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# A History of The Changes In Population of Certain Mammals In Western Kansas

Floyd L. Carter

*Fort Hays Kansas State College*

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A HISTORY  
OF THE CHANGES IN POPULATION OF CERTAIN  
MAMMALS IN WESTERN KANSAS

A Thesis

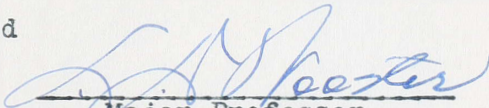
presented to the Graduate Faculty of the  
Fort Hays Kansas State College in partial  
fulfillment of the requirements for the  
Degree of Master of Science

by

Floyd L. Carter, B.S.

Fort Hays Kansas State College

Approved

  
Major Professor

Date July 28, 1939

  
Acting Chairman Graduate Council

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# A HISTORY OF THE CHANGES IN POPULATION OF CERTAIN MAMMALS IN WESTERN KANSAS

## INTRODUCTION

A complete study of the changes in population of a group of animals of any region would include cycles of increase and decrease, due to ecological factors of many kinds. A study of this type would include the seasonal distribution of species, transient populations over short periods of time and short cycles or changes due to innumerable causes.

This particular study has been restricted to certain mammals in western Kansas, including some on which there is little information, and others which observers would be most likely to notice in every day life. For several years the writer has been vitally interested in the animal life in Kansas. Therefore, when the need for a study of western Kansas mammals was presented to him in the summer of 1936, the problem of this study was selected. It is hoped that this report will suggest to ecologists, historians, and others, further studies, including reasons for the changes here-in shown.

Few studies have been made covering any lengthy period of time, and these few are of individual species such as the bison. No study has been made covering the larger mammals for as long a time as is covered in this study.

The only remaining source of information covering a period of fifty years or more is the early settlers. Consequently, they were largely used in obtaining the information collected for this study. Since this source of information is fast disappearing it seemed urgent that these data be obtained before it was too late.

The original reports obtained from early settlers in connection with this study are in the files of the writer.

## The Problem

What have been the changes in population of certain mammals in western Kansas? Observers have been aware for some time that there have been changes in mammal population in western Kansas. Some animals have increased, while others have decreased, even to extinction in a few cases. There have been many changes over small areas for short periods. However, only the larger and more lasting changes were sought for in this study.

In solving the question, the main problem was to gather information about the changes in population of certain mammals over as long a period as information was available. The main problem in gathering this information was to obtain reports from enough individuals to test one another's statements and thus validate the information secured. Many of the individuals contacted suggested reasons for the changes found, but this information, while kept on file, was not included in the present problem of study.

In securing this information records were obtained in most cases from as early as 1840. In order to facilitate in charting and tabulating this information, twenty five-year periods are used to cover the years from 1840-1939.

It was impractical to include all of the species of mammals of western Kansas in this study. Therefore, from



the one hundred and nine species and sub-species (Hibbard 1932) of mammals found in this area, twenty-four were selected. Those animals were chosen with which the early settler was most familiar. No attempt was made to distinguish sub-species and in two or three cases, species, where such distinctions were not familiar to the individuals from whom the information was to be obtained. The following list of mammals was studied:

#### UNGULATA

Antelope	<u>Antilocapra americana (Ord)</u>
Bison	<u>Bison bison (Linnaeus)</u>
Deer	<u>Odocoileus virginianus</u> and <u>Odocoileus macrotis</u>
Elk	<u>Cervus canadensis (Erxleben)</u>

#### CARNIVORA

Badger	<u>Taxidea taxus (Schreber)</u>
Bear, Black	<u>Ursus americanus Pallas</u>
Bear, Grizzly	<u>Ursus horribilus (Ord)</u>
Coyote	<u>Canis nebracensis Merriam</u>
Fox, red	<u>Vulpes macrourus Baird</u>
Lynx	<u>Lynx rufus (Merriam)</u>
Mountain Lion	<u>Felis oregonensis (Merriam)</u>
Otter	<u>Lutra canadensis (F. Cuvier)</u>
Raccoon	<u>Procyon lotor (Nelson and Goodman)</u>

Skunk (Common)	<u>Mephitis mesomelas (Gray)</u>
Swift fox	<u>Vulpes velox (Say)</u>
Weasel	<u>Mustela longicauda Bonaparte</u>
Wolf	<u>Canis frustrator Woodhouse</u>
Little Spotted Skunk	<u>Spilogale interrupta (Rafinesque)</u>

#### RODENTIA

Beaver	<u>Castor canadensis (Bailey)</u>
Porcupine	<u>Erethizon epixanthum Swenk</u>
Tree Squirrel	<u>Sciurus niger (Geoffroy)</u>

#### LAGOMORPHA

Cottontail	<u>Sylvilagus floridanus &amp; auduboni</u>
Jackrabbit (blacktail)	<u>Lepus californicus melanotis (Mearns)</u>
Jackrabbit (whitetail)	<u>Lepus townsendii campanius Hollister</u>

#### MARSUPIALIA

Opossum	<u>Didelphis virginiana Kerr</u>
---------	----------------------------------

The area studied includes fifty-four counties, covering approximately that part of Kansas which lies between the 98th and the 102nd meridian (see Fig. 1). The following counties included in the territory form the eastern boundary line of the area: (from north to south) Jewell, Mitchell, Lincoln, Ellsworth, Rice, Reno, Kingman and Harper. Black (1937) applies the term, "Great Plains Region" to approximately the same area.



## RELATED LITERATURE

Papers dealing with western Kansas Mammalogy are few in number and even less work has been done on the changes in mammal population in western Kansas.

The United States Executive Documents, (1853-55) are probably the earliest scientific reports of mammals in the western United States. However, there are only a few notes on this area in these volumes.

Wright (1913) presents some early events in the territory surrounding Dodge City. He mentions some of the mammals of an early day.

Knox (1875) gives probably the earliest check list of Kansas mammals.

Greeley (1860) cites some events noticed on the trail to California across Kansas.

Bandel (1932) cites some cases of early day mammal life as seen along early army trails through southern Kansas.

Blanchard (1931) gives some early day history of the animal life of southwestern Kansas.

Hornaday (1887) made a study of the history of the extinction of the bison.

Baker (1889) presents a list of mammals along the one hundred meridian between N. latitude 38.30 and 39.30.

Lantz (1904) published a check list of mammals in early Kansas.

Seton (1906) gives an account of the bison, its numbers and extinction.

Barr (1908) writes in diary form some early day accounts of animal life in Lincoln county.

Nelson (1925) presents material on the extinction of the pronghorned antelope.

Walker (1930) in his unpublished check list of mammals, gives a condensed report of the mammals of recent times.

Wooster (1931) reports the status of certain mammals in western Kansas, 1931.

Hibbard (1932) has given an extensive list of mammals based on collected specimens.

Wooster (1935) presents a study of the presence and the changes in population of several mammals in recent years.

Black (1937) published a check list of the mammals found in Kansas in recent times.

## METHODS.

Data were gathered largely by two methods: first, from records already in print, and second from questionnaires sent out to early settlers.

County bounty records were used as verifying evidence to ascertain relative numbers, and several historical papers were examined for information on early mammal population.

The names of over one-thousand early settlers were obtained by postal inquiries sent to every town in the area covered. Information from these early settlers was obtained by about twenty-five personal interviews and from two hundred twenty-five returns from four-hundred printed questionnaires sent out. The great bulk of the information was obtained by means of these questionnaires. In the questionnaire, the following general questions were asked: When did you come to Kansas? Where did you locate? The following questions pertaining to the groups of mammals were asked: Were these animals present when you came? How do the present numbers compare with those of the early days? If they have come into your part of the state since you came, when did you first see them? Are they present now? If not, when did they disappear?

This study was made during the summers of 1936, 1937, 1938, and 1939; and the winter of 1938-1939. Most of the questionnaires were sent out during the winter of 1938-1939 and the data compiled at that time.

It is to be kept in mind that the reports received were from old settlers whose observations span the period of time from their arrival in western Kansas to the answering of the questionnaire (1938-1939).

In order to test the reliability of the reports received, they were carefully compared, to find the degree of agreement. Four or more reports were received from each county in the area. Data contained in the reports were compared upon the following points:

1. Dates of the appearance or disappearance of each species.
2. Dates of the maximum and minimum population of each species.
3. Approximate numbers of each species at each period.

To show the degree of agreement of the reports received, data from one county, and of a sample animal are here shown. Five reports were obtained from Scott county, pertaining to the swift fox. These reports were received from settlers, two of whom came to the county in 1873, and three who arrived in 1885, 1886, and 1889, respectively. The two earliest reports (1873) showed the swift present



and quite common in an early day, and last seen in 1912. The three remaining reports showed a few swifts present when the settlers arrived, and last seen between 1900-1910 (no exact date given). It may be seen from these tabulations that a reasonable degree of agreement was found in the reports, and conclusions were drawn accordingly from these results.

When the reports did not agree closely, a careful study was made to discover, if possible, the cause for the lack of agreement. Special efforts were made to secure information about the matter from other sources. In some cases, the writer went personally into the county and searched for the discrepancy, in order to clarify the matter, if possible. Early historical papers, county bounty records and available published and unpublished records were examined. In this manner an extensive check of the early settlers' reports was made. If, after further investigation had been made, there was still a lack of agreement, the results were so stated or else discarded. One case is recorded where some of the reports pertaining to the early history of the common skunk did not agree.

Three reports, one each from Graham, Finney and Rooks, show, "No skunk until about 1885." In searching for evidence on the question, the following statements were found: Blanchard (1931) in a report of southwest Kansas says:

44130  
"Skunks were numerous in early day." Knox (1875) reports for western central Kansas: "Skunks frequent." Many reports showed that the skunk was not as numerous in an early day as in recent years. Therefore, from these reports it may be seen that there is still some doubt regarding the early history of the skunk in western Kansas.

To further test the reliability of reports, two sample counties, Ellsworth and Ness, were more thoroughly studied. Twenty or more reports were obtained from each of these two counties, and these were thoroughly tested by comparing with one another and with all other available sources.

Summaries were made for each species. The following records of the swift fox are cited as an example. The following data are recorded from Ness county. From the twenty-five reports received: eighteen settlers reported that in 1876 to 1886 the swift fox was present, but not numerous. Dates when the swift was last seen:

13 reported that they last saw swifts between 1880-90.

5 reported that they last saw swifts between 1890-1900.

The last date of their presence recorded was 1899.

To still further test these reports, published check lists, unpublished accounts, such as records kept by early settlers, historical papers and bounty records were used as verifying evidence.

By these methods, it was found that in most cases there was a reasonable degree of agreement in the reports of early settlers.

The results of all of the information received from each county were charted. (Fig. 1-24) Charts, divided into twenty five-year periods were used, upon which the information was placed showing records of each animal, from each county studied. Symbols were placed on the chart to represent the approximate relative abundance of each animal.

The symbol #, was used to show that the animal was abundant.

The symbol x, was used to show that the animal was common.

The symbol -, was used to show that the animals were few.

Blank spaces were left to denote absence of the animal.

These symbols were placed in the proper spaces, opposite that period of time, for the respective counties. While information was obtained for most of the five-year periods, it was impossible to get separate reports for all. Relative terms were used frequently by the early settlers in making their reports. Such terms as: "Increasing the last five years," "Decreasing the last five years," "Millions for the first ten years," and "These animals reached maximum in 1900," were used by the early settler. To make the charts continuous in nature, these short periods were filled in, on the basis of these relative terms.

