82/83	11	81	11	39	11		11		11		11		11	315	11	496	11	559
83/84	16	182	16	81	16	39	16		16		16		16		16	315	16	496
84/85	9	192	9	182	9	81	9	39	9		9		9		9		9	315
85/86	23	76	23	192	23	182	23	81	23	39	23		23		23		23	
86/87	23	305	23	76	23	192	23	182	23	81	23	39	23		23		23	
87/88	31	93	31	305	31	76	31	192	31	182	31	81	31	39	31		31	
88/89	34	25	34	93	34	305	34	76	34	192	34	182	34	81	34	39	34	
89/90	23	14	23	25	23	93	23	305	23	76	23	192	23	182	23	81	23	39
90/91				14		25		93		305		76		192		182		81
91/92	32	8	32		32	14	32	25	32	93	32	305	32	76	32	192	32	182
92/93	15	27	15	8	15		15	14	15	25	15	93	15	305	15	76	15	192
93/94	8	125	8	27	8	8	8		8	14	8	25	8	93	8	305	8	76
				125		27		8				14		25		93		305
						125		27		8				14		25		93
	0.1009186		0.3610139					125		27		8				14		25
					0.678443													14
							0.6296142											14
									0.7746489									8
											0.6877965							27
													0.4252442					125
															0.1286569			
																		0.0911115

**Correlation Values of Mink vs Ermine for Bloodvein Trapline Section**

Year	Mink	Ermine	Ermine 1 year out	Mink	Ermine 2 years out	Mink	Ermine 3 years out	Mink	Ermine 4 years out	Mink	Ermine 5 years out	Mink	Ermine 6 years out	Mink	Ermine 7 years out	Mink	Ermine 8 years out
61/62	133	104		133		133		133		133		133		133		133	
62/63	61	95	104	61		61		61		61		61		61		61	
63/64	47	95	95	47	104	47		47		47		47		47		47	
64/65	37	89	37	37	95	37	104	37		37		37		37		37	
65/66	68	201	68	68	95	68	95	68	104	68		68		68		68	
66/67	31	55	31	31	89	31	95	31	95	31	104	31		31		31	
67/68	87	121	87	87	201	87	89	87	95	87	95	87	104	87		87	
68/69	250	154	250	250	55	250	201	250	89	250	95	250	95	250	104	250	
69/70	111	39	111	111	121	111	55	111	201	111	89	111	95	111	95	111	104
70/71					154		121		55		201		89		95		95
71/72	148	20	148	148	39	148	154	148	121	148	55	148	201	148	89	148	95
72/73	46	77	46	46		46	39	46	154	46	121	46	55	46	201	46	89
73/74	13	4	13	13	20	13		13	39	13	154	13	121	13	55	13	201
74/75	30	112	30	30	77	30	20	30		30	39	30	154	30	121	30	55
75/76	32	127	32	32	4	32	77	32	20	32		32	39	32	154	32	121
76/77	92	132	92	92	112	92	4	92	77	92	20	92		92	39	92	154
77/78					127		112		4		77		20				39
78/79					132		127		112		4		77		20		
79/80							132		127				4		77		20
80/81									132		127				4		77
81/82	62	54	62	62		62		62		62	132	62	127	62	112	62	4







Correlation Values for Mink from Duck Mountain Trapline Section																
Year	Mink	Mink 1 year out	Mink	Mink 2 years out	Mink	Mink 3 years out	Mink	Mink 4 years out	Mink	Mink 5 years out	Mink	Mink 6 years out	Mink	Mink 7 years out	Mink	Mink 8 years out
61/62	325		325		325		325		325		325		325		325	
62/63	330	325	330		330		330		330		330		330		330	
63/64	226	330	226	325	226		226		226		226		226		226	
64/65		226		330		325										
65/66	288		288	226	288	330	288	325	288		288		288		288	
66/67	95	288	95	226	95	226	95	330	95	325	95		95		95	
67/68		95		288		288		226	330	330		325				
68/69	488		488	95	488	288	488	226	488	226	488	325	488		488	
69/70	539	488	539		539	95	539	288	539		539	226	539	330	539	325
70/71	364	539	364	488	364		364	95	364	288	364		364	226	364	330
71/72	339	364	339	539	339	488	339		339	95	339	288	339		339	226
72/73	538	339	538	364	538	539	538	488	538		538	95	538	288	538	
73/74	388	538	388	339	388	364	388	539	388	488	388	95	388	95	388	288
74/75	313	388	313	538	313	339	313	364	313	539	313	488	313		313	95
75/76		313		388		538		339		364		539		488		
76/77				313		388		538		339		364		539		488
77/78						313		388		538		339		364		539
78/79								313		388		538		339		364
79/80										313		388		538		339
80/81												313		388		538
81/82														313		388
82/83															313	313

83/84																
84/85	73		73		73		73		73		73		73		73	
85/86	161	73	161		161		161		161		161		161		161	
86/87	183	161	183	73	183		183		183		183		183		183	
87/88	272	183	272	161	272	73	272		272		272		272		272	
88/89	147	272	147	183	147	161	147	73	147		147		147		147	
89/90	135	147	135	272	135	183	135	161	135	73	135		135		135	
90/91		135		147		272		183		161		73				
91/92	74		74	135	74	147	74	272	74	183	74	161	74	73	74	
92/93	122	74	122		122	135	122	147	122	272	122	183	122	161	122	73
93/94	46	122	46	74	46		46	135	46	147	46	272	46	183	46	161
		46		122		74				135		147		272		183
				46		122		74				135		147		272
	0.7414947					46		122		74				135		147
			0.4439204					46		122		74				135
					0.4696005					46		122		74		
							0.5470698					46		122		74
									0.3460761					46		122
											0.0179563					46
													0.7321377			
																0.7304777







82/83																	370
83/84																	
84/85	370		370		370		370		370		370		370		370		
85/86	209	370	209		209		209		209		209		209		209		
86/87	360	209	360	370	360		360		360		360		360		360		
87/88	287	360	287	209	287	370	287		287		287		287		287		
88/89	244	287	244	360	244	209	244	370	244		244		244		244		
89/90	84	244	84	287	84	360	84	209	84	370	84		84		84		
90/91		84		244		287		360		209		370					
91/92	139		139	84	139	244	139	287	139	360	139	209	139	370	139		
92/93	107	139	107		107	84	107	244	107	287	107	360	107	209	107	370	
93/94	52	107	52	139	52		52	84	52	244	52	287	52	360	52	209	
		52		107		139				84		244		287		360	
				52		107		139				84		244		287	
	0.3343694					52		107		139				84		244	
			0.0928525					52		107		139					84
					0.1791513					52		107		139			
							0.2840154					52		107		139	
									0.3526236					52		107	
											0.3082892					52	
													0.1797027				
																	-0.2321285

**Correlation Values for Mink vs Muskrat from Duck Mountain Trapline Section**

Year	Mink	Muskrat	Mink	Muskrat 1 year out	Mink	Muskrat 2 years out	Mink	Muskrat 3 years out	Mink	Muskrat 4 years out	Mink	Muskrat 5 years out	Mink	Muskrat 6 years out	Mink	Muskrat 7 years out	Mink	Muskrat 8 years out
61/62	325	729	325		325		325		325		325		325		325		325	
62/63	330	828	330	729	330		330		330		330		330		330		330	
63/64	226	1711	226	828	226	729	226		226		226		226		226		226	
64/65				1711		828		729										
65/66	288	2436	288		288	1711	288	828	288	729	288		288		288		288	
66/67	95	1297	95	2436	95		95	1711	95	828	95	729	95		95		95	
67/68				1297		2436				1711								
68/69	488	1408	488		488	1297	488	2436	488	1711	488	828	488	729	488		488	
69/70	539	1816	539	1408	539		539	1297	539	2436	539	1711	539	828	539	828	539	729
70/71	364	3951	364	1816	364	1408	364		364	1297	364	2436	364		364	1711	364	828
71/72	339	8927	339	3951	339	1816	339	1408	339	1297	339	2436	339	2436	339		339	1711
72/73	538	3733	538	8927	538	3951	538	1816	538	1408	538	1297	538	1297	538		538	
73/74	388	579	388	3733	388	8927	388	3951	388	1816	388	1408	388		388	1297	388	2436
74/75	313	2086	313	579	313	3733	313	8927	313	3951	313	1816	313	1408	313		313	1297
75/76				2086		579		3733		8927		3951		1816				
76/77						2086		579		3733		8927		3951		1408		1408
77/78								2086		579		3733		3951		1816		1816
78/79										2086		579		3733		3951		3951
79/80												2086		579		3733		8927
80/81																		8927
																		3733



Correlation Values for Mink vs Ermine from Duck Mountain Trapline Section																
Year	Mink	Ermine	Ermine 1 years out	Mink	Ermine 2 years out	Mink	Ermine 3 years out	Mink	Ermine 4 years out	Mink	Ermine 5 years out	Mink	Ermine 6 years out	Mink	Ermine 7 years out	Ermine 8 years out
61/62	325	358		325		325		325		325		325		325		325
62/63	330	445	358	330		330		330		330		330		330		330
63/64	226	636	445	226	358	226		226		226		226		226		226
64/65			636		445		358									
65/66	288	568		288	636	288	445	288	358	288		288		288		288
66/67	95	115	568	95		95	636	95	445	95	358	95		95		95
67/68			115		568				636		445		358			
68/69	488	875		488	115	488	568	488		488	636	488	445	488	358	488
69/70	539	375	875	539		539	115	539	568	539		539	636	539	445	539
70/71	364	255	375	364	875	364		364	115	364	568	364		364	636	364
71/72	339	199	255	339	375	339	875	339		339	115	339	568	339		339
72/73	538	255	199	538	255	538	375	538	875	538		538	115	538	568	538
73/74	388	132	255	388	199	388	255	388	375	388	875	388		388	115	388
74/75	313	370	132	313	255	313	199	313	255	313	375	313	875	313		313
75/76			370		132		255		199		255		375		875	
76/77					370		132		255		199		255		375	875
77/78							370		132		255		199		255	375
78/79									370		132		255		199	255
79/80											370		132		255	199
80/81													370		132	255
81/82															370	132







**Correlation Values for Mink from Hole River Trapline Section**

Year	Mink	Mink 1 year out	Mink	Mink 2 years out	Mink	Mink 3 years out	Mink	Mink 4 years out	Mink	Mink 5 years out	Mink	Mink 6 years out	Mink	Mink 7 years out	Mink	Mink 8 years out
62/63	82		82		82		82		82		82		82		82	
63/64	74	82	74		74		74		74		74		74		74	
64/65		74		82		82										
65/66				74		74										
66/67	68		68		68	74	68	82	68		68		68		68	
67/68	81	68	81		81		81	74	81	82	81		81		81	
68/69	216	81	216	68	216		216		216	74	216	82	216		216	
69/70	76	216	76	81	76	68	76		76		76	74	76	82	76	
70/71	38	76	38	216	38	81	38	68	38		38		38	74	38	82
71/72	109	38	109	76	109	216	109	81	109	68	109		109		109	74
72/73		109		38		76		216		81		68				
73/74	24		24	109	24	38	24	76	24	216	24	81	24	68	24	
74/75	32	24	32		32	109	32	38	32	76	32	216	32	81	32	68
75/76	48	32	48	24	48		48	109	48	38	48	76	48	216	48	81
76/77	133	48	133	32	133	24	133		133	109	133	38	133	76	133	216
77/78	35	133	35	48	35	32	35	24	35		35	109	35	38	35	76
78/79		35		133		48		32		24				109		38
79/80				35		133		48		32		24				109
80/81						35		133		48		32		24		
81/82	48		48		48		48	35	48	133	48	32	24		48	24
82/83	44	48	44		44		44	35	44	133	44	32	24	48	44	32

83/84	17	44	17	48	17		17		17		17	35	17	133	17	48
84/85	28	17	28	44	28	48	28		28		28		28	35	28	133
85/86	40	28	40	17	40	44	40	48	40		40		40		40	35
86/87	44	40	44	28	44	17	44	44	44	48	44		44		44	
87/88	57	44	57	40	57	28	57	17	57	44	57	48	57		57	
88/89	34	57	34	44	34	40	34	28	34	17	34	44	34	48	34	
89/90	44	34	44	57	44	44	44	40	44	28	44	17	44	44	44	48
90/91		44		34		57		44		40		28		17		44
91/92	42		42	44	42	34	42	57	42	44	42	40	42	28	42	17
92/93	6	42	6		6	44	6	34	6	57	6	44	6	40	6	28
93/94	13	6	13	42	13		13	44	13	34	13	57	13	44	13	40
		13		6		42				44		34		57		44
				13		6		42				44		34		57
	0.2476663					13		6		42				44		34
			-0.0022347					13		6		42				44
					0.3563179					13		6		42		
							0.4230444					13		6		42
									0.0951766					13		6
											-0.0236053					13
													0.120542			
																0.6401272







83/84	4	23	4	59	4		4		4		4	14	4	147	4	72
84/85	45	4	45	23	45	59	45		45		45		45	14	45	147
85/86	59	45	59	4	59	23	59	59	59		59		59		59	14
86/87	51	59	51	45	51	4	51	23	51	59	51		51		51	
87/88	25	51	25	59	25	45	25	4	25	23	25	59	25		25	
88/89	20	25	20	51	20	59	20	45	20	4	20	23	20	59	20	
89/90	19	20	19	25	19	51	19	59	19	45	19	4	19	23	19	59
90/91		19		20		25		51		59		45		4		23
91/92	30		30	19	30	20	30	25	30	51	30	59	30	45	30	4
92/93	3	30	3		3	19	3	20	3	25	3	51	3	59	3	45
93/94	0	3	0	30	0		0	19	0	20	0	25	0	51	0	59
		0		3		30				19		20		25		51
				0		3		30				19		20		25
	0.1663188					0		3		30				19		20
			0.0466558					0		3		30				19
					-0.0625461					0		3		30		
							-0.0073675					0		3		30
									0.2370243					0		3
											0.0212756					0
													-0.2458378			
															0.3581877	





**Correlation Values for Mink vs Ermine from Hole River Trapline Section**

Year	Mink	Ermine	Mink	Ermine 1 year out	Mink	Ermine 2 years out	Mink	Ermine 3 years out	Mink	Ermine 4 years out	Mink	Ermine 5 years out	Mink	Ermine 6 years out	Mink	Ermine 7 years out	Mink	Ermine 8 years out	
62/63	82	83	82		82		82		82		82		82		82		82		82
63/64	74	113	74	83	74		74		74		74		74		74		74		74
64/65				113		83													
65/66						113		83											
66/67	68	72	68		68	113	68	83	68	83	68		68		68		68		68
67/68	81	45	81	72	81		81	113	81	113	81	83	81		81		81		81
68/69	216	144	216	45	216	72	216		216		216	113	216	83	216		216		216
69/70	76	9	76	144	76	45	76	72	76	72	76		76	113	76	83	76		76
70/71	38	0	38	9	38	144	38	45	38	72	38	72	38		38	113	38		38
71/72	109	30	109	0	109	9	109	144	109	45	109	72	109		109		109		109
72/73				30		0		9		144		45		72					113
73/74	24	43	24		24	30	24	0	24	9	24	144	24	45	24	72	24		24
74/75	32	75	32	43	32	30	32	30	32	0	32	9	32	144	32	45	32		32
75/76	48	72	48	75	48	43	48	30	48	30	48	0	48	9	48	144	48		48
76/77	133	147	133	72	133	75	133	43	133	30	133	30	133	0	133	9	133		133
77/78	35	14	35	147	35	72	35	75	35	43	35	30	35	30	35	0	35		35
78/79				14		147		72		75		43				30			0
79/80						14		147		72		75		43					30
80/81								14		147		72		75		43			30
81/82	48	59	48		48		48		48	14	48	147	48	72	48	75	48		48
82/83	44	23	44	59	44		44		44		44	14	44	147	44	72	44		44

83/84	17	4	17	23	17	59	17		17		17		17	14	17	147	17	72
84/85	28	45	28	4	28	23	28	59	28		28		28		28	14	28	147
85/86	40	59	40	45	40	4	40	23	40	59	40		40		40		40	14
86/87	44	51	44	59	44	45	44	4	44	23	44	59	44		44		44	
87/88	57	25	57	51	57	59	57	45	57	4	57	23	57	59	57		57	
88/89	34	20	34	25	34	51	34	59	34	45	34	4	34	23	34	59	34	
89/90	44	19	44	20	44	25	44	51	44	59	44	45	44	4	44	23	44	59
90/91				19		20		25		51		59		45		4		23
91/92	42	30	42		42	19	42	20	42	25	42	51	42	59	42	45	42	4
92/93	6	3	6	30	6		6	19	6	20	6	25	6	51	6	59	6	45
93/94	13	0	13	3	13	30	13		13	19	13	20	13	25	13	51	13	59
				0		3		30				19		20		25		51
						0		3		30				19		20		25
	0.721129		0.1589857					0		3		30			19			20
					0.1707215					0		3		30				19
							0.5290623					0		3		30		30
									0.4735301					0		3		30
											0.3138215				0			3
													0.0978592					0
															-0.2265643			
																		0.4900521

**Correlation Values for Muskrat vs Ermine from Hole River Trapline Section**

Year	Muskrat	Ermine	Muskrat	Ermine 1 year out	Muskrat	Ermine 2 years out	Muskrat	Ermine 3 years out	Muskrat	Ermine 4 years out	Muskrat	Ermine 5 years out	Muskrat	Ermine 6 years out	Muskrat	Ermine 7 years out	Muskrat	Ermine 8 years out
62/63	384	83	384		384		384		384		384		384		384		384	
63/64	1195	113	1195	83	1195		1195		1195		1195		1195		1195		1195	
64/65				113		83												
65/66						113	83											
66/67	967	72	967		967		967	113	967	83	967		967		967		967	
67/68	670	45	670	72	670		670		670	113	670	83	670		670		670	
68/69	527	144	527	45	527	72	527		527		527	113	527	83	527		527	
69/70	760	9	760	144	760	45	760	72	760		760		760	113	760	83	760	
70/71	604	0	604	9	604	144	604	45	604	72	604		604		604	113	604	83
71/72	34	30	34	0	34	9	34	144	34	45	34	72	34		34		34	113
72/73				30		0		9		144		45		72				
73/74	390	43	390		390	30	390	0	390	9	390	144	390	45	390	72	390	
74/75	1288	75	1288	43	1288		1288	30	1288	0	1288	9	1288	144	1288	45	1288	72
75/76	1071	72	1071	75	1071	43	1071		1071	30	1071	0	1071	9	1071	144	1071	45
76/77	652	147	652	72	652	75	652	43	652		652	30	652	0	652	9	652	144
77/78	122	14	122	147	122	72	122	75	122	43	122		122	30	122	0	122	9
78/79				14		147		72		75		43				30		0
79/80						14		147		72		75		43				30
80/81								14		147		72		75		43		
81/82	494	59	494		494		494		494	14	494	147	494	72	494	75	494	43
82/83	623	23	623	59	623		623		623		623	14	623	147	623	72	623	75



Correlation Values for Mink from Lac Du Bonnet Trapline Section																
Year	Mink	Mink 1 year out	Mink	Mink 2 years out	Mink	Mink 3 years out	Mink	Mink 4 years out	Mink	Mink 5 years out	Mink	Mink 6 years out	Mink	Mink 7 years out	Mink	Mink 8 years out
61/62	191		191		191		191		191		191		191		191	
62/63	303	191	303		303		303		303		303		303		303	
63/64	186	303	186	191	186		186		186		186		186		186	
64/65		186		303	191											
65/66	106		106	186	106	303	106	191	106		106		106		106	
66/67	161	106	161		161	186	161	303	161	191	161		161		161	
67/68	208	161	208	106	208	106	208	186	208	303	208	191	208		208	
68/69	184	208	184	161	184	106	184		184	186	184	303	184	191	184	
69/70	161	184	161	208	161	161	161	106	161		161	186	161	303	161	191
70/71	74	161	74	184	74	208	74	161	74	106	74		74	186	74	303
71/72	176	74	176	161	176	184	176	208	176	161	176	106	176		176	186
72/73	90	176	90	74	90	161	90	184	90	208	90	161	90	106	90	
73/74	60	90	60	176	60	74	60	161	60	184	60	208	60	161	60	106
74/75	112	60	112	90	112	176	112	74	112	161	112	184	112	208	112	161
75/76	196	112	196	60	196	90	196	176	196	74	196	161	196	184	196	208
76/77	349	196	349	112	349	60	349	90	349	176	349	74	349	161	349	184
77/78	53	349	53	196	53	112	53	60	53	90	53	176	53	74	53	161
78/79	490	53	490	349	490	196	490	112	490	60	490	90	490	176	490	74
79/80		490		53		349		196		112		60		90		176
80/81				490		53		349		196		112		60		90
81/82	233		233		233	490	233	53	233	349	233	196	233	112	233	60



**Correlation Values for Muskrats from Lac Du Bonnet Trapline Section**

Year	Muskra	Muskra 1 year out	Muskra 2 years out	Muskra 3 years out	Muskra 4 years out	Muskra 5 years out	Muskra 6 years out	Muskra 7 years out	Muskra 8 years out
61/62	215	215	215	215	215	215	215	215	215
62/63	850	850	850	850	850	850	850	850	850
63/64	1220	1220	1220	1220	1220	1220	1220	1220	1220
64/65		1220	850	215					
65/66	501	501	1220	501	501	501	501	501	501
66/67	497	497	497	497	497	497	497	497	497
67/68	233	233	233	233	233	233	233	233	233
68/69	428	233	428	428	428	428	428	428	428
69/70	590	428	590	590	590	590	590	590	590
70/71	545	590	545	545	545	545	545	545	545
71/72	303	545	303	303	303	303	303	303	303
72/73	692	303	692	692	692	692	692	692	692
73/74	728	692	728	728	728	728	728	728	728
74/75	2381	728	2381	2381	2381	2381	2381	2381	2381
75/76	1553	2381	1553	1553	1553	1553	1553	1553	1553
76/77	515	1553	515	515	515	515	515	515	515
77/78	308	515	308	308	308	308	308	308	308
78/79	674	308	674	674	674	674	674	674	674
79/80		674							
80/81			674	308	1553	2381	728	692	303
				308	515	1553	2381	728	692

81/82	674		674		674	674	674	308	674	515	674	1553	674	2381	674	728
82/83	1689	674	1689		1689		1689	674	1689	308	1689	515	1689	1553	1689	2381
83/84	873	1689	873	674	873		873		873	674	873	308	873	515	873	1553
84/85	1211	873	1211	1689	1211	674	1211		1211		1211	674	1211	308	1211	515
85/86	521	1211	521	873	521	1689	521	674	521		521		521	674	521	308
86/87	1415	521	1415	1211	1415	873	1415	1689	1415	674	1415		1415		1415	674
87/88	993	1415	993	521	993	1211	993	873	993	1689	993	674	993		993	
88/89	128	993	128	1415	128	521	128	1211	128	873	128	1689	128	674	128	
89/90	62	128	62	993	62	1415	62	521	62	1211	62	873	62	1689	62	674
90/91		62		128		993		1415		521		1211		873		1689
91/92	293		293	62	293	128	293	993	293	1415	293	521	293	1211	293	873
92/93	98	293	98		98	62	98	128	98	993	98	1415	98	521	98	1211
93/94	1186	98	1186	293	1186		1186	62	1186	128	1186	993	1186	1415	1186	521
		1186		98		293				62		128		993		1415
				1186		98		293				62		128		993
	0.2811241					1186		98		293				62		128
			-0.0849484					1186		98		293				62
					-0.1336168					1186		98		293		
							-0.0166073					1186		98		293
									-0.3028164					1186		98
											-0.2735444					1186
													-0.127549			
																0.0604021

