2000

Historical demography of the Chippewa-Cree of the Rocky Boy's Reservation Montana 1917-1937

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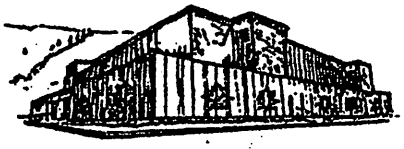

HISTORICAL DEMOGRAPHY OF THE CHIPPEWA-CREE OF THE ROCKY BOY'S RESERVATION, MONTANA: 1917-1937

By

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B.A. University of Montana, 1993

B.A. University of Montana, 1994

Presented in partial fulfillment of the requirements

for the

Degree of Master of Arts

University of Montana

2000

Approved by:

Chairman, Board of Examiners

Dean, Graduate School

6-23-2000

Date

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Presnell, Annajeanette. M.A. 2000 Anthropology

Historical Demography of the Chippewa-Cree of the Rocky Boy's Reservation, Montana: 1917-1937 (pp.130)

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This study reconstructs the demography of the Chippewa-Cree at Rocky Boy's Reservation, Montana, using data derived from six censuses collected by the United States Bureau of Indian Affairs in 1917, 1921, 1925, 1929, 1933, and 1937. An ethnohistorical method was used to determine the primary environmental and socially created conditions that caused changes in the population structure. The database was examined against contemporaneous government documents and ethnological accounts of events to reconstruct and interpret correctly Chippewa-Cree demographic patterns.

Study results suggest that the Chippewa-Cree population structure was determined by social and physical conditions created by the administration of the Indian Office. Malnutrition, starvation, and disease plagued the Chippewa-Cree. Under such conditions, the Chippewa-Cree exhibited a small steady growth in their population through natural increase and immigration. Population growth did not, however, imply improved health. Chronic ill-health stemming from inadequate medical care, overcrowded living conditions, and poor health persisted throughout the first twenty years of Rocky Boy's Reservation.

ACKNOWLEDGEMENTS

I would sincerely like to thank my advisor Dr. Gregory Campbell. He has contributed greatly to the development of my interest in demography, Native Americans, communicable diseases, and anthropology. I am forever grateful for his patience while I attended flight school and established my career in Army Aviation.

I greatly appreciate the support and patience my thesis committee members, Dr. Randy Skelton and Professor Richmond Clow, have provided me.

Thanks to my mom for encouraging me to further my studies and to accomplish my goals. I also appreciate the time she spent in proofreading my thesis and making suggestions. Thanks to my sister who helped me out on numerous occasions while I was out of town. I greatly appreciate it. And thanks to Brad for purchasing the computer programs I needed to conduct and complete this study.

Finally, I would like to thank my good friend Darren Musico, who was a constant source of encouragement. Without his support (and his computer) I might have never finished this project. I can never say how much I appreciated it. Thank you.

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CHAPTER 1

INTRODUCTION

Historical demographers of American Indians continue to focus their research on the changes that followed Native American occupation of reservations. The establishment of reservations by the United States Government for various Native American societies generated a wealth of administrative documents from which demographic data may be derived and analyzed.

Until recently, American Indian populations have been regarded as poor subjects for demographic analysis (Meyer 1982:30). Systems for recording statistics such as births and deaths for reservations were often of poor quality, intermittent, or even non-existent. The demographic reconstruction of any population has many inherent problems. Ascertaining whether historic patterns and variations in the population structure for American Indian populations are real is complicated further by the cultural biases of non-Indian record keepers and the incompleteness of records (Moore and Campbell 1989:18).

One approach that enables demographers to understand more fully the structure of Native American populations is

an ethnohistorical method. The ethnohistorical approach improves the quality of data and the accuracy of results of a demographic analysis (Moore and Campbell 1989:18). The researcher begins with a primary database, that is known to be distorted by the ethnocentrism of the census taker, and cross-checks the database against ethnological accounts describing cultural practices which are contemporaneous with the database (Ibid. 1989:18).

The primary sources of population data researchers use are population censuses. Population censuses, over time, provide pictures of a population constantly changing. Vital events, such as births, deaths and migration, that occur in the population, are the reasons for population changes (McFalls 1991:3). Analysis of censuses reveal not only the structure, but also the history of part or all of the population (Pressat 1972:3). This especially is true if pertinent questions about vital events are asked (Ibid. 1972:3). The use of multiple sources helps to decrease observer and record bias, although it does not totally eliminate the ethnocentrism problem from collected data.

A wide variety of demographic source materials are available for Native Americans to supplement the census data (Meyer 1982:30). Data quality problems may be overcome by using these other ethnohistorical sources in

addition to census and population records. To compensate partially for the poor quality of data, census figures may be cross-checked with accounts of contemporary observers such as agents, missionaries, teachers, and travelers (Meyer 1982:30).

The documentation of matters pertaining to the reservations by the United States Government were generated to monitor those eligible to receive federal services. The Indian agents submitted Annual Reports to the Commissioner of Indian Affairs, and these documents provide insights into the social and administrative background against which the censuses were collected. This knowledge is valuable in evaluating the quality of the census data and aid in their interpretation (Meyer 1982:31).

Melissa Meyer, a history professor at the University of Minnesota, stated that compiling a demographic history is not a significant endeavor unless the results are linked to particular environments and sets of social and economic factors (Meyer 1982:31). Social conditions existing at the time a population census was recorded are pertinent to the reconstruction and interpretation of demographic records. Social and economic factors contribute, to a large extent, to the conditions that affect fertility and mortality, which change a population's structure. Often the

consequences of the policies the government set forth and enforced may be seen in the demographic record.