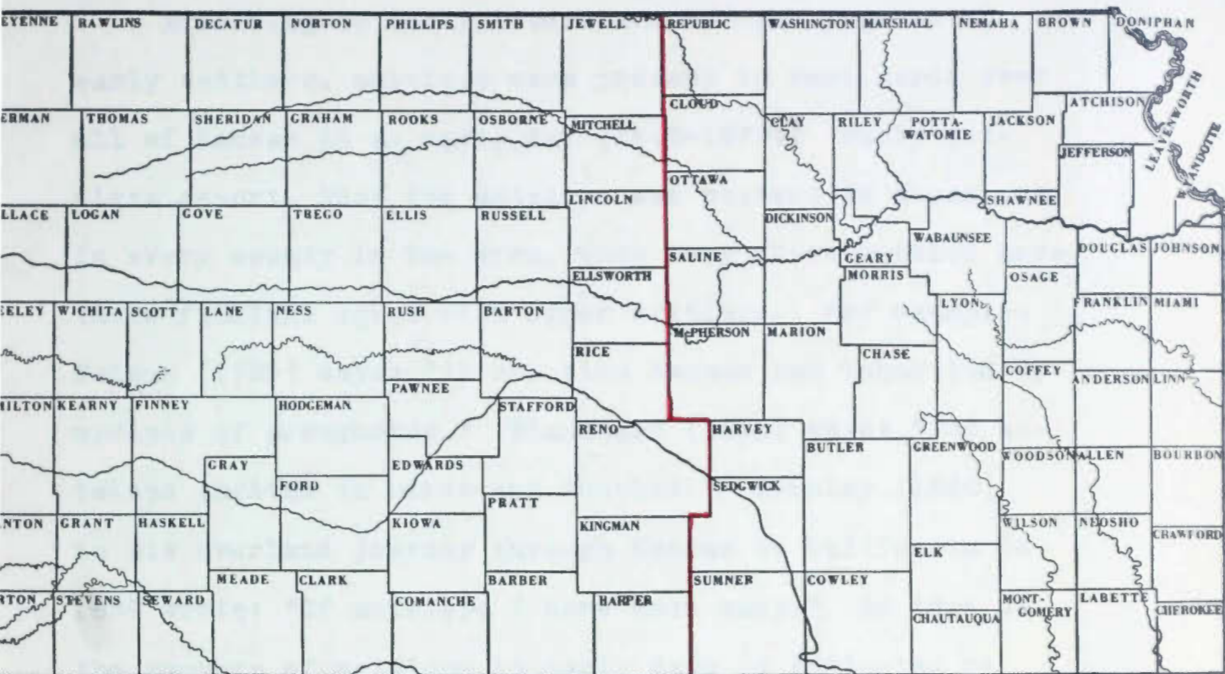


Figure 1. The area studied. That part of Kansas west of the red line.



THE ANTELOPE, Antilocapra americana (Ord)

According to early literature and the reports of early settlers, antelope were present in vast herds over all of Kansas in an early day (1840-1870). Early settlers report, that the antelope was present in abundance in every county in the area, when they first settled here. These findings agree with other writings. For example: Nelson (1925) says: "At one time Kansas was inhabited by myriads of pronghorns." Blanchard (1931) says: "The antelope thrived in herds and bunches." Greeley (1860) in his overland journey through Kansas to California in 1859 wrote: "Of antelope I have seen many." An idea of the numbers of antelope in early days is indicated by early writers, as for example: Nelson (1925) reports:

George Bird Grinnell informed the writer that he has often talked about the abundance of antelope with men familiar with the western plains fifty years ago and has never met a man of experience who did not agree with him that during the middle of the last century antelope were far more abundant than the buffalo.

Hornaday (1887) estimates the early herds of buffalo at fifty to seventy-five million. Nelson (1925) reports:

In view of the greater territory occupied by the pronghorn and its known abundance, it may be considered a conservative estimate to place its probable original numbers at not less than thirty to forty millions, and possibly more.

Reports from early settlers show antelope still common in most of the area in 1890, but also that they were

decreasing rapidly. Baker (1889) reports for central western Kansas: "Antelope still comparatively common; until quite recently, very numerous."

Early settlers report that the antelope continued to decrease, until by 1910 only a few were found and these in southern counties in small bands. Reports from two counties, Morton and Stevens, show antelope present in 1920. Reports from early settlers in Wallace county show antelope in 1929. Bill Mull of Ashland, Kansas in Clark county, in answer to a questionnaire says a herd of seven antelope wintered on his farm in 1926. These reports agree closely with Nelson (1925) in his report of the status of the pronghorned antelope in 1922-24, in which he says:

The only antelope definitely reported as existing in Kansas in 1923 was a band estimated to contain eight, in the extreme southwest part of the state in Morton county. They probably pass back and forth across the line .... In 1923, however, they had become exterminated throughout the greater portion of the state.

In a letter dated July 2, 1924, Hal G. Evarts, of Hutchinson, wrote that he had recently received reliable information that in 1916 a herd of sixty-two pronghorns was ranging about twenty-five miles northwest of Cimarron, in the Pawnee creek breaks. In 1916 a band of sixteen spent the summer and winter fifteen miles west of Garden City.

Antelope Antilocapra americana(Ord)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Grant
1840-44	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1845-49	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1850-54	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1855-59	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1860-64	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1865-69	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	x	#	#	#
1870-74	x	x	x	x	x	x	x	x	#	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x
1875-79	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	-	-	x	x	x	x	x	x	x	x
1880-84	-	-	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	x	-	-	-	-	-	-	-	x	x	x
1885-89	-	-	x	-	-	-	x	-	x	-	x	x	-	-	x	x	x	x	-	-	-	-	-	-	-	-	x	x
1890-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-
1895-99			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1900-04			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1905-09			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1910-14																												
1915-19																												
1920-24					-																							
1925-29					-																							
1930-34																												
1935-39																												

Figure 2. Showing the relative abundance of the antelope, as reported by earl the counties in the western half of Kansas over a period of years f  
 # Abundant                      x Common                      - Few                      Absent





THE BISON, Bison bison (Linnaeus)

Reports from early settlers show, that buffalo were present when they arrived in 1865-1870. Reports from the early settlers show that a few bison were still present between 1870 and 1880 in the northwest and southwest parts of western Kansas. A few still remained after 1880. George Kinkel of Colby, Kansas reported seeing one in 1898 in Thomas county and this is the last buffalo, in the wild state, recorded in the reports received from early settlers.

Early writers in reporting the great herds of buffalo which once roamed over Kansas, estimated them in millions, as for example: Bandel (1932) in writing of the early days says: "The once great herd of fifty to seventy-five million ...." Seton (1906) states that fifty to seventy-five million is a conservative estimate and this estimate is based on the numbers slain in the early days (1850-1865).

In writing of the decrease in numbers, Seton (1906) says: "A sharper decrease is shown about the year 1865, although .... they had been decreasing for some time before 1865." Hornaday (1887) estimated the southern herd at four million in 1871, and in that same year records: "Col. R. I. Dodge, while traveling in the Arkansas valley, drove for twenty-five miles through a continuous herd."



Bison Bison bison (Linnaeus)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray
1840-44	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1845-49	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1850-54	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1855-59	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1860-64	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1865-69	#	#	#	#	#	X	X	#	#	X	X	X	X	X	X	X	#	#	#	X	X	X	X	X	X	X	X	X
1870-74	#	X	X	#	#	X	X	X	X	X	X	X	X	-	-	-	#	#	#	X	X	X	X	X	X	-	-	X
1875-79	X	-	-	X	X	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	X
1880-84	X		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-			-
1885-89	-		-	-					-		-					-	-	-										-
1890-94																												
1895-99				-																								
1900-04																												
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1910-14																												
1915-19																												
1920-24																												
1925-29																												
1930-34																												
1935-39																												

Figure 3. Showing the relative abundance of the bison, as reported by early counties in the western half of Kansas over a period of years from  
 # Abundant                      x Common                      - Few                      Absent

Smoky and the Paradise."





DEER, Odocoileus virginianus and Odocoileus macrotis

Early settlers in making the reports on deers, used the term "deers" to apply to all species of deer present in the area. Therefore, no attempt was made to designate a certain species of deer in this study.

According to reports of early settlers, deers were present in all of the fifty-four counties in the area from 1865 to 1875. These reports indicate that in the eastern and central portions of the area a decrease in number of deers began in about 1870 and continued until in about 1890, they were scarce. Deers were reported from only six counties: Cheyenne, Morton, Stevens, Ford, Clark, and Commanche, in 1890 and then only in scattered bands of a few each. An occasional deer is reported between 1890 and 1900 from the southwest part of the state. The latest report of deer is from D. C. Cook of Ford, Kansas, who reports one in Ford county in 1896.

Records of other observers are found which go back even farther than the reports of early settlers, as for example: Blanchard (1931) mentions that deer were present in southwest Kansas between 1850-1865. Bandel (1932) reports that in 1855 deer were plentiful in southwestern Kansas. Knox (1875) mentions: "Deer are more or less common along the wooded portions of the streams, especially on the Smoky and the Paradise."



Bison Bison bison (Linnaeus)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray	Ford
1840-44	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1845-49	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1850-54	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1855-59	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1860-64	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1865-69	#	#	#	#	#	x	x	#	#	x	x	x	x	x	x	x	#	#	#	x	x	x	x	x	x	x	x	x	x
1870-74	#	x	x	#	#	x	x	x	x	x	x	x	x	-	-	-	#	#	#	x	x	x	x	x	x	-	-	x	x
1875-79	x	-	-	x	x	-	-	-	-	-	-	-	-	-	-	-	x	x	-	-	-	-	-	-	-	-	-	x	x
1880-84	x		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1885-89	-		-	-					-		-					-	-	-										-	-
1890-94				-																									
1895-99																													
1900-04																													
1905-09																													
1910-14																													
1915-19																													
1920-24																													
1925-29																													
1930-34																													
1935-39																													

Figure 3. Showing the relative abundance of the bison, as reported by early western counties in the western half of Kansas over a period of years from 1840 to 1939.  
 # Abundant                      x Common                      - Few                      Absent

Smoky and the Paradise."

Sheridan	Graham	Trego	Lane	Ness	Hodgeman	Gray	Ford	Meade	Clark	Phillips	Smith	Jewell	Rooks	Osborne	Mitchell	Ellis	Russell	Lincoln	Rush	Barton	Ellsworth	Rice	Pawnee	Stafford	Reno	Edwards	Kiowa	Pratt	Kingman	Comanche	Barber
#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
X	X	X	X	X	X	X	X	X	X	X	-	-	X	X	X	X	X	-	X	X	X	#	X	#	#	#	#	#	#	#	#
X	X	X	X	-	-	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	X	X	#	X	X	X	X	X	X	X
-	-	-	-	-	-	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

as reported by early writers and the written statements of old settlers, in the  
a period of years from 1840 to 1939.  
absent



Deers Odocoileus virginianus and Odocoileus macrotis

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Cove	Trego	Lane	Ness	Hodgeman	Crawford
1840-44	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1845-49	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1850-54	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1855-59	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1860-64	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1865-69	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1870-74	x	-	-	-	-	-	x	x	x	x	x	x	x	x	x	x	x	x	x	-	-	-	-	-	-	-	-	-
1875-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-
1880-84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1885-89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1890-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1895-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1900-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1905-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1910-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1915-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1920-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1925-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1930-34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1935-39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Figure 4. Showing the relative abundance of the deer, as reported by early counties in the western half of Kansas over a period of years from 1840 to 1939.

# Abundant                      x Common                      - Few                      Absent



THE ELK, Cervus canadensis (Erxleben)

Early settlers report that most of the elk were gone before they arrived in 1865-1870, but that elk bones were plentiful on the prairie. Reports received from early settlers in seventeen counties show elk present between 1865-1880 in small numbers, and the reports from the southern part of the area show a few elk present between 1885 and 1890. Reports indicate that there were no elk present in the area after 1890. The last reports of elk is that of C. L. Rickart of Rolla, Kansas in which he reports that he saw an elk in Morton county in 1885.

The accounts of early writers agree with these reports closely, as for example: Bandel (1932) mentions in 1855 in southwest Kansas that there were plenty of elk. Greeley (1860) in traveling through Kansas mentions that a party of hunters showed them some elk that they had killed the day before. Barr (1908) says:

Mr. J. R. Meade, in a letter to Miss Clara Green, before 1860 speaks of seeing a herd of elk between five hundred and a thousand in number, coming down the valley from Spillman Creek. They crossed the Saline near where the town of Lincoln now stands.

Blanchard (1931) in her history of southwest Kansas mentions that elk were present in an early day. Knox (1875) reports: "Quite common in the western parts of the state."



Elk Cervus canadensis (Erxleben)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray
1840-44																												
1845-49																												
1850-54																												
1855-59																												
1860-64																												
1865-69																												
1870-74																												
1875-79																												
1880-84																												
1885-89																												
1890-94																												
1895-99																												
1900-04																												
1905-09																												
1910-14																												
1915-19																												
1920-24																												
1925-29																												
1930-34																												
1935-39																												

Figure 5. Showing the relative abundance of the elk, as reported by early writ  
counties in the western half of Kansas over a period of year from 1  
# Abundant                      x Common                      - Few                      Absent



THE BADGER, Taxidea taxus (Schreber)

Early settlers report that from 1850 until 1900 badgers were common in the area and seemed to have reached their maximum numbers in about 1890. Blanchard (1931) says: "There were many badgers." Baker (1889) reports for western central Kansas: "Badger common, lives in burrows on the open prairie." Lantz (1904) reports: "Found throughout the state, but rarely in the eastern portion; abundant on the plains."