**Correlation Values for Ermine from Lac Du Bonnet Trapline Section**

Year	Ermine	Ermine 1 year out	Ermine	Ermine 2 years out	Ermine	Ermine 3 years out	Ermine	Ermine 4 years out	Ermine	Ermine 5 years out	Ermine	Ermine 6 years out	Ermine	Ermine 7 years out	Ermine	Ermine 8 years out
61/62	359		359					359						359		
62/63	582	359	582					582						582		
63/64	421	582	421	359				421						421		
64/65		421		582		359										
65/66	411		411	421		582		411						411		
66/67	125	411	125			421		125						125		
67/68	178	125	178	411		178		178						178		
68/69	72	178	72	125		411		72						72		
69/70	51	72	51	178		125		51						51		359
70/71	15	51	15	72		178		15						15		582
71/72	85	15	85	51		72		85						85		421
72/73	125	85	125	15		51		125						125		
73/74	122	125	122	85		15		122						122		411
74/75	405	122	405	125		85		405						405		125
75/76	207	405	207	122		125		207						207		178
76/77	431	207	431	405		431		431						431		72
77/78	30	431	30	207		405		30						30		51
78/79	415	30	415	431		207		415						415		15
79/80		415		30		431										85
80/81				415		30										125
81/82	253		253			415		253						253		122







Correlation Values for Mink vs Ermine from Lac Du Bonnet Trapline Section																			
Year	Mink	Ermine	Mink	Ermine 1 year out	Mink	Ermine 2 years out	Mink	Ermine 3 years out	Mink	Ermine 4 years out	Mink	Ermine 5 years out	Mink	Ermine 6 years out	Mink	Ermine 7 years out	Mink	Ermine 8 years out	
61/62	191	359	191		191		191		191		191		191		191		191		191
62/63	303	582	303	359	303		303		303		303		303		303		303		303
63/64	186	421	186	582	186	359	186		186		186		186		186		186		186
64/65				421		582	359												
65/66	106	411	106		106	421	582		106	359	106		106		106		106		106
66/67	161	125	161	411	161		161	421	161	582	161		161		161		161		161
67/68	208	178	208	125	208	411		208	208	421	208	359	208	359	208		208		208
68/69	184	72	184	178	184	125	411	184	184	421	184	582	184	582	184	359	184		184
69/70	161	51	161	72	161	178	125	161	161	411	161	421	161	421	161	582	161	359	161
70/71	74	15	74	51	74	72	178	74	74	125	74	411	74	411	74	421	74	582	74
71/72	176	85	176	15	176	51	72	176	176	178	176	125	176	178	176	421	176	421	176
72/73	90	125	90	85	90	15	51	90	90	72	90	178	90	125	90	411	90	411	90
73/74	60	122	60	125	60	85	15	60	60	51	60	72	60	178	60	125	60	411	60
74/75	112	405	112	122	112	125	85	112	112	15	112	51	112	72	112	178	112	125	112
75/76	196	207	196	405	196	122	125	196	196	85	196	15	196	51	196	72	196	178	196
76/77	349	431	349	207	349	405	122	349	349	125	349	85	349	15	349	51	349	72	349
77/78	53	30	53	431	53	207	405	53	53	122	53	125	53	85	53	15	53	51	53
78/79	490	415	490	30	490	431	207	490	490	405	490	122	490	125	490	85	490	15	490
79/80				415		30	431			207		405		122		125		85	
80/81						415	30			431		207		405		122		125	
81/82	233	253	233		233	415	415	233	233	30	233	431	233	207	233	405	233	122	233

82/83	173	106	173	253	173		173		173	415	173	30	173	431	173	207	173	405
83/84	141	110	141	106	141	253	141		141		141	415	141	30	141	431	141	207
84/85	85	197	85	110	85	106	85	253	85		85		85	415	85	30	85	431
85/86	126	216	126	197	126	110	126	106	126	253	126		126		126	415	126	30
86/87	137	153	137	216	137	197	137	110	137	106	137	253	137		137		137	415
87/88	230	270	230	153	230	216	230	197	230	110	230	106	230	253	230		230	
88/89	245	189	245	270	245	153	245	216	245	197	245	110	245	106	245	253	245	
89/90	119	77	119	189	119	270	119	153	119	216	119	197	119	110	119	106	119	253
90/91				77		189		270		153		216		197		110		106
91/92	186	109	186		186	77	186	189	186	270	186	153	186	216	186	197	186	110
92/93	45	16	45	109	45		45	77	45	189	45	270	45	153	45	216	45	197
93/94	67	108	67	16	67	109	67		67	77	67	189	67	270	67	153	67	216
				108		16		109				77		189		270		153
						108		16		109				77		189		270
	0.5975195		0.0744436					108		16		109				77		189
					0.5555621					108		16		109				77
							0.0468187					108		16		109		77
									0.2766633					108		16		109
											-0.1051306				108			109
													-0.101628					108
															-0.1305194			
																		-0.4274098

**Correlation Values for Muskrats vs Ermine from Lac Du Bonnet Trapline Section**

Year	Muskra	Ermine	Muskra	Ermine 1 year out	Muskra	Ermine 2 years out	Muskra	Ermine 3 years out	Muskra	Ermine 4 years out	Muskra	Ermine 5 years out	Muskra	Ermine 6 years out	Muskra	Ermine 7 years out	Muskra	Ermine 8 years out	
61/62	215	359	215		215		215		215		215		215		215		215		215
62/63	850	582	850	359	850		850		850		850		850		850		850		850
63/64	1220	421	1220	582	1220	359	1220		1220		1220		1220		1220		1220		1220
64/65				421		582		359											
65/66	501	411	501		501	421	501	582	501	359	501		501		501		501		501
66/67	497	125	497	411	497		497	421	497	582	497	359	497		497		497		497
67/68	233	178	233	125	233	411	233	421	233	421	233	582	233	359	233		233		233
68/69	428	72	428	178	428	125	428	411	428	421	428	421	428	582	428	359	428		428
69/70	590	51	590	72	590	178	590	125	590	411	590		590	421	590	582	590		590
70/71	545	15	545	51	545	72	545	178	545	125	545	411	545		545	421	545		545
71/72	303	85	303	15	303	51	303	72	303	178	303	125	303	411	303		303		303
72/73	692	125	692	85	692	15	692	51	692	72	692	178	692	125	692	411	692		692
73/74	728	122	728	125	728	85	728	15	728	51	728	178	728	178	728	125	728		728
74/75	2381	405	2381	122	2381	125	2381	85	2381	15	2381	51	2381	72	2381	178	2381		2381
75/76	1553	207	1553	405	1553	122	1553	125	1553	85	1553	15	1553	51	1553	72	1553		1553
76/77	515	431	515	207	515	405	515	122	515	125	515	85	515	15	515	51	515		515
77/78	308	30	308	431	308	207	308	405	308	122	308	125	308	85	308	15	308		308
78/79	674	415	674	30	674	431	674	207	674	405	674	122	674	125	674	85	674		674
79/80				415		30		431		207		405		122		125			85
80/81						415		30		431		207		405		122			125
81/82	674	253	674		674		674	415	674	30	674	431	674	207	674	405	674		674

82/83	1689	106	1689	253	1689		1689		1689	415	1689	30	1689	431	1689	207	1689	405
83/84	873	110	873	106	873	253	873		873		873	415	873	30	873	431	873	207
84/85	1211	197	1211	110	1211	106	1211	253	1211		1211		1211	415	1211	30	1211	431
85/86	521	216	521	197	521	110	521	106	521	253	521		521		521	415	521	30
86/87	1415	153	1415	216	1415	197	1415	110	1415	106	1415	253	1415		1415		1415	415
87/88	993	270	993	153	993	216	993	197	993	110	993	106	993	253	993		993	
88/89	128	189	128	270	128	153	128	216	128	197	128	110	128	106	128	253	128	
89/90	62	77	62	189	62	270	62	153	62	216	62	197	62	110	62	106	62	253
90/91				77		189		270		153		216		197		110		106
91/92	293	109	293		293	77	293	189	293	270	293	153	293	216	293	197	293	110
92/93	98	16	98	109	98		98	77	98	189	98	270	98	153	98	216	98	197
93/94	1186	108	1186	16	1186	109	1186		1186	77	1186	189	1186	270	1186	153	1186	216
				108		16		109				77		189		270		153
						108		16		109				77		189		270
	0.2770678		0.1131368					108		16		109			77		189	
						-0.1455967				108		16		109				77
								-0.2159779				108		16		109		
										-0.2903469				108		16		109
												-0.3822809				108		16
														-0.0391368				108
																-0.1587565		
																		0.1136011

Correlation Values for Mink from Little Grand Rapids Trapline Section

Year	Mink	Mink 1 year out	Mink	Mink 2 years out	Mink	Mink 3 years out	Mink	Mink 4 years out	Mink	Mink 5 years out	Mink	Mink 6 years out	Mink	Mink 7 years out	Mink	Mink 8 years out
61/62	527		527				527		527		527		527		527	
62/63	387	527	387				387		387		387		387		387	
63/64	228	387	228	527			228		228		228		228		228	
64/65	267	228	267	387	527		267		267		267		267		267	
65/66	171	267	171	228	387	527	171		171		171		171		171	
66/67	258	171	258	267	228	387	258	527	258		258		258		258	
67/68	359	258	359	171	228	267	359	228	359	527	359		359		359	
68/69	446	359	446	258	171	228	446	267	446	228	446	527	446		446	
69/70	108	446	108	359	228	267	108	171	108	267	108	228	108	527	108	527
70/71		108		446	171	228		258		171		267		228		387
71/72				108	228	267		359		258		171		267		228
72/73	88		88			108	88	446	88	359	88	258	88	171	88	267
73/74	39	88	39				39	108	39	446	39	359	39	258	39	171
74/75	66	39	66	88			66		66	108	66	446	66	359	66	258
75/76	38	66	38	39	88		38		38		38	108	38	446	38	359
76/77	169	38	169	66	39	88	169	88	169		169		169	108	169	446
77/78		169		38	66			39		88						108
78/79				169				66		39		88				
79/80					169			38		66		39		88		
80/81						169		169		38		66		39		88
81/82	94		94				94		94	169	94	38	94	66	94	39

82/83	44	94	44		44		44		44		44	169	44	38	44	66
83/84	20	44	20	94	20		20		20		20		20	169	20	38
84/85	24	20	24	44	24	94	24		24		24		24		24	169
85/86	50	24	50	20	50	44	50	94	50		50		50		50	
86/87	45	50	45	24	45	20	45	44	45	94	45		45		45	
87/88	122	45	122	50	122	24	122	20	122	44	122	94	122		122	
88/89	26	122	26	45	26	50	26	24	26	20	26	44	26	94	26	
89/90	19	26	19	122	19	45	19	50	19	24	19	20	19	44	19	94
90/91		19		26		122		45		50		24		20		44
91/92	34		34	19	34	26	34	122	34	45	34	50	34	24	34	20
92/93	9	34	9		9	19	9	26	9	122	9	45	9	50	9	24
		9		34				19		26		122		45		50
				9		34				19		26		122		45
	0.7447957					9		34				19		26		122
			0.6030774					9		34				19		26
					0.5908252					9		34				19
							0.4815148					9		34		
									0.4813929					9		34
											0.6409362					9
													0.5705287			
															0.684697	

**Correlation Values for Muskrats from Little Grand Rapids Trapline Section**

Year	Muskrat	Muskrat 1 year out	Muskrat 2 years out	Muskrat 3 years out	Muskrat 4 years out	Muskrat 5 years out	Muskrat 6 years out	Muskrat 7 years out	Muskrat 8 years out
61/62	1292								
62/63	1759	1292							1292
63/64	3832	1759	1292						1759
64/65	5279	3832	1759						3832
65/66	6555	5279	3832	1292					5279
66/67	4613	6555	5279	1759	1292				6555
67/68	2271	4613	5279	3832	1759	1292			4613
68/69	1512	2271	6555	5279	3832	1759	1292		2271
69/70	612	1512	4613	612	5279	3832	1759	1292	1512
70/71		612	1512	2271	4613	6555	5279	3832	612
71/72			612	1512	2271	4613	6555	5279	1759
72/73	369			1512	2271	4613	6555	5279	3832
73/74	424	369		612	1512	2271	4613	6555	5279
74/75	1708	424		424	612	1512	4613	6555	5279
75/76	1107	1708	369	1708	612	1512	4613	6555	5279
76/77	448	1107	424	1107	612	1512	4613	6555	5279
77/78		448	1708	448	424	1512	4613	6555	5279
78/79			1107	1708	424	1512	4613	6555	5279
79/80			448	1107	1708	424	1512	4613	6555
80/81				448	1107	1708	424	1512	4613









81/82	94	460	94		94		94		94		94	448	94	1107	94	1708	94	424
82/83	44	289	44	460	44		44		44		44		44	448	44	1107	44	1708
83/84	20	272	20	289	20	460	20		20		20		20		20	448	20	1107
84/85	24	171	24	272	24	289	24	460	24		24		24		24		24	448
85/86	50	269	50	171	50	272	50	289	50	460	50		50		50		50	
86/87	45	245	45	269	45	171	45	272	45	289	45	460	45		45		45	
87/88	122	87	122	245	122	269	122	171	122	272	122	289	122	460	122		122	
88/89	26	5	26	87	26	245	26	269	26	171	26	272	26	289	26	460	26	
89/90	19	68	19	5	19	87	19	245	19	269	19	171	19	272	19	289	19	460
90/91				68		5		87		245		269		171		272		289
91/92	34	17	34		34	68	34	5	34	87	34	245	34	269	34	171	34	272
92/93	9	0	9	17	9		9	68	9	5	9	87	9	245	9	269	9	171
				0		17				68		5		87		245		269
						0		17				68		5		87		245
	0.4605014		0.6230877					0		17				68		5		87
					0.8445201					0		17				68		5
							0.8327369					0		17				68
									0.6508794					0		17		
											0.510703					0		17
													0.1960095					0
															0.0375229			
																		0.140377



82/83	44	45	44	102	44		44		44		44		44	72	44	33	44	122
83/84	20	10	20	45	20	102	20		20		20		20		20	72	20	33
84/85	24	11	24	10	24	45	24	102	24		24		24		24		24	72
85/86	50	78	50	11	50	10	50	45	50	102	50		50		50		50	72
86/87	45	26	45	78	45	11	45	10	45	45	102	45		45		45	50	
87/88	122	8	122	26	122	78	122	11	122	10	122	45	122	102	122		122	
88/89	26	4	26	8	26	26	26	78	26	11	26	10	26	45	26	102	26	
89/90	19	2	19	4	19	8	19	26	19	78	19	11	19	10	19	45	19	102
90/91				2		4		8		26		78		11		10		45
91/92	34	9	34		34	2	34	4	34	8	34	26	34	78	34	11	34	10
92/93	9	10	9	9	9		9	2	9	4	9	8	9	26	9	78	9	11
				10		9				2		4		8		26		78
						10		9				2		4		8		26
	0.7684888		0.6747066					10		9				2		4		8
					0.6742414				10		9				2		4	8
							0.8469053				10			9		2		4
									0.7105287					10		9		2
											0.7452062				10		9	9
													0.5314738			10		10
															0.3721965			10
																		0.5340863

**Correlation Values for Muskrats vs Ermine from Little Grand Rapids Trapline Section**

Year	Muskrat	Ermine	Muskrat	Ermine 1 year out	Muskrat	Ermine 2 years out	Muskrat	Ermine 3 years out	Muskrat	Ermine 4 years out	Muskrat	Ermine 5 years out	Muskrat	Ermine 6 years out	Muskrat	Ermine 7 years out	Muskrat	Ermine 8 years out
61/62	1292	333	1292		1292		1292		1292		1292		1292		1292		1292	
62/63	1759	328	1759	333	1759		1759		1759		1759		1759		1759		1759	
63/64	3832	503	3832	328	3832	333	3832		3832		3832		3832		3832		3832	
64/65	5279	353	5279	503	5279	328	5279	333	5279		5279		5279		5279		5279	
65/66	6555	440	6555	353	6555	503	6555	328	6555	333	6555		6555		6555		6555	
66/67	4613	153	4613	440	4613	353	4613	503	4613	328	4613	333	4613		4613		4613	
67/68	2271	267	2271	153	2271	440	2271	353	2271	503	2271	328	2271	333	2271		2271	
68/69	1512	344	1512	267	1512	153	1512	440	1512	353	1512	503	1512	328	1512	333	1512	
69/70	612	7	612	344	612	267	612	153	612	440	612	353	612	503	612	328	612	333
70/71				7		344		267		153		440		353		503		328
71/72						7		344		267		153		440		353		503
72/73	369	85	369		369		369	7	369	344		267		153		440		503
73/74	424	38	424	85	424		424	7	424	344	7	267		153		440		503
74/75	1708	122	1708	38	1708	85	1708		1708	344	7	267		153		440		503
75/76	1107	33	1107	122	1107	38	1107	85	1107	344	7	267		153		440		503
76/77	448	72	448	33	448	122	448	38	448	344	7	267		153		440		503
77/78				72		33		122		38		85		448		448		7
78/79						72		33		38		85						
79/80						72		33		38		85						
80/81						72		33		38		85						
81/82	460	102	460		460		460		460								460	85
																	460	36

82/83	289	45	289	102	289		289		289		289		289	72	289	33	289	122
83/84	272	10	272	45	272	102	272		272		272		272		272	72	272	33
84/85	171	11	171	10	171	45	171	102	171		171		171		171		171	72
85/86	269	78	269	11	269	10	269	45	269	102	269		269		269		269	
86/87	245	26	245	78	245	11	245	10	245	45	245	102	245		245		245	
87/88	87	8	87	26	87	78	87	11	87	10	87	45	87	102	87		87	
88/89	5	4	5	8	5	26	5	78	5	11	5	10	5	45	5	102	5	
89/90	68	2	68	4	68	8	68	26	68	78	68	11	68	10	68	45	68	102
90/91				2		4		8		26		78		11		10		45
91/92	17	9	17		17	2	17	4	17	8	17	26	17	78	17	11	17	10
92/93	0	10	0	9	0		0	2	0	4	0	8	0	26	0	78	0	11
				10		9				2		4		8		26		78
						10		9			2		4		8		26	
	0.7839459		0.8196331					10		9			2		4		8	
					0.8556452					10		9			2		4	
							0.7817071					10		9			2	
									0.5596114				10		9			
											0.4974392				10			9
													0.5981283					10
															0.6219144			
																		0.3127624



**Correlation Values for Muskrats from Pauingassi Trapline Section**

Year	Muskrat	Muskrat 1 year out	Muskrat	Muskrat 2 year out	Muskrat	Muskrat 3 years out	Muskrat	Muskrat 4 years out	Muskrat	Muskrat 5 years out	Muskrat	Muskrat 6 years out	Muskrat	Muskrat 7 years out	Muskrat	Muskrat 8 years out
82/83	255		255		255		255		255		255		255		255	
83/84	234	255	234		234		234		234		234		234		234	
84/85	429	234	429	255	429		429		429		429		429		429	
85/86	213	429	213	234	213	255	213		213		213		213		213	
86/87	312	213	312	429	312	234	312	255	312		312		312		312	
87/88	165	312	165	213	165	429	165	234	165	255	165		165		165	
88/89	30	165	30	312	30	213	30	429	30	234	30	255	30		30	
89/90	35	30	35	165	35	312	35	213	35	429	35	234	35	255	35	
90/91	50	35	50	30	50	165	50	312	50	213	50	429	50	234	50	255
91/92	32	50	32	35	32	30	32	165	32	312	32	213	32	429	32	234
92/93	0	32	0	50	0	35	0	30	0	165	0	312	0	213	0	429
93/94	23	0	23	32	23	50	23	35	23	30	23	165	23	312	23	213
		23		0		32		50		35		30		165		312
				23		0		32		50		35		30		165
	0.6728917					23		0		32		50		35		30
			0.6608037					23		0		32		50		35
					0.5175743					23		0		32		50
							0.2502356					23		0		32
									0.176812				23		0	
											0.306631					23
													0.1760055			
																-0.7371758



**Correlation Values for Mink vs Muskrats from Pauingassi Trapline Section**

Year	Mink	Muskrat	Mink	Muskrat 1 year out	Mink	Muskrat 2 year out	Mink	Muskrat 3 years out	Mink	Muskrat 4 years out	Mink	Muskrat 5 years out	Mink	Muskrat 6 years out	Mink	Muskrat 7 years out	Mink	Muskrat 8 years out
82/83	75	255	75		75		75		75		75		75		75		75	
83/84	34	234	34	255	34		34		34		34		34		34		34	
84/85	46	429	46	234	46	255	46		46		46		46		46		46	
85/86	54	213	54	429	54	234	54	255	54		54		54		54		54	
86/87	56	312	56	213	56	429	56	234	56	255	56		56		56		56	
87/88	19	165	19	312	19	213	19	429	19	234	19	255	19		19		19	
88/89	27	30	27	165	27	312	27	213	27	429	27	234	27	255	27		27	
89/90	42	35	42	30	42	165	42	312	42	213	42	429	42	234	42	255	42	
90/91	38	50	38	35	38	30	38	165	38	312	38	213	38	429	38	234	38	255
91/92	18	32	18	50	18	35	18	30	18	165	18	312	18	213	18	429	18	234
92/93	4	0	4	32	4	50	4	35	4	30	4	165	4	312	4	213	4	429
93/94	4	23	4	0	4	32	4	50	4	35	4	30	4	165	4	312	4	213
				23		0		32		50		35		30		165		312
						23		0		32		50		35		30		165
	0.6608813		0.5407069					23		0		32		50		35		30
					0.6622431					23		0		32		50		35
							0.5083855					23		0		32		50
									0.6258363				23		0		32	
										0.7286704				23		0		32
													0.4102436				23	
																	-0.1855059	
																		-0.3404164