The past two decades have seen a continuous increase in works dealing with the methods for reconstructing Native American population histories from censuses and ethnohistorical sources. Stephen Kunitz (1981), Department of Preventive Medicine and Community Health, University of Rochester School of Medicine, examined the Navajo Indian Reservation's response to underdevelopment, while Meyer (1982) effectively addressed incompleteness of records on the White Earth Indian Reservation. Moore and Campbell (1989) applied ethnohistorical methods to their work on the Southern Cheyenne Indians; and later (Campbell 1991) to the Northern Cheyenne in Montana. Choong's (1992) master's thesis analyzed the early years on the Fort Peck Indian Reservation in Montana. Thornton's (1987) population histories of American Indians in general, and later, specifically of the Cherokee (Thornton, 1990) contribute meaningful insight to population decline and growth. Jackson (1992) used burial and baptismal registers and censuses to analyze five mission communities in the San Francisco Bay area to explore the dynamics of demographic collapse. He hypothesized that the living conditions in the missions contributed to the destruction of the Indian

population. Griffen (1991) studied census and ration records to make quantitative data on the Southern Apaches living at the presidio of Janos, Chihuahua, in the late eighteenth and early nineteenth centuries. Jorgenson (1978) proposes that contemporary Indian societies cannot be understood without regard to the political economic forces that have shaped and dominated them. He states that domestic dependency is characterized by special forces of political domination that have had economic, social, religious and emotional effects on Indian cultures and Indian people (Jorgenson 1978:6). Sawchuk (1992) analyzed census returns and civil registers to decipher demographic factors that influence marriage age of civilian inhabitants of Rock of Gibraltar. All of the above studies informed the present examination of demographic changes among the Chippewa-Cree of the Rocky Boy's Reservation.

CURRENT STUDY

For the purpose of this study, an ethnohistorical method was applied to the Rocky Boy's Reservation during the early reservation period (1917-1937) using data from the Indian Census Rolls (National Archives, Record Group 75). The results were then interpreted against

ethnohistorical data derived from the Superintendent's Annual Narrative and Statistical Reports from Field Jurisdictions of the Bureau of Indian Affairs and other secondary sources.

The focus of this study was to address several broad questions pertaining to reservation demography: (1) to what extent can the demography of the Rocky Boy's Reservation be constructed from the census records; and (2) what were some of the social and economic conditions which might have affected the population structure.

Previous work on Rocky Boy's Reservation has mostly dealt with the history of the people and the establishment of the reservation. Wessel (1975) provided an excellent source of information regarding the Cree and the trials and adversities that both the Chippewa and the Cree faced in establishing a home for themselves. Ryan (1998) also gave an account of the land and economic struggles encountered by the Chippewa and Cree. Burt's (1986) article addressed the dilemma and struggle the Cree faced resulting from their ambiguous status, American or Canadian. Ewers' (1974) ethnological report was an investigation and evaluation of the ethnohistorical material that would bear evidence to who possessed the land that encompasses Rocky Boy's Reservation prior to 1888. Sharrock and Sharrock

(1974) concentrated only a small portion of their historical account of the Cree to the establishment of Rocky Boy's Reservation. Dusenberry (1954) conducted a concise historical study on "Montana's Displaced Persons" and supplemented the study with personal interviews with informants on Rocky Boy's Reservation. Gray (1942) wrote a history of the Montana Cree Indians in conjunction with the Works Progress Administration. His work includes a collection of articles about the Cree Indians that appeared in newspapers throughout Montana. Burt (1942) focused his work on the Cree and Metis around the time of Riel Rebellion and the dilemma as to whether the Cree and Metis were Americans or Canadians.

Demographic studies of Rocky Boy's Reservation have been limited to gross population counts. To date there has not been any work that deals specifically and systematically with the demography of the Chippewa-Cree population on Rocky Boy's Reservation during the reservation period.

THEORETICAL BACKGROUND

The physical and cultural environment to which Native American populations had to adapt when placed on

reservations produced stresses that adversely affected tribal populations. Reservation stresses created included restriction of movement to limited areas, changes in diet, increased proximity to diseases, and non-tribal political conflicts. The effects of Chippewa-Cree adaptation to reservation life can be seen in the demographic history of the Chippewa-Cree on Rocky Boy's Reservation.

Health care patterns created and perpetuated by reservation living conditions can alter population structure. Many scholars have wrongly assumed that the health of Native American populations improved dramatically once they were placed on reservations and exposed to the benefits of western medicine (Campbell 1991:339). In actuality, the health status of many American Indian societies declined despite apparent growth in the population and increase in medical services. While the technological potential for improved health may have existed, social conditions and other cultural factors often formed a barrier between Native American populations and good health (Choong 1991:10).

Campbell's work with the Northern Cheyenne demonstrates that population growth alone does not yield an accurate picture of the demographic history of the Northern Cheyenne (Campbell 1991). Thus, change in population size

alone is not a good index of health. Health and fertility of the Northern Cheyenne were shown to be a direct result of the political and economic conditions imposed upon them. This theoretical approach states that underdevelopment or non-development in Third-World countries is caused and perpetuated by the dominance and economic control of a stronger political power (Webster 1984). Development, or lack thereof, are inextricably linked to demographic patterns (Kunitz 1981).

From this perspective, reservations are considered to be underdeveloped areas. Reservations were established to assimilate Native Americans into a civilized American life by introducing concepts of self-sufficiency, education, Christianity and private property (Campbell 1987:7,52). In actuality, the policies set by Congress and carried out by the Office of Indian Affairs until 1948 only continued to push Native American societies further into poverty. Native American underdevelopment worsened as tribal populations continued to lose control of their reservation land, tribal funds, resources and health care.

The consequences of underdevelopment are revealed as changes in population structure through demographic change (Kunitz 1981:175). A population's structure is the distribution of the population among its sex and age

groupings. Biological factors, such as disease and health, and cultural factors, such as social conditions and cultural practices determine the distribution of individuals in the structure. These biological and cultural factors affect mortality and fertility causing variations in the population structure.

Cultural factors heavily influence the nature of the biological factors. Social conditions influence health and the prevalence of disease which affect fertility and mortality. For example, the reservation superintendent controlled access to rations and other resources allotted to their particular reservation. Consequently, this control resulted in dietary changes, malnutrition, susceptibility to disease, and death, that were manifested in the population structure.