From reports received from early settlers it is shown that beginning in 1895 there was a gradual decrease which lasted for ten or fifteen years (1910) then remaining about the same until recent times. Reports received from early settlers from about three fourths of the counties (particularly in the western part of the area) indicate that there has been a decrease in badger numbers in the last ten years. Reports from about one fourth of the counties indicate that the badger has maintained its numbers during the time studied in this report. Reports from one county, Gray, show rather a surprising increase from 1905 to 1939.



Badger *Taxidea taxus* (Schreber)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Cove	Trego	Lane	Ness	Hodgeman	Gray
1840-44	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1845-49	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1850-54	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1855-59	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1860-64	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1865-69	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1870-74	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1875-79	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1880-84	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1885-89	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1890-94	x	x	x	x	x	-	x	x	-	x	-	x	x	x	x	x	-	x	x	-	x	x	-	x	x	-	-	-
1895-99	x	-	x	x	x	-	x	x	-	x	-	x	-	-	x	-	-	x	-	-	x	x	-	-	-	-	-	-
1900-04	x	-	x	x	x	-	x	x	-	x	-	x	-	-	-	-	x	-	-	x	-	-	x	-	-	-	-	-
1905-09	-	-	x	x	x	-	x	x	-	x	-	-	-	-	-	-	-	x	-	-	x	-	-	-	-	-	-	-
1910-14	-	-	x	x	x	-	x	x	-	x	-	-	-	-	-	-	-	x	-	-	x	-	-	-	-	-	-	-
1915-19	-	-	x	x	x	-	x	x	-	-	-	-	-	-	-	-	-	x	-	-	x	-	-	-	-	-	-	-
1920-24	-	-	x	x	x	-	x	x	-	-	-	-	-	-	-	-	-	x	-	-	x	-	-	-	-	-	-	-
1925-29	-	-	x	x	x	-	x	x	-	-	-	-	-	-	-	-	-	x	-	-	x	-	-	-	-	-	-	-
1930-34	-	-	x	x	x	-	x	x	-	-	-	-	-	-	-	-	-	x	-	-	x	-	-	-	-	-	-	-
1935-39	-	-	x	-	x	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Figure 6. Showing the relative abundance of the badger, as reported by early w  
counties in the western half of Kansas over a period of years from 1  
# Abundant x Common - Few Absent





BEARS, Ursus americanus and Ursus horribilus

A few bears were reported in the area before the time of the early settler (before 1860). Bandel (1932) reports in his diary of events in his army life, in 1855: "250 miles west of southeast corner of Kansas, shot two black bear today." Hibbard (1937) says in regard to the early status of bears: "In early days this bear was very common in south central Kansas where it inhabited the gypsum caves. Now extinct."

Early settlers report black bear present in Meade, Clark, Barber, Harper and Commanche counties from 1860 to 1895. The only northern county from which reports of bears were received was Jewell. The reports from that county show that bears, though scarce, were present up until 1870.

Reports from early settlers in Barber county show grizzly bears present up until 1880. One grizzly was reported seen in Osborne county by John Blunt of Downs, Kansas, between 1865-1875. Hibbard (1932) reports: "Grizzly was once common throughout Kansas west of the Flint Hills, now extinct in the state."

Bears Ursus Americanus and Ursus horribilus (Grizzly recorded in red)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman
1840-44																											
1845-49																											
1850-54																											
1855-59																											
1860-64																											
1865-69																											
1870-74																											
1875-79																											
1880-84																											
1885-89																											
1890-94																											
1895-99																											
1900-04																											
1905-09																											
1910-14																											
1915-19																											
1920-24																											
1925-29																											
1930-34																											
1935-39																											

Figure 7. Showing the relative abundance of the bear, as reported by early w  
counties in the western half of Kansas over a period of year from  
# Abundant x Common - Few Absent



ported V early writers and the written statements of old settlers, in the  
 period of years from 1840 to 1939.  
 Absent

Graham

Gove

Lane

Ness

Hodgeman

Gray

Ford

Meade

Clark

Phillips

Smith

Jewell

Rocks

Osborne

Mitchell

Ellis

Russell

Lincoln

Rush

Barton

Ellsworth

Rice

Pawnee

Stafford

Reno

Edwards

Kiowa

Pratt

Kingman

Commanche

Barber

Harper

(in 1911)

THE COYOTE, Canis nebrascensis Merriam

Early settlers report that in most of the area covered, coyotes were present in great numbers in the early days. According to these reports from early settlers, coyotes began to decline in numbers to some extent in about 1865, and this decrease was reported in most of the counties. However, in the northwest and southwest parts of the state there appears to have been a slight increase at that time, according to the reports of early settlers. Reports of early settlers in the following counties: Cheyenne, Seward, Gray, and Barber, show an increase in the last thirty years in coyote numbers. Reports from about twenty-two counties (mainly in the central part of the area) show decrease, and the reports from twenty-eight counties show little change in numbers, in the last thirty years.

Early writers mention the abundance of coyotes present in the area in an early day in the following accounts: Blanchard (1931) mentions hundreds of coyotes in her accounts of southwest Kansas. Greeley (1860) in 1859 in Kansas, saw many coyotes, according to his records. Wright (1913) says coyotes were numerous in the early days in the region about Dodge City. Lantz (1905) reports: "During the year ending June 30, 1904, 18,425 coyotes were killed in the state, and six counties are missing from the total."



Coyote Canis nebracensis Merriam

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray
1840-44	x	#	#	x	#	#	#	#	#	#	#	#	#	#	#	#	#	x	x	x	x	#	#	#	#	#	#	x
1845-49	x	#	#	x	#	#	#	#	#	#	#	#	#	#	#	#	#	x	x	x	x	#	#	#	#	#	#	x
1850-54	x	#	#	x	#	#	#	#	#	#	#	#	#	#	#	#	#	x	x	x	x	#	#	#	#	#	#	x
1855-59	x	#	#	x	#	#	#	#	#	#	#	#	#	#	#	#	#	x	x	x	x	#	#	#	#	#	#	x
1860-64	x	#	#	x	#	#	#	#	#	#	#	#	#	#	#	#	#	x	x	x	x	#	#	#	#	#	#	x
1865-69	x	#	#	x	#	#	#	#	#	#	#	#	#	#	#	#	#	x	x	x	x	#	#	#	#	#	#	x
1870-74	x	#	#	x	#	#	#	#	#	#	#	#	#	#	#	#	#	x	x	x	x	#	#	#	#	#	#	x
1875-79	x	#	#	x	#	#	#	#	#	#	#	#	#	#	#	#	#	x	x	x	x	#	#	#	#	#	#	x
1880-84	x	#	x	x	#	x	x	#	#	#	#	#	x	#	x	#	#	x	x	x	x	x	x	x	x	x	x	x
1885-89	x	x	x	x	#	x	x	x	x	x	x	x	x	x	x	x	#	x	x	x	x	x	x	x	x	x	x	x
1890-94	x	x	x	x	#	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1895-99	x	x	x	x	#	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1900-04	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x
1905-09	#	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	#	x	-	x	x	x	x	x	x	x	#
1910-14	#	-	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	#	x	-	x	x	-	-	-	-	-	#
1915-19	#	-	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	#	x	-	x	x	-	-	-	-	-	#
1920-24	#	-	x	x	x	x	x	-	x	-	x	-	x	x	x	x	x	#	x	x	x	x	-	-	-	-	-	#
1925-29	#	-	x	x	x	x	x	-	x	-	x	-	x	x	x	x	x	#	x	-	x	x	-	-	-	-	-	#
1930-34	#	-	x	x	x	x	x	-	x	-	x	-	x	x	x	x	x	#	x	-	x	x	-	-	-	-	-	#
1935-39	#	-	x	x	x	x	x	-	x	-	x	-	x	x	x	x	x	#	x	-	x	x	-	-	-	-	-	#

Figure 8. Showing the relative abundance of the coyote, as reported by early w  
the counties in the western half of Kansas over a period of years fr  
# Abundant                      x Common                      - Few                      Absent





## THE WOLF, Canis frustrator Woodhouse

Reports of the early days in Kansas show great numbers of wolves in all of the area. Early settlers report that the wolves began to diminish in numbers about 1880 and by 1890 they were scarce, in this area. By 1890 only scattered wolves are reported, although reports from a few counties show wolves present in rare cases at the time this study was made (1939). Reports from Thomas county show wolves present in the last few years. Two wolves were reported killed in Ellsworth county in the winter of 1938-39. The writer heard of these reports and traced down the pelt of one, which had been sold, and it was identified as a gray wolf. The other pelt could not be located.

In regards, the status of the wolf in an early day, as given by early writers, the following records are shown: Blanchard (1931) in her report of the early days in southwest Kansas, says: "Of the smaller animals which roamed the prairie, were the thousands of big gray wolves and coyotes ...." Horace Greeley (1860) says: "But the gray-wolf is also a denizen of the prairie.... I think we have seen at least a dozen of the species to-day ...." Miles (1896) reports: "Captain Baldwin was chased by wolves near General Custer's camp near Fort Hays in 1870.

There were fifty to seventy-five wolves in the pack."

Lantz (1904) records:

Once abundant, still found in a few scattered sections of the state. There is a bounty of five dollars on the large wolves in most of the counties. Last year only three counties were called upon to pay such bounties .... (Chautauqua, Republic, and Sherman).

Wolf Canis frustrator Woodhouse

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray
1840-44	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1845-49	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1850-54	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1855-59	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1860-64	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1865-69	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1870-74	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	-	-	x	x	x	-	x	x	x	x
1875-79	x	-	-	x	x	-	x	x	x	-	x	x	x	x	x	x	x	x	-	-	-	x	x	-	x	x	x	x
1880-84	-	-	-	-	-	-	-	-	-	-	x	x	x	x	x	x	x	x	-	-	-	-	-	-	-	-	-	-
1885-89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1890-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1895-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1900-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1905-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1910-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1915-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1920-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1925-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1930-34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1935-39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Figure 9. Showing the relative abundance of the wolf, as reported by early writers in the counties in the western half of Kansas over a period of years if  
 # Abundant                      x Common                      - Few                      Absent







THE LYNX, (bob cat) Lynx rufus (Merriam)

In an early day the lynx was found by early settlers in all of the area except a few central eastern counties. Blanchard (1931) reports that there were many bob cats present in the southwest in an early day. Hibbard (1932) says:

This species of bobcat is found mainly west of the 99th meridian and especially along the Oklahoma border in the region of gypsum caves.

Reports from early settlers show the following changes in numbers up to the present time:

1. The beginning of a decrease in lynx in about 1890.
2. Continue to decrease until by 1900 few were present.
3. Only occasional records since 1900.

Comrade Smith of Larned, Kansas, reports that in 1903 he saw one in Pawnee county. Faye Galler, a college student at Hays, says her father, A. L. Galler, killed two bob-cats in Hodgeman county during a snowy spell in the early part of 1907.<sup>1</sup> George Larkin of Lake City reports seeing a bob cat in Barber county in 1903.

1. Taken from the unpublished notes of L. D. Wooster, Hays, Kansas.

Lynx Lynx rufus (Merriam)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Grant
1840-44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1845-49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1850-54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1855-59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1860-64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1865-69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1870-74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1875-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1880-84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1885-89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1890-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1895-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1900-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1905-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1910-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1915-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1920-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1925-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1930-34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1935-39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Figure 10. Showing the relative abundance of the lynx, as reported by early writers in the counties in the western half of Kansas over a period of years

# Abundant                      x Common                      - Few                      Absent

years from 1840 to 1939.

[illegible]



THE MOUNTAIN LION, (Panther) Felis oregonensis (Merriam)

Only a few individual mountain lions were reported by early settlers in this area and then from scattered localities. Early settlers in seventeen counties report their presence in an early day (1880-1890). Knox (1875) states:

A specimen taken about nine years ago at Valley Falls, by Mr. Whitman; probably only a transient visitor. Now and then known as crossing different parts of the state.