**Correlation Values for Muskrats vs Ermine from Pauingassi Trapline Section**

Year	Muskrat	Ermine	Muskrat	Ermine 1 year out	Muskrat	Ermine 2 years out	Muskrat	Ermine 3 years out	Muskrat	Ermine 4 years out	Muskrat	Ermine 5 years out	Muskrat	Ermine 6 years out	Muskrat	Ermine 7 years out	Muskrat	Ermine 8 years out
82/83	255	53	255		255		255		255		255		255		255		255	
83/84	234	30	234	53	234		234		234		234		234		234		234	
84/85	429	7	429	30	429	53	429		429		429		429		429		429	
85/86	213	41	213	7	213	30	213	53	213		213		213		213		213	
86/87	312	41	312	41	312	7	312	30	312	53	312		312		312		312	
87/88	165	11	165	41	165	41	165	7	165	30	165	53	165		165		165	
88/89	30	5	30	11	30	41	30	41	30	7	30	30	30	53	30		30	
89/90	35	9	35	5	35	11	35	41	35	41	35	7	35	30	35	53	35	
90/91	50	3	50	9	50	5	50	11	50	41	50	41	50	7	50	30	50	53
91/92	32	2	32	3	32	9	32	5	32	11	32	41	32	41	32	7	32	30
92/93	0	0	0	2	0	3	0	9	0	5	0	11	0	41	0	41	0	7
93/94	23	0	23	0	23	2	23	3	23	9	23	5	23	11	23	41	23	41
				0		0		2		3		9		5		11		41
						0		0		2		3		9		5		11
	0.6020474		0.710934					0		0		2		3		9		5
					0.56442702					0		0		2		3		9
							0.37107744					0		0		2		3
									0.70103					0		0		2
											0.7041866					0		0
													-0.4191502					0
															-0.2300004			
																		0.912939





Correlation Values for Muskrats from Whiteshell Trapline Section																
Year	Musktrat	Musktrat 1 year out	Musktrat	Musktrat 2 years out	Musktrat	Musktrat 3 years out	Musktrat	Musktrat 4 years out	Musktrat	Musktrat 5 years out	Musktrat	Musktrat 6 years out	Musktrat	Musktrat 7 years out	Musktrat	Musktrat 8 years out
54/56	2557		2557													
56/57	2249	2557	2249													
57/58	2205	2249	2205	2557												
58/59	2074	2205	2074	2249	2557											
59/60	1261	2074	1261	2205	2249	2557										
60/61	763	1261	763	2074	2205	2249	2557									
61/62	1273	763	1273	1261	2074	2205	2249	2557								
62/63	60	1273	60	763	1261	2074	2205	2249	2557							
63/64	706	60	706	1273	60	763	1261	2074	2205	2249	2557					
64/65	1208	706	1208	60	706	763	1208	1261	2074	2205	2249	2557				
65/66	1799	1208	1799	706	1208	1273	1799	60	706	763	1208	1261	2074	2205	2249	2557
66/67	1715	1799	1715	1208	1799	60	1715	1208	1261	2074	2205	2249	2557			
67/68	984	1715	984	1799	1715	706	984	1208	1261	2074	2205	2249	2557			
68/69	657	984	657	1715	1799	1208	657	1208	1261	2074	2205	2249	2557			
69/70	958	657	958	984	1715	1799	958	1799	1261	2074	2205	2249	2557			
70/71	1148	958	1148	657	964	1715	1148	1715	1261	2074	2205	2249	2557			
71/72	752	1148	752	958	657	964	752	964	1261	2074	2205	2249	2557			
72/73	910	752	910	1148	958	1715	910	657	1261	2074	2205	2249	2557			
73/74	484	910	484	752	1148	1799	484	958	1261	2074	2205	2249	2557			
74/75	768	484	768	910	958	1715	768	1148	1261	2074	2205	2249	2557			



Correlation Values for Ermine from Whiteshell Trapline Section																
Year	Ermine	Ermine 1 year out	Ermine	Ermine 2 years out	Ermine	Ermine 3 years out	Ermine	Ermine 4 years out	Ermine	Ermine 5 years out	Ermine	Ermine 6 years out	Ermine	Ermine 7 years out	Ermine	Ermine 8 years out
54/56	105		105		105		105		105		105		105		105	
56/57	223	105	223		223		223		223		223		223		223	
57/58	193	223	193	105	193		193		193		193		193		193	
58/59	85	193	85	223	85	105	85		85		85		85		85	
59/60	55	85	55	193	55	223	55	105	55		55		55		55	
60/61	229	55	229	85	229	193	229	223	229	105	229		229		229	
61/62	53	229	53	55	53	85	53	193	53	223	53	105	53		53	
62/63	12	53	12	229	12	55	12	85	12	193	12	223	12	105	12	
63/64	118	12	118	53	118	229	118	55	118	85	118	193	118	223	118	105
64/65	86	118	86	12	86	53	86	229	86	55	86	85	86	193	86	223
65/66	193	86	193	118	193	12	193	53	193	229	193	55	193	85	193	193
66/67	196	193	196	86	196	118	196	12	196	53	196	229	196	55	196	85
67/68	66	196	66	193	66	86	66	118	66	12	66	53	66	229	66	55
68/69	77	66	77	196	77	193	77	86	77	118	77	12	77	53	77	229
69/70	124	77	124	66	124	196	124	193	124	86	124	118	124	12	124	53
70/71	16	124	16	77	16	66	16	196	16	193	16	86	16	118	16	12
71/72	12	16	12	124	12	77	12	66	12	196	12	193	12	86	12	118
72/73	8	12	8	16	8	124	8	77	8	66	8	196	8	193	8	86
73/74	41	8	41	12	41	16	41	124	41	77	41	66	41	196	41	193
74/75	62	41	62	8	62	12	62	16	62	124	62	77	62	66	62	196
75/76	269	62	269	41	269	8	269	12	269	16	269	124	269	77	269	66



**Correlation Values for Mink vs Muskrats from Whiteshell Trapline Section**

Year	Mink	Muskkrat	Muskkrat 1 year out	Mink	Muskkrat 2 years out	Mink	Muskkrat 3 years out	Mink	Muskkrat 4 years out	Mink	Muskkrat 5 years out	Mink	Muskkrat 6 years out	Mink	Muskkrat 7 years out	Mink	Muskkrat 8 years out
54/56	119	2557		119													
56/57	130	2249	2557	130													
57/58	279	2205	2249	279	2557												
58/59	202	2074	2205	202	2249	2557											
59/60	145	1261	2074	145	2205	2249	2557										
60/61	271	763	1261	271	2074	2205	2249	2557									
61/62	225	1273	763	225	1261	2074	2205	2249	2557								
62/63	32	60	1273	32	763	1261	2074	2205	2249	2557							
63/64	214	706	60	214	1273	1261	2074	2205	2249	2557							
64/65	179	1208	706	179	60	1273	2074	2205	2249	2557							
65/66	296	1799	1208	296	706	1273	2074	2205	2249	2557							
66/67	241	1715	1799	241	1208	1261	2074	2205	2249	2557							
67/68	233	964	1715	233	1799	1208	2074	2205	2249	2557							
68/69	222	657	964	222	1715	1208	2074	2205	2249	2557							
69/70	247	958	657	247	964	1715	2074	2205	2249	2557							
70/71	126	1148	958	126	657	1715	2074	2205	2249	2557							
71/72	108	752	1148	108	958	1208	2074	2205	2249	2557							
72/73	127	910	752	127	1148	1208	2074	2205	2249	2557							
73/74	88	484	910	88	752	1148	2074	2205	2249	2557							
74/75	52	768	484	52	910	752	2074	2205	2249	2557							



**Correlation Values for Mink vs Ermine from Whiteshell Trapline Section**

Year	Mink	Ermine	Ermine 1 year out	Mink	Ermine 2 years out	Mink	Ermine 3 years out	Mink	Ermine 4 years out	Mink	Ermine 5 years out	Mink	Ermine 6 years out	Mink	Ermine 7 years out	Mink	Ermine 8 years out
54/56	119	105	119	119	105	119	119	119	119	119	119	119	119	119	119	119	119
56/57	130	223	130	130	105	130	130	130	130	130	130	130	130	130	130	130	130
57/58	279	193	279	279	223	279	279	279	279	279	279	279	279	279	279	279	279
58/59	202	85	202	202	193	202	202	202	202	202	202	202	202	202	202	202	202
59/60	145	55	145	145	85	145	145	145	105	145	145	145	145	145	145	145	145
60/61	271	229	271	271	55	271	271	271	223	271	105	271	271	271	271	271	271
61/62	225	53	225	225	229	225	225	225	193	225	223	225	225	225	225	225	225
62/63	32	12	32	32	53	32	32	32	85	32	193	32	32	32	32	32	32
63/64	214	118	214	214	12	214	214	214	55	214	85	214	214	214	214	214	214
64/65	179	86	179	179	118	179	179	179	229	179	55	179	179	179	179	179	179
65/66	296	193	296	296	86	296	296	296	53	296	229	296	296	296	296	296	296
66/67	241	196	241	241	193	241	241	241	12	241	53	241	241	241	241	241	241
67/68	233	66	233	233	193	233	233	233	118	233	12	233	233	233	233	233	233
68/69	222	77	222	222	196	222	222	222	86	222	118	222	222	222	222	222	222
69/70	247	124	247	247	77	247	247	247	193	247	86	247	247	247	247	247	247
70/71	126	16	126	126	124	126	126	126	196	126	193	126	126	126	126	126	126
71/72	108	12	108	108	16	108	108	108	66	108	196	108	108	108	108	108	108
72/73	127	8	127	127	12	127	127	127	77	127	66	127	127	127	127	127	127
73/74	88	41	88	88	8	88	88	88	124	88	77	88	88	88	88	88	88
74/75	52	62	52	52	41	52	52	52	16	52	124	52	52	52	52	52	52
75/76	127	269	127	127	62	127	127	127	12	127	16	127	127	127	127	127	127

76/77				269		62		41		8		12		16		124		77	
77/78	250	125	250		250	269		250	62	250	41	250	8	250	12	250	16	250	124
78/79				125					269		62		41		8		12		16
79/80	299	109	299		299	125		299		299	269	299	62	299	41	299	8	299	12
80/81	216	160	216	109	216			216	125	216		216	269	216	62	216	41	216	8
81/82	260	158	260	160	260	109		260		260	125	260		260	269	260	62	260	41
82/83	93	62	93	158	93	160		93	109	93		93	125	93		93	269	93	62
83/84				62		158			160		109				125				269
84/85	78	18	78		78	62		78	158	78	160	78	109	78		78	125	78	
85/86	52	42	52	18	52			52	62	52	158	52	160	52	109	52		52	125
86/87	37	54	37	42	37	18		37		37	62	37	158	37	160	37	109	37	
87/88	89	55	89	54	89	42		89	18	89		89	62	89	158	89	160	89	109
88/89	125	85	125	55	125	54		125	42	125	18	125		125	62	125	158	125	160
89/90	108	48	108	85	108	55		108	54	108	42	108	18	108		108	62	108	158
90/91	100	29	100	48	100	85		100	55	100	54	100	42	100	18	100		100	62
91/92				29		48			85		55		54		42		18		
92/93	94	29	94		94	29		94	48	94	85	94	55	94	54	94	42	94	18
93/94	55	18	55	29	55			55	29	55	48	55	85	55	55	55	54	55	42
				18		29					29		48		85		55		54
						18			29				29		48		85		55
	0.6081546		0.5614298						18		29				29		48		85
						0.308138					18		29				29		48
								0.4274247					18		29				29
										0.3327318					18		29		29
												-0.0406833					18		29
														-0.1055706					18
																-0.2662664			
																			-0.0914502

**Correlation Values for Muskrats vs Ermine from Whiteshell Trapline Section**

Year	Muskrat	Ermine	Ermine 1 year out	Muskrat	Ermine 2 years out	Muskrat	Ermine 3 years out	Muskrat	Ermine 4 years out	Muskrat	Ermine 5 years out	Muskrat	Ermine 6 years out	Muskrat	Ermine 7 years out	Muskrat	Ermine 8 years out
54/56	2557	105		2557				2557					2557				
56/57	2249	223	105	2249				2249					2249				
57/58	2205	193	223	2205	105			2205					2205				
58/59	2074	85	193	2074	223	105		2074					2074				
59/60	1261	55	85	1261	193	223	105	1261					1261				
60/61	763	229	55	763	85	193	223	763	105				763				
61/62	1273	53	229	1273	55	85	193	1273	223	105			1273				
62/63	60	12	53	60	229	55	85	60	85	223	105		60				
63/64	706	118	12	706	53	229	55	706	55	193	223	105	706				
64/65	1208	86	118	1208	12	53	229	1208	229	55	193	223	1208				
65/66	1799	193	86	1799	118	118	118	1799	53	193	229	105	1799				
66/67	1715	196	193	1715	86	118	118	1715	12	53	193	223	1715				
67/68	964	66	196	964	193	86	86	964	118	118	118	105	964				
68/69	657	77	66	657	196	193	193	657	86	118	118	105	657				
69/70	958	124	77	958	66	196	196	958	193	118	118	105	958				
70/71	1148	16	124	1148	77	66	66	1148	196	118	118	105	1148				
71/72	752	12	16	752	124	118	77	752	66	118	118	105	752				
72/73	910	8	12	910	16	118	124	910	77	118	118	105	910				
73/74	484	41	8	484	12	118	16	484	124	118	118	105	484				
74/75	768	62	41	768	8	118	12	768	16	118	118	105	768				
75/76	1619	269	62	1619	41	118	8	1619	12	118	118	105	1619				



**Appendix 5. Mink, muskrat and ermine fur return totals of selected  
Ontario Registered Trapline regions: Kenora and Red Lake**

**KENORA DISTRICT REGISTERED TRAPLINES**

Trapline #	1964/1965				1965/1966				1966/1967				1967/1968				1968/1969			
	# Trappers	Mink	Muskrat	Ermine	# Trappers	Mink	Muskrat	Ermine	# Trappers	Mink	Muskrat	Ermine	# Trappers	Mink	Muskrat	Ermine	# Trappers	Mink	Muskrat	Ermine
1					2	5	110	0	2	26	112	10	2	9	50	10	2	9	110	10
2	1	4	58	15	1	2	59	3	1	4	12	2	1	0	4	0	1	12	13	1
3					1	9	46	0	1	20	0	0	1	14	0	0	2	23	29	0
4									2	4	50	0	1	24	0	0	2	14	32	0
5													1	0	35	0	2	7	0	0
6									1	6	0	0	1	0	0	0	1	1	0	0
7	1	23	30	0	~	~	~	~	1	3	16	0	1	9	11	0	1	9	0	0
8	1	4	0	0	1	1	0	0	~	~	~	~	1	0	0	0	1	0	0	0
9	~	~	~	~	~	~	~	~	1	5	0	0	1	5	0	0	~	~	~	~
10	1	0	0	0	1	0	0	0	~	~	~	~	1	0	1	0	1	0	0	0
11	1	5	0	0	1	0	0	0	1	7	0	0	1	0	0	0	1	7	0	0
12	1	14	24	1	1	10	135	0	1	34	16	1	1	26	3	0	1	9	1	0
13	1	6	30	6	2	3	50	0	2	7	5	0	2	16	24	3	~	~	~	~
14	1	10	50	7	2	9	68	10	2	13	0	3	2	12	15	4	1	4	2	0
15													1	7	0	0	1	1	1	0
16					1	0	0	0	1	5	0	0	1	2	0	0	~	~	~	~
17	1	0	0	0	1	0	0	0	1	3	0	0	1	0	0	0	1	2	0	0
18					1	4	113	24	1	17	328	14	1	14	140	11	~	~	~	~
19									1	5	10	0	~	~	~	~	1	15	110	8
20									1	10	2	2	1	3	0	0	1	10	0	2
21																	~	~	~	~
22	3	19	62	0	2	6	66	0	~	~	~	~	2	3	54	0	1	0	0	0
23					1	5	56	10	1	15	70	3	1	25	25	0	~	~	~	~
24									1	1	0	0	1	21	0	0	1	8	0	0
25	1	2	10	2	~	~	~	~	1	11	0	4	1	1	10	0	1	13	59	0

	1964/1965 Cont.			1965/1966 Cont.			1966/1967 Cont.			1967/1968 Cont.			1968/1969 Cont.							
	1	3	50	0	1	0	50	0	1	0	0	0	1	4	0	0	1	0	0	
27																				
28																				
29					1	0	0	0	~	~	~	~	1	0	0	0	~	~	~	
30	1	2	40	0	1	1	0	0	~	~	~	~	1	0	0	0	1	1	2	
31	1	5	5	5	1	0	0	0	1	10	0	2	1	12	8	2	1	0	0	
32	1	1	0	0	2	0	2	1	1	0	0	0	1	0	0	0	1	19	0	
33	1	6	50	0	1	2	88	10	2	24	150	12	2	30	88	24	2	10	30	
34																				
35	1	3	15	2	1	0	0	1	1	3	0	1	1	3	15	13	1	8	15	
36																				
37	1	16	63	6	1	14	72	1	1	3	27	0	1	13	34	9	1	1	50	
<b>Total</b>	<b>20</b>	<b>123</b>	<b>485</b>	<b>44</b>	<b>27</b>	<b>71</b>	<b>915</b>	<b>60</b>	<b>30</b>	<b>236</b>	<b>798</b>	<b>54</b>	<b>39</b>	<b>264</b>	<b>517</b>	<b>76</b>	<b>34</b>	<b>186</b>	<b>525</b>	<b>40</b>

Trapline #	1969/1970				1970/1971				1971/1972				1972/1973				1973/1974			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	1	9	88	0	2	5	100	0	2	3	0	0	2	1		0	2	1		0
2	1	5	26	0	1	0	53	0	1	5	0	1	1	2		0	1	1		0
3	3	34	50	2	2	12	27	0	1	3	13	0	1	7		0	1	7		0
4	3	3	195	0	2	0	0	0	2	5	0	0	1	0		0	1	0		0
5	1	0	22	0	1	6	28	0	1	0	12	0	1	4		0	1	0		0
6	1	0	0	0	~	~	~	~	~	~	~	~	~	~		~	~	~		~
7	1	7	0	0	~	~	~	~	~	~	~	~	~	~		~	~	~		~
8	1	1	0	0	1	2	0	0	1	0	0	0	1	0		0	1	0		0
9	1	0	0	0	~	~	~	~	~	~	~	~	~	~		~	~	~		~
10	~	~	~	~	1	0	0	0	1	1	0	0	1	0		0	1	0		0
11	1	0	0	0	2	0	0	0	1	0	5	0	1	0		0	2	0		0
12	1	26	9	0	1	5	0	0	2	6	6	1	1	2		0	1	5		0
13	2	5	9	0	2	0	14	0	2	8	22	0	1	2		0	2	5		0
14	1	6	7	0	2	13	0	0	1	0	0	0	2	5		0	2	0		0
15	1	1	0	0	1	4	0	0	~	~	~	~	1	0		0	1	0		0
16	1	3	0	0	2	5	11	0	1	4	0	0	1	0		0	~	~		~
17	1	0	0	0	1	1	0	0	1	0	0	0	1	5		0	1	0		0
18	~	~	~	~	~	~	~	~	~	~	~	~	~	~		~	~	~		~
19	1	5	165	0	1	6	0	0	1	8	0	0	1	0		0	1	12		0
20	1	0	0	0	1	2	0	0	1	9	0	0	1	5		0	1	3		0
21	1	0	0	0	1	0	11	0	1	2	0	0	1	0		0	1	1		0
22	1	2	0	0	1	0	0	0	1	2	0	0	1	1		0	1	0		0
23	1	3	50	0	1	3	60	0	1	0	0	0	1	3		0	~	~		~
24	1	3	0	0	1	0	0	0	1	0	0	0	1	1		0	1	3		0
25	1	1	36	0	1	11	40	0	~	~	~	~	1	10		0	1	12		0

	1969/1970 Cont.			1970/1971 Cont.			1971/1972 Cont.			1972/1973 Cont.			1973/1974 Cont.						
27	1	1	48	0	1	0	0	0	1	2	0	0	1	0	0	~	~	~	
28	1	0	0	0	1	3	15	0	~	~	~	~	~	~	~	~	~	~	
29	1	3	0	0	~	~	~	~	~	~	~	~	~	~	~	~	~	~	
30	1	3	0	0	~	~	~	~	~	~	~	~	~	~	~	~	~	~	
31	1	0	0	0	1	0	0	0	1	3	0	0	1	1	0	0	0	0	
32	2	0	30	0	2	0	0	0	2	0	0	0	2	0	0	0	2	2	
33	2	5	30	0	1	0	40	0	1	1	0	0	1	0	0	0	1	0	
34	1	0	8	0	2	21	0	0	2	33	96	0	2	2	0	0	2	5	
35	1	2	25	8	2	3	30	0	1	2	0	0	~	~	~	~	1	1	
36	1	15	50	0	1	2	0	0	~	~	~	~	1	0	0	0	1	0	
37	3	8	0	0	2	3	65	0	~	~	~	~	~	~	~	~	1	2	
Total	43	151	848	10	41	109	494	0	37	101	154	2	36	52	0	0	37	68	0

Trapline #	1974/1975				1975/1976				1976/1977				1977/1978				1978/1979			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	2	5		0	2	0		0	2	6		0	2	4		0	1	1		0
2	1	1		0	1	1		0	1	5		0	1	6		0	1	2		0
3	1	3		0	1	4		0	1	8		0	1	14		0	1	6		0
4	2	3		0	2	4		0	1	7		0	1	1		0	1	1		0
5	2	1		0	3	1		0	3	5		0	1	1		0	2	3		0
6	2	1		2	1	1		1	1	1		1	1	0		1	1	1		1
7	1	0		0	1	1		1	1	1		1	1	7		1	1	0		1
8	1	0		0	1	1		1	1	1		1	1	1		1	1	0		1
9	1	0		0	1	0		0	1	0		0	1	1		0	1	2		0
10	1	0		0	2	0		0	1	4		0	1	0		0	1	9		0
11	1	0		0	2	6		0	1	2		1	1	1		1	1	0		1
12	2	3		0	2	3		0	1	2		1	1	1		1	2	0		1
13	2	0		0	2	0		0	1	0		1	1	0		1	1	0		1
14	2	1		1	2	0		0	1	5		1	1	15		1	1	12		1
15	1	0		0	1	0		0	1	1		1	1	0		1	1	0		1
16	1	1		1	1	0		1	1	1		1	1	1		1	1	0		1
17	1	0		0	1	5		0	1	1		1	1	1		1	1	0		1
18	1	0		0	2	5		0	1	1		1	1	1		1	1	10		1
19	1	1		0	1	2		0	1	13		1	1	2		1	1	4		1
20	1	0		0	2	3		0	1	1		1	1	6		1	1	23		1
21	1	1		0	1	0		1	1	0		1	1	0		1	1	3		1
22	1	0		0	1	0		0	1	0		1	1	0		1	1	1		1
23	1	0		0	1	1		0	1	0		1	1	0		1	1	1		1
24	1	0		0	1	5		0	1	4		1	1	3		1	1	1		1
25	1	9		0	1	4		0	1	28		1	1	0		1	1	17		1

	1974/1975 Cont.		1975/1976 Cont.		1976/1977 Cont.		1977/1978 Cont.		1978/1979 Cont.							
	~	~	~	~	1	10	0	0	1	0						
27	~	~	~	~	1	10	0	0	1	0						
28	1	5	1	0	1	0	0	~	~	~						
29	1	2	1	3	1	36	0	12	1	30						
30	1	0	~	~	1	0	0	~	~	~						
31	2	3	1	1	1	0	0	14	1	0						
32	1	4	1	0	1	0	0	0	1	17						
33	2	2	2	3	2	13	0	10	1	11						
34	2	5	1	0	2	6	0	2	1	2						
35	1	0	~	~	2	12	0	2	1	9						
36	1	0	~	~	1	0	0	0	1	3						
37	~	~	~	~	1	0	0	0	1	0						
Total	39	46	0	0	38	46	0	0	31	102	0	0	30	168	0	0