Social conditions can additionally affect population structure by causing migration in and out of the population, selection of mates, and limiting or controlling fertility. Distribution of individuals in a population, therefore, ultimately is the product of the demographic forces of fertility, mortality, and migration (Harrison and Boyce 1972:6).

SUMMARY

In the following chapters, the demographic experience of the Chippewa-Cree on Rocky Boy's Reservation is historically reconstructed from 1917-1937 utilizing the ethnohistorical method and demographic tools. Chippewa-Cree demographic patterns reveal population structures influenced by economic underdevelopment on Rocky Boy's Reservation.

CHAPTER 2

ETHNOHISTORICAL SETTING

Ethnologists who examine Indian occupancy of the Northern Great Plains conclude that both the Chippewa and the Cree were geographically and culturally Woodland tribes prior to their movement onto the northern plains. This chapter provides a chronological account of the Chippewa and Cree peoples on Rocky Boy's Reservation, beginning with the 17th Century, moving to their motives for the migration westward, to how finally a reservation came to be established for them. The struggles the Chippewa-Cree people faced at the turn of the century are relevant to understanding the data analyzed in this study.

DESIGNATION OF THE CHIPPEWA

Throughout North American history, fur traders and missionaries have known the Chippewa by various names. The most pertinent names used in the literature are "Bungi," "Plains Ojibwa," "Northern Ojibwa," "Ojibwa," "Chippewa," and "Saulteaux" (Bishop 1974:4; Howard 1961:173). The United States government, the Bureau of Indian Affairs, and

the Canadian government officially termed various groups of Bungi or Plains-Ojibwa tribes "Chippewa" (Howard 1961:172-173). Most of the historical record uses "Chippewa" and "Ojibwa" interchangeably. For purposes of this study, the designation "Chippewa" will be used in order to remain consistent with the self-identification of the people on Rocky Boy's Reservation.

THE FUR TRADE: 17TH CENTURY

The European fur trade began along the St. Lawrence drainage area around 1530 with the French when their fishermen began taking fur bearing animals. The trade incorporated large numbers of Indians surrounding the St. Lawrence valley by the end of the 16th Century. Samuel de Champlain, a French explorer, extended the French trade to the Georgian Bay area in 1615 (Bishop 1969:107).

By 1620, the European trade and missionary influences had reached the Chippewa, first indirectly through intermediate tribes such as the Ottawa and Huron, and later, directly through the Europeans themselves (Bishop 1974:8). The Chippewa resided along the northern shores of Lake Huron and the eastern shores of Lake Superior (Ibid. 1974:3). To their north and northwest resided the Cree.

Until 1670, both the Cree and Assiniboine were forced to trade through the Ottawa and Chippewa middlemen. The formation of Hudson's Bay Company by English businessmen in 1670, attracted the Cree to trade on a large scale with them (Bishop 1969:317 and 1974:9). Several posts were established along the Hudson and James Bays enabling the English to monopolize the fur trade in the Hudson Bay drainage area (Bishop 1969:108). The Ottawa and Chippewa were forced to hunt for furs themselves in order to procure trade goods (Bishop 1969:317). Termination of the Iroquois wars allowed French traders to expand the fur trade west of Lakes Michigan and Superior (Bishop 1969:108,337).

THE CHIPPEWA INDIANS: ETHNOHISTORICAL OVERVIEW

Tracing movements of the Chippewa into the west is difficult due to the lack of clarity found in available documentary sources, most of which are fur trade records (Peers 1994:27). The Chippewa aligned themselves with the French traders, not with Hudson's Bay, which had the only available records (Peers 1994:27).

After 1680, a major separation of the Chippewa occurred. Some groups migrated along the north shore of Lake Superior while others penetrated along the south shore

(Bishop 1974:9). New trading alliances developed with the Dakota in the west and large trading and fishing villages were established (Hickerson 1966:10). The Dakota were involved in tribal warfare with the Cree, who were then located west of Lake Superior. A breach in the Dakota-Chippewa alliance occurred in 1736 when the Dakota massacred French traders on the Lake of the Woods (Bishop 1969:319; Hickerson 1962:66). The Chippewa joined with the Cree and Assiniboine in their raids against the Dakota on the pretense of revenge.

After the dissolution of the Chippewa-Dakota alliance in 1736, the Chippewa began forcibly entering Dakota territory in Minnesota (Bishop 1974:10 and Hickerson 1962:70-72; 1966:12). This migration resulted in their replacement of the Dakota in the northern wooded parts of Minnesota and neighboring portions of Wisconsin. The Chippewa motives for moving into the region were mainly a quest for new abundant hunting and trapping territories, and the political status they would gain by controlling access to the region (Howard 1977:13; Peers 1994:7). By the 1780's, the Chippewa were firmly established in the area. They continued to make minor territorial gains toward the prairies to the south and west (Hickerson 1962:70-72; 1966:12).

Individual French traders united to form the Northwest Company in 1782 and to compete with the Hudson's Bay Company and the rivalry became intense (Bishop 1969:109; 1974:11). The competition over furs drew traders more inland, closer to where the Chippewa and other tribal people were trapping (Bishop 1969:333). This allowed the Chippewa to remain on the eastern edge of the plains from the Minnesota River country to the Red River country throughout the year as traders came to them. It put an end to their seasonal "commuting" to and from their eastern villages and trade gatherings (Peers 1994:59). The Red River country was Assiniboine and Cree country that afforded not only an abundant supply of furred game for trading, but also large game, such as bison, for subsistence (Howard 1977:17). As the Chippewa began to live among the Cree and Assiniboine in the Red River area, they increased their reliance on bison, which brought significant changes to Chippewa life between 1797 and 1804 (Peers 1994:59). Some changes, such as the hunting of bison, were simply efficient accommodations to the different resources of the west or to pressures from fur-trade competition. More importantly, their residence on the Red River marked an end to the seasonal "commuting" to

and from their eastern villages and trade gatherings (Peers 1994:59; Hickerson 1962:)

As early as 1805, beaver began to grow scarce in some areas, and large game became depleted as a result of overhunting with guns (Bishop 1968:8). By 1821, the Northwest Company merged with the Hudson's Bay Company, ending 40 years of competition. This consolidation allowed Hudson's Bay Company to implement new trade policies that drastically reduced the trade in furs (Bishop 1968:9).