Lantz (1904) states:

At one time not uncommon in the territory now covered by Kansas. Records at Valley Falls; in Commanche county, in Trego, have been made within the last thirty years.

One of the most recent records is of a specimen killed by Messrs. Applebaugh and Spratt, nine miles north of Hays city on August 15, 1904. This specimen is in the museum of the Fort Hays Kansas State College.

The latest record comes from the report of Mrs. Carl Miller of Sharon Springs, which shows a mountain lion seen in Wallace county in 1919.



Mountain Lion Felis oregonensis (Merriam)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Cove	Trego	Lane	Ness	Hodgeman	Gray
1840-44	-	-							-	-				-			-		-				-			-		
1845-49		-							-	-				-			-		-				-			-		
1850-54	-	-							-	-				-			-		-				-			-		
1855-59	-	-							-	-				-			-		-				-			-		
1860-64	-	-							-	-				-			-		-				-			-		
1865-69	-	-							-	-				-			-		-				-			-		
1870-74	-	-							-	-				-			-		-				-			-		
1875-79	-	-							-	-				-			-		-				-			-		
1880-84	-	-							-	-				-			-		-				-			-		
1885-89	-	-							-	-				-			-		-				-			-		
1890-94																	-											
1895-99																	-											
1900-04																	-											
1905-09																	-											
1910-14																	-											
1915-19					-																							
1920-24																												
1925-29																												
1930-34																												
1935-39																												

Figure 11. Showing the relative abundance of the mountain lion, as reported by  
in the counties in the western half of Kansas over a period of years  
# Abundant      x Common      - Few      Absent









## THE SWIFT FOX, Vulpes velox (Say)

Reports indicate that swifts were plentiful in an early day. Tabulations of the reports from early settlers show the swift fox present in greater numbers in the western one-fourth of the state, in an early day, than in any other part of the area. The swift was not recorded as ever being numerous in the southeast part of the area. The early settlers report that these animals began to decrease at the time of the incoming population of men and by 1869 were uncommon.

After 1900 swifts were found only in scattered parts of the area. Early settlers in three counties, report a few swifts present in recent times: Mrs. Clara Friend of Johnson (Stanton county) records that a swift fox was reported from that county in 1938; Mrs. Sophia Reece of Leoti mentions that a swift fox was reported in Wichita county in the last three or four years; and Frank Fuhr of Meade, Kansas, reports that a few have been seen in Meade county in the last few years.

These reports agree closely with the records of other writers. For example: Blanchard (1931) says that swifts were plentiful in 1850-1865. Knox (1875) says: "Kit fox, rare." Baker (1889) reports: "Very numerous until within the past five or six years. It lives in

shallow burrows on the open prairie." Lantz (1904) says:  
"Formerly common in western Kansas, now rare." Black  
reports:

So far as museum records indicate, this fox is known from specimens from Douglas, Logan, and Cheyenne counties. It is most certainly extinct in the eastern part of the state, .... It possibly still occurs in a few localities.

Swift fox *Vulpes velox* (Say)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	...
1840-44	x	x	x		x	-	x	x	x		x	-	x	-	x	x	x	x	-	-		-	x	x		-	-	
1845-49	x	x	x		x	-	x	x	x		x	-	x	-	-	x	x	x	-	-		-	x	x		-	-	
1850-54	x	x	x		x	-	x	x	x		x	-	x	-	-	x	x	x	-	-		-	x	x		-	-	
1855-59	x	x	x		x	-	x	x	x		x	-	x	-	-	x	x	x	-	-		-	x	x		-	-	
1860-64	x	x	x		x	-	x	x	x		x	-	x	-	-	x	x	x	-	-		-	x	x		-	-	
1865-69	x	x	x		x	-	x	x	x		x	-	x	-	-	x	x	x	-	-		-	x	x		-	-	
1870-74	x	x	x		x	-	x	x	x		x	-	x	-	-	x	x	x	-	-		-	x	x		-	-	
1875-79	x	x	x		x	-	x	x	x		x	-	x	-	-	x	x	x	-	-		-	x	x		-	-	
1880-84	x	x	x		x	-	x	x	x		x	-	x	-	-	x	x	x	-	-		-	x	x		-	-	
1885-89	-	-	x		x	-	x	x	-		-	-	-	-	-	x	-	x		-		-	x	-		-	-	
1890-94	-	-	x		x		x	x	-		-	-	-	-	-	-	-	x				-	x	-		-	-	
1895-99		-	x		x		-	x	-		-	-	-	-	-	-	-	x					x	-				
1900-04			-		x		-	-	-		-	-	-	-	-	-	-	-					-	-				
1905-09			-		-		-	-	-		-	-	-	-	-	-	-	-					-	-				
1910-14	-		-		-		-	-	-		-	-	-	-	-	-	-	-					-	-				
1915-19			-		-		-	-	-		-	-	-	-	-	-	-	-					-	-				
1920-24					-		-	-	-		-	-	-	-	-	-	-	-					-	-				
1925-29					-		-	-	-		-	-	-	-	-	-	-	-					-	-				
1930-34					-		-	-	-		-	-	-	-	-	-	-	-					-	-				
1935-39							-	-	-		-	-	-	-	-	-	-	-										

Figure 12. Showing the relative abundance of the swift, as reported by early writers in the counties in the western half of Kansas over a period of years:  
 # Abundant      x Common      - Few      Absent

1. Taken from the unpublished records of L. D. Wooster, Hays, Kansas.





THE RED FOX, Vulpes macrourus Baird

Only occasional reports are found of red fox in western Kansas. Early settlers' reports show that the fox was present, particularly in the eastern half of the area. However, reports received from Gove, Ness, and Gray counties show red fox present in an early day. The northern counties in which the early settlers show red fox in an early day are: Clark, Smith, and Jewell. Reports from one extreme western county, Greeley, show the presence of a few red fox before 1870. Few fox are reported after 1890. Students reported one red fox caught in a trap during the Christmas holidays of 1934,<sup>1</sup> in Cheyenne county.

1. Taken from the unpublished records of L. D. Wooster, Hays, Kansas.



Red Fox Vulpes macrourus Baird

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Mesa	Hodgeman	Gray
1840-44							-															-						-
1845-49							-															-						-
1850-54							-															-						-
1855-59							-															-						-
1860-64							-															-						-
1865-69							-															-						-
1870-74							-															-						-
1875-79																						-						-
1880-84																						-						-
1885-89																										-		-
1890-94																												-
1895-99																												
1900-04																												
1905-09																												
1910-14																												
1915-19																												
1920-24																												
1925-29																												
1930-34																												
1935-39																												

Figure 13. Showing the relative abundance of the red fox as reported by early western half of Kansas over a period of years from 1840 to 1939.  
 # Abundant                      x Common                      - Few                      Absent





THE OTTER, Lutra canadensis (F. Cuvier)

Early settlers report that in about one-half of the counties otters were present in small numbers, in an early day and until about 1880. However, the report of J. R. Conard of Tasco, shows otter present as late as 1910 in Sheridan county, and this is the last report of otter in the area.

These reports agree with other writers, as for example: Wright (1913) mentions otter in the early days on the plains. Lantz (1904) says: "Formerly common, but now rare." Hibbard (1932) says: "The otter once frequented the streams through the state. Now extinct in the state." Black (1937) says:

Formerly ranged over the entire state or presumably so. There are museum records from Trego county ....; now wholly extinct within the state.

Otter Lutra canadensis (F. Cuvier)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray	Ford
1840-44		•		•			•			•		•						•	•		•		•					•	
1845-49		•		•			•			•		•						•	•		•		•					•	
1850-54		•		•			•			•		•						•	•		•		•					•	
1855-59		•		•			•			•		•						•	•		•		•					•	
1860-64		•		•			•			•		•						•	•		•		•					•	
1865-69		•		•			•			•		•						•	•		•		•					•	
1870-74		•		•			•			•		•						•	•		•		•					•	
1875-79		•		•			•			•		•						•	•		•		•					•	
1880-84		•		•			•			•		•						•	•		•		•					•	
1885-89				•			•			•		•						•	•		•		•					•	
1890-94							•			•		•						•	•		•		•					•	
1895-99							•			•		•						•	•		•		•					•	
1900-04							•			•		•						•	•		•		•					•	
1905-09							•			•		•						•	•		•		•					•	
1910-14							•			•		•						•	•		•		•					•	
1915-19							•			•		•						•	•		•		•					•	
1920-24							•			•		•						•	•		•		•					•	
1925-29							•			•		•						•	•		•		•					•	
1930-34							•			•		•						•	•		•		•					•	
1935-39							•			•		•						•	•		•		•					•	

Figure 14. Showing the relative abundance of the otter, as reported by early writers in the counties in the western half of Kansas over a period of years from 1840 to 1939.

# Abundant      x Common      - Few      Absent



ated by early writers and the written statements of old settlers, in  
 hood of years from 1840 to 1939.

[illegible]

THE RACCOON, Procyon lotor (Nelson and Goodman)

Tabulations of reports of early settlers, show the raccoon appearing in the area about the time that man began to settle there, namely about 1865. According to reports on file from early settlers, they did not increase rapidly, nor were they ever present in great numbers. In agreement with these reports are the following accounts of early writers: Knox (1875) in his report of the entire state, reports raccoons common. Baker (1889) says: "Common in the bluffs and rough banks along streams." Lantz (1904) reports: "Common in the wooded parts of the state and westward along streams where there is scattered timber."

Raccoons have never been reported as plentiful, but with few exceptions have continued to hold their established numbers. Reports from early settlers in Thomas, Norton, Hodgeman, and Pawnee counties show an increase in raccoons and these reports show that the raccoon is present then in only the heavily wooded areas with plenty of running water present. There have been no raccoons reported from the southwest part of the state, in Grant, Haskell, Morton and Stevens counties, at any time, by any of the settlers.

Raccoon Procyon lotor (Nelson and Goodman)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray
1840-44																												
1845-49																												
1850-54																												
1855-59																												
1860-64																												
1865-69																												
1870-74																			-	-	-	-	-	-	-	-	-	-
1875-79		X	X				-		-	-	-	-	X					X	-	-	X	-	-	X	-	-	-	-
1880-84		X	X				-		-	-	-	-	X					X	-	-	X	-	-	X	-	-	-	-
1885-89	-	X	X	-			-	X	-	-	-	-	X					X	-	-	X	-	-	X	-	-	-	-
1890-94	-	X	X	-			-	X	-	-	-	-	X					X	-	-	X	-	-	X	-	-	-	-
1895-99	-	X	X	-			-	X	-	-	-	-	X					X	-	-	X	-	-	X	-	-	-	-
1900-04	-	X	X	-			-	X	-	-	-	-	X					X	-	-	X	-	-	X	-	-	-	-
1905-09	-	X	X	-			-	-	-	-	-	-	X					X	-	X	X	-	-	-	-	-	-	-
1910-14	-	X	X	-	-		-	-	-	-	-	-	X					X	-	X	X	-	-	-	-	-	-	-
1915-19	-	-	X	X	-		-	-	-	-	-	-	-					-	-	X	X	-	-	-	-	-	X	-
1920-24	-	-	X	X	-		-	-	-	-	-	-	-					-	-	X	X	-	-	-	-	-	X	-
1925-29	-	-	X	X	-		-	-		-	-	-	-					-	-	X	X	-	-	-	-	-	X	-
1930-34	-	-	X	X	-		-	-		-	-	-	-					-	-	X	X	-	-	-	-	-	X	-
1935-39	-	-	X	X	-		-	-		-	-	-	-					-	-	X	X	-	-	-	-	-	X	-

Figure 15. Showing the relative abundance of the raccoon, as reported by early writers in the counties in the western half of Kansas over a period of years from 1840 to 1939.

# Abundant      x Common      - Few      Absent





THE SKUNK, Mephitis mesomelas (Gray)

Reports from early settlers in most of the counties studied show that the skunk has always been fairly common. However, three reports: one each from Graham, Finney, and Rooks counties, record that the skunk was not present until about 1885. Other reports from early settlers in these counties and in all of the other counties in the area record that skunks were present in an early day (before 1885). There is obviously a contradiction in reports from these three counties.

Early writers report the common skunk in the following statements: Knox (1875) reports the common skunk: "Frequent" for that period shortly preceding 1875. Lantz (1904) states that the skunk: "Is abundant throughout the state.." Blanchard (1931) says: "Skunks were numerous in early day.."