Trapline #	1979/1980				1980/1981				1981/1982				1982/1983				1983/1984			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	1	0		0	1	0		0	2	0		0	2	4		0	2	0		0
2	1	0		0	1	0		0	1	0		0	1	0		0	1	0		0
3	1	4		0	1	2		1	1	0		1	1	0		2	1	0		0
4	1	2	1	0	1	1	0	0	2	0	0	0	2	0		0	2	0		0
5	2	1		0	2	3		0	2	4		0	2	0		0	2	0		0
6	1	0		0	1	0		0	1	1	1	0	1	0		0	1	0		0
7	1	0		0	1	0		0	1	2	1	0	1	2		1	1	2		0
8	1	0		0	1	0		0	1	4	1	0	1	2		0	1	3		0
9	1	0		0	1	0		0	1	0	1	0	1	1		0	1	2		0
10	1	2		0	1	4		0	1	6		0	1	5		0	1	0		0
11	1	3		0	1	0		0	1	0		0	1	2		0	2	0		0
12	1	9		0	1	15		0	1	13		0	1	2		0	2	0		0
13	1	2		0	1	2		2	1	0		0	1	1		0	1	0		0
14	1	16		0	1	0		0	2	3	30	0	2	1		0	2	0		0
15	1	6		0	1	10		0	1	11		0	1	0		0	1	2		0
16	1	15		0	1	14		0	1	0		0	1	1		0	1	3		0
17	1	6		0	1	1		0	1	0		0	1	0		0	1	0		0
18	1	2		0	1	25		0	1	5		1	1	1		0	1	0		0
19	1	4		0	1	3		0	1	1		0	1	4		0	1	2		0
20	1	15		0	1	19		0	1	17		0	1	9		0	1	8		0
21	1	0		0	1	4		0	1	4		0	1	0		0	1	1		0
22	1	0		0	1	1		0	1	2		0	1	0		0	1	0		0
23	1	0		0	1	1		0	1	1		0	1	0		0	1	1		0
24	1	7		0	1	4		0	1	1		0	1	0		0	1	0		0
25	1	24		0	1	9		0	1	8		6	1	0		0	1	2		0

	1979/1980 Cont.		1980/1981 Cont.		1981/1982 Cont.		1982/1983 Cont.		1983/1984 Cont.											
	~	0	~	0	~	0	~	0	~	0										
26	1	2	~	0	~	0	~	0	~	0										
27	1	0	~	0	~	0	~	0	~	0										
28	2	1	~	0	~	0	~	0	~	0										
29	1	30	~	0	~	0	~	0	~	0										
30	~	~	~	0	~	0	~	0	~	0										
31	1	1	~	0	~	0	~	0	~	0										
32	1	0	~	0	~	0	~	0	~	0										
33	1	6	~	0	~	0	~	0	~	0										
34	1	10	~	0	~	0	~	0	~	0										
35	~	~	~	0	~	0	~	0	~	0										
36	~	~	~	0	~	0	~	0	~	0										
37	2	0	~	0	~	0	~	0	~	0										
<b>Total</b>	<b>35</b>	<b>166</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>190</b>	<b>1</b>	<b>2</b>	<b>37</b>	<b>99</b>	<b>31</b>	<b>33</b>	<b>41</b>	<b>54</b>	<b>0</b>	<b>10</b>	<b>40</b>	<b>37</b>	<b>0</b>	<b>7</b>

Trapline #	1984/1985				1985/1986				1986/1987				1987/1988				1988/1989			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	2	0		0	2	8		0	1	8		0	1	3		0	1	0		0
2	1	0		0	1	0		0	1	1		1	1	1		1	1	0		0
3	1	0		0	1	2		1	1	1		0	1	5		0	1	1		0
4	1	0		1	3	5		0	3	8		0	3	8		0	3	1		0
5	2	4		2	2	3		0	2	4		0	2	17		0	2	0		0
6	1	0		0	1	1		1	1	28		1	1	34		0	1	28		0
7	1	1		0	1	0		0	1	0		0	1	0		0	1	0		0
8	1	0		1	1	1		1	2	0		0	2	0		0	2	6		0
9	1	0		0	1	1		1	1	0		0	1	1		0	1	0		0
10	1	2		0	1	0		0	1	12		0	1	13		0	1	0		1
11	2	0		0	2	0		0	1	0		0	1	23		0	1	0		0
12	2	0		0	2	6		0	2	6		0	1	25		0	2	16		0
13	1	0		0	1	0		0	1	0		1	1	4		0	1	5		0
14	2	0		0	2	0		0	1	0		0	1	4		0	1	5		0
15	1	7		0	1	0		0	1	5		0	1	1		0	1	7		0
16	1	2		0	1	4		0	1	13		0	1	18		0	1	7		0
17	2	0		0	2	0		0	1	0		0	1	3		0	1	7		0
18	1	0		1	1	0		5	1	6		7	2	0		0	2	2		0
19	1	0		0	1	0		1	2	0		0	2	0		0	3	1		0
20	1	7		0	1	5		0	1	12		0	1	44		26	1	1		0
21	1	0		0	1	1		0	2	0		0	2	2		1	2	4		0
22	1	0		0	1	0		0	1	0		0	1	0		0	1	1		0
23	1	0		0	1	0		0	1	1		0	2	1		0	1	1		0
24	1	1		0	2	3		3	2	0		0	1	0		0	1	1		1

	1984/1985 Cont.				1985/1986 Cont.				1986/1987 Cont.				1987/1988 Cont.				1988/1989 Cont.			
25	1	0		1	1	0		0	2	2		8	3	0		2	1	0		0
26	2	0		0	2	0		0	2	1		5	3	5		2	2	1		2
27	1	2		0	~	~	~	~	~	~	~	~	1	2		0	1	4		0
28	2	0		0	3	0		0	3	0		0	~	~	~	~	~	~	~	~
29	1	0		1	1	7		9	1	10		3	1	3		0	1	3		0
30	1	1		0	1	3		0	1	2		0	3	0		0	1	2		0
31	1	0		0	1	1		0	1	0		0	1	3		0	~	~	~	~
32	2	0		0	3	0		0	3	0		0	~	~	~	~	~	~	~	~
33	3	1		0	2	0		0	1	0		0	2	0		0	2	1		0
34	1	0		0	1	6		1	1	1		0	1	6		0	1	0		2
35	1	0		0	1	0		0	1	0		0	1	0		0	1	0		0
36	1	0		0	1	1		0	1	0		0	1	0		0	2	0		0
37	1	0		0	1	4		3	1	0		0	1	0		0	1	0		0
<b>Total</b>	<b>46</b>	<b>28</b>	<b>0</b>	<b>5</b>	<b>47</b>	<b>58</b>	<b>0</b>	<b>23</b>	<b>49</b>	<b>122</b>	<b>0</b>	<b>25</b>	<b>48</b>	<b>221</b>	<b>0</b>	<b>31</b>	<b>41</b>	<b>91</b>	<b>0</b>	<b>4</b>

Trapline #	1989/1990				1990/1991				1991/1992				1992/1993			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	1	1		0	1	0		0	1	0		0	1	0		2
2	1	0		0	1	0		0	1	0		0	1	0		0
3	1	2		0	1	0		0	1	1		0	1	0		0
4	2	0		0	2	0		0	1	2		1	1	1		1
5	2	0		0	1	0		0	1	0		0	1	1		1
6	1	19		0	1	7		0	1	13		0	1	16		0
7	~	~		~	~	~		~	~	~		~	~	~		~
8	2	1		0	2	1		0	2	1		1	2	1		0
9	1	0		0	1	0		0	1	0		0	1	0		0
10	1	3		0	1	3		0	1	0		0	1	0		0
11	1	0		0	1	0		0	1	0		0	1	0		0
12	2	4		0	1	0		0	1	0		0	2	0		0
13	1	0		0	1	0		0	1	0		0	1	0		0
14	1	0		0	1	0		0	1	0		0	1	0		0
15	1	3		0	1	0		0	1	0		0	1	0		0
16	1	4		0	1	0		0	1	2		0	1	1		0
17	1	7		2	2	0		0	2	1		0	2	1		0
19	3	0		0	2	0		0	2	1		0	2	1		0
20	1	23		0	1	0		0	1	1		0	1	0		0
21	~	~		~	~	~		~	~	~		~	~	~		~
23	1	0		0	1	0		0	1	0		0	1	0		0
24	~	~		~	~	~		~	~	~		~	~	~		~
27	~	~		~	~	~		~	~	~		~	~	~		~
28	~	~		~	~	~		~	~	~		~	~	~		~

KENORA DISTRICT REGISTERED TRAPLINES

	1989/1990 Cont.		1990/1991 Cont.		1991/1992 Cont.		1992/1993 Cont.					
29	1	0	~	~	~	~	1	0	0			
31	~	~	~	~	1	0	1	0	0			
32	2	0	~	~	~	~	~	~	~			
33	1	0	0	0	1	0	2	0	0			
34	1	8	0	0	1	0	1	0	0			
35	~	~	~	~	~	~	1	0	0			
36	2	0	0	0	1	0	~	~	~			
37	1	0	~	~	~	~	~	~	~			
<b>Total</b>	<b>33</b>	<b>77</b>	<b>0</b>	<b>2</b>	<b>22</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>17</b>	<b>0</b>	<b>2</b>

Trapline #	KENORA DISTRICT REGISTERED TRAPLINES											
	1993/1994				1994/1995				1995/1996			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	1	0		0	1	0		0	1	1		0
2	1	0		0	2	1		0	2	0		0
3	1	0		0	1	1		0	1	0		0
4	~	~	~	~	1	0		0	1	0		0
5	2	0		0	~	~	~	~	2	0		0
6	1	13		0	1	19		0	1	13		6
7	1	2		0	1	0		0	~	~		~
10	1	1		0	1	0		0	~	~		~
11	1	0		0	1	0		0	1	0		0
12	3	0		0	3	7		5	2	0		0
13	1	0		0	1	0		0	1	0		0
15	1	0		0	1	1		0	1	0		0
16	1	3		0	1	0		0	1	0		0
18	~	~	~	~	1	4		0	~	~		~
20	1	5		0	1	2		0	1	2		0
21	~	~	~	~	1	0		0	~	~		~
24	~	~	~	~	1	3		0	1	0		0
26	~	~	~	~	1	5		0	~	~		~
27	~	~	~	~	1	0		0	~	~		~
29	1	2		0	1	1		0	2	3		0
31	1	0		0	~	~		~	~	~		~
33	2	0		0	2	0		0	2	0		0
34	1	0		0	1	0		0	1	0		0
35	1	0		0	1	0		0	~	~		~
37	~	~	~	~	~	~		~	1	0		0
Total	22	26	0	0	26	44	0	5	22	19	0	6

Trapline #	1973/1974				1974/1975				1975/1976				1976/1977				1977/1978			
	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine	# Trappers	Mink	Muskat	Ermine
1	4	7	47	2	4	11	92	14	4	10	148	7	4	16	62	1	5	26	48	1
2	1	0	0	0	1	0	17	0	1	0	0	0	1	0	12	0	1	0	46	0
3	3	2	0	0	9	14	102	19	1	0	30	0	1	0	0	0	1	0	0	0
4	2	2	11	0	3	0	0	0	~	~	~	~	~	~	~	~	1	0	0	0
5	~	~	~	~	2	0	0	0	1	0	3	0	2	13	3	5	2	0	0	0
6	2	0	14	0	3	0	0	0	4	5	81	0	4	3	22	0	4	3	5	0
7	9	1	95	6	2	0	9	0	1	0	64	0	1	1	6	0	2	0	11	0
8	3	7	6	18	8	3	0	0	1	1	8	0	1	2	0	0	1	0	22	0
9	1	0	2	0	4	7	284	22	2	0	55	0	1	1	16	0	2	0	0	0
10	4	0	6	12	3	2	11	6	~	~	~	~	~	~	~	~	1	1	3	0
11	2	0	0	0	2	5	43	0	1	0	3	0	1	0	0	0	2	5	4	0
12	1	1	0	0	1	0	16	6	1	0	0	0	1	5	2	0	2	0	0	0
13	1	0	1	0	2	3	28	0	~	~	~	~	~	~	~	~	~	~	~	~
14	2	1	35	0	1	1	5	7	1	0	0	0	1	0	0	0	1	0	0	0
15	1	3	3	1	2	0	5	0	1	2	15	0	1	3	1	6	1	10	1	0
16	2	0	0	1	2	1	0	0	4	4	0	0	5	7	7	2	7	7	8	2
17	1	3	1	1	1	0	20	0	4	2	0	0	5	1	8	0	5	8	0	0
18	~	~	~	~	2	6	24	8	2	0	0	0	2	0	0	0	2	9	1	4
19	1	7	55	1	~	~	~	~	3	0	0	0	3	0	0	0	2	4	11	0
20	1	0	0	0	~	~	~	~	1	0	0	0	3	5	28	4	1	10	24	1
21	1	0	0	0	1	0	0	0	10	11	99	1	10	6	17	3	11	22	41	20
22	1	0	0	0	~	~	~	~	1	0	3	0	~	~	~	~	2	0	0	0
23	1	1	0	0	1	7	171	4	4	3	181	0	4	4	18	24	4	24	5	43
24	3	1	16	0	1	0	0	0	2	3	11	0	2	1	4	0	2	3	0	1
25	2	0	27	0	1	0	12	0	2	1	23	0	1	1	1	0	2	0	3	0
26	1	0	0	0	1	0	0	0	2	0	0	0	2	3	3	1	1	25	24	0

27	1	0	0	0	0	37	0	1	0	0	0	2	2	21	0	2	1	0	0
28	~	~	~	~	~	8	0	2	7	50	0	2	3	13	0	4	4	12	0
29	1	4	46	6	2	11	0	3	0	0	1	5	7	2	3	8	10	43	2
30	1	0	0	0	1	120	0	1	2	13	0	1	6	0	1	1	7	0	3
31	7	3	2	0	1	0	0	1	0	1	0	2	0	0	0	2	0	0	0
32	1	0	0	0	1	0	0	~	~	~	~	0	0	0	0	1	0	0	2
33	11	9	34	17	10	141	16	10	29	115	38	10	32	42	0	11	28	14	7
34	1	1	17	0	1	28	0	2	1	23	2	2	2	6	0	4	4	0	5
35	2	3	6	0	3	61	0	3	1	14	4	3	3	12	0	6	20	134	3
36	8	3	20	4	8	239	11	6	8	49	9	6	14	30	0	6	12	134	24
37	2	0	0	0	2	0	0	1	0	0	0	3	0	0	0	2	0	0	0
38	1	0	0	0	2	0	0	3	0	13	0	4	7	15	0	4	5	0	0
39	3	0	0	0	3	4	27	3	0	0	0	3	0	0	0	3	10	0	3
40	3	0	0	0	3	0	0	3	0	0	0	3	0	0	0	4	6	7	0
41	9	4	169	2	9	289	29	10	13	278	0	10	26	123	28	12	45	92	25
42	2	0	47	1	2	142	1	2	4	66	0	2	7	65	5	2	16	43	0
43	11	1	30	1	2	24	1	6	0	11	0	7	1	14	5	9	10	32	6
44	10	23	95	23	11	313	33	12	57	308	18	11	58	53	50	12	86	101	41
45	2	2	46	3	3	18	0	4	9	95	1	4	8	39	4	3	6	52	1
46	5	3	19	1	6	75	15	6	3	111	0	7	24	22	5	9	16	13	16
47	6	2	56	2	6	104	5	8	15	85	2	8	22	43	34	9	34	91	25
48	6	3	41	0	6	203	0	5	12	35	0	5	10	70	2	5	13	37	14
49	4	4	11	0	3	58	5	4	2	52	1	5	15	50	7	6	18	107	17
50	2	2	68	2	2	10	12	2	2	115	0	2	0	9	0	2	0	16	0
51	3	1	27	1	3	67	0	3	0	12	0	1	5	0	0	4	1	201	0
52	5	1	21	3	5	11	11	5	4	16	0	5	5	22	22	5	23	19	19
53	5	0	50	0	5	55	21	5	14	31	2	6	9	24	9	7	21	24	12
54	2	0	0	0	1	0	4	2	1	5	0	2	1	7	4	2	3	0	0
55	2	1	0	3	3	4	5	4	7	9	0	4	2	42	17	4	14	16	5
56	2	0	0	0	3	39	6	3	10	56	7	2	26	46	23	4	17	43	8
57	3	1	13	2	3	53	0	3	0	73	0	3	8	27	3	3	10	36	2
Total	171	107	1137	113	172	2986	261	177	243	2360	93	186	375	1007	268	221	597	1524	312

Trapline #	1978/1979				1979/1980				1980/1981				1981/1982				1982/1983				
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	
1	7	31	135	3	7	12	82	3	8	26	18	5	8	17	20	1	8	6	67	2	
2	1	1	0	0	1	1	1	0	1	1	0	0	0	1	1	1	1	1	1	1	1
3	1	0	0	0	1	0	3	0	1	0	0	0	0	1	0	0	0	1	0	4	0
4	1	0	6	0	1	0	32	0	3	0	78	0	3	0	15	0	0	3	2	1	0
5	2	0	0	0	3	5	14	1	3	8	16	0	3	2	3	0	3	6	15	0	
6	4	14	83	2	6	17	122	1	6	21	242	9	6	16	192	13	6	16	152	3	
7	2	4	131	0	2	5	413	2	2	1	471	2	2	10	256	6	2	13	126	0	
8	1	3	1	5	1	3	4	1	2	0	9	0	1	0	0	0	2	0	2	0	
9	2	0	0	0	2	0	0	0	3	7	18	0	3	0	0	0	2	0	0	0	
10	1	17	10	2	2	2	40	10	1	1	96	6	1	1	22	0	2	6	90	4	
11	2	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
12	2	0	11	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
13	2	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	3	5	0	0	
14	1	0	0	0	2	4	13	4	2	2	3	0	2	3	0	2	2	0	9	0	
15	1	0	4	0	1	0	16	1	1	0	0	0	1	0	0	0	1	0	0	0	
16	7	12	1	3	8	12	2	1	8	16	35	0	8	12	5	2	8	13	2	0	
17	5	8	1	0	4	12	0	0	4	5	13	1	6	2	1	2	6	3	0	0	
18	2	7	0	5	3	0	0	0	3	9	61	4	5	10	2	0	15	1	15	2	
19	2	11	4	0	2	11	7	4	1	8	7	0	1	7	44	2	1	2	0	5	
20	2	7	8	3	3	11	1	4	3	18	48	0	3	8	15	16	2	5	2	0	
21	13	35	50	26	13	29	70	38	13	60	113	14	13	39	36	17	13	24	46	11	
22	3	4	55	6	3	11	105	4	3	3	36	0	3	0	0	0	3	0	1	0	
23	3	28	0	12	3	18	169	0	3	12	0	0	3	2	2	0	3	1	14	0	
24	2	15	22	6	1	3	0	0	1	6	0	0	1	2	0	1	1	0	0	0	
25	2	5	5	1	1	2	5	2	3	7	18	0	4	4	12	0	4	0	48	0	
26	1	39	79	0	1	29	0	0	1	6	0	0	1	0	0	0	2	0	2	0	
27	2	2	2	0	2	4	0	0	2	7	0	0	2	2	0	0	2	0	3	0	

28	3	8	52	2	3	4	34	0	3	6	31	0	3	1	18	0	3	2	32	1
29	4	29	123	15	4	21	0	0	4	24	185	38	4	13	80	33	4	14	137	13
30	1	14	4	0	1	1	37	2	2	26	90	5	4	3	4	0	2	24	226	0
31	1	5	1	3	1	0	0	0	1	2	2	2	1	1	1	5	1	3	5	1
32	0	0	0	0	1	2	2	0	2	0	15	0	1	0	0	0	~	~	~	~
33	16	74	169	1	14	152	50	7	14	35	36	8	14	27	3	4	14	9	0	2
34	7	44	154	0	7	24	31	0	7	1	17	0	6	2	7	0	7	1	0	0
35	6	12	113	7	6	17	79	1	6	17	44	0	6	4	10	0	6	6	25	0
36	10	4	28	2	12	7	50	4	12	6	36	5	12	11	11	4	12	5	1	0
37	5	0	0	0	6	13	10	0	5	14	0	0	7	3	0	7	7	0	0	1
38	4	3	4	0	4	6	0	0	3	5	0	0	4	2	15	0	4	1	1	1
39	3	30	1	15	3	18	0	0	3	13	3	3	3	5	16	2	5	5	1	1
40	4	5	0	12	3	2	21	0	3	3	15	7	3	2	24	1	5	6	1	0
41	12	41	127	20	12	43	289	27	12	40	395	28	11	35	21	23	12	13	226	16
42	2	16	12	4	2	9	53	12	2	3	164	3	2	18	17	6	2	1	38	0
43	7	15	20	3	8	19	14	9	8	22	11	10	10	21	2	15	11	15	22	16
44	12	87	103	56	12	81	98	38	11	82	296	23	4	12	8	1	4	6	22	5
45	4	20	52	4	4	21	67	20	4	14	64	11	9	31	10	3	9	10	3	2
46	9	45	74	15	9	26	132	3	9	34	32	14	8	12	42	14	8	6	62	2
47	10	32	190	11	10	16	169	26	10	24	90	36	5	10	4	8	5	10	26	13
48	7	18	44	4	7	21	108	16	7	19	73	10	8	12	17	3	8	13	17	2
49	10	18	27	14	9	9	53	2	8	24	89	8	12	45	13	61	12	36	67	29
50	1	2	4	0	2	6	4	2	2	16	50	0	11	18	58	20	12	12	81	19
51	5	2	12	0	5	9	101	4	5	6	80	3	7	12	30	10	7	8	7	4
52	5	15	32	1	5	12	49	5	5	24	36	11	2	3	68	2	1	3	31	1
53	7	30	20	5	8	15	19	14	8	19	33	12	5	6	0	2	6	5	123	2
54	2	12	0	0	2	6	1	4	2	11	15	5	3	4	3	0	3	11	3	2
55	5	13	20	8	3	9	5	5	3	10	22	13	4	1	31	11	4	4	14	4
56	3	9	3	0	4	7	6	0	4	11	0	0	4	3	0	0	6	4	2	1
57	3	6	149	2	~	~	~	~	3	15	43	2	3	5	20	0	14	5	40	2
Total	242	852	2146	278	241	767	2581	277	249	750	3249	298	260	459	1159	297	289	342	1812	167