Many Native peoples chose to participate less and less in the fur trade, however small groups of Chippewa began traveling to American posts along the Missouri River (Peers 1994:102). Changes in the fur trade, shortage of large game and furs, and greater reliance on the bison, led the Chippewa to adapt a more plains orientation (Peers 1994:112).

The decades from 1837 to 1857 were relatively peaceful times for the Chippewa. On the other hand, the years 1858 to 1870 were stressful. Exploration of the West by Euro-americans, competition for remaining resources, negotiations of treaties, movement onto reservations and the extinction of the bison happened in rapid succession from 1858 to 1870 (Peers 1994:181).

The precise origins of the Chippewa of Montana are less certain, partly because they derive from various band populations that were scattered throughout Manitoba, Saskatchewan, North Dakota, Wisconsin and Minnesota.

Sharrock and Sharrock surmise that Rocky Boy's band left Minnesota in the early 1800's, and followed the buffalo north of the Missouri River, arriving in Montana by 1850 or earlier (Sharrock and Sharrock 1974:157). Alternatively, Wessel speculates the band originated with the Chippewa who had moved with the Cree across the Plains of Canada or with that part of the Chippewa who settled in the Turtle Mountains of North Dakota (Wessel 1975:10). Ryan concludes that the Chippewa were part of the Turtle Mountain band in North Dakota that moved west due to "subsistence problems and bitter disagreements amongst themselves" after the Ten Cent Treaty (Ryan 1998:28). In any event, few deny Rocky Boy's claim to American birth.

Wessel states that the Chippewa arrived in Montana sometime after 1890 seeking a permanent settlement (Wessel 1975:19). Bryan agrees that the Chippewa arrived into Montana well after 1875 from the Turtle Mountain region (Bryan 1985:72).

In 1891, Congress passed an act to negotiate a treaty to establish a reservation for the Pembina Band of Chippewa

Indians in the northern part of North Dakota in the Turtle Mountains (Gray 1942:170; Wessel 1975:19). Some difficulty was encountered in negotiating the treaty. A number of mixed bloods from Canada who had settled in the Turtle Mountains were not included in the settlement and adamantly held the land until the treaty was ratified several years later (Camp 1987:vii). To make matters worse, the proposed reservation in the Turtle Mountains was also too small to sustain the number of people assigned (Bryan 1985:72; Wessel 1975:19).

Friction between the mixed blood majority and full blood minority may have forced the full bloods to abandon the reservation (Gray 1942:171). Little Shell, leader of the migrating band, and his people settled in Montana in the 1880's and 1890's (Sharrock and Sharrock 1974:157).

The Turtle Mountain Reservation was much too small for all the inhabitants and a number of Chippewa Indians were encouraged to settle on land held entrust for them southwest of Havre, Montana (Gray 1942:170). There were 245 full bloods at the time of the establishment of the reservation. Gray assumes that these were the same Chippewa Indians that migrated to Montana under the leadership of Chief Rocky Boy in the beginning of the twentieth century (Gray 1942:172).

THE CREE INDIANS: ETHNOHISTORICAL OVERVIEW

As early as 1640, Jesuit priests mention in their correspondence of Cree Indians living in the Hudson's Bay area (Mandelbaum 1940:169). The Cree were mostly nomadic woodland hunters who occupied a large area extending north from Lake Superior to the Hudson Bay (Wessel 1975:3). At this time, the Cree were already involved in the fur trade with the Huron, and it was not until the decimation of the Huron by the Iroquois that the French became involved in trade (Sharrock and Sharrock 1974:11).

The main posts of the newly formed British Hudson's Bay Company in the area of the Cree attracted the Cree to establish direct trade with them in 1670. Some Cree were then able to set themselves up as middlemen in the fur trade to the interior Indian groups, particularly the Assiniboine (Sharrock and Sharrock 1974:12).

When a Woodland group contacted fur traders, they had to either adopt the fur trade as their primary economy, as the Cree did, or push farther inland to avoid being overrun by their neighbors that trapped and traded (Sharrock and Sharrock 1974:14). Newly established trade posts attracted more and more people to trade. This resulted in the exploitation of previously untouched pelted animals and a

depletion of subsistence resources. Based on this reality, Cree expanded their territory to the west after they established trade relations with Hudson's Bay Company (Mandelbaum 1940:176; Sharrock and Sharrock 1974:15).

By 1750, the Cree were becoming more dependent upon the fur trade for arms, clothing and provisions (Mandelbaum 1940:176). At the same time, the Cree became go-betweens for the hunting tribes of the interior and the posts on Hudson's Bay trading goods for furs. As the French Canadians moved into the interior, hunting tribes began to divert their resources to build a trade with the French. The trade with the British Hudson's Bay Company and the Cree diminished. To regain their foothold with the Cree fur trade, Hudson's Bay Company established secondary posts inland in order to trade directly with the Indians (Sharrock and Sharrock 1974:20).

The fur trade forced some Cree to move well onto the Canadian plains. The Cree, still familiar with the lakes and woodlands, shuttled in and out of the prairies, seasonally (Mandelbaum 1940:179). In response to depleted game in the east, the Cree moved into the plains well in advance of the trading posts (Sharrock and Sharrock 1974:21). The small game population in the wooded areas surrounding the plains began to become overhunted and the

Cree turned to the buffalo for their subsistence (Ibid. 1974:22).

The Cree alliance with the Assiniboine aided in their transition from a Woodland culture to a Plains culture (Sharrock and Sharrock 1974:14). The plains area occupied by the Cree and the Assiniboine was well supplied with small fur-bearing animals. Intentional depletion of that supply by the British to stop American fur company expansion, caused the Indians to move out of necessity into the plains to follow the bison as their major source of food, shelter and clothing (Sharrock and Sharrock 1974:44). Movement onto the plains increased the Cree population, and aided with arms, they expanded their territory (Mandelbaum 1940:178). By 1800, the Plains Cree inhabited the areas from the Assiniboine River across the plains to the upper North Saskatchewan River and the mid- and lower South Saskatchewan River (Dempsey 1984:11 and Sharrock and Sharrock 1974:38).