Early settlers from a few scattered counties, especially in the greater sandy plains regions, report a decrease in numbers of skunks since 1900. However, the early settlers in most of the area report that skunks are now, and always have been, common.

Skunk *Mephitis mesomelas* (Gray)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman
1840-44	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x	x	x
1845-49	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x	x	x
1850-54	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x	x	x
1855-59	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x	x	x
1860-64	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x	x	x
1865-69	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x	x	x
1870-74	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x	x	x
1875-79	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x	x	x
1880-84	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x		x	x	x	x	x
1885-89	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x
1890-94	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x
1895-99	x	x	#	x	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	x	x
1900-04	#	x	#	x	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	x	x
1905-09	#	x	#	x	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	#	-	x	x	x	x	x
1910-14	#	x	#	x	x	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	#	-	-	-	x	x	x
1915-19	#	x	#	x	x	x	x	-	x	x	x	x	-	x	x	-	x	x	x	x	#	-	-	-	x	-	x
1920-24	#	x	#	x	#	x	x	-	x	x	x	x	-	x	x	x	-	x	x	x	#	-	-	-	x	-	x
1925-29	#	x	#	x	#	x	x	-	x	x	x	x	-	x	x	x	-	x	x	x	#	-	-	-	x	-	x
1930-34	#	x	#	#	#	x	x	-	x	x	x	x	-	x	x	x	-	x	x	x	#	-	-	-	x	-	x
1935-39	#	x	#	#	#	x	x	-	x	x	x	x	-	x	x	x	-	x	x	x	#	-	-	-	x	-	x

Figure 16. Showing the relative abundance of the skunk, as reported by early writers in the western half of Kansas over a period of years from 1840 to 1939.

# Abundant      x Common      - Few      Absent





THE LITTLE SPOTTED SKUNK, (civet) Spilogale interrupta (Rafinesque)

Letters from early settlers show that the little spotted skunk, though never present in large numbers, has always been and still is common in all of the area.

Blanchard (1931) reports civets as numerous. Knox (1875) reports: "More frequent than the common skunk ...."

Baker (1889) says: "Not seen here till the autumn of 1887."

A few reports from early settlers show a slight decrease in the numbers of the little spotted skunk, but in the main the reports show that it has been common at all times during the period studied.



Little Spotted Skunk Spilogale interrupta (Rafinesque)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray
1840-44	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x
1845-49	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x
1850-54	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x
1855-59	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x
1860-64	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x
1865-69	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x
1870-74	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x
1875-79	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x
1880-84	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x
1885-89	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1890-94	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1895-99	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1900-04	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1905-09	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	-	-	x	x	x	x	x	x	x	x	x	x	x
1910-14	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	-	-	x	x	x	x	x	x	x	x	x	x	x
1915-19	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	-	-	x	x	x	x	x	x	x	x	x	x	x
1920-24	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	-	-	x	x	x	x	x	x	x	x	x	x	x
1925-29	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	-	-	x	x	x	x	x	x	x	x	x	x	x
1930-34	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	-	-	x	x	x	x	x	x	x	x	x	x	x
1935-39	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	-	-	x	x	x	x	x	x	x	x	x	x	x

Figure 17. Showing the relative abundance of the little spotted skunk, as reported by settlers, in the counties in the western half of Kansas over a period of 100 years.

# Abundant

x Common

- Few

Absent





THE LONG TAILED WEASEL, Mustela longicauda Bonaparte

Although never present in vast numbers, weasels have been found and reported in most of the area since the early settlers first came (1865-1875). Reports from early settlers show the weasel on the decrease beginning about 1880. They have continued to decrease in most of the counties. However, early settlers in Phillips county report that there has been rather a surprising increase in the last twenty-five years.

These findings show close agreement with the reports of others as for example: "Blanchard (1931) reports weasels present in an early day. Knox (1875) reports weasels: "Occasional. Winter coat does not always become white in this state." Lantz (1904) says: "In eastern Kansas; not very common here."



Weasel Mustela longicauda (Bonaparte)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray
1840-44	X	-	-	X	X	X	X	X	-	-	-	-	-	-		-	X	-	X	X	X	X	X	X	X	-	-	-
1845-49	X	-	-	X	X	X	X	X	-	-	-	-	-	-		-	X	-	X	X	X	X	X	X	X	-	-	-
1850-54	X	-	-	X	X	X	X	X	-	-	-	-	-	-		-	X	-	X	X	X	X	X	X	X	-	-	-
1855-59	X	-	-	X	X	X	X	X	-	-	-	-	-	-		-	X	-	X	X	X	X	X	X	X	-	-	-
1860-64	X	-	-	X	X	X	X	X	-	-	-	-	-	-		-	X	-	X	X	X	X	X	X	X	-	-	-
1865-69	X	-	-	X	X	X	X	X	-	-	-	-	-	-		-	X	-	X	X	X	X	X	X	X	-	-	-
1870-74	X	-	-	X	X	X	X	X	-	-	-	-	-	-		-	X	-	X	X	X	X	X	X	X	-	-	-
1875-79	X	-	-	X	X	X	X	X	-	-	-	-	-	-		-	X	-	X	X	X	X	X	X	X	-	-	-
1880-84	X	-	-	X	X	-	-	X	-	-	-	-	-	-		-	X	-	-	-	-	X	X	X	X	-	-	-
1885-89	-	-	-	X	X	-	-	X	-	-	-	-	-	-		-	X	-	-	-	-	X	-	-	-	-	-	-
1890-94	-	-	-	X	-	-	-	X	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
1895-99	-	-	-	-	-	-	-	X	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
1900-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
1905-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
1910-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
1915-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
1920-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
1925-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
1930-34	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
1935-39	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-

Figure 18. Showing the relative abundance of the weasel, as reported by early surveys in the counties in the western half of Kansas over a period of years from 1840 to 1939.

# Abundant                      x Common                      - Few                      Absent



Gove	Lane	Ness	Hodgeman	Gray	Ford	Meade	Clark	Phillips	Smith	Jewell	Rooks	Osborne	Mitchell	Ellis	Russell	Lincoln	Rush	Barton	Ellsworth	Rice	Pawnee	Stafford	Reno	Edwards	Kiowa	Pratt	Kingman	Comanche	Barber	Harper
X	X	-	-	-	X	-	X	X	X	-	X	-	-	X	X	-	X	X	X	X	-	-	X		X	X	-	-	-	-
X	X	-	-	-	X	-	X	X	X	-	X	-	-	X	X	-	X	X	X	X	-	-	X		X	X	-	-	-	-
X	X	-	-	-	X	*	X	X	X	-	X	-	-	X	X	-	X	X	X	X	-	-	X		X	X	-	-	-	-
X	X	-	-	-	X	-	X	X	X	-	X	-	-	X	X	-	X	X	X	X	-	-	X		X	X	-	-	-	-
X	X	-	-	-	X	-	X	X	X	-	X	-	-	X	X	-	X	X	X	X	-	-	X		X	X	-	-	-	-
X	X	-	-	-	X	-	X	X	X	-	X	-	-	X	X	-	X	X	X	X	-	-	X		X	X	-	-	-	-
X	X	-	-	-	X	-	X	X	X	-	X	-	-	X	X	-	X	X	X	X	-	-	X		X	X	-	-	-	-
X	X	-	-	-	X	-	X	X	X	-	X	-	-	X	X	-	X	X	X	X	-	-	X		X	-	-	-	-	-
X	X	-	-	-	-	-	-	-	X	-	X	-	-	X	X	-	-	X	X	-	-	-	X		X	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-	-	-	X		-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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orted by early sriters and the written statements of old settlers,  
 eriod of years from 1840 to 1939.  
 sent

THE BEAVER, Castor canadensis (Bailey)

Beavers were plentiful in the early days in nearly all of the streams of Kansas, according to the reports of early settlers. Early settlers reports received, show that beavers began to decrease soon after settlement of the area by man, (1870) and continued until they were scarce in 1890. A few farmers protected the beaver. These individuals show the beaver coming back into the area in about 1915 and by 1939 had returned to twelve counties. Reports from early settlers show that they are increasing and spreading at the present time along the wooded streams of western Kansas.

These reports compare closely with the records of other writers, as for example: Blanchard (1931) writes:

The Arkansas Valley was noted for beaver in early days. D. W. Barton recalls that during the winter of 1873, trappers caught 600 beaver on the Arkansas River between Dodge City and the present site of Garden City.

Black (1937) says:

This subspecies (Missouri River Beaver) appears to have invaded Kansas in comparatively recent years from the northwest, and is now rather widespread throughout the state, although still of very local occurrence. Colonies have been reported along the Kansas and Republican rivers until quite recently, and it has also been reported from the Blue, Smoky Hill, Solomon, Mulberry and Arkansas rivers, as late as 1924 ... The beaver appears to be reestablishing itself rapidly, and it is to be hoped that the trappers will give the animal a reasonable chance to succeed.



Beaver Castor canadensis (Bailey)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Cove	Trego	Lane	Ness	Hodgeman	Gray
1840-44	x	x	-	-	x					x	-	x							-		-					x	x	
1845-49	x	x	-	-	x					x	-	x							-		-					x	x	
1850-54	x	x	-	-	x					x	-	x							-		-					x	x	
1855-59	-	x	-	-	x					-		-							-		-					x	x	
1860-64	-	x	-	-	x					-		-							-		-					x	x	
1865-69	-	x	-	-	-					-		-							-		-					x	x	
1870-74	-	x	-	-	-					-		-							-		-					x	x	
1875-79	-	x	-	-	-					-		-							-		-					-	x	
1880-84	-	-	-	-	-					-		-							-		-					-	-	
1885-89	-	-		-	-					-									-		-					-	-	-
1890-94	-	-		-	-														-		-					-	-	-
1895-99	-			-	-														-		-						-	
1900-04	-			-	-														-		-						-	
1905-09	-			-	-														-		-						-	
1910-14	-			-	-														-		-						-	
1915-19	-			-	-														-		-		-				-	
1920-24	-	-		-	-														-		-						-	
1925-29	-	-		-	-						-								-		-		-				-	
1930-34	-	-		-	-						-								-		-		-				-	
1935-39	-	-		-	-														-		-		-				-	

Figure 19. Showing the relative abundance of the beaver, as reported by early  
in the counties in the western half of Kansas over a period of year  
# Abundant                      x Common                      - Few                      Absent

patrolmen west of Hays.

1. Taken from the unpublished notes of L. D. Wooster,  
Hays, Kansas.





THE PORCUPINE, Erethizon epixanthum Swenk

Early settlers report that porcupines were not found in this area in the early days. The first ones were reported between 1870-1874. Within the next ten years, or by 1884, reports from most of the counties show their presence in small numbers. In agreement with these reports, Knox (1875) records: "Found sparingly in western parts of the state." Early settlers report that the porcupine never became numerous and few are reported from 1900 to 1939. Hibbard (1932) reports:

The porcupine was once common in northwestern Kansas along the Smoky, Solomon and Republican Rivers and their tributaries. For many years the porcupine was considered extinct in Kansas. In 1924, E. H. Hillman collected a porcupine twenty miles southwest of Wakeeney, Kansas, and on February 15, 1933, Frank Horky of Oberlin, Kansas, collected a specimen in Decatur county. These two specimens are now in the K. U. Museum of Birds and Mammals. These are the only two specimens on record that have been found in Kansas for many years.

Other records (other than the ones mentioned by Hibbard, 1932) are on file. Wooster (1931) states:

One porcupine was captured approximately ten miles north of Hays, Kansas, in the fall of 1929. Another was captured northeast of Stockton, Kansas, on Bow Creek, during the winter of 1930-31. The writer saw both of these specimens.

George Larkin of Lake City reports that he saw a porcupine in Barber county in 1932. J. W. Shean of Spearville, Kansas, reports seeing one in 1938, in Ford county. On December 22, 1939, a porcupine was captured by two highway patrolmen west of Hays.