Trapline #	1983/1984				1984/1985				1985/1986				1986/1987				1987/1988				
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	
1	7	5	8	0	7	2	0	0	7	38	12	4	8	7	2	0	0	6	18	19	0
2	-	-	-	-	1	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0
3	1	0	0	0	1	0	0	0	2	0	1	3	2	2	0	0	2	2	2	0	0
4	3	0	0	0	3	0	1	0	3	0	0	0	3	0	0	0	3	0	0	0	0
5	3	0	1	0	3	0	16	0	3	1	0	5	3	1	0	0	2	0	0	0	0
6	7	10	90	0	7	7	80	2	4	2	29	0	3	3	9	0	3	0	0	0	0
7	2	10	172	0	2	7	70	0	2	2	34	0	2	1	112	0	2	0	0	0	0
8	2	0	0	0	2	0	0	0	3	1	1	0	3	0	0	0	2	0	0	0	0
9	1	0	0	2	1	0	0	0	1	0	0	0	1	0	0	6	1	0	0	0	0
10	2	2	9	0	2	1	29	4	2	1	104	17	2	7	19	0	2	3	2	0	0
11	-	-	-	-	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0
12	-	-	-	-	1	0	3	0	1	0	0	0	1	0	0	0	1	0	0	0	0
13	1	2	0	0	1	0	0	0	2	0	0	0	1	2	0	0	1	7	1	0	0
14	3	1	5	0	3	1	0	0	3	0	0	0	2	0	22	0	2	0	0	0	0
15	1	0	0	0	1	0	0	0	-	-	-	-	-	-	-	-	1	0	0	0	0
16	8	4	5	0	7	6	0	0	6	2	0	2	6	2	0	0	5	16	17	5	5
17	6	1	0	0	6	0	0	0	6	8	0	1	6	17	0	2	6	19	3	1	1
18	5	3	1	0	5	0	0	0	5	0	0	0	5	0	0	0	4	1	0	0	0
19	1	0	0	0	1	0	0	0	1	2	0	1	2	0	0	0	2	19	172	1	1
20	3	6	6	0	3	7	0	0	3	7	0	0	4	0	0	0	4	12	10	4	4
21	13	5	27	0	12	8	24	2	13	16	22	3	13	18	10	1	12	33	30	2	2
22	3	0	9	0	6	2	25	0	6	6	1	0	6	1	24	0	3	0	0	0	0
23	3	2	0	0	3	3	0	0	3	1	0	0	3	0	0	0	1	6	1	1	1
24	1	0	0	0	1	2	2	0	1	0	0	0	2	0	5	0	3	9	0	1	1
25	4	6	33	0	4	7	15	1	4	7	0	0	3	3	0	0	3	22	21	0	0
26	1	9	3	0	1	7	35	2	1	2	44	2	1	4	41	1	2	6	1	1	0



Trapline #	1988/1989				1989/1990				1990/1991				1991/1992				
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	
1	7	7	17	0	8	1	0	0	0	8	0	0	0	8	6	0	0
2	-	-	-	-	1	0	0	0	0	1	0	0	0	1	0	0	0
3	3	0	0	0	3	0	0	0	0	3	0	0	0	3	0	0	0
4	2	0	10	0	2	33	1	0	0	2	0	0	0	2	0	0	0
5	2	0	0	0	3	3	2	0	0	3	0	0	0	3	0	0	0
6	2	2	11	0	3	1	12	0	0	3	2	0	0	3	0	0	0
7	2	0	0	0	3	0	0	0	0	3	0	0	0	3	0	0	0
8	1	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0
9	2	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0
10	3	5	2	7	3	0	0	0	0	3	3	0	0	3	0	0	0
11	2	0	0	0	2	0	0	0	0	2	0	0	0	2	0	0	0
12	1	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0
13	1	0	0	0	2	3	0	0	0	2	0	0	0	2	0	0	0
14	2	6	0	0	2	0	0	0	0	2	1	0	0	2	0	0	0
15	-	-	-	-	1	0	0	0	0	1	0	0	0	1	0	0	0
16	5	7	0	5	5	0	0	0	0	5	0	0	0	5	0	0	0
17	4	7	0	12	6	6	9	0	0	6	6	0	0	6	3	0	0
18	1	0	0	0	6	1	0	0	0	6	2	21	0	6	0	0	0
19	1	0	0	0	2	1	0	0	0	2	0	0	0	2	0	0	0
20	3	0	0	1	4	5	4	0	0	4	3	0	0	4	4	0	0
21	13	13	0	0	14	6	1	0	0	14	6	0	0	14	8	0	0
22	3	0	0	0	4	0	0	0	0	4	0	0	0	3	0	0	0
23	1	10	0	0	1	3	2	0	0	1	0	0	0	1	0	0	0
24	2	0	0	0	3	0	0	0	0	3	0	0	0	3	0	0	0
25	3	11	15	14	3	12	19	3	0	3	5	8	5	3	1	0	0
26	2	2	0	0	2	1	1	0	0	2	0	0	0	2	0	0	0

27	3	5	0	0	0	3	3	2	0	0	0	3	19	16	0	3	4	0	0	0
28	3	2	0	0	0	3	3	2	2	0	0	3	1	0	0	3	3	0	0	0
29	1	13	2	6	2	5	2	2	0	0	0	13	0	0	0	2	4	0	0	0
30	1	0	2	0	1	2	4	0	0	0	0	0	0	2	0	1	0	0	0	0
31	~	~	~	~	~	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0
32	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
33	11	31	5	0	16	10	0	0	0	0	0	16	11	0	0	16	7	0	0	0
34	3	0	0	0	6	0	0	0	0	0	0	6	0	0	0	6	0	0	0	0
35	7	32	0	2	9	1	0	0	0	0	0	9	0	0	0	9	11	0	0	0
36	5	2	0	0	12	1	0	0	0	0	0	12	1	0	0	12	2	0	0	0
37	4	0	0	0	6	0	0	0	0	0	0	8	0	0	0	9	0	0	0	0
38	5	3	0	4	5	1	0	0	0	0	0	5	0	0	0	6	0	0	0	0
39	3	8	0	4	3	1	0	0	0	0	0	3	0	0	0	3	0	0	0	0
40	3	2	0	0	6	3	0	0	0	0	0	6	6	0	0	6	5	0	0	0
41	12	13	29	21	13	16	31	0	0	0	0	13	9	0	0	13	10	0	0	0
42	1	0	10	0	1	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0
43	8	0	0	0	11	0	2	0	0	0	0	11	0	0	0	11	3	0	0	0
44	3	13	34	29	4	10	5	7	0	0	0	3	6	0	0	3	5	0	0	3
45	11	9	0	0	12	7	19	0	0	0	0	12	2	0	0	12	4	0	0	0
46	7	7	0	14	7	2	5	0	0	0	0	7	1	0	0	7	4	0	0	0
47	7	5	0	52	7	1	13	0	0	0	0	7	0	0	0	7	3	0	0	0
48	8	4	0	1	10	3	0	0	0	0	0	10	2	0	0	9	6	0	0	0
49	10	10	1	12	12	27	0	10	0	0	0	12	13	0	0	13	15	0	0	3
50	11	13	20	58	15	9	5	19	0	0	0	15	7	0	3	14	13	0	0	0
51	6	0	0	0	8	1	0	0	0	0	0	8	0	0	0	8	2	0	0	0
52	2	0	17	0	2	0	43	0	0	0	0	2	0	0	0	2	0	0	0	0
53	4	3	10	5	5	0	155	0	0	0	0	4	2	0	0	6	4	117	0	0
54	3	1	0	0	3	3	0	0	0	0	0	3	4	0	0	3	6	0	0	0
55	2	1	0	0	2	8	0	0	0	0	0	3	0	0	0	3	0	0	0	0
56	2	10	0	1	2	4	1	0	0	0	0	3	1	0	0	2	1	0	0	0
57	11	30	0	0	14	8	0	0	0	0	0	14	1	0	0	14	2	0	0	0
Total	225	287	185	248	287	206	340	39	289	127	47	14	290	136	118	6				

**Appendix 6. Intraspecific correlation coefficients calculated for mink, muskrat and ermine fur return totals of Kenora and Red Lake Registered Trapline regions**













Correlation Values for Mink from Kenora Trapline Region											
Year	Mink	Mink 1 Year Out	Mink	Mink 2 Years Out	Mink	Mink 3 Years Out	Mink	Mink 4 Years Out	Mink	Mink 5 Years Out	
64/65	123		123		123		123		123		
65/66	71	123	71		71		71		71		
66/67	236	71	236	123	236		236		236		
67/68	264	236	264	71	264	123	264		264		
68/69	186	264	186	236	186	71	186	123	186		
69/70	151	186	151	264	151	236	151	71	151	123	
70/71	109	151	109	186	109	264	109	236	109	71	
71/72	101	109	101	151	101	186	101	264	101	236	
72/73	52	101	52	109	52	151	52	186	52	264	
73/74	70	52	70	101	70	109	70	151	70	186	
74/75	49	70	49	52	49	101	49	109	49	151	
75/76	51	49	51	70	51	52	51	101	51	109	
76/77	181	51	181	49	181	70	181	52	181	101	
77/78	102	181	102	51	102	49	102	70	102	52	
78/79	170	102	170	181	170	51	170	49	170	70	
79/80	166	170	166	102	166	181	166	51	166	49	
80/81	190	166	190	170	190	102	190	181	190	51	
81/82	99	190	99	166	99	170	99	102	99	181	
82/83	54	99	54	190	54	166	54	170	54	102	
83/84	37	54	37	99	37	190	37	166	37	170	
84/85	28	37	28	54	28	99	28	190	28	166	
85/86	58	28	58	37	58	54	58	99	58	190	
86/87	122	58	122	28	122	37	122	54	122	99	
87/88	221	122	221	58	221	28	221	37	221	54	
88/89	91	221	91	122	91	58	91	28	91	37	
89/90	77	91	77	221	77	122	77	58	77	28	
90/91	11	77	11	91	11	221	11	122	11	58	
91/92	18	11	18	77	18	91	18	221	18	122	
92/93	17	18	17	11	17	77	17	91	17	221	
93/94	26	17	26	18	26	11	26	77	26	91	



Correlation Values for Mink from Kenora Trapline Region											
Year	Mink	Mink 6 Years Out	Mink	Mink 7 Years Out	Mink	Mink 8 Years Out	Mink	Mink 9 Years Out	Mink	Mink 10 Years Out	
64/65	123		123		123		123		123		
65/66	71		71		71		71		71		
66/67	236		236		236		236		236		
67/68	264		264		264		264		264		
68/69	186		186		186		186		186		
69/70	151		151		151		151		151		
70/71	109	123	109		109		109		109		
71/72	101	71	101	123	101		101		101		
72/73	52	236	52	71	52	123	52		52		
73/74	70	264	70	236	70	71	70	123	70		
74/75	49	186	49	264	49	236	49	71	49	123	
75/76	51	151	51	186	51	264	51	236	51	71	
76/77	181	109	181	151	181	186	181	264	181	236	
77/78	102	101	102	109	102	151	102	186	102	264	
78/79	170	52	170	101	170	109	170	151	170	186	
79/80	166	70	166	52	166	101	166	109	166	151	
80/81	190	49	190	70	190	52	190	101	190	109	
81/82	99	51	99	49	99	70	99	52	99	101	
82/83	54	181	54	51	54	49	54	70	54	52	
83/84	37	102	37	181	37	51	37	49	37	70	
84/85	28	170	28	102	28	181	28	51	28	49	
85/86	58	166	58	170	58	102	58	181	58	51	
86/87	122	190	122	166	122	170	122	102	122	181	
87/88	221	99	221	190	221	166	221	170	221	102	
88/89	91	54	91	99	91	190	91	166	91	170	
89/90	77	37	77	54	77	99	77	190	77	166	
90/91	11	28	11	37	11	54	11	99	11	190	
91/92	18	58	18	28	18	37	18	54	18	99	
92/93	17	122	17	58	17	28	17	37	17	54	
93/94	26	221	26	122	26	58	26	28	26	37	



Correlation Values for Ermine from Kenora Trapline Region											
Year	Ermine	Ermine 1 Year Out	Ermine	Ermine 2 Years Out	Ermine	Ermine 3 Years Out	Ermine	Ermine 4 Years Out	Ermine	Ermine 5 Years Out	Ermine
64/65	44		44		44		44		44		44
65/66	60	44	60		60		60		60		60
66/67	54	60	54	44	54		54		54		54
67/68	76	54	76	60	76	44	76		76		76
68/69	40	76	40	54	40	60	40	44	40		40
69/70	10	40	10	76	10	54	10	60	10	44	44
70/71	0	10	0	40	0	76	0	54	0	60	60
71/72	2	0	2	10	2	40	2	76	2	54	54
72/73	0	2	0	0	0	10	0	40	0	76	76
73/74	0	0	0	2	0	0	0	10	0	40	40
74/75	0	0	0	0	0	2	0	0	0	10	10
75/76	0	0	0	0	0	0	0	2	0	0	0
76/77	0	0	0	0	0	0	0	0	0	2	2
77/78	0	0	0	0	0	0	0	0	0	0	0
78/79	0	0	0	0	0	0	0	0	0	0	0
79/80	0	0	0	0	0	0	0	0	0	0	0
80/81	2	0	2	0	2	0	2	0	2	0	0
81/82	33	2	33	0	33	0	33	0	33	0	0
82/83	10	33	10	2	10	0	10	0	10	0	0
83/84	7	10	7	33	7	2	7	0	7	0	0
84/85	5	7	5	10	5	33	5	2	5	0	0
85/86	23	5	23	7	23	10	23	33	23	2	2
86/87	25	23	25	5	25	7	25	10	25	33	33
87/88	31	25	31	23	31	5	31	7	31	10	10
88/89	4	31	4	25	4	23	4	5	4	7	7
89/90	2	4	2	31	2	25	2	23	2	5	5
90/91	0	2	0	4	0	31	0	25	0	23	23
91/92	0	0	0	2	0	4	0	31	0	25	25
92/93	2	0	2	0	2	2	2	4	2	31	31



Correlation Values for Ermine from Kenora Trapline Region											
Year	Ermine	Ermine 6 Years Out	Ermine	Ermine 7 Years Out	Ermine	Ermine 8 Years Out	Ermine	Ermine 9 Years Out	Ermine	Ermine 10 Years Out	
64/65	44		44		44		44		44		
65/66	60		60		60		60		60		
66/67	54		54		54		54		54		
67/68	76		76		76		76		76		
68/69	40		40		40		40		40		
69/70	10		10		10		10		10		
70/71	0	44	0		0		0		0		
71/72	2	60	2	44	2		2		2		
72/73	0	54	0	60	0	44	0		0		
73/74	0	76	0	54	0	60	0	44	0		
74/75	0	40	0	76	0	54	0	60	0	44	
75/76	0	10	0	40	0	76	0	54	0	60	
76/77	0	0	0	10	0	40	0	76	0	54	
77/78	0	2	0	0	0	10	0	40	0	76	
78/79	0	0	0	2	0	0	0	10	0	40	
79/80	0	0	0	0	0	2	0	0	0	10	
80/81	2	0	2	0	2	0	2	2	2	0	
81/82	33	0	33	0	33	0	33	0	33	2	
82/83	10	0	10	0	10	0	10	0	10	0	
83/84	7	0	7	0	7	0	7	0	7	0	
84/85	5	0	5	0	5	0	5	0	5	0	
85/86	23	0	23	0	23	0	23	0	23	0	
86/87	25	2	25	0	25	0	25	0	25	0	
87/88	31	33	31	2	31	0	31	0	31	0	
88/89	4	10	4	33	4	2	4	0	4	0	
89/90	2	7	2	10	2	33	2	2	2	0	
90/91	0	5	0	7	0	10	0	33	0	2	
91/92	0	23	0	5	0	7	0	10	0	33	
92/93	2	25	2	23	2	5	2	7	2	10	



**Appendix 7. Mink, muskrat and ermine fur return totals of Registered Traplines within  
Northwestern Ontario sections A - E**

Trapline #	1973/1974				1974/1975				1975/1976				1976/1977				1977/1978				
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	
1	4	7	47	2	4	11	82	14	4	10	148	7	4	16	62	1	5	26	48	1	
16	2	0	0	1	2	1	0	0	4	4	0	0	5	7	7	2	7	7	8	2	2
17	1	3	1	1	1	0	20	0	4	2	0	0	5	1	8	0	5	8	0	0	0
19	1	7	55	1	-	-	-	-	3	0	0	0	3	0	0	0	2	4	11	0	0
20	1	0	0	0	-	-	-	-	1	0	0	0	3	5	28	4	1	10	24	1	1
22	1	0	0	0	-	-	-	-	1	0	3	0	-	-	-	-	2	0	0	0	0
33	11	9	34	17	10	10	141	16	10	29	115	38	10	32	42	0	11	28	14	7	7
34	1	1	17	0	1	0	28	0	2	1	23	2	2	2	6	0	4	4	0	5	5
35	2	3	6	0	3	1	61	0	3	1	14	4	3	3	12	0	6	20	134	3	3
36	8	3	20	4	8	3	239	11	6	8	49	9	6	14	30	0	6	12	134	24	24
38	1	0	0	0	2	0	0	0	3	0	13	0	4	7	15	0	4	5	0	0	0
44	10	23	95	23	11	22	313	33	12	57	308	18	11	58	53	50	12	66	101	41	41
48	6	3	41	0	6	8	203	0	5	12	35	0	5	10	70	2	5	13	37	14	14
49	4	4	11	0	3	1	58	5	4	2	52	1	5	15	50	7	6	18	107	17	17
50	2	2	68	2	2	3	10	12	2	2	115	0	2	0	9	0	2	0	16	0	0
51	3	1	27	1	3	1	67	0	3	0	12	0	1	5	0	0	4	1	201	0	0
57	3	1	13	2	3	4	53	0	3	0	73	0	3	8	27	3	3	10	36	2	2
Total	61	67	435	54	59	65	1285	91	70	128	960	79	72	183	419	69	85	252	871	117	117

Trapline #	1978/1979				1979/1980				1980/1981				1981/1982				1982/1983			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	7	31	135	3	7	12	82	3	8	26	18	5	8	17	20	1	8	6	67	2
16	7	12	1	3	8	12	2	1	8	16	35	0	8	12	5	2	8	13	2	0
17	5	8	1	0	4	12	0	0	4	5	13	1	6	2	1	2	6	3	0	0
19	2	11	4	0	2	11	7	4	1	8	7	0	1	7	44	2	1	2	0	5
20	2	7	8	3	3	11	1	4	3	18	48	0	3	8	15	16	2	5	2	0
22	3	4	55	6	3	11	105	4	3	3	36	0	3	0	0	0	3	0	1	0
33	16	74	169	1	14	152	50	7	14	35	36	8	14	27	3	4	14	9	0	2
34	7	44	154	0	7	24	31	0	7	1	17	0	6	2	7	0	7	1	0	0
35	6	12	113	7	6	17	79	1	6	17	44	0	6	4	10	0	6	6	25	0
36	10	4	28	2	12	7	50	4	12	6	36	5	12	11	11	4	12	5	1	0
38	4	3	4	0	4	6	0	0	3	5	0	0	4	2	15	0	4	1	1	1
44	12	87	103	56	12	81	98	38	11	82	296	23	4	12	8	1	4	6	22	5
48	7	18	44	4	7	21	108	16	7	19	73	10	8	12	17	3	8	13	17	2
49	10	18	27	14	9	9	53	2	8	24	89	8	12	45	13	61	12	36	67	29
50	1	2	4	0	2	6	4	2	2	16	50	0	11	18	58	20	12	12	81	19
51	5	2	12	0	5	9	101	4	5	6	80	3	7	12	30	10	7	8	7	4
57	3	6	149	2	~	~	~	~	3	15	43	2	3	5	20	0	14	5	40	2
Total	107	343	1011	101	105	401	771	90	105	302	921	65	116	196	277	126	128	131	333	71

Trapline #	1983/1984				1984/1985				1985/1986				1986/1987				1987/1988			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	7	5	8	0	7	2	0	0	7	38	12	4	8	7	2	0	6	18	19	0
16	8	4	5	0	7	6	0	0	6	2	0	2	6	2	0	0	5	16	17	5
17	6	1	0	0	6	0	0	0	6	8	0	1	6	17	0	2	6	19	3	1
19	1	0	0	0	1	0	0	0	1	2	0	1	2	0	0	0	2	19	172	1
20	3	6	6	0	3	7	0	0	3	7	0	0	4	0	0	0	4	12	10	4
22	3	0	9	0	6	2	25	0	6	6	1	0	6	1	24	0	3	0	0	0
33	15	15	1	0	15	4	0	0	16	24	11	3	16	10	0	0	11	34	18	4
34	7	0	0	0	7	0	0	0	7	7	0	0	6	0	0	0	3	2	0	0
35	9	2	8	0	9	8	0	0	9	7	11	0	8	2	11	0	8	9	0	0
36	12	4	34	0	13	1	0	0	13	11	5	2	13	12	0	0	8	14	2	0
38	5	0	16	0	5	2	0	1	5	1	0	2	6	0	0	0	6	16	8	2
44	4	9	37	1	4	12	20	1	4	4	15	10	4	18	4	1	4	14	18	3
48	10	3	10	0	10	8	3	6	10	5	37	2	10	5	0	3	8	35	8	0
49	13	13	23	6	13	31	82	28	15	69	23	45	15	44	66	8	12	86	14	16
50	14	13	108	9	13	4	126	25	14	17	104	43	14	10	0	2	13	10	51	23
51	7	5	22	3	7	7	41	2	8	8	0	3	8	12	13	0	8	13	0	0
57	11	5	51	0	11	7	64	0	11	22	4	0	11	11	0	0	10	10	17	0
Total	135	85	338	19	137	101	361	63	141	238	223	118	143	151	120	16	117	327	357	59

NORTHWESTERN ONTARIO SECTION A - RED LAKE REGISTERED TRAPLINES																				
Trapline #	1988/1989				1989/1990				1990/1991				1991/1992							
	# Trappers	Mink	Muskrat	Ermine	# Trappers	Mink	Muskrat	Ermine	# Trappers	Mink	Muskrat	Ermine	# Trappers	Mink	Muskrat	Ermine				
1	7	7	17	0	8	1	0	0	8	0	0	0	8	6	0	0				
16	5	7	0	5	5	0	0	0	5	0	0	0	5	0	0	0				
17	4	7	0	12	6	6	9	0	6	6	0	0	6	3	0	0				
19	1	0	0	0	2	1	0	0	2	0	0	0	2	0	0	0				
20	3	0	0	1	4	5	4	0	4	3	0	0	4	4	0	0				
22	3	0	0	0	4	0	0	0	4	0	0	0	3	0	0	0				
33	11	31	5	0	16	10	0	0	16	11	0	0	16	7	0	0				
34	3	0	0	0	6	0	0	0	6	0	0	0	6	0	0	0				
35	7	32	0	2	9	1	0	0	9	0	0	0	9	11	0	0				
36	5	2	0	0	12	1	0	0	12	1	0	0	12	2	0	0				
38	5	3	0	4	5	1	0	0	5	0	0	0	6	0	0	0				
44	3	13	34	29	4	10	5	7	3	6	0	0	3	5	0	3				
48	8	4	0	1	10	3	0	0	10	2	0	0	9	6	0	0				
49	10	10	1	12	12	27	0	10	12	13	0	0	13	15	0	3				
50	11	13	20	58	15	9	5	19	15	7	0	3	14	13	0	0				
51	6	0	0	0	8	1	0	0	8	0	0	0	8	2	0	0				
57	11	30	0	0	14	8	0	0	14	1	0	0	14	2	0	0				
<b>Total</b>	<b>103</b>	<b>159</b>	<b>77</b>	<b>124</b>	<b>140</b>	<b>84</b>	<b>23</b>	<b>36</b>	<b>139</b>	<b>50</b>	<b>0</b>	<b>3</b>	<b>138</b>	<b>76</b>	<b>0</b>	<b>6</b>				