Culturally and geographically by the mid-1820's, the Cree were entrenched in a Plains economy and relied heavily on the buffalo. As the buffalo moved and remained south of the Missouri River, consequently, the Cree moved south as well (Sharrock and Sharrock 1974:68).

The Cree presence, enhanced by guns, made them a formidable force among the Indians of the Upper Missouri (Wessel 1975:4). The Cree were the most powerful enemy of the Blackfeet and continually encroached upon Blackfeet territory (Mandelbaum 1940:184). Until the 1850's, the Cree hunted buffalo and traded at posts along the Missouri River.

In 1851, the Treaty of Laramie assigned territorial boundaries for the tribal groups of the Upper Missouri. It was intended to have included all the Upper Missouri Indians, but it ignored the Cree (Sharrock and Sharrock 1974:109). Later, the 1855 Stevens Blackfeet Treaty assigned Cree lands north of the Missouri River to the Blackfeet. For some reason, the Cree were excluded from this treaty (Ibid. 1974:116).

The decades of the 1860's and 1870's marked the disappearance of the Cree from U.S. Government records as recognized U.S. Indians (Sharrock and Sharrock 1974:119). It did not mark their disappearance from American soil.

The rapid decline and ultimate extinction of the buffalo coincided with the transfer of the North-West Territories to the newly created Dominion of Canada in 1869. At sometime, white settlers followed the first strands of the national Canadian railway (Peterson 1978:23;

Sharrock and Sharrock 1974:141). By 1876, many Indian bands on the Canadian prairies found their livelihood and their staples diminishing and consented to sign Treaty No. 6 with the Crown. A band of Cree under Big Bear refused to sign the treaty and relied for their continued existence on the pursuit of the buffalo (Peterson 1978:23; Sharrock and Sharrock 1974:131).

The almost total disappearance of the buffalo, forced Big Bear to adhere to the treaty by the fall of 1882. Big Bear's band received annuity payments as provided for by the treaty but refused steadfastly to end his or his people's independence by refusing to settle on a reserve (Dempsey 1984:103; Sharrock and Sharrock 1974:144). The Canadian policy was to make the Indians dependent on the government for annuities, and entice them northward away from the border (Sharrock and Sharrock 1974:144-145).

Canadian officials labeled Big Bear's independence, as "rebellious" by Canadian officials. Concentrating his efforts on organizing other Indian bands from their respective reserves for a united front against the Canadian government, Big Bear continued his quest for a peaceful resolution of grievances instead of a futile and bloody wàr, which his people could not win (Peterson 1978:24).

The Metis', a group of mixed white (French or English) and Indian (Primarily Cree or Chippewa) descent led by Louis Riel, had grievances against the Canadian government because no treaty was ever made with the Metis to give title to the lands they had settled (Camp 1987:6; Ewers 1974:86). Louis Riel gained the sympathy of Big Bear's band assuring them that the Metis would also insist upon resolutions of Big Bear's grievances (Dempsey 1984:152; Ewers 1974:90).

Impatient for action on his petition to the Canadian government, Louis Riel created his own government and initiated armed action (Ewers 1974:91). The rebellion lasted two months before a Canadian force soundly defeated Riel's forces. Nevertheless, the rebellion lasted long enough to involve Cree Indians from both Poundmaker's and Big Bear's bands (Dion 1979:97; Ewers 1974:91).

Young members of Big Bear's band grew impatient with his passive resistance and were no longer in the mood to negotiate with Canada. Riel's growing militancy appealed more to the young activists and they believed the Cree should aid the Metis rebels (Dion 1979:97; Ewers 1974:92; Peterson 1978:24).

In April 1885, the Cree Indians attacked the Canadian settlement at Frog Lake and destroyed it. Big Bear was

sentenced to prison, but was released in 1887, and died soon thereafter. Big Bear's son, Wandering Spirit, was hanged along with seven other Indian participants (Ewers 1974:92) and his other son, Imasees, escaped across the border into Montana with approximately one hundred Cree refugees (Ewers 1974:93; Peterson 1978:25).

Imasees, now known as Little Bear, and his followers settled near Fort Assiniboine, an isolated military outpost near Havre, Montana. They found temporary employment at the fort and were eager to have some land assigned to them for cultivation. The Commissioner of Indian Affairs wrote a letter to the Secretary of the Interior indicating that these refugees were not native to the United States, and had no rights to any of the Indian reservations but "should be given a chance to earn their bread (Peterson 1978:28)."

The question of citizenship or nationality of Indians has traditionally been pointless to the Indians (Peterson 1978:28). Hereditary Cree hunting grounds have been located both north and south of the 49th parallel, and the official survey of the border in the 1870's was all but ignored by non-treaty Indians. When various bands signed Treaty No. 6, regardless of their location on either side of the 49th parallel, they became Canadians and thus their

responsibility (Peterson 1978:28; Sharrock and Sharrock 1974:125).

The United States was not willing to extradite the Cree to Canada for several reasons. First, Canada had given political asylum to Indian participants in the Battle of the Little Big Horn several years earlier. Additionally, no one was willing to assist in the arrest of the Cree by Canadian officials on American soil (Sharrock and Sharrock 1974:149-150). Suddenly, the Cree's citizenship status was in doubt and the years after 1885 were times of restless wandering, starvation, deprivation and death (Peterson 1978:29). The Cree were given asylum by President Cleveland, and Canada was in no position to demand that the U.S. hand over their "renegades."

For a short time, the Assiniboine assisted the Cree, dividing their own rations with them. For next several years, the Cree moved from the Fort Belknap Reservation, to the Blackfeet Reservation, to the military reservation of Fort Assiniboine, and to the Flathead Indian Reservation seeking a place to make a home and a living. Money from the United States Interior Department, An Office of Indian Affairs, provided some relief to these destitute Indians, but many still died of disease or exposure (Ewers 1974:96-100).