1. Taken from the unpublished notes of L. D. Wooster, Hays, Kansas.



Porcupine Erethizon epixanthum Swenk

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Cove	Trego	Lane	Ness	Hodgeman	Cray
1840-44																												
1845-49																												
1850-54																												
1855-59																												
1860-64																												
1865-69																												
1870-74							x		-		-	-							-			-				-		-
1875-79		-			-		x		-		-	-	-						-			-				-		-
1880-84		-			-		x		-		-	-	-						-		-	-				-		-
1885-89	-	-		-	-		x		-		-	-	-	-					-		-	-				-		-
1890-94	-	-		-	-		x		-			-	-	-					-		-	-				-		-
1895-99	-	-		-	-		-		-					-							-	-				-		-
1900-04	-	-		-	-		-		-					-							-	-				-		-
1905-09	-	-		-	-		-		-					-							-	-				-		-
1910-14	-	-	-	-	-		-		-					-							-	-				-		-
1915-19	-	-	-	-	-		-		-					-							-	-				-		-
1920-24	-	-	-	-	-		-		-					-							-	-				-		-
1925-29	-	-	-	-			-		-					-							-	-				-		-
1930-34	-	-	-	-			-		-					-							-	-				-		-
1935-39	-	-	-	-			-		-					-							-	-				-		-

Figure 20. Showing the relative abundance of the porcupine, as reported by earl  
in the counties in the western half of Kansas over a period of years  
# Abundant                      x Common                      - Few                      Absent

ed by law, it does not seem to be decreasing greatly in  
numbers."





THE TREE SQUIRREL, Sciurus niger (Geoffroy)

Tree squirrels were not numerous in an early day in the area, according to the reports of early settlers. Early settlers report that the tree squirrel was not present in great numbers until after the people came into the area and proved-up on timber claims, thereby, raising trees for a natural habitat for this animal. According to the reports of early settlers, the tree squirrel appeared in Jewell county about 1860, and within a short time other counties in the northern part of the area showed tree squirrels present in small numbers. They continued to increase and spread until by 1890, they had become fairly common in the eastern and northern parts of the area. The reports indicate that they had become in all of the area by 1900, except in scattered sections of the area where trees were scarce. From 1900 until the present time there has been little change in tree squirrel numbers as shown by reports. Reports from a few western counties, Wallace, Logan, Morton, and Stevens, indicate a slight decrease in the last ten years.

These reports are in agreement with the following records from other observers. Blanchard (1931) says: "Tree squirrel which are quite common now have come here in the late years." Lantz (1904) states: "Tree squirrel common in the wooded parts of the state, while not protected by law, it does not seem to be decreasing greatly in numbers."



Tree Squirrel Sciurus niger (Geoffroy)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray	Ford
1840-44																													
1845-49																													
1850-54																													
1855-59																													
1860-64																													
1865-69																													
1870-74																													
1875-79																													
1880-84		-										-															-		-
1885-89	-	-					-	-			-	-			-				-	-	-		-		-	-	-	-	-
1890-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	x
1895-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	x
1900-04	x	x	-	-	x	x	x	x	-	-	x	x	x	x	x	x	x	-	x	x	x	x	-	-	x	x	x	-	x
1905-09	x	x	-	-	x	x	x	x	-	x	x	x	x	x	x	x	x	-	x	x	x	x	x	-	x	x	x	x	x
1910-14	x	x	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x
1915-19	x	x	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1920-24	x	x	x	-	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1925-29	x	x	x	-	-	x	x	x	x	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x	-	x	x	x	x
1930-34	x	x	x	-	-	-	x	x	x	x	x	x	x	x	x	-	-	x	x	x	x	x	x	x	-	-	x	x	#
1935-39	x	x	x	-	-	-	x	x	x	x	x	x	x	x	x	-	-	x	x	x	x	x	x	x	-	-	x	x	#

Figure 20. Showing the relative abundance of the tree squirrel, as reported by earl  
in the counties in the western half of Kansas over a period of years fro  
# Abundance                      x Common                      - Few                      Absent





THE COTTONTAIL RABBIT, Sylvilagus floridanus and  
Sylvilagus auduboni

The cottontail, according to the reports received from early settlers, was over all the area in an early day (1860-65) but were few in number. It attained the greatest numbers in the eastern half of the area. Questionnaire reports from the eastern half of the area show the cottontail present in small numbers at all times during the period studied. A few reports from the west part of the state indicate a decrease in cottontail numbers in the last twenty years. Black (1937) shows cottontails present in all of the area at that time.

The cottontail, while being reduced somewhat in numbers at the present time, is still common.

Cottontail Sylvilagus floridanus and Sylvilagus auduboni

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray
1840-44	x	x	-	-	-	x	x	-	-	x	-		x	x	-	-	-	-	x	x	-	-	x	-	x	x	x	x
1845-49	x	x	-	-	-	x	x	-	-	x	-		x	x	-	-	-	-	x	x	-	-	x	-	x	x	x	x
1850-54	x	x	-	-	-	x	x	-	-	x	-		x	x	-	-	-	-	x	x	-	-	x	-	x	x	x	x
1855-59	x	x	-	-	-	x	x	-	-	x	-		x	x	-	-	-	-	x	x	-	-	x	-	x	x	x	x
1860-64	x	x	-	-	-	x	x	-	-	x	-		x	x	-	-	-	-	x	x	-	-	x	-	x	x	x	x
1865-69	x	x	-	-	-	x	x	-	-	x	-		x	x	-	-	-	-	x	x	-	-	x	-	x	x	x	x
1870-74	x	x	-	-	-	x	x	-	-	x	-		x	x	-	-	-	-	x	x	-	-	x	-	x	x	x	x
1875-79	x	x	-	-	-	x	x	-	-	x	-		x	x	-	-	-	-	x	x	-	-	x	-	x	x	x	x
1880-84	x	x	-	-	-	x	x	-	-	x	-		x	x	-	-	-	-	x	x	-	-	x	-	x	x	x	x
1885-89	x	x	-	-	-	x	x	-	-	x	-		x	x	-	-	-	-	x	x	-	-	x	-	x	x	x	x
1890-94	x	x	-	-	-	x	x	-	-	x	-		x	x	-	-	-	-	x	x	-	-	x	-	x	x	x	x
1895-99	x	-	x	-	-	-	x	-	-	x	-	-	x	x	x	-	x	x	x	-	x	x	x	-	-	x	-	x
1900-04	x	-	x	-	-	-	x	-	-	x	-	x	x	x	x	-	x	x	x	-	x	x	x	-	-	x	-	x
1905-09	x	-	x	-	-	-	x	-	-	x	-	x	x	x	x	-	x	x	x	-	x	x	x	-	-	x	-	x
1910-14	x	-	x	-	-	-	x	-	-	x	-	x	x	x	x	-	x	x	x	-	xx	x	x	-	-	x	-	x
1915-19	x	-	x	-	-	-	x	-	-	x	-	x	x	x	x	-	x	x	x	-	x	x	x	-	-	x	-	x
1920-24	x	-	x	-	-	-	x	-	-	x	-	x	x	x	x	-	x	x	x	-	x	x	x	-	-	x	-	x
1925-29	x	-	x	-	-	-	x	-	-	x	-	x	-	x	x	-	x	x	x	-	x	x	x	-	-	x	-	x
1930-34	x	-	x	-	-	-	x	-	-	x	-	x	-	x	x	-	x	x	x	-	x	x	x	-	-	x	-	x
1935-39	x	-	x	-	-	-	x	-	-	x	-	x	-	x	x	-	x	x	x	-	x	x	x	-	-	x	-	x

Figure 22. Showing the relative abundance of the cottontail, as reported by ear in the counties in the western half of Kansas over a period of years.

# Abundant

x Common

- Few

Absent





THE BLACKTAIL JACKRABBIT, Lepus californicus melanotis (Mearns)

According to the reports of early settlers, blacktail jackrabbits were few in number in the area when they first arrived (1860). Early settlers report that blacktails began to increase rapidly about 1865 and by 1890 were numerous in most of the area. From tabulation of these reports, this increase began in the southern counties and moved steadily northward. They reached their maximum numbers in most of the area in about 1920, although local exceptions occur, such as the increase to exceptional numbers in several western counties in 1934.

This species is abundant in most of the area at the present time, according to the reports received.

Baker (1889) speaks of this species as: "Very common."

Hibbard (1932) says:

This species is common throughout the state, except in the extreme northeastern corner. It inhabits the open fields and prairies.

Black (1937) states: "Common throughout the state, especially so west of and through the Flint Hills."



Blacktail Jackrabbit Lepus californicus melanotis (Mearns)

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray	
1840-44	-	-		-	-	-	-							-	-	-		-	-	-		-	-	-	-	-	-	-	
1845-49	-	-		-	-	-	-							-	-	-		-	-	-		-	-	-	-	-	-	-	
1850-54	-	-		-	-	-	-	-						-	-	-		-	-	-		-	-	-	-	-	-	-	
1855-59	-	-		-	-	-	-	-						-	-	-		-	-	-		-	-	-	-	-	-	-	
1860-64	-	-		-	-	-	-	-	-					-	-	-		-	-	-		-	-	-	-	-	-	-	
1865-69	-	-		-	-	-	-	-	-				-	-	-	-		-	X	-		X	X	X	-	-	X	X	
1870-74	-	-		-	-	-	-	-	-	-	-		-	-	-	-	-	-	X	-		X	X	X	X	-	X	X	
1875-79	-	-	-	-	X	X	-	-	-	-	-		-	-	-	X	-	X	X	X	X	X	X	X	X	-	X	#	
1880-84	X	#	-	X	X	X	X	X	-	-	-		-	X	X	X	-	X	X	X	X	-	X	X	X	X	-	#	#
1885-89	X	#	-	X	X	#	X	X	-	-	-		X	X	X	X	-	X	X	X	X	-	#	#	X	#	-	#	#
1890-94	X	#	#	X	X	#	X	X	X	-	X	-	X	X	X	#	X	X	X	X	X	X	#	#	#	#	X	#	#
1895-99	X	#	#	#	#	#	#	X	X	-	#	-	X	X	X	#	X	#	#	#	#	#	#	#	#	#	X	#	#
1900-04	#	#	#	#	#	#	#	X	X	#	#	-	X	#	X	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1905-09	#	#	#	#	#	#	#	X	X	#	#	X	#	#	X	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1910-14	#	#	#	#	#	#	#	#	#	#	#	X	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1915-19	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1920-24	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1925-29	#	-	X	#	X	X	X	#	#	#	#	#	#	#	#	X	X	X	X	X	X	X	#	#	#	-	#	X	X
1930-34	X	X	X	#	X	X	X	X	#	#	#	X	X	#	#	X	X	X	-	X	X	X	#	#	#	-	#	X	X
1935-39	X	-	X	#	X	X	X	X	#	#	#	X	X	#	#	X	X	X	-	X	X	X	#	#	#	-	#	X	X

Figure 23. Showing the relative abundance of the blacktail jackrabbit, as reported in the counties in the western half of Kansas over a period of years.

# Abundant

X Common

- Few

Absent.





THE WHITETAIL JACKRABBIT, Lepus townsendii campanius Hollister

The reports from questionnaires sent out to early settlers show that the whitetail jackrabbit was much more common in western Kansas when the early settlers came to the area, than it is now. While they were found over all of the area, they attained the greatest numbers in the northern half of the state. Reports from early settlers show that whitetails reached their highest total population in the area in about 1860 and have decreased from that time to the present, except that the reports indicate that there may have been a slight increase in the northwest in the last ten years. Early settlers' reports show that the whitetail began a shift in range to the north and west until by 1900, they were scarce in most of the counties, except the very most northern and western counties. Early settlers in the two northern tiers of counties from Jewell county to the western border, report that whitetails are not uncommon there. Reports of occasional observations of whitetails have been received from counties farther south. For example: O. V. Dubbs of Arnold, Kansas, an early settler in Ness county who spent much of his time hunting in western Kansas, reports seeing two whitetail jackrabbits in Meade county in the fall of 1929. Wooster (1931) reports:

In a county-wide rabbit hunt in Rush County on December 26, 1930, 6,200 jackrabbits were killed, of which one was a whitetail. One month later, another county-wide hunt was held in the same county, in which 11,664 jackrabbits were brought in, six of which were reported to have been of the white-tailed species.

Black (1937) gives as the range of the whitetail:

Theoretically the northern half of Kansas, over most of which it was once common. It is now rare, and no doubt extinct in many localities. The known limits of its range in Kansas are Finney county on the south and Riley county on the east.

Hibbard (1932) says: "This species .... was once common over the north half of the state. It is not plentiful in any locality."