Trapline #	1973/1974				1974/1975				1975/1976				1976/1977				1977/1978			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
18	2	6	24	8	2	0	0	0	2	0	0	0	2	0	0	0	2	9	1	4
21	1	0	0	0	10	11	99	1	10	6	17	3	11	22	41	20	11	22	41	20
37	2	0	0	0	1	0	0	0	3	0	0	0	2	0	0	0	2	0	0	0
39	3	0	0	0	3	4	27	0	3	0	0	0	3	0	0	0	3	10	0	3
40	3	0	0	0	3	0	0	0	3	0	0	0	3	0	0	0	4	6	7	0
41	9	4	169	29	10	13	278	0	10	26	123	28	12	45	92	25	12	45	92	25
42	2	0	47	1	2	4	66	0	2	7	85	5	2	16	43	0	2	16	43	0
43	11	1	30	1	6	0	11	0	7	1	14	5	9	10	32	6	9	10	32	6
45	2	2	46	3	3	6	18	0	4	8	39	4	3	6	52	1	3	6	52	1
46	5	3	19	15	6	3	111	0	7	24	22	5	9	16	13	16	9	16	13	16
47	6	2	56	5	8	15	85	2	8	22	43	34	9	34	91	25	9	34	91	25
52	5	1	21	11	5	4	16	0	5	5	22	22	5	23	19	19	5	23	19	19
53	5	0	50	21	5	14	31	2	6	9	24	9	7	21	24	12	6	21	24	12
<b>Total</b>	<b>54</b>	<b>13</b>	<b>438</b>	<b>13</b>	<b>49</b>	<b>50</b>	<b>769</b>	<b>91</b>	<b>65</b>	<b>73</b>	<b>792</b>	<b>6</b>	<b>70</b>	<b>108</b>	<b>369</b>	<b>115</b>	<b>78</b>	<b>218</b>	<b>415</b>	<b>131</b>

Trapline #	1978/1979				1979/1980				1980/1981				1981/1982				1982/1983			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
18	2	7	0	5	3	0	0	0	3	9	61	4	5	10	2	0	15	1	15	2
21	13	35	50	26	13	29	70	38	13	60	113	14	13	39	36	17	13	24	46	11
37	5	0	0	0	6	13	10	0	5	14	0	0	7	3	0	7	7	0	0	1
39	3	30	1	15	3	18	0	0	3	13	3	3	3	5	16	2	5	5	1	1
40	4	5	0	12	3	2	21	0	3	3	15	7	3	2	24	1	5	6	1	1
41	12	41	127	20	12	43	289	27	12	40	395	28	11	35	21	23	12	13	226	16
42	2	16	12	4	2	9	53	12	2	3	164	3	2	18	17	6	2	1	38	0
43	7	15	20	3	8	19	14	9	8	22	11	10	10	21	2	15	11	15	22	16
45	4	20	52	4	4	21	67	20	4	14	64	11	9	31	10	3	9	10	3	2
46	9	45	74	15	9	26	132	3	9	34	32	14	8	12	42	14	8	6	62	2
47	10	32	190	11	10	16	169	26	10	24	90	36	5	10	4	8	5	10	26	13
52	5	15	32	1	5	12	48	5	5	24	36	11	2	3	68	2	1	3	31	1
53	7	30	20	5	8	15	19	14	8	19	33	12	5	6	0	2	6	5	123	2
<b>Total</b>	<b>83</b>	<b>291</b>	<b>578</b>	<b>121</b>	<b>86</b>	<b>223</b>	<b>893</b>	<b>154</b>	<b>85</b>	<b>279</b>	<b>1017</b>	<b>153</b>	<b>83</b>	<b>195</b>	<b>242</b>	<b>100</b>	<b>99</b>	<b>99</b>	<b>594</b>	<b>67</b>

NORTHWESTERN ONTARIO SECTION B - RED LAKE REGISTERED TRAPLINES																				
Trapline #	1983/1984				1984/1985				1985/1986				1986/1987				1987/1988			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
18	5	3	1	0	5	0	0	0	5	0	0	0	5	0	0	0	4	1	0	0
21	13	5	27	0	12	8	24	2	13	16	22	3	13	18	10	1	12	33	30	2
37	7	0	0	0	7	0	0	0	7	0	0	0	7	2	0	0	4	0	0	0
39	7	6	5	0	7	5	0	2	8	8	0	0	8	5	0	0	3	5	0	0
40	5	3	29	1	7	7	0	0	7	4	3	0	8	11	0	2	5	25	36	2
41	12	13	53	1	12	5	61	0	12	29	78	21	12	23	9	4	13	39	15	11
42	2	0	19	0	2	3	10	0	2	4	5	0	2	4	2	0	2	10	3	0
43	11	3	8	0	10	7	24	7	10	1	47	0	10	0	0	0	10	21	8	10
45	12	3	9	1	12	9	4	5	12	10	43	3	12	8	10	0	9	24	5	0
46	10	6	25	2	10	3	97	9	7	6	27	7	7	9	10	6	6	16	0	2
47	6	5	26	3	7	9	46	10	7	21	35	13	7	15	1	12	6	42	14	1
52	1	0	0	0	2	0	53	0	2	1	0	0	2	1	20	0	2	3	30	0
53	6	9	118	0	6	9	17	7	6	10	2	8	6	17	83	0	5	17	104	4
Total	97	56	320	8	99	65	336	42	98	110	262	55	99	113	145	25	81	236	245	32

Trapline #	NORTHWESTERN ONTARIO SECTION B - RED LAKE REGISTERED TRAPLINES															
	1988/1989				1989/1990				1990/1991				1991/1992			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
18	1	0	0	0	6	1	0	0	6	2	21	2	6	0	0	0
21	13	13	0	0	14	6	1	0	14	6	0	0	14	8	0	0
37	4	0	0	0	6	0	0	0	8	0	0	0	9	0	0	0
39	3	8	0	4	3	1	0	0	3	0	0	0	3	0	0	0
40	3	2	0	0	6	3	0	0	6	6	0	0	6	5	0	0
41	12	13	29	21	13	16	31	0	13	9	0	0	13	10	0	0
42	1	0	10	0	1	1	0	0	1	0	0	0	1	0	0	0
43	8	0	0	0	11	0	2	0	11	0	0	0	11	3	0	0
45	11	9	0	0	12	7	19	0	12	2	0	0	12	4	0	0
46	7	7	0	14	7	2	5	0	7	1	0	0	7	4	0	0
47	7	5	0	52	7	1	13	0	7	0	0	0	7	3	0	0
52	2	0	17	0	2	0	43	0	2	0	0	0	2	0	0	0
53	4	3	10	5	5	0	155	0	4	2	0	0	6	4	117	0
<b>Total</b>	<b>76</b>	<b>60</b>	<b>66</b>	<b>96</b>	<b>93</b>	<b>38</b>	<b>269</b>	<b>0</b>	<b>94</b>	<b>28</b>	<b>21</b>	<b>2</b>	<b>97</b>	<b>41</b>	<b>117</b>	<b>0</b>

Trapline #	1973/1974				1974/1975				1975/1976				1976/1977				1977/1978			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
12	1	1	0	0	1	0	16	9	1	0	0	0	1	5	2	0	2	0	0	0
13	1	0	1	0	2	3	28	0	1	1	1	1	1	1	1	1	1	1	1	1
14	2	1	35	0	1	1	5	7	1	0	0	0	1	0	0	0	1	0	0	0
15	1	3	3	1	2	0	5	0	1	2	15	0	1	3	1	6	1	10	1	0
23	1	1	0	0	1	7	171	4	4	3	181	0	4	4	24	4	4	24	5	43
24	3	1	16	0	1	0	0	0	2	3	11	0	2	1	4	0	2	3	0	1
25	2	0	27	0	1	0	12	0	2	1	23	0	1	1	1	0	2	0	3	0
26	1	0	0	0	1	0	0	0	2	0	0	0	2	3	3	1	1	25	24	0
27	1	0	0	0	1	0	37	0	1	0	0	0	2	2	21	0	2	1	0	0
28	1	1	1	1	4	0	8	0	2	7	50	0	2	3	13	0	4	4	12	0
29	1	4	46	6	2	1	11	0	3	0	0	1	5	7	2	3	8	10	43	2
30	1	0	0	0	1	1	120	0	1	2	13	0	1	6	0	1	1	7	0	3
31	7	3	2	0	1	0	0	0	1	0	1	0	2	0	0	0	2	0	0	0
54	2	0	0	0	1	2	0	4	2	1	5	0	2	1	7	4	2	3	0	0
55	2	1	0	3	3	3	4	5	4	7	9	0	4	2	42	17	4	14	16	5
56	2	0	0	0	3	6	39	6	3	10	56	7	2	26	46	23	4	17	43	8
Total	28	15	130	10	26	24	456	32	30	36	364	8	32	64	160	79	40	118	147	62

Trapline #	1978/1979				1979/1980				1980/1981				1981/1982				1982/1983			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
12	2	0	11	0	1	0	0	0	3	0	0	0	3	0	0	0	3	5	0	0
13	2	0	0	0	1	0	0	0	3	0	0	0	3	0	0	0	3	5	0	0
14	1	0	0	0	2	4	13	4	2	2	3	0	2	3	0	2	2	0	9	0
15	1	0	4	0	1	0	16	1	1	0	0	0	1	0	0	0	1	0	0	0
23	3	28	0	12	3	18	169	0	3	12	0	0	3	2	2	0	3	1	14	0
24	2	15	22	6	1	3	0	0	1	6	0	0	1	2	0	1	1	0	0	0
25	2	5	5	1	1	2	5	2	3	7	18	0	4	4	12	0	4	0	48	0
26	1	39	79	0	1	29	0	0	1	6	0	0	1	0	0	0	2	0	2	0
27	2	2	2	0	2	4	0	0	2	7	0	0	2	2	0	0	2	0	2	0
28	3	8	52	2	3	4	34	0	3	6	31	0	3	1	18	0	2	0	3	0
29	4	29	123	15	4	21	0	0	4	24	185	38	4	13	80	33	4	14	137	13
30	1	14	4	0	1	1	37	2	2	26	90	5	4	3	4	0	2	24	226	0
31	1	5	1	3	1	0	0	0	1	2	2	2	1	1	1	5	1	3	5	1
54	2	12	0	0	2	6	1	4	2	11	15	5	3	4	3	0	3	11	3	2
55	5	13	20	8	3	9	5	5	3	10	22	13	4	1	31	11	4	4	14	4
56	3	9	3	0	4	7	6	0	4	11	0	0	4	3	0	0	6	4	2	1
Total	35	179	326	47	30	108	286	18	35	130	366	63	40	39	151	52	41	68	495	22

Trapline #	1983/1984				1984/1985				1985/1986				1986/1987				1987/1988			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
12	1	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
13	1	2	0	0	1	0	0	0	0	2	0	0	0	1	2	0	1	7	1	0
14	3	1	5	0	3	1	0	0	0	3	0	0	0	2	0	22	2	0	0	0
15	1	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0
23	3	2	0	0	3	3	0	0	0	3	1	0	0	3	0	0	3	6	1	1
24	1	0	0	0	1	2	2	0	0	1	0	0	0	2	0	5	0	9	0	1
25	4	6	33	0	4	7	15	1	0	4	7	0	0	3	3	0	3	22	21	0
26	1	9	3	0	1	7	35	2	0	1	2	44	2	1	4	41	2	6	1	0
27	1	0	0	6	1	3	1	0	0	1	5	8	0	1	0	0	3	9	33	0
28	1	0	22	0	1	2	17	10	0	1	1	39	15	1	4	7	2	10	0	0
29	4	16	29	1	4	10	94	5	0	4	14	10	24	3	5	95	5	0	0	0
30	2	21	87	0	2	1	0	0	0	1	8	5	0	1	11	29	0	14	13	1
31	1	0	0	0	1	0	0	0	0	1	2	2	0	1	0	0	1	7	9	0
54	3	6	0	0	3	3	11	1	0	3	3	0	15	3	1	0	3	4	0	0
55	3	2	0	1	2	0	0	0	0	2	1	7	0	2	0	0	1	1	0	0
56	2	3	0	0	3	3	5	0	0	14	6	1	1	3	1	0	2	13	1	1
Total	31	68	179	8	32	42	163	19	42	50	116	57	28	31	199	10	28	108	80	4

NORTHWESTERN ONTARIO SECTION C - RED LAKE REGISTERED TRAPLINES																
Trapline #	1988/1989				1989/1990				1990/1991				1991/1992			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
12	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
13	1	0	0	0	2	3	0	0	2	0	0	0	2	0	0	0
14	2	6	0	0	2	0	0	0	2	1	0	4	2	0	0	0
15	~	~	~	~	1	0	0	0	1	0	0	0	1	0	0	0
23	1	10	0	0	1	3	2	0	1	0	0	0	1	0	1	0
24	2	0	0	0	3	0	0	0	3	0	0	0	3	0	0	0
25	3	11	15	14	3	12	19	3	3	5	8	5	3	1	0	0
26	2	2	0	0	2	1	1	0	2	0	0	0	2	0	0	0
27	3	5	0	0	3	3	2	0	3	19	16	0	3	4	0	0
28	3	2	0	0	3	3	2	0	3	1	0	0	3	3	0	0
29	1	13	2	6	2	5	2	0	2	13	0	0	2	4	0	0
30	1	0	2	0	1	2	4	0	1	0	2	0	1	0	0	0
31	~	~	~	~	1	0	0	0	1	0	0	0	1	0	0	0
54	3	1	0	0	3	3	0	0	3	4	0	0	3	6	0	0
55	2	1	0	0	2	8	0	0	3	0	0	0	3	0	0	0
56	2	10	0	1	2	4	1	0	3	1	0	0	2	1	0	0
Total	27	61	19	21	32	47	33	3	34	44	26	9	33	19	1	0

Trapline #	1973/1974				1974/1975				1975/1976				1976/1977				1977/1978			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
RL2	1	0	0	0	1	0	17	0	0	0	0	0	1	0	12	0	1	0	46	0
RL3	3	2	0	0	9	14	102	19	0	0	0	1	0	0	0	0	1	0	0	0
RL4	2	2	11	0	3	0	0	0	2	2	2	2	2	13	3	5	2	0	0	0
RL5	2	0	14	0	3	0	0	0	0	0	0	0	0	3	22	0	4	3	5	0
RL6	3	7	6	18	8	3	0	0	1	1	8	0	1	2	0	0	1	0	22	0
RL9	1	0	2	0	4	7	294	22	2	0	55	0	1	1	16	0	2	0	0	0
RL10	4	0	6	12	3	2	11	6	2	2	2	2	1	1	1	0	1	1	3	0
RL11	2	0	0	0	2	5	43	0	1	0	3	0	1	0	0	0	2	5	4	0
K31	1	0	0	0	2	3	0	0	1	1	0	0	1	0	0	0	1	14	0	0
K32	2	2	0	0	1	4	0	0	1	0	0	0	1	0	0	0	1	0	0	0
K33	1	0	0	0	2	2	0	0	2	3	0	0	2	13	0	0	1	10	0	0
K34	2	5	0	0	2	5	0	0	1	0	0	0	2	6	0	0	1	2	0	0
K35	1	1	0	0	1	0	0	0	2	12	0	0	1	0	0	0	1	2	0	0
K36	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
K37	1	2	0	0	2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
Total	27	21	39	30	44	45	467	47	16	10	180	0	21	50	53	5	22	37	80	0

Trapline #	1978/1979				1979/1980				1980/1981				1981/1982				1982/1983			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
RL2	1	1	0	0	1	1	1	0	0	0	0	0	1	1	0	0	1	1	1	0
RL3	1	0	0	0	1	0	3	0	0	0	0	0	1	0	1	0	1	1	4	0
RL4	1	0	6	0	1	0	32	0	0	0	78	0	3	0	15	0	3	2	1	0
RL5	2	0	0	0	3	5	14	1	0	16	0	3	3	2	3	0	3	6	15	0
RL6	4	14	83	2	6	17	122	1	21	242	9	6	6	16	192	13	6	16	152	3
RL8	1	3	1	5	1	3	4	1	0	9	0	2	1	0	0	0	2	0	2	0
RL9	2	0	0	0	2	0	0	0	7	18	0	3	3	0	0	0	2	0	0	0
RL10	1	17	10	2	2	2	40	10	1	96	6	1	1	1	22	0	2	6	80	4
RL11	2	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
K31	1	0	0	0	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
K32	1	17	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
K33	1	11	0	0	1	6	0	0	8	0	0	2	2	3	10	10	1	3	0	0
K34	1	2	0	0	1	10	0	0	9	0	0	1	1	3	3	3	1	9	7	0
K35	1	9	0	0	2	2	2	2	0	0	0	1	1	1	1	0	1	0	0	0
K36	1	3	0	0	2	2	2	2	4	0	0	2	2	4	2	2	2	0	1	1
K37	1	0	0	0	2	0	0	0	28	1	0	2	1	3	5	5	1	2	0	0
Total	22	77	100	9	23	45	216	13	89	460	15	31	26	32	233	31	27	47	264	15

Trapline #	NORTHWESTERN ONTARIO SECTION D - KENORA / RED LAKE REGISTERED TRAPLINES																			
	1983/1984				1984/1985				1985/1986				1986/1987				1987/1988			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
RL2	1	1	1	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
RL3	1	0	0	0	1	0	0	0	2	0	1	3	2	2	0	0	2	2	0	0
RL4	3	0	0	0	3	0	1	0	3	0	0	0	3	0	0	0	3	0	0	0
RL5	3	0	1	0	3	0	16	5	3	1	0	5	3	1	0	0	3	0	0	0
RL6	7	10	90	0	7	7	80	0	4	2	29	0	3	3	9	0	3	0	0	0
RL8	2	0	0	0	2	0	0	2	3	1	1	0	3	0	0	0	3	0	0	0
RL9	1	0	0	2	1	0	0	0	1	0	0	0	1	0	0	6	1	0	0	0
RL10	2	2	9	0	2	1	29	17	2	1	104	0	2	7	19	0	2	3	2	0
RL11	-	-	-	-	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
K31	-	-	-	-	1	0	0	0	1	1	0	0	1	0	0	0	1	3	-	0
K32	2	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0	1	3	-	0
K33	1	0	0	0	3	1	0	0	2	0	0	0	1	0	0	0	2	0	0	0
K34	1	3	0	1	1	0	0	1	1	6	1	1	1	1	0	0	1	6	0	0
K35	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
K36	1	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	0
K37	1	0	0	0	1	0	0	3	1	4	3	3	1	0	0	0	1	0	0	0
Total	26	15	100	3	31	9	126	6	30	17	135	29	28	14	28	6	24	14	2	0

Trapline #	1988/1989				1989/1990				1990/1991				1991/1992			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
RL2	2	2	2	2	1	0	0	0	1	0	0	0	1	0	0	0
RL3	3	0	0	0	3	0	0	0	3	0	0	0	3	0	0	0
RL4	2	0	10	0	2	33	1	0	2	0	0	0	2	0	0	0
RL5	2	0	0	0	3	3	2	0	3	0	0	0	3	0	0	0
RL6	2	2	11	0	3	1	12	0	3	2	0	0	3	0	0	0
RL8	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
RL9	2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
RL10	3	5	2	7	3	0	0	0	3	3	0	0	3	0	0	0
RL11	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
K31	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
K32	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
K33	2	1	1	0	1	0	0	0	1	0	0	0	1	0	0	0
K34	1	0	0	2	1	8	1	0	1	0	0	0	1	0	0	0
K35	1	0	0	0	1	0	1	0	1	0	0	0	1	0	0	0
K36	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
K37	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
Total	24	8	23	9	26	47	15	0	23	5	0	0	23	0	0	0

Trapline #	NORTHWESTERN ONTARIO SECTION E - KENORA REGISTERED TRAPLINES																			
	1964/1965				1965/1966				1966/1967				1967/1968				1968/1969			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1					2	5	110	0	2	26	112	10	2	9	50	10	2	9	110	10
2	1	4	56	15	1	2	59	3	1	4	12	2	1	0	4	0	1	12	13	1
3					1	9	46	0	1	20	0	0	1	14	0	0	2	23	29	0
4									2	4	50	0	1	24	0	0	2	14	32	0
5													1	0	35	0	2	7	0	0
6									1	6	0	0	1	0	0	0	1	1	0	0
7	1	23	30	0	~	~	~	~	1	3	16	0	1	9	11	0	1	9	0	0
8	1	4	0	0	1	1	0	0	~	~	~	~	1	0	0	0	1	0	0	0
9	~	~	~	~	~	~	~	~	1	5	0	0	1	5	0	0	~	~	~	~
10	1	0	0	0	1	0	0	0	~	~	~	~	1	0	1	0	1	0	0	0
11	1	5	0	0	1	0	0	0	1	7	0	0	1	0	0	0	1	7	0	0
12	1	14	24	1	1	10	135	0	1	34	16	1	1	26	3	0	1	9	1	0
13	1	6	30	6	2	3	50	0	2	7	5	0	2	16	24	3	~	~	~	~
14	1	10	50	7	2	9	66	10	2	13	0	3	2	12	15	4	1	4	2	0
15																				
16					1	0	0	0	1	5	0	0	1	2	0	0	~	~	~	~
17	1	0	0	0	1	0	0	0	1	3	0	0	1	0	0	0	1	2	0	0
18					1	4	113	24	1	17	328	14	1	14	140	11	~	~	~	~
19									1	5	10	0	~	~	~	~	1	15	110	8
20					1	10	2	2	1	3	0	0	1	3	0	0	1	10	0	2
21																				
22	3	19	62	0	2	6	66	0	~	~	~	~	2	3	54	0	1	0	0	0
23					1	5	56	10	1	15	70	3	1	25	25	0	~	~	~	~
24					1	1	0	0	1	1	0	0	1	21	0	0	1	8	0	0
25	1	2	10	2	~	~	~	~	1	11	0	4	1	1	10	0	1	13	59	0

	1964/1965 Cont.				1965/1966 Cont.				1966/1967 Cont.				1967/1968 Cont.				1968/1969 Cont.			
27	1	3	50	0	1	0	50	0	1	0	0	0	1	4	0	0	1	0	0	0
28													1	0	0	0	1	3	0	0
29					1	0	0	0	~	~	~	~	1	0	0	0	~	~	~	~
30	1	2	40	0	1	1	0	0	~	~	~	~	1	0	0	0	1	1	2	0
<b>Total</b>	<b>15</b>	<b>92</b>	<b>352</b>	<b>31</b>	<b>21</b>	<b>55</b>	<b>753</b>	<b>47</b>	<b>24</b>	<b>196</b>	<b>621</b>	<b>39</b>	<b>31</b>	<b>195</b>	<b>372</b>	<b>28</b>	<b>26</b>	<b>148</b>	<b>359</b>	<b>21</b>