In the early 1890's, the homeless Cree managed to survive, as fragmented bands, without either federal or state assistance. The Cree "eked out a precarious existence" hunting small game, peddling their own handicrafts and by seasonal employment on farms and ranches (Ewers 1974:103). In winter they tended to gather in small groups on the outskirts of different towns. The "refugee" Cree lived a rather tenuous existence (Sharrock and Sharrock 1974:153).

Estimates of the number of Canadian refugees in Montana following the Riel Rebellion ranged from 100 to about 200, according to Office of Indian Affairs and United States Army sources. It is apparent that the original refugees were augmented by others who came into Montana from the north in the months following the Riel Rebellion (Ewers 1974:94). A report in 1892 showed a large number of Cree in Montana, approximately 500 individuals. It was becoming extremely difficult to distinguish the political refugees from those who had come to Montana for other reasons.

In 1896, the Governor of Montana sent a letter to the United States Secretary of State stating that the Cree had become "an intolerable nuisance" and "the patience of our people has been sorely tried (Gray 1942:12)." He went on

to say that the number of Cree were increasing and a plan must be adopted to deport these Indians across the boundary line. The "Deportation Bill of 1896" became law in the spring of 1896 designed "to deliver at the International boundary line, by employment of the Army or otherwise, all refugee Canadian Cree Indians (Ewers 1974:107; Peterson 1978:30)."

The problem with enforcing this law was the fact that many Cree were citizens. During the ten years following the Riel Rebellion, an overwhelming majority of the half-blooded Cree Indians living in northern Montana were citizens of the United States. The Governor of Montana insisted that "all Cree... should be deported from Montana (Gray 1942:27)," this included as many mixed bloods as he could find (Wessel 1975:17). Little Bear and his former rebels feared that they would be held criminally liable for murders committed in Canada in 1885 (Peterson 1978:32). The Canadian government had issued a general amnesty for all participants in the Riel Rebellion in 1886 (Sharrock and Sharrock 1974:153). Many of the Cree believed that a return to Canada would be preferable to the continued existence at starvation level in hostile Montana and submitted to deportation peacefully (Peterson 1978:32).

Immediately after their entry into Canada, Little Bear was arrested and charged with murder at Frog Lake and the rest of his band was imprisoned (Peterson 1978:32). Little Bear was later acquitted of the murders and returned to Montana, along with many of the deported Cree, in 1897 (Dusenberry 1954:8; Peterson 1978:33).

ESTABLISHMENT OF ROCKY BOY'S RESERVATION

It was Frank Bird Linderman's opinion, that Rocky Boy was a very gentle man, much less aggressive than his contemporary, Little Bear, a leader of the Indians who crossed the border from Canada after the Riel Rebellion (Linderman 1968:161). Little Bear bore the stigma of "British Cree" and participant in the Frog Lake Massacre. Rocky Boy, an American tribesman, first became known to officials when he petitioned for a reservation for his people (Ewers 1974:114).

The exact date the Cree and the landless Chippewa began to consolidate is unclear, however it is most assured that their association began before the Cree were extradited to Canada, and continued upon their return to the United States (Sharrock and Sharrock 1974:154). Some

have speculated that Little Bear joined Rocky Boy as a matter of expedience, for Rocky Boy, not tainted with the Frog Lake Massacre, was better regarded by local whites, and hence, had a better chance of getting land (Dusenberry 1954:10; Sharrock and Sharrock 1974:155).

A growing concern for the welfare of the landless Indians among influential citizens publicized the Indian's plight. The campaign to seek and negotiate a home for the Chippewa and Cree was spearheaded by a group of prominent white citizens of Montana, most notably Frank Bird Linderman. Many Montanans agreed to place Rocky Boy and his band upon land within the state, but when it came to specific reservation sites near their homes, many resisted. The resistors were farmers, ranchers, railway officials and Indian leaders from the Flathead, Crow and Blackfeet Reservations. They wanted no portions of their reservation set aside for Rocky Boy's band (Ewers 1974:114).

Rocky Boy and many of his followers would have accepted a reservation anywhere in Montana on land that offered them resources for making a living. Chief Rocky Boy sent a letter to Theodore Roosevelt, President of the United States, asking that a portion of land be set aside on the Flathead Reservation for his band of Chippewa Indians in 1902. Paris Gibson, a United States Senator

from Montana, asked that relief be provided only for the American born Indians, of which, not more than twenty or thirty among Rocky Boy's band were American born Indians (Ewers 1974:115; Gray 1942:167).

W. H. Smead, an Indian agent from the Flathead Reservation, was sent to investigate and gain facts in this case. The Agent concluded that the Indians were Chippewas originating from Wisconsin, and "came to Montana some fifty years ago but were never allotted any land (Ewers 1974:117)." It was also verified that the Chippewa had intermarried with several tribes, particularly the Cree. Rocky Boy claimed to have a following of about 400 people, however the agent proposed that a considerable number of those people were Canadian Cree (Ibid. 1974:119).

Conflicting reports from W. H. Smead, Indian agent, to A. C. Tonner, Acting Commissioner of Indian Affairs, prompted another investigation that resulted in a letter to the Secretary of the Interior that stated,

> ...The policy of this Department is to break up tribal relations as soon as possible and cause the Indians to become self-supporting and self-reliant, and not to increase tribal membership or create new reservations unless the best of reasons exist therefor. In the present case it is shown that more than half, and probably a majority, of the Indians under consideration are Cree who belong in Canada, and have been for many years past self-supporting and who are capable of continuing to

> provide for themselves in the future. It is not therefore thought the circumstance in the case call for any further action (Ewers 1974:119).

In 1903, Rocky Boy appealed to the W. H. Smead, Senator from Montana, and gained his interest and support in finding a home for Rocky Boy's American-born Chippewa. Upon the Senator's insistence, A. C. Tonner, the Commissioner of Indian Affairs, sent a special agent to identify Rocky Boy's people. The special agent concluded that it was nearly impossible to provide definite information as to the composition of the band as a whole let alone to trace their complicated history. However, he did recommend that Rocky Boy's band should be settled on the Flathead Reservation (Ewers 1974:122).