The shift in range of the whitetail jackrabbit along with the correlative change in range of its cousin, the blacktail, is a most interesting phenomenon. It has not been a part of the mission of this study to attempt to analyze causes, but this particular problem is a challenging one for future study.



Whitetail Jackrabbit Lepus townsendii campanius Hollister

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Cove	Trego	Lane	Ness	Hodgeman	Gray	Band
1840-44	#	#	#	#	#	x	x	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1845-49	#	#	#	#	#	x	x	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1850-54	#	#	#	#	#	x	x	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1855-59	#	#	#	#	#	x	x	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1860-64	#	#	#	#	#	x	x	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1865-69	#	#	#	#	#	x	x	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	x	#
1870-74	#	#	#	#	#	x	x	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	x	x	#
1875-79	#	#	#	#	#	x	x	x	#	#	x	#	#	#	x	x	x	x	#	#	#	#	#	x	#	x	x	x	#
1880-84	#	#	#	#	#	x	x	x	#	#	x	#	#	#	x	x	x	x	#	#	#	#	#	x	#	x	x	x	#
1885-89	x	x	x	x	#	x	#	x	x	x	x	x	x	x	x	x	x	x	x	#	-	x	x	x	x	x	x	-	-
1890-94	x	x	-	x	x	x	#	x	x	x	x	x	x	x	x	-	-	-	x	#	-	x	x	x	x	x	x	-	-
1895-99	x	-	-	x	x	x	#	x	-	x	x	x	-	-	x	-	-	-	-	#	-	x	x	-	x	-	x	-	-
1900-04	-	-	-	x	x	x	#	-	-	x	x	x	-	-	x	-	-	-	-	#	-	-	-	-	x	-	x	-	-
1905-09	-	-	-	x	x	x	#	-	-	-	-	-	x	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-
1910-14	-	-	-	x	-	x	#	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1915-19	-	-	-	x	-	x	#	x	-	-	-	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-
1920-24	x	x	-	x	-	x	#	x	-	-	-	-	-	-	-	-	-	-	-	-	x	x	-	-	-	-	-	-	-
1925-29	#	x	x	x	-	x	x	x	-	-	-	-	-	-	-	-	-	-	x	-	x	x	-	-	-	-	-	-	-
1930-34	#	x	x	x	-	x	x	#	-	-	x	-	-	-	-	-	-	-	x	-	x	x	-	-	-	-	-	-	-
1935-39	#	x	x	x	-	x	x	#	-	-	x	-	-	-	-	-	-	-	x	x	x	x	-	-	-	-	-	-	-

Figure 24. Showing the relative abundance of the whitetail jackrabbit, as reported by settlers, in the counties in the western half of Kansas over a period of 150 years.

# Abundant                      x Common                      - Few                      Absent





THE OPOSSUM, Didelphis virginiana Kerr

According to reports on file from early settlers, the opossum was not here in an early day. The opossum while not included on the list, was reported by many as an animal which had arrived since settlement of man began, namely 1865-1870. Old timers in twenty-one counties report the presence of the opossum in an early day, and most of these noted their presence in about 1875 or later, although Hamilton county reports show their first appearance in 1865. The early settlers reported that the opossum came in with the growth of planted trees and has remained present, up to the present time. These reports are in agreement with early writers, as for example: Blanchard (1931) writes: "Opossum which are quite common now have come here in late years." Lantz (1904) records: "Common in the wooded parts of the state and along streams westward.."

Hibbard in his check list (1932) says:

The opossum is common through the eastern portion of the state. It has been taken in Trego county, but does not occur in the extreme northwestern corner of the state.

Mr. and Mrs. J. A. Brown of Edmond, Kansas, in Cheyenne county report seeing the first opossum in 1898 and that they have seen them in recent times. Wayne Jacka and the writer collected an opossum on Big Creek about one mile west of Hays in Ellis county in the fall of 1926.



Opossum Didelphis virginiana Kerr

	Cheyenne	Rawlins	Sherman	Thomas	Wallace	Logan	Greeley	Wichita	Scott	Hamilton	Kearny	Finney	Stanton	Grant	Haskell	Morton	Stevens	Seward	Decatur	Norton	Sheridan	Graham	Gove	Trego	Lane	Ness	Hodgeman	Gray
1840-44																												
1845-49																												
1850-54																												
1855-59																												
1860-64																												
1865-69										.																		
1870-74										.																		
1875-79										.																		
1880-84										.																		
1885-89	-									.									.					.				
1890-94	-									.									.					.				
1895-99	-									.									.				.		.			
1900-04	-							.		.									.		.		.	.	.			
1905-09	-							.		.									.		.		.	.	.			
1910-14	-							.		.									.		.		.	.	.			
1915-19	-							.		.									.		.		.	.	.			
1920-24	-							.		.									.		.		.	.	.			
1925-29	-							.		.									.		.		.	.	.			
1930-34	-							.		.									.		.		.	.	.			
1935-39	-							.		.									.		.		.	.	.			

Figure 25. Showing the relative abundance of the opossum, as reported by earl  
in the counties in the western half of Kansas over a period of yea  
# Abundant x Common - Few Absent

White Jack	Cott Skunk Civet	Black Jack
---------------	------------------------	---------------

	Trepp
	Lane
	Ness
	Hodgeman
	Gray
	Ford
	Meade
	Clark
	Phillips
	Smith
	Jewell
	Rooks
	Osborne
	Mitchell
	Ellis
	Russell
	Lincoln
	Rush
	Barton
	Ellsworth
	Rice
	Pawnee
	Stafford
	Reno
	Edwards
	Kiowa
	Pratt
	Kingman
	Comanche
	Barber
	Harper

by early writers and the written statements of old settlers,  
 the world of years from 1840 to 1939.



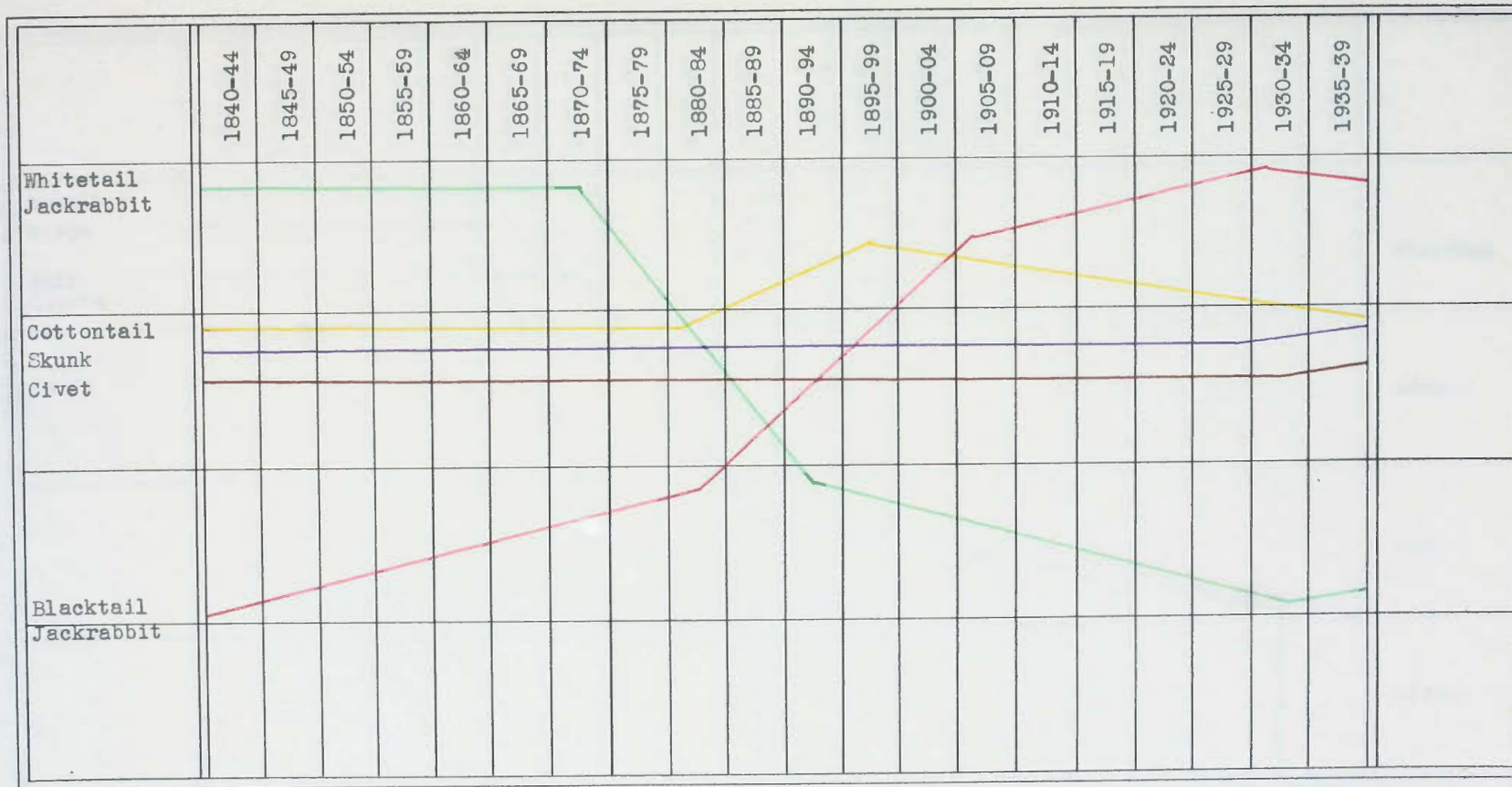


Figure 26. Showing the changes in numbers over a period of almost one-hundred years. The graphs are for western Kansas as a whole and are not necessarily true for every part of the whole.



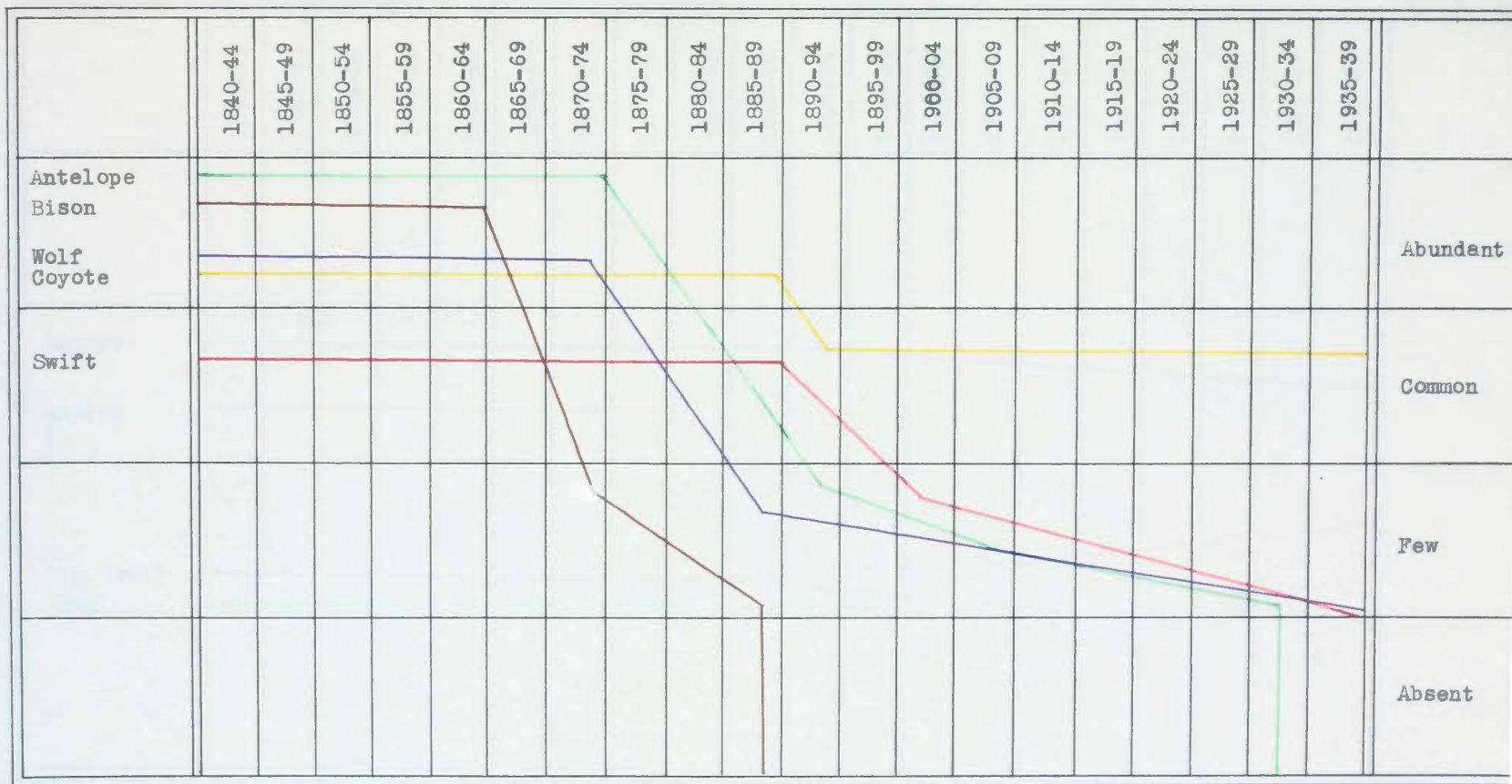


Figure 27. Showing changes in numbers over a period of almost one-hundred years. The graphs are for western Kansas as a whole and are not necessarily true for every part of the whole.