Trapline #	1969/1970				1970/1971				1971/1972				1972/1973				1973/1974			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	1	9	88	0	2	5	100	0	2	3	0	0	2	1		0	2	1		0
2	1	5	26	0	1	0	53	0	1	5	0	1	1	2		0	1	1		0
3	3	34	50	2	2	12	27	0	1	3	13	0	1	7		0	1	7		0
4	3	3	195	0	2	0	0	0	2	5	0	0	1	0		0	1	0		0
5	1	0	22	0	1	6	28	0	1	0	12	0	1	4		0	1	0		0
6	1	0	0	0	~	~	~	~	~	~	~	~	~	~		~	~	~		~
7	1	7	0	0	~	~	~	~	~	2	0	0	~	0		~	~	0		~
8	1	1	0	0	1	2	0	0	1	0	0	0	1	0		~	~	0		~
9	1	0	0	0	~	~	~	~	~	1	0	0	~	~		~	~	~		~
10	~	~	~	~	1	0	0	0	1	1	0	0	1	0		0	1	0		0
11	1	0	0	0	2	0	0	0	1	0	5	0	1	0		0	2	0		0
12	1	26	9	0	1	5	0	0	2	6	6	1	1	2		0	1	5		0
13	2	5	9	0	2	0	14	0	2	8	22	0	1	2		0	2	5		0
14	1	6	7	0	2	13	0	0	1	0	0	0	2	5		0	2	0		0
15	1	1	0	0	1	4	0	0	~	~	~	~	1	0		0	1	0		0
16	1	3	0	0	2	5	11	0	1	4	0	0	1	0		0	~	~		~
17	1	0	0	0	1	1	0	0	1	0	0	0	1	5		0	1	0		0
18	~	~	~	~	~	~	~	~	~	8	0	0	1	0		0	1	12		0
19	1	5	165	0	1	8	0	0	1	9	0	0	1	5		0	1	3		0
20	1	0	0	0	1	2	0	0	1	2	0	0	1	0		0	1	1		0
21	1	0	0	0	1	0	11	0	1	2	0	0	1	1		0	1	0		0
22	1	2	0	0	1	0	0	0	1	0	0	0	1	3		0	~	~		~
23	1	3	50	0	1	3	60	0	1	0	0	0	1	1		0	1	3		0
24	1	3	0	0	1	0	0	0	2	1	0	0	1	1		0	1	4		0
25	1	1	36	0	1	11	40	0	~	~	~	~	1	10		0	1	12		0

	1969/1970 Cont.				1970/1971 Cont.				1971/1972 Cont.				1972/1973 Cont.				1973/1974 Cont.			
27	1	1	48	0	1	0	0	0	1	2	0	0	1	0		0	~	~	~	~
28	1	0	0	0	1	3	15	0	~	~	~	~	~	~	~	~	~	~	~	~
29	1	3	0	0	~	~	~	~	~	~	~	~	1	0		0	1	4		0
30	1	3	0	0	~	~	~	~	1	1	0	0	1	0		0	1	0		0
<b>Total</b>	<b>32</b>	<b>121</b>	<b>705</b>	<b>2</b>	<b>30</b>	<b>80</b>	<b>359</b>	<b>0</b>	<b>30</b>	<b>62</b>	<b>58</b>	<b>2</b>	<b>29</b>	<b>49</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>58</b>	<b>0</b>	<b>0</b>

Trapline #	1974/1975				1975/1976				1976/1977				1977/1978				1978/1979			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	2	5		0	2	0		0	2	6		0	2	4		0	1	1		0
2	1	1		0	1	1		0	1	6		0	1	6		0	1	2		0
3	1	3		0	1	4		0	1	8		0	1	14		0	1	6		0
4	2	3		0	2	4		0	1	7		0	1	1		0	1	1		0
5	2	1		0	3	1		0	2	5		0	1	1		0	2	3		0
6	-	-		1	1	1		1	1	1		1	1	0		1	1	0		1
7	1	0		0	1	1		1	1	1		1	1	7		1	1	0		1
8	1	0		0	1	1		1	1	1		1	1	1		0	1	1		1
9	1	0		0	1	0		0	1	0		0	1	1		0	1	2		0
10	1	0		0	2	0		0	1	4		0	1	0		0	1	9		0
11	1	0		0	2	6		0	1	1		1	1	1		1	1	0		1
12	2	3		0	2	3		0	1	2		0	1	1		0	2	0		0
13	2	0		0	2	0		0	1	0		0	1	0		0	1	0		0
14	-	-		1	2	0		0	1	2		1	1	15		1	1	2		0
15	1	0		0	1	5		0	1	5		0	1	0		0	1	12		0
16	-	-		1	1	1		1	1	1		1	1	0		0	1	1		0
17	1	0		0	1	0		0	1	1		0	1	1		0	1	0		0
18	1	0		0	2	5		0	1	1		0	1	1		0	1	10		0
19	1	1		0	1	2		0	1	13		0	1	2		0	1	4		0
20	1	0		0	2	3		0	1	1		0	1	6		0	1	23		0
21	1	1		0	1	1		1	1	0		0	1	0		0	1	3		0
22	1	0		0	1	0		0	1	0		0	1	0		0	1	1		0
23	1	0		0	1	1		0	1	0		0	1	0		0	1	1		0
24	1	0		0	1	5		0	1	4		0	1	0		0	1	1		0
25	1	9		0	1	4		0	1	28		0	1	0		0	1	17		0

	1974/1975 Cont.		1975/1976 Cont.		1976/1977 Cont.		1977/1978 Cont.		1978/1979 Cont.				
	~	~	~	~	1	10	0	0	1	0			
27	1	5	0	0	1	0	0	0	1	0			
28	1	2	0	3	1	36	0	12	1	30			
29	1	0	0	~	1	0	0	~	~	~			
30	1	0	0	~	1	0	0	~	~	~			
<b>Total</b>	<b>30</b>	<b>34</b>	<b>0</b>	<b>33</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>74</b>	<b>0</b>	<b>23</b>	<b>126</b>	<b>0</b>

Trapline #	1979/1980				1980/1981				1981/1982				1982/1983				1983/1984			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	1	0		0	2	0		0	2	0		0	2	4		0	2	0		0
2	1	0		0	1	0		0	1	0		0	1	0		0	1	0		0
3	1	4		0	1	2		1	1	0		1	1	0		2	1	0		0
4	1	1		1	1	0		0	2	0		0	2	0		0	2	0		0
5	2	1		0	2	4		0	2	0		0	2	0		0	2	0		0
6	1	0		0	1	1		1	1	0		0	1	0		0	1	0		0
7	1	0		0	1	0		1	1	0		1	1	0		1	1	0		0
8	1	0		0	1	4		1	1	2		1	2	2		1	1	3		0
9	1	0		0	1	0		1	1	0		1	1	1		1	1	3		0
10	1	2		0	1	4		0	1	6		0	1	5		0	1	0		0
11	1	3		0	1	0		0	1	0		0	1	2		0	2	0		0
12	1	9		0	1	15		0	1	13		0	1	2		0	2	0		0
13	1	2		0	1	2		2	1	0		0	1	1		0	1	0		0
14	1	16		0	1	0		0	2	3		0	2	1		0	2	0		0
15	1	6		0	1	10		0	1	11		0	1	0		0	1	2		0
16	1	15		0	1	14		0	1	0		0	1	1		0	1	3		0
17	1	6		0	1	1		0	1	0		0	1	0		0	1	0		0
18	1	2		0	1	25		0	1	5		1	1	1		0	1	0		0
19	1	4		0	1	3		0	1	1		0	1	4		0	1	2		0
20	1	15		0	1	19		0	1	17		0	1	9		0	1	8		0
21	1	0		0	1	4		0	1	4		0	1	0		0	1	1		0
22	1	0		0	1	1		0	1	2		0	1	0		0	1	0		0
23	1	0		0	1	1		1	1	2		1	1	0		0	1	0		0
24	1	7		0	1	4		0	1	1		1	1	0		0	1	1		0
25	1	24		0	1	9		0	1	8		6	1	0		0	1	2		0



Trapline #	1984/1985				1985/1986				1986/1987				1987/1988				1988/1989			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	2	0		0	2	8		0	1	8		0	1	3		0	1	0		0
2	1	0		0	1	0		0	1	1	1	0	1	1	1	1	1	0		0
3	1	0		0	1	2		1	1	1	0	0	1	5		0	1	1		0
4	1	1	1	1	3	5		0	3	10		0	3	8		0	3	1		0
5	2	4		2	2	3		0	2	4		0	2	17		0	2	0		0
6	1	0		0	1	1	1	1	1	28		1	1	34		0	1	28		0
7	1	1		0	1	0		0	1	0		0	1	0		0	1	0		0
8	1	1	1	1	1	1	1	1	2	0		0	2	0		0	2	6		0
9	1	0		0	1	1		0	1	0		0	1	1		0	1	0		0
10	1	2		0	1	0		0	1	12		0	1	13		0	1	2		1
11	2	0		0	2	0		0	1	0		0	1	23		0	1	0		0
12	2	0		0	2	6		0	1	6		0	1	25		0	2	16		0
13	1	0		0	1	0		0	1	0		1	1	4		0	1	5		0
14	2	0		0	2	0		0	1	0		0	1	1		1	1	1		1
15	1	7		0	1	0		0	1	5		0	1	1		0	1	7		0
16	1	2		0	1	4		0	1	13		0	1	18		0	1	7		0
17	2	0		0	2	0		0	1	0		0	1	3		0	1	1		1
18	1	0		1	1	0		5	1	6		7	2	0		0	2	2		0
19	1	0		0	1	0		1	2	0		0	2	0		0	3	1		0
20	1	7		0	1	5		0	1	12		0	1	44		26	1	1		0
21	1	0		0	1	1		0	2	0		0	2	2		1	2	4		0
22	1	0		0	1	0		0	1	0		0	1	0		0	1	1		0
23	1	0		0	1	0		0	1	1		0	2	1		0	1	1		0
24	1	1		0	2	3		3	2	0		0	1	0		0	1	1		1
25	1	0		1	1	0		0	2	2		8	3	0		2	1	0		0

	1984/1985 Cont.		1985/1986 Cont.		1986/1987 Cont.		1987/1988 Cont.			1988/1989 Cont.										
26	2	0	2	0	2	1	5	3	5	2	2	1	2							
27	1	2	~	~	~	~	~	1	2	0	1	4	0							
28	2	0	3	0	3	0	0	~	~	~	~	~	~							
29	1	0	1	7	1	10	3	1	3	0	1	3	0							
30	1	1	1	3	1	2	0	3	0	0	1	2	0							
<b>Total</b>	<b>36</b>	<b>27</b>	<b>0</b>	<b>5</b>	<b>37</b>	<b>46</b>	<b>0</b>	<b>19</b>	<b>40</b>	<b>121</b>	<b>0</b>	<b>25</b>	<b>41</b>	<b>212</b>	<b>0</b>	<b>31</b>	<b>34</b>	<b>90</b>	<b>0</b>	<b>2</b>

Trapline #	1989/1990				1990/1991				1991/1992				1992/1993			
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine
1	1	1		0	1	0		0	1	0		0	1	0		2
2	1	0		0	1	0		0	1	0		0	1	0		0
3	1	2		0	1	0		0	1	1		0	1	0		0
4	2	0		0	2	0		0	2	0		1	2	0		0
5	2	0		0	1	0		0	1	0		0	2	0		0
6	1	19		0	1	7		0	1	0		0	2	0		0
7	-	-		1	1	2		2	2	2		2	1	0		0
8	2	1		0	1	1		1	1	1		1	1	0		0
9	1	0		0	1	1		1	1	1		2	2	2		2
10	1	3		0	1	1		1	1	0		0	2	2		2
11	1	0		0	1	3		0	1	0		0	2	2		2
12	2	4		0	1	0		0	1	0		0	2	0		0
13	1	0		0	1	0		0	1	0		0	1	0		0
14	1	0		0	1	0		0	2	0		1	2	0		0
15	1	3		0	1	0		0	1	0		0	1	0		0
16	1	4		0	1	0		0	1	2		0	1	0		0
17	1	7		2	2	0		0	2	1		0	2	1		0
19	3	0		0	2	0		0	2	1		1	2	1		0
20	1	23		0	1	0		0	1	1		0	1	0		0
21	-	-		1	1	0		0	1	1		2	2	2		2
23	1	0		0	1	0		0	1	0		0	2	2		2
24	-	-		1	1	0		0	1	0		0	2	2		2
27	-	-		1	1	0		0	1	0		0	2	2		2
28	-	-		1	1	0		0	1	0		0	2	2		2



**NORTHWESTERN ONTARIO SECTION E - KENORA REGISTERED TRAPLINES**

Trapline #	1993/1994				1994/1995				1995/1996											
	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine	# Trappers	Mink	Muskkrat	Ermine								
1	1	0		0	1	0		0	1	1	0	0								
2	1	0		0	2	1		0	2	0		0								
3	1	0		0	1	1		0	1	0		0								
4	1	1	1	1	1	0		0	1	0		0								
5	2	0		0	1	1	1	1	2	0		0								
6	1	13		0	1	19		0	1	13		6								
7	1	2		0	1	0		0	1	1	1	1								
10	1	1		0	1	0		0	1	1	1	1								
11	1	0		0	1	0		0	1	0		0								
12	3	0		0	3	7		5	2	0		0								
13	1	0		0	1	0		0	1	0		0								
15	1	0		0	1	1		0	1	0		0								
16	1	3		0	1	0		0	1	0		0								
18	1	1	1	1	1	4		0	1	1	1	1								
20	1	5		0	1	2		0	1	2		0								
21	1	1	1	1	1	0		0	1	1	1	1								
24	1	1	1	1	1	3		0	1	0		0								
26	1	1	1	1	1	5		0	1	1	1	1								
27	1	1	1	1	1	0		0	1	1	1	1								
29	1	2		0	1	1		0	2	3		0								
<b>Total</b>	<b>17</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>44</b>	<b>0</b>	<b>5</b>	<b>18</b>	<b>19</b>	<b>0</b>	<b>6</b>								

**Appendix 8. Intraspecific correlation coefficients calculated for mink, muskrat and ermine fur return totals of Registered Traplines within Northwestern Ontario sections A - E**

Correlation Values for Mink from Northwestern Ontario - Section A																					
Year	Mink	Mink 1 Year Out	Mink	Mink 2 Years Out	Mink	Mink 3 Years Out	Mink	Mink 4 Years Out	Mink	Mink 5 Years Out	Mink	Mink 6 Years Out	Mink	Mink 7 Years Out	Mink	Mink 8 Years Out	Mink	Mink 9 Years Out	Mink	Mink 10 Years Out	
73/74	67	67	67		67		67		67		67		67		67		67		67		67
74/75	65	67	65		65		65		65		65		65		65		65		65		65
75/76	128	65	128	67	128		128		128		128		128		128		128		128		128
76/77	183	128	183	65	183	67	183		183		183		183		183		183		183		183
77/78	252	183	252	128	252	65	252	67	252		252		252		252		252		252		252
78/79	343	252	343	183	343	128	343	65	343	67	343		343		343		343		343		343
79/80	401	343	401	252	401	183	401	128	401	65	401	67	401		401		401		401		401
80/81	302	401	302	343	302	252	302	183	302	128	302	65	302	67	302		302		302		302
81/82	196	302	196	401	196	343	196	252	196	183	196	128	196	65	196	67	196		196		196
82/83	131	196	131	302	131	401	131	343	131	252	131	183	131	128	131	65	131	67	131		131
83/84	85	131	85	196	85	302	85	401	85	343	85	252	85	183	85	128	85	65	85	67	85
84/85	101	85	101	131	101	196	101	302	101	401	101	343	101	252	101	183	101	128	101		101
85/86	238	101	238	85	238	131	238	196	238	302	238	401	238	343	238	252	238	183	238		238
86/87	151	238	151	101	151	85	151	131	151	196	151	302	151	401	151	343	151	252	151		151
87/88	327	151	327	238	327	101	327	85	327	131	327	196	327	302	327	401	327	343	327		327
88/89	159	327	159	151	159	238	159	101	159	85	159	131	159	196	159	302	159	401	159		159

89/90	84	159	84	327	84	151	84	238	84	101	84	85	84	131	84	196	84	302	84	401
90/91	50	84	50	159	50	327	50	151	50	238	50	101	50	85	50	131	50	196	50	302
91/92	76	50	76	84	76	159	76	327	76	151	76	238	76	101	76	85	76	131	76	196
		76		50		84		159		327		151		238		101		85		131
				76		50		84		159		327		151		238		101		85
	0.6277634					76		50		84		159		327		151		238		101
			0.2324949					76		50		84		159		327		151		238
					-0.3479153					76		50		84		159		327		151
							-0.6295202					76		50		84		159		327
									-0.5292004					76		50		84		159
											-0.2303935				76		50		84	
													0.255686				76		50	
															0.6168339				76	
																	0.4528994			
																				-0.0298629

**Correlation Values for Muskrat from Northwestern Ontario - Section A**

Year	Muskrat	Muskrat 1 Year Out	Muskrat 2 Years Out	Muskrat 3 Years Out	Muskrat 4 Years Out	Muskrat 5 Years Out	Muskrat 6 Years Out	Muskrat 7 Years Out	Muskrat 8 Years Out	Muskrat 9 Years Out	Muskrat 10 Years Out
73/74	435	435	435	435	435	435	435	435	435	435	435
74/75	1285	435	1285	1285	1285	1285	1285	1285	1285	1285	1285
75/76	960	1285	960	960	960	960	960	960	960	960	960
76/77	439	960	439	439	439	439	439	439	439	439	439
77/78	871	439	871	1285	871	871	871	871	871	871	871
78/79	1011	871	1011	960	1011	435	1011	1011	1011	1011	1011
79/80	771	1011	771	439	771	1285	771	771	771	771	771
80/81	921	771	921	871	921	960	1285	435	921	921	921
81/82	277	921	277	1011	871	439	960	1285	277	277	277
82/83	333	277	333	771	1011	871	439	960	1285	333	333
83/84	338	333	338	921	771	1011	871	439	960	338	338
84/85	361	338	361	277	921	771	1011	871	439	361	361
85/86	223	361	223	333	277	921	771	1011	871	223	223
86/87	120	223	120	338	120	277	921	771	1011	120	120
87/88	357	120	357	361	338	333	277	921	771	357	357

88/89	77	357	77	120	77	223	77	361	77	338	77	333	77	277	77	921	77	771	77	1011
89/90	23	77	23	357	23	120	23	223	23	361	23	338	23	333	23	277	23	921	23	771
90/91	0	23	0	77	0	357	0	120	0	223	0	361	0	338	0	333	0	277	0	921
91/92	0	0	0	23	0	77	0	357	0	120	0	223	0	361	0	338	0	333	0	277
		0		0		23		77		357		120		223		361		338		333
				0		0		23		77		357		120		223		361		338
	0.6258412					0		0		23		77		357		120		223		361
			0.5383932					0		0		23		77		357		120		223
					0.6917199					0		0		23		77		357		120
							0.5512364					0		0		23		77		357
									0.5557365					0		0		23		77
										0.5072522						0		0		23
											0.2038058							0		0
															0.4556281					0
																	0.4885959			
																				0.3032394

**Correlation Values for Ermine from Northwestern Ontario - Section A**

Year	Ermine	Ermine 1 Year Out	Ermine 2 Years Out	Ermine 3 Years Out	Ermine 4 Years Out	Ermine 5 Years Out	Ermine 6 Years Out	Ermine 7 Years Out	Ermine 8 Years Out	Ermine 9 Years Out	Ermine 10 Years Out
73/74	54	54	54	54	54	54	54	54	54	54	54
74/75	91	54	91	91	91	91	91	91	91	91	91
75/76	79	91	79	79	79	79	79	79	79	79	79
76/77	69	79	69	69	69	69	69	69	69	69	69
77/78	117	69	117	117	117	117	117	117	117	117	117
78/79	101	117	101	101	101	101	101	101	101	101	101
79/80	90	101	90	90	90	90	90	90	90	90	90
80/81	65	90	65	117	65	65	91	54	65	65	65
81/82	126	65	126	101	126	69	79	126	54	126	126
82/83	71	126	71	90	71	117	69	71	91	71	71
83/84	19	71	19	65	19	101	117	19	79	19	19
84/85	63	19	63	126	63	90	101	63	69	63	63
85/86	118	63	118	71	118	65	90	118	117	118	118
86/87	16	118	16	19	16	126	65	16	101	16	16
87/88	59	16	59	63	59	71	126	59	90	59	59
88/89	124	59	124	118	124	19	71	124	65	124	124

0



**Correlation Values for Mink from Northwestern Ontario - Section B**

Year	Mink	Mink 1 Year Out	Mink	Mink 2 Years Out	Mink	Mink 3 Years Out	Mink	Mink 4 Years Out	Mink	Mink 5 Years Out	Mink	Mink 6 Years Out	Mink	Mink 7 Years Out	Mink	Mink 8 Years Out	Mink	Mink 9 Years Out	Mink	Mink 10 Years Out	
73/74	13		13				13		13		13		13		13		13		13		13
74/75	50	13	50				50		50		50		50		50		50		50		50
75/76	73	50	73	13			73		73		73		73		73		73		73		73
76/77	108	73	108	50	13		108		108		108		108		108		108		108		108
77/78	218	108	218	73	50	13	218	13	218		218		218		218		218		218		218
78/79	291	218	291	108	73	50	291	50	291	13	291		291		291		291		291		291
79/80	223	291	223	218	108	73	223	73	223	50	223	13	223		223		223		223		223
80/81	279	223	279	291	108	73	279	108	279	73	279	50	279	13	279		279		279		279
81/82	195	279	195	223	291	108	195	218	195	108	195	73	195	50	195	13	195		195		195
82/83	99	195	99	279	99	223	99	291	99	218	99	108	99	73	99	50	99	13	99		99
83/84	56	99	56	195	56	279	56	223	56	291	56	218	56	108	56	73	56	50	56		56
84/85	65	56	65	99	65	195	65	279	65	223	65	291	65	218	65	108	65	73	65		65
85/86	110	65	110	56	110	99	110	195	110	279	110	223	110	291	110	218	110	108	110		110
86/87	113	110	113	65	113	56	113	99	113	195	113	279	113	223	113	291	113	218	113		113
87/88	236	113	236	110	236	65	236	56	236	99	236	195	236	279	236	223	236	291	236		236
88/89	60	236	60	113	60	110	60	65	60	56	60	99	60	195	60	279	60	223	60		60