Montana's U.S. Senator, Paris Gibson, introduced a bill in 1904 to provide a home for Rocky Boy and 110 American-born Indians on the Flathead Reservation (Ewers 1974:122). The bill passed in the Senate but not in the House. The Salish opposed settling Rocky Boy's band on their reservation (Ibid. 1974:123).

In 1908, Montana's U.S. Congressman, Joseph M. Dixon, managed to gain an appropriation for the settling of Rocky Boy's Band upon public land, if available, or upon some suitable existing Indian reservation (Ewers 1974:124;

Sharrock and Sharrock 1974:158). The agreement required the approval of resident Indians in order to place them on one of the existing reservations. The difficult problem of placing Rocky Boy's Indians on land in Montana still remained (Ewers 1974:125).

Even without going to a reservation, the passage of the 1908 bill brightened substantially Rocky Boy's prospects for obtaining a home for his people in Montana. The bill provided another settlement that was to be by allotments, and a special agent was sent to ascertain the number of Chippewa of Rocky Boy's band eligible for allotment (Sharrock and Sharrock 1974:158).

Due to Rocky Boy's people being intermarried with Canadian Cree and mixed-bloods, thus pressured the agent to include their names and those of their children on the roster of his band. These pressures became increasingly difficult to resist (Ewers 1974:126). The agent found 120 individuals who he believed properly belonged to the United States (Sharrock and Sharrock 1974:159). An effort was made to exclude the Canadian Cree from this list, but many mixed-blood families were included (Ewers 1974:127).

Rocky Boy's band was to be given allotments on the Blackfeet Reservation, but the area of the reservation selected was not adequate to their needs. The Indians

would have to leave the reservation in order to make a living (Wessel 1975:36). Farming was impossible and grazing without cattle was of little use. Also, the altitude and location of the site made living in the winter almost impossible.

Several years passed and Montana's citizens became more and more impatient with the government's efforts to find a home for the impoverished Indians living on the outskirts of Montana towns and traveling over the state. Originally, in 1909, it was thought that Rocky Boy's band would settle at Fort Belknap. The superintendent "unalterably opposed" the idea saying that the band's influence would be harmful to the Indians under his charge (Sharrock and Sharrock 1974:162). In June 1912, plans were underway to allot Rocky Boy's people a portion of the Blackfeet Reservation (Ewers 1974:128). The Blackfeet did not want Rocky Boy's band, nor did they give formal approval (Sharrock and Sharrock 1974:167).

More difficulties were encountered in preparing a correct roll of the band that numbered 386 at the time. Rocky Boy and several other older Indians were inclined to be exceedingly liberal in their decisions as to who were members of the band (Ewers 1974:128).

In 1911, the United States Army closed the Fort

Assiniboine Military Reservation and prepared to open the area to settlement. The fort's land reservation contained over 160,000 acres of grasslands and mountains with a number of streams originating in the Bear Paw Mountains. The area also had the advantage of some distance from any of Montana's population centers (Wessel 1975:39).

In 1912, a proposal was put forth to remove these Indians on to 92,000 acres of the abandoned Fort Assiniboine Military Reservation, which had been transferred to the Interior Department (Bryan 1985:72). The Secretary of the Interior permitted Rocky Boy's and Little Bear's people to live on the land that he expected they would obtain for their home (Ewers 1974:129).

Opposition to providing a home for Rocky Boy's band on Fort Assiniboine came from Havre, the nearest town. General hostility toward the Indians seems to have been the main source of opposition to establishing a reservation, not the lands. This hostility undoubtedly delayed the settling of Rocky Boy's band at Fort Assiniboine for several years.

In the spring of 1915, the citizens of Havre agreed not to oppose establishing an Indian reservation at Fort Assiniboine if the Federal Government limited the reservation to the southern and western part of the

military reserve (Wessel 1975:47). This meant the Chippewa and Cree would settle on land farthest from Havre in a mountainous area with few streams (Ibid. 1975:47).

Rocky Boy died April 18, 1916. On September 7, 1916, President Woodrow Wilson signed an Executive Order creating Rocky Boy's Reservation (Figure 1)(Bryan 1985:72). Approximately fifty-six thousand and forty acres of the abandoned Fort Assiniboine Military Reservation in Montana were set aside for "Rocky Boy's band of Chippewas and such other homeless Indians in the State of Montana as the Secretary of the Interior may see fit to locate thereon (Ewers 1974:130; U.S. Dept. of Interior 1978:88)(Figure 1)."

Over 650 people made claim to membership in Rocky Boy's Band in 1917. The Secretary of the Interior established a final list of 451 Indians "declared to be entitled to membership in Rocky Boy's band and to the benefits of the reservation (Ewers 1974:131; Gray 1942:174)." The reason for the elimination of these names is unclear. The omission of so many Native people from the enrollment list created the base for a large floating landless Indian population in Montana that plagued the Indian Office over the next years (Wessel 1975:77). Rocky Boy's mixed Chippewa-Cree bands got their homeland, but

Little Shell's Chippewa band from Turtle Mountain continued to seek a home.