Figure 28. Showing changes in numbers over a period of almost one-hundred years. The graphs are for western Kansas as a whole and are not necessarily true for every part of the whole.

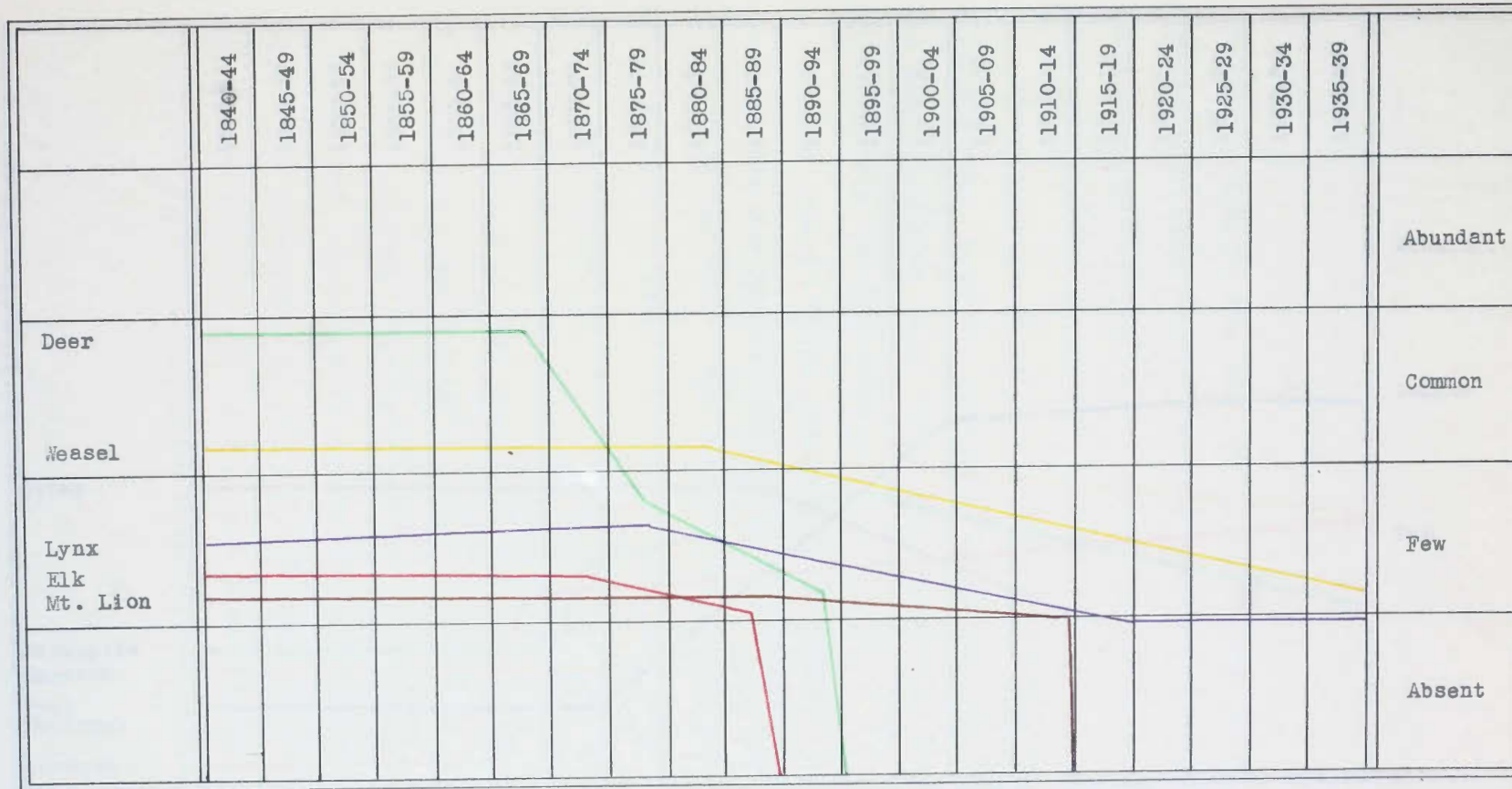


Figure 29. Showing changes in numbers over a period of almost one-hundred years. The graphs are for western Kansas as a whole and are not necessarily true for every part of the whole.



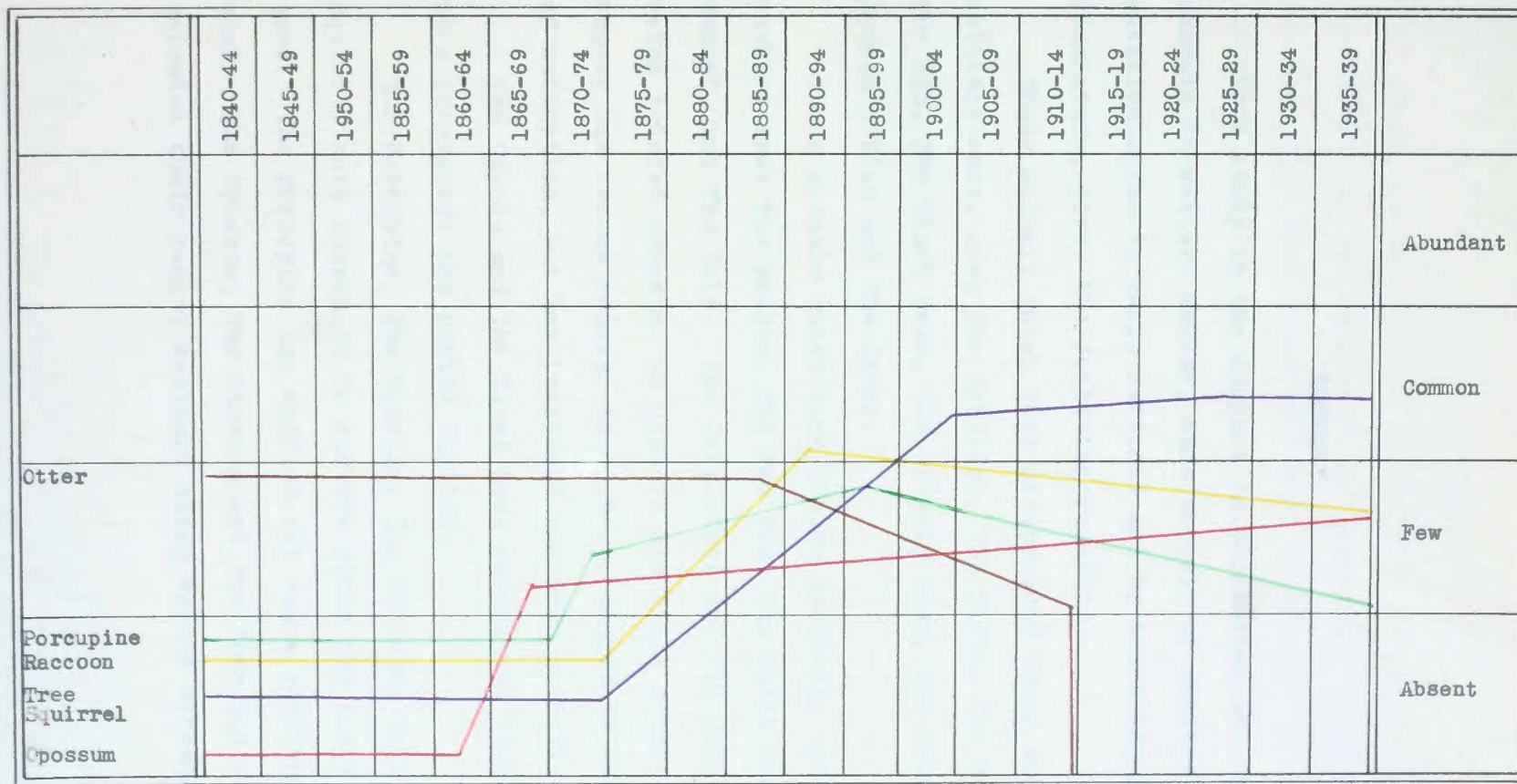


Figure 30. Showing changes in numbers over a period of almost one-hundred years. The graphs are for western Kansas as a whole and are not necessarily true for every part of the whole.

## SUMMARY

This study in the changes in population and range of mammals in western Kansas, made largely by sending out questionnaires to early settlers and by searching in early literature, gives the following results:

Those animals which have disappeared since the early settlers came, are: The Antelope, The Bison, The Deer, The Elk, The Black Bear, The Grizzly Bear, The Bobcat, The Mountain Lion and The Otter.

Those animals which have become decidedly reduced in numbers are: The Badger, The Red Fox, The Swift Fox, The Weasel, and The Wolf. The Cottontail and The Skunk, while being reduced somewhat in numbers are still common. The Beaver has become reduced in numbers, almost to the point of extinction, but has increased somewhat recently.

The Coyote and The Civet have maintained their numbers throughout the period studied.

The Porcupine, The Opossum, The Raccoon, and The Tree Squirrel have increased in numbers since the early settlers came. The Porcupine has shifted its range southward somewhat. The Opossum, The Raccoon and the Tree Squirrel have extended their ranges westward along wooded streams.

There has been a most interesting shift in range of the Whitetail Jackrabbit and the Blacktail Jackrabbit. The Whitetail have moved northward almost out of the area, and the Blacktail are occupying the area which the White-tail have left.



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## APPENDIX

A copy of the questionnaire, which was sent out to the early settlers to secure information concerning the changes in mammal population over a period of years in western Kansas, is found on the following page.

In Kansas there are still people who remember and can give first-hand information on the animal life of the early days in this state. This information should be gathered and preserved before it is too late, for it is valuable. We are working on the matter of serving this information and come to you, as one of the early pioneers, for this valuable material.

First, will you please answer two questions for us?

WHEN DID YOU COME TO KANSAS? ..... WHERE DID YOU LOCATE? .....

We would be very glad to have any comments that you may have about your early life in Kansas, especially some of your early experiences with animals.

WOULD YOU CHECK THE FOLLOWING COLUMNS, PLEASE?

Kansas animals that are here or were here in the past	Check after those animals which were found here when you came.	How do the pres- ent numbers of these animals compare with the early days?	THOSE ANIMALS WHICH HAVE DISAPPEARED		
			Date you last saw them	Where did you last see them?	Why did they disappear?
Coyote					
Wolf					
Skunk					
Civet Cat					
Raccoon					
Brown Bear					
Grizzly Bear					
Otter					
Porcupine					
Fox (Red)					
Swift (Fox)					
Weasel					
Beaver					
Jackrabbit (white tailed)					
Jackrabbit (black tailed)					
Cottontail					
Tree Squirrel					
Antelope					
Badger					
Mt. Lion (Cougar)					
Bob-cat					

(over)



COULD YOU CHECK THE FOLLOWING COLUMNS, PLEASE?

Kansas animals that are here or were here in the past	Check after those animals which were found here when you came.	How do the pres- ent numbers of these animals compare with the early days?	THOSE ANIMALS WHICH HAVE DISAPPEARED		
			Date you last saw them	Where did you last see them?	Why did they disappear?
ison (Buffalo)					
eer					
lk					

List below some animals that have come into your part of the state since you came.	When did you first see them?	Are these animals present now?	If not present now when did they disappear

Any interesting experiences that you have had, or your own comment on animal life in early days and now?

(Thank you very much)