89/90	38	60	38	236	38	113	38	110	38	65	38	56	38	99	38	195	38	279	38	223
90/91	28	38	28	60	28	236	28	113	28	110	28	65	28	56	28	99	28	195	28	279
91/92	41	28	41	38	41	60	41	236	41	113	41	110	41	65	41	56	41	99	41	195
		41		28		38		60		236		113		110		65		56		99
				41		28		38		60		236		113		110		65		56
	0.648872					41		28		38		60		236		113		110		65
			0.2968798					41		28		38		60		236		113		110
						-0.1437514				41		28		38		60		236		113
								-0.4995698				41		28		38		60		236
										-0.4542194				41		28		38		60
												-0.2304189				41		28		38
														-0.0014759				41		28
																0.0824626				41
																		0.3039096		
																				-0.0556964

Correlation Values for Muskrat from Northwestern Ontario - Section B

Year	Muskrat	Muskrat 1 Year Out	Muskrat	Muskrat 2 Years Out	Muskrat	Muskrat 3 Years Out	Muskrat	Muskrat 4 Years Out	Muskrat	Muskrat 5 Years Out	Muskrat	Muskrat 6 Years Out	Muskrat	Muskrat 7 Years Out	Muskrat	Muskrat 8 Years Out	Muskrat	Muskrat 9 Years Out	Muskrat	Muskrat 10 Years Out
73/74	438		438		438		438		438		438		438		438		438		438	
74/75	769	438	769		769		769		769		769		769		769		769		769	
75/76	792	769	792	438	792		792		792		792		792		792		792		792	
76/77	369	792	369	769	369	438	369		369		369		369		369		369		369	
77/78	415	369	415	792	415	769	415	438	415		415		415		415		415		415	
78/79	578	415	578	369	578	792	578	769	578	438	578		578		578		578		578	
79/80	893	578	893	415	893	438	893	792	893	769	893	438	893		893		893		893	
80/81	1017	893	1017	578	1017	415	1017	369	1017	792	1017	769	1017	438	1017		1017		1017	
81/82	242	1017	242	893	242	578	242	415	242	369	242	792	242	769	242	438	242		242	
82/83	594	242	594	1017	594	893	594	578	594	415	594	369	594	792	594	769	594	438	594	
83/84	320	594	320	242	320	1017	320	893	320	578	320	415	320	369	320	792	320	769	320	438
84/85	336	320	336	594	336	242	336	1017	336	893	336	578	336	415	336	369	336	792	336	769
85/86	262	336	262	320	262	336	262	242	262	1017	262	893	262	578	262	415	262	369	262	792
86/87	145	262	145	336	145	320	145	320	145	242	145	1017	145	893	145	578	145	415	145	369
87/88	245	145	245	262	245	336	245	320	245	594	245	242	245	1017	245	893	245	578	245	415

88/89	66	245	66	145	66	262	66	336	66	320	66	594	66	242	66	1017	66	893	66	578
89/90	269	66	269	245	269	145	269	262	269	336	269	320	269	594	269	242	269	1017	269	893
90/91	21	269	21	66	21	245	21	145	21	262	21	336	21	320	21	594	21	242	21	1017
91/92	117	21	117	269	117	66	117	245	117	145	117	262	117	336	117	320	117	594	117	242
		117		21		269		66		245		145		262		336		320		594
				117		21		269		66		245		145		262		336		320
	0.5108939					117		21		269		66		245		145		262		336
			0.3833333					117		21		269		66		245		145		262
					0.3136543					117		21		269		66		245		145
							0.3733227					117		21		269		66		245
									0.5106366					117		21		269		66
											0.0729832					117		21		269
													0.0845773					117		21
															0.0116539					117
																	0.0738873			
																				-0.0070153

**Correlation Values for Ermine from Northwestern Ontario - Section B**

Year	Ermine	Ermine 1 Year Out	Ermine 2 Years Out	Ermine 3 Years Out	Ermine 4 Years Out	Ermine 5 Years Out	Ermine 6 Years Out	Ermine 7 Years Out	Ermine 8 Years Out	Ermine 9 Years Out	Ermine 10 Years Out
73/74	13	13									
74/75	91	13									
75/76	6	91	13								
76/77	115	6	115	13							
77/78	131	115	131	91	13						
78/79	121	131	121	6	121	13					
79/80	154	121	154	115	6	91					
80/81	163	154	163	131	115	6	13				
81/82	100	163	100	121	100	115	6	13			
82/83	67	100	67	154	131	67	115	6	13		
83/84	8	67	8	163	6	8	131	8	6		
84/85	42	8	42	100	163	42	121	42	115	6	
85/86	55	42	55	67	100	55	154	55	131	115	6
86/87	25	55	25	8	67	25	163	25	121	131	115
87/88	32	25	32	42	8	32	100	32	154	121	131
88/89	96	32	96	55	42	96	67	96	163	154	121



Correlation Values for Mink from Northwestern Ontario - Section C

Year	Mink	Mink 1 Year Out	Mink	Mink 2 Years Out	Mink	Mink 3 Years Out	Mink	Mink 4 Years Out	Mink	Mink 5 Years Out	Mink	Mink 6 Years Out	Mink	Mink 7 Years Out	Mink	Mink 8 Years Out	Mink	Mink 9 Years Out	Mink	Mink 10 Years Out	
73/74	15		15		15		15		15		15		15		15		15		15		15
74/75	24	15	24	15	24	15	24	15	24	15	24	15	24	15	24	15	24	15	24	15	24
75/76	36	24	36	15	36		36		36		36		36		36		36		36		36
76/77	64	36	64	24	64	15	64		64		64		64		64		64		64		64
77/78	118	64	118	36	118	24	118	15	118		118		118		118		118		118		118
78/79	179	118	179	64	179	36	179	24	179	15	179	15	179	179	179	179	179	179	179	179	179
79/80	108	179	108	118	108	64	108	36	108	24	108	15	108	108	108	108	108	108	108	108	108
80/81	130	108	130	179	130	118	130	64	130	36	130	24	130	15	130		130		130		130
81/82	39	130	39	108	39	179	39	118	39	64	39	24	39	24	39	15	39	15	39	39	39
82/83	68	39	68	130	68	108	68	179	68	118	68	36	68	36	68	24	68	15	68	68	68
83/84	68	68	68	39	68	130	68	108	68	179	68	64	68	64	68	36	68	24	68	68	68
84/85	42	68	42	68	42	39	42	130	42	108	42	179	42	118	42	64	42	36	42	42	42
85/86	50	42	50	68	50	68	50	39	50	130	50	108	50	179	50	118	50	64	50	50	50
86/87	31	50	31	42	31	68	31	68	31	39	31	130	31	108	31	179	31	118	31	31	31
87/88	108	31	108	50	108	42	108	68	108	68	108	39	108	130	108	108	108	179	108	108	108
88/89	61	108	61	31	61	50	61	42	61	68	61	68	61	39	61	130	61	108	61	61	179







**Correlation Values for Ermine from Northwestern Ontario - Section C**

Year	Ermine	Ermine 1 Year Out	Ermine	Ermine 2 Years Out	Ermine	Ermine 3 Years Out	Ermine	Ermine 4 Years Out	Ermine	Ermine 5 Years Out	Ermine	Ermine 6 Years Out	Ermine	Ermine 7 Years Out	Ermine	Ermine 8 Years Out	Ermine	Ermine 9 Years Out	Ermine	Ermine 10 Years Out
73/74	10		10		10		10		10		10		10		10		10		10	
74/75	32	10	32		32		32		32		32		32		32		32		32	
75/76	8	32	8	10	8		8		8		8		8		8		8		8	
76/77	79	8	79	32	79	10	79		79		79		79		79		79		79	
77/78	62	79	62	8	62	32	62	10	62		62		62		62		62		62	
78/79	47	62	47	79	47	8	47	32	47	10	47		47		47		47		47	
79/80	18	47	18	62	18	79	18	8	18	32	18	10	18		18		18		18	
80/81	63	18	63	47	63	62	63	79	63	8	63	32	63	10	63		63		63	
81/82	52	63	52	18	52	47	52	62	52	79	52	8	52	32	52	10	52		52	
82/83	22	52	22	63	22	18	22	47	22	62	22	79	22	8	22	32	22	10	22	
83/84	8	22	8	52	8	63	8	18	8	47	8	62	8	79	8	8	8	32	8	10
84/85	19	8	19	22	19	52	19	63	19	18	19	47	19	62	19	79	19	8	19	32
85/86	57	19	57	8	57	22	57	52	57	63	57	18	57	47	57	62	57	79	57	8
86/87	10	57	10	19	10	8	10	22	10	52	10	63	10	18	10	47	10	62	10	79
87/88	4	10	4	57	4	19	4	8	4	22	4	52	4	63	4	18	4	47	4	62
88/89	21	4	21	10	21	57	21	19	21	8	21	22	21	52	21	63	21	18	21	47



**Correlation Values for Mink from Northwestern Ontario - Section D**

Year	Mink	Mink 1 Year Out	Mink	Mink 2 Years Out	Mink	Mink 3 Years Out	Mink	Mink 4 Years Out	Mink	Mink 5 Years Out	Mink	Mink 6 Years Out	Mink	Mink 7 Years Out	Mink	Mink 8 Years Out	Mink	Mink 9 Years Out	Mink	Mink 10 Years Out	
73/74	21		21		21		21		21		21		21		21		21		21		21
74/75	45	21	45		45		45		45		45		45		45		45		45		45
75/76	10	45	10	21	10		10		10		10		10		10		10		10		10
76/77	50	10	50	45	50	21	50		50		50		50		50		50		50		50
77/78	37	50	37	10	37	45	37	21	37		37		37		37		37		37		37
78/79	77	37	77	50	77	10	77	45	77	21	77		77		77		77		77		77
79/80	45	77	45	37	45	50	45	10	45	45	45	21	45		45		45		45		45
80/81	89	45	89	77	89	37	89	50	89	10	89	45	89	21	89		89		89		89
81/82	32	89	32	45	32	77	32	37	32	50	32	10	32	45	32	21	32		32		32
82/83	47	32	47	89	47	45	47	77	47	37	47	50	47	10	47	45	47	21	47		47
83/84	15	47	15	32	15	89	15	45	15	77	15	37	15	50	15	10	15	45	15	21	15
84/85	9	15	9	47	9	32	9	89	9	45	9	77	9	37	9	50	9	10	9	45	9
85/86	17	9	17	15	17	47	17	32	17	89	17	45	17	77	17	37	17	50	17	10	17
86/87	14	17	14	9	14	15	14	47	14	32	14	89	14	45	14	77	14	37	14	50	14
87/88	14	14	14	17	14	9	14	15	14	47	14	32	14	89	14	45	14	77	14	37	14
88/89	8	14	8	14	8	17	8	9	8	15	8	47	8	32	8	89	8	45	8	77	8



**Correlation Values for Muskrat from Northwestern Ontario - Section D**

Year	Muskrat	Muskrat 1 Year Out	Muskrat 2 Years Out	Muskrat 3 Years Out	Muskrat 4 Years Out	Muskrat 5 Years Out	Muskrat 6 Years Out	Muskrat 7 Years Out	Muskrat 8 Years Out	Muskrat 9 Years Out	Muskrat 10 Years Out
73/74	39	39	39	39	39	39	39	39	39	39	39
74/75	467	39	467	467	467	467	467	467	467	467	467
75/76	180	467	180	180	180	180	180	180	180	180	180
76/77	53	180	53	39	53	53	53	53	53	53	53
77/78	80	53	80	467	80	80	80	80	80	80	80
78/79	100	80	100	180	100	39	100	100	100	100	100
79/80	216	100	80	53	216	467	216	216	216	216	216
80/81	460	216	100	80	460	180	460	39	460	460	460
81/82	233	460	216	100	233	53	233	467	233	233	233
82/83	264	233	460	216	264	80	264	180	264	264	264
83/84	100	264	100	460	100	100	80	53	467	39	264
84/85	126	100	264	233	126	216	100	100	180	100	100
85/86	135	126	100	264	135	460	216	80	53	126	126
86/87	28	135	126	100	28	233	460	216	80	28	28
87/88	2	28	135	126	2	264	233	460	216	2	2



Correlation Values for Ermine from Northwestern Ontario - Section D

Year	Ermine	Ermine 1 Year Out	Ermine	Ermine 2 Years Out	Ermine	Ermine 3 Years Out	Ermine	Ermine 4 Years Out	Ermine	Ermine 5 Years Out	Ermine	Ermine 6 Years Out	Ermine	Ermine 7 Years Out	Ermine	Ermine 8 Years Out	Ermine	Ermine 9 Years Out	Ermine	Ermine 10 Years Out
73/74	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
74/75	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
75/76	0	47	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76/77	5	0	5	47	5	30	5	30	5	5	5	5	5	5	5	5	5	5	5	5
77/78	0	5	0	0	0	47	0	30	0	0	0	0	0	0	0	0	0	0	0	0
78/79	9	0	9	5	9	0	9	47	9	30	9	9	9	9	9	9	9	9	9	9
79/80	13	9	13	0	13	5	13	0	13	47	13	30	13	13	13	13	13	13	13	13
80/81	15	13	15	9	15	0	15	5	15	0	15	47	15	30	15	15	15	15	15	15
81/82	31	15	31	13	31	9	31	0	31	5	31	0	31	47	31	30	31	31	31	31
82/83	15	31	15	15	15	13	15	9	15	0	15	5	15	0	15	47	15	30	15	30
83/84	3	15	3	31	3	15	3	13	3	9	3	0	3	5	3	0	3	47	3	30
84/85	6	3	6	15	6	31	6	15	6	13	6	9	6	0	6	5	6	0	6	47
85/86	29	6	29	3	29	15	29	31	29	15	29	13	29	9	29	0	29	5	29	0
86/87	6	29	6	6	6	3	6	15	6	31	6	15	6	13	6	9	6	0	6	5
87/88	0	6	0	29	0	6	0	3	0	15	0	31	0	15	0	13	0	9	0	5
88/89	9	0	9	6	9	29	9	6	9	3	9	15	9	31	9	15	9	13	9	9



Correlation Values for Mink from Northwestern Ontario - Section E

Year	Mink	Mink 1 Year Out	Mink	Mink 2 Years Out	Mink	Mink 3 Years Out	Mink	Mink 4 Years Out	Mink	Mink 5 Years Out	Mink	Mink 6 Years Out	Mink	Mink 7 Years Out	Mink	Mink 8 Years Out	Mink	Mink 9 Years Out	Mink	Mink 10 Years Out
64/65	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92
65/66	55	92	55	92	55	92	55	92	55	92	55	92	55	92	55	92	55	92	55	92
66/67	196	55	196	92	196	55	196	92	196	55	196	92	196	55	196	92	196	55	196	92
67/68	195	196	195	55	195	92	195	92	195	92	195	92	195	92	195	92	195	92	195	92
68/69	148	195	148	196	148	55	148	92	148	195	148	92	148	195	148	92	148	195	148	92
69/70	121	148	121	195	121	196	121	55	121	92	121	92	121	92	121	92	121	92	121	92
70/71	80	121	80	148	80	195	80	196	80	55	80	92	80	92	80	92	80	92	80	92
71/72	62	80	62	121	62	148	62	195	62	196	62	55	62	92	62	92	62	92	62	92
72/73	49	62	49	80	49	121	49	148	49	195	49	196	49	55	49	92	49	92	49	92
73/74	60	49	60	62	60	80	60	121	60	148	60	195	60	196	60	55	60	92	60	92
74/75	35	60	35	49	35	62	35	80	35	121	35	148	35	195	35	196	35	55	35	92
75/76	47	35	47	60	47	49	47	62	47	80	47	121	47	148	47	195	47	196	47	92
76/77	150	47	150	35	150	60	150	49	150	62	150	80	150	121	150	148	150	195	150	196
77/78	74	150	74	47	74	35	74	60	74	49	74	62	74	80	74	121	74	148	74	195
78/79	128	74	128	150	128	47	128	35	128	60	128	49	128	62	128	80	128	121	128	148
79/80	149	128	149	74	149	150	149	47	149	35	149	60	149	49	149	62	149	80	149	121





**Correlation Values for Mink from Northwestern Ontario - Section E**

Year	Mink	Mink 1 Year Out	Mink	Mink 2 Years Out	Mink	Mink 3 Years Out	Mink	Mink 4 Years Out	Mink	Mink 5 Years Out	Mink	Mink 6 Years Out	Mink	Mink 7 Years Out	Mink	Mink 8 Years Out	Mink	Mink 9 Years Out	Mink	Mink 10 Years Out	
64/65	92		92		92		92		92		92		92		92		92		92		92
65/66	55	92	55		55		55		55		55		55		55		55		55		55
66/67	196	55	196	92	196		196		196		196		196		196		196		196		196
67/68	195	196	195	55	195	92	195		195		195		195		195		195		195		195
68/69	148	195	148	196	148	55	148	92	148		148		148		148		148		148		148
69/70	121	148	121	195	121	196	121	55	121	92	121		121		121		121		121		121
70/71	80	121	80	148	80	195	80	196	80	55	80	92	80		80		80		80		80
71/72	62	80	62	121	62	148	62	195	62	196	62	55	62	92	62		62		62		62
72/73	49	62	49	80	49	121	49	148	49	195	49	196	49	55	49	92	49		49		49
73/74	60	49	60	62	60	80	60	121	60	148	60	195	60	196	60	55	60	92	60		60
74/75	35	60	35	49	35	62	35	80	35	121	35	148	35	195	35	196	35	55	35		35
75/76	47	35	47	60	47	49	47	62	47	80	47	121	47	148	47	195	47	196	47		47
76/77	150	47	150	35	150	60	150	49	150	62	150	80	150	121	150	148	150	195	150		150
77/78	74	150	74	47	74	35	74	60	74	49	74	62	74	80	74	121	74	148	74		74
78/79	128	74	128	150	128	47	128	35	128	60	128	49	128	62	128	80	128	121	128		128
79/80	149	128	149	74	149	150	149	47	149	35	149	60	149	49	149	62	149	80	149		149
80/81	139	149	139	128	139	74	139	150	139	47	139	35	139	60	139	49	139	62	139		139
81/82	86	139	86	149	86	128	86	74	86	150	86	47	86	35	86	60	86	49	86		86
82/83	38	86	38	139	38	149	38	128	38	74	38	150	38	47	38	35	38	60	38		38



**Correlation Values for Muskrat from Northwestern Ontario - Section E**

Year	Muskrat	Muskrat 1 Year Out	Muskrat 2 Years Out	Muskrat 3 Years Out	Muskrat 4 Years Out	Muskrat 5 Years Out	Muskrat 6 Years Out	Muskrat 7 Years Out	Muskrat 8 Years Out	Muskrat 9 Years Out	Muskrat 10 Years Out
64/65	352										
65/66	753	352									
66/67	621	753	352								
67/68	372	621	753	352							
68/69	359	372	621	753	352						
69/70	705	359	372	621	705	352					
70/71	359	705	359	372	359	753	352				
71/72	58	359	705	58	372	58	753	58			
72/73	0	58	0	0	0	0	621	0	352	0	
73/74	0	0	58	0	705	0	372	0	753	0	0
74/75	0	0	0	58	0	0	359	0	621	0	352
75/76	0	0	0	0	58	0	705	0	372	0	753
76/77	0	0	0	0	0	58	359	0	359	0	621
77/78	0	0	0	0	0	0	58	0	705	0	372
78/79	0	0	0	0	0	0	0	58	359	0	359
79/80	0	0	0	0	0	0	0	0	58	0	705
80/81	0	0	0	0	0	0	0	0	0	58	359
81/82	31	0	31	0	31	0	31	0	31	0	31



**Correlation Values for Ermine from Northwestern Ontario - Section E**

Year	Ermine	Ermine 1 Year Out	Ermine	Ermine 2 Years Out	Ermine	Ermine 3 Years Out	Ermine	Ermine 4 Years Out	Ermine	Ermine 5 Years Out	Ermine	Ermine 6 Years Out	Ermine	Ermine 7 Years Out	Ermine	Ermine 8 Years Out	Ermine	Ermine 9 Years Out	Ermine	Ermine 10 Years Out
64/65	31		31		31		31		31		31		31		31		31		31	
65/66	47	31	47		47		47		47		47		47		47		47		47	
66/67	39	47	39	31	39		39		39		39		39		39		39		39	
67/68	28	39	28	47	28	31	28		28		28		28		28		28		28	
68/69	21	28	21	39	21	47	21	31	21		21		21		21		21		21	
69/70	2	21	2	28	2	39	2	47	2	31	2		2		2		2		2	
70/71	0	2	0	21	0	28	0	39	0	47	0	31	0		0		0		0	
71/72	2	0	2	2	2	21	2	28	2	39	2	47	2	31	2		2		2	
72/73	0	2	0	0	0	2	0	21	0	28	0	39	0	47	0	31	0		0	
73/74	0	0	0	2	0	0	0	2	0	21	0	28	0	39	0	47	0	31	0	
74/75	0	0	0	0	0	2	0	0	0	2	0	21	0	28	0	39	0	47	0	31
75/76	0	0	0	0	0	0	0	2	0	0	0	2	0	21	0	28	0	39	0	47
76/77	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	21	0	28	0	39
77/78	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	21	0	28
78/79	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	21
79/80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
80/81	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	2	2	0
81/82	15	2	15	0	15	0	15	0	15	0	15	0	15	0	15	0	15	0	15	2

82/83	2	15	2	2	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
83/84	6	2	6	15	6	2	6	0	6	0	6	0	6	0	6	0	6	0	6	0
84/85	4	6	4	2	4	15	4	2	4	0	4	0	4	0	4	0	4	0	4	0
85/86	19	4	19	6	19	2	19	15	19	2	19	0	19	0	19	0	19	0	19	0
86/87	25	19	25	4	25	6	25	2	25	15	25	2	25	0	25	0	25	0	25	0
87/88	34	25	34	19	34	4	34	6	34	2	34	15	34	2	34	0	34	0	34	0
88/89	2	34	2	25	2	19	2	4	2	6	2	2	2	15	2	2	2	0	2	0
89/90	2	2	2	34	2	25	2	19	2	4	2	6	2	2	2	15	2	2	2	0
90/91	0	2	0	2	0	34	0	25	0	19	0	4	0	6	0	2	0	15	0	2
91/92	0	0	0	2	0	2	0	34	0	25	0	19	0	4	0	6	0	2	0	15
92/93	2	0	2	0	2	2	2	2	2	34	2	25	2	19	2	4	2	6	2	2
93/94	0	2	0	0	0	0	0	2	0	2	0	34	0	25	0	19	0	4	0	6
94/95	5	0	5	2	5	0	5	0	5	2	5	2	5	34	5	25	5	19	5	4
95/96	6	5	6	0	6	2	6	0	6	0	6	2	6	2	6	34	6	25	6	19
		6		5		0		2		0		0		2		2		34		25
				6		5		0		2		0		0		2		2		34
	0.7623577					6		5		0		2		0		0		2		2
			0.5352838					6		5		0		2		0		0		2
					0.1939784					6		5		0		2		0		0
								-0.0281617				6		5		0		2		0
										-0.1907536				6		5		0		2
												-0.1952413				6		5		0
														-0.3265855				6		5
																-0.342472				6
																		-0.3589808		
																				-0.3763792