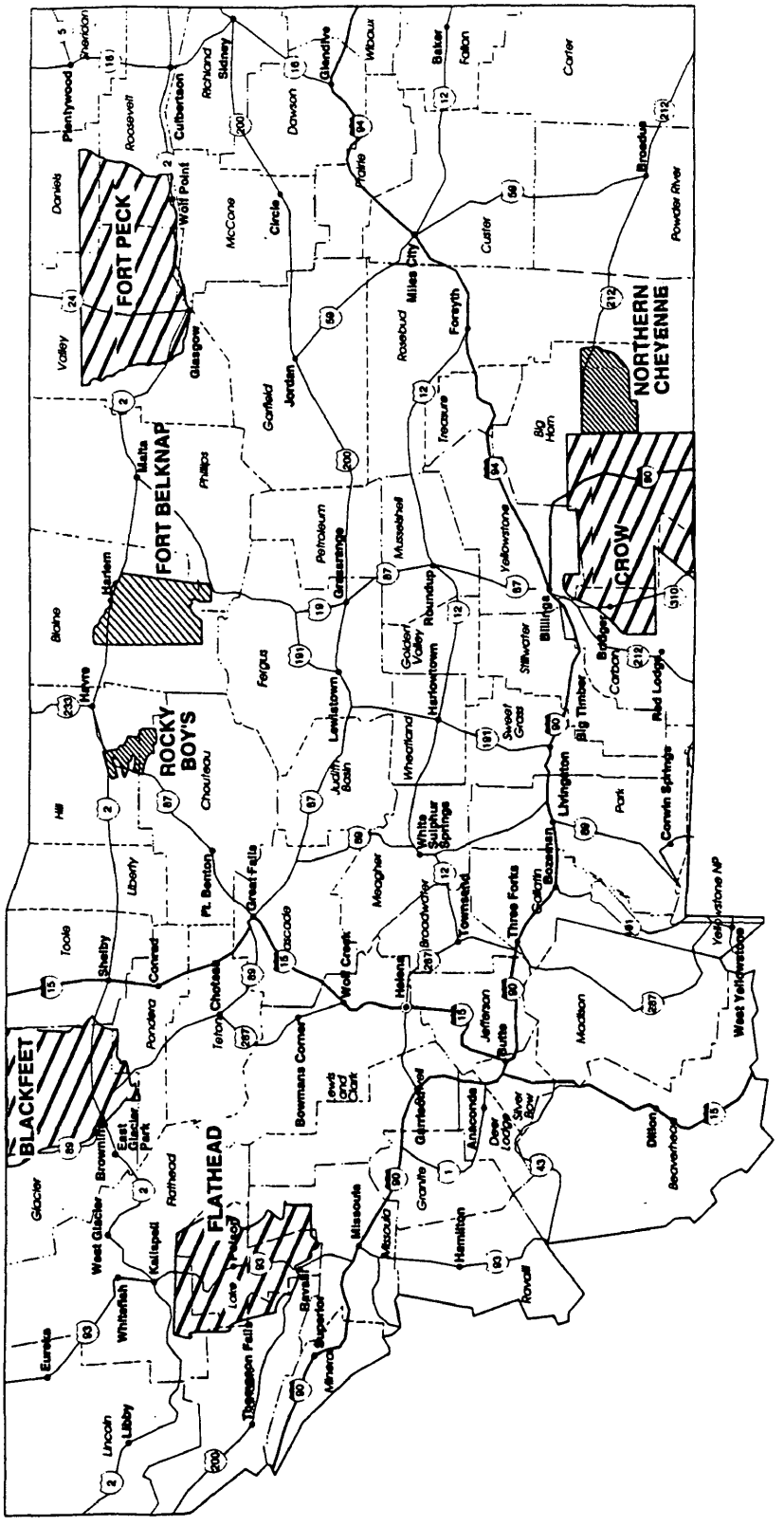


Figure 1. Location of Rocky Boy's Reservation in Montana. In *American Indian Reservations and Trust Areas* ed. by Veronica Velarde Tiller (U.S. Department of Commerce 1996).

CHAPTER 3

MATERIALS AND METHODS

SOURCES OF DATA

An Act of Congress in 1884 required agents to compile and submit annual census data for the tribes under their jurisdiction (Campbell 1987:20). The first Chippewa-Cree census was conducted on the reservation in July 1917, and annually thereafter. For this study, censuses at four year intervals will be analyzed between 1917-1937.

Primary data for this analysis were drawn from Indian Census Rolls (The National Archives, Record Group 75,) and Superintendents' Annual Narrative and Statistical Reports From Field Jurisdictions of the Bureau of Indian Affairs (1918-1932, 1934). The data were used to construct a demographic profile of the Chippewa-Cree at Rocky Boy's Reservation 1917-1937. The rolls contained the following information: (1) present census roll number, (2) last census roll number, (3) name of individual, (4) relationship (husband, wife, widow, son, daughter, grandson, granddaughter, grandmother, grandfather), (5)

sex, (6) age, (7) date of birth, and in later censuses: (8) tribe, (9) degree of blood, (10) marital condition, (11) enrollment information.

Standard demographic practice is to analyze population censuses every five or ten years. This study deviates from standard demographic methods and analyzes the population censuses every four years in order to examine an additional year within the study period. This will provide a closer, more detailed examination of the population as it changes through the study period.

The enumeration of the Chippewa-Cree varied throughout this study. The 1917, 1921, 1925 and 1929 censuses were conducted on or about June 30th or July 1st. The 1933 census was conducted on April 1st and the 1937 census on January 1st. Each census year examined in this study was analyzed for an entire calendar year regardless of when the enumeration was conducted. This provided the consistency necessary to evaluate the data and assess the changes in the population from one census year to another.

POPULATION STRUCTURE

Population structures provide graphical representation of the age-sex composition of a population for each census

year. The basic form of the structure consists of rectangles, whose measured length on the horizontal axis is equal to the percentage of males and females for each five-year age cohort in the population.

Demographers group data into five-year age cohorts rather than using single year group because census data reveals systematic tendencies on the part of the population to report certain preferred ages, such as ages ending in zero or five (Coale and Zelnik 1963:6). The age of an individual in a census is commonly defined in terms of the age of the person at his or her last birthday. The tendency of enumerators or respondents to report certain preferred ages is called age heaping (Shryock et.al. 1973:201). The grouping of ages into five-year age cohorts functions to account for inconsistent age registration (Campbell and Swan 1989:66).

Pressat notes that the number of years between censuses must correspond to the number of years in the age groups under consideration in order to compare age-sex structures (Pressat 1978:27). In this study, the period between two population censuses (four years) is a little less than the composition of the age cohorts (five years). Pressat (1978:29) states that a slight time displacement, such as in this study, does not prevent capable comparisons

between the 1917 data for a certain age cohort, for example, and the 1921 data for an age cohort four years older.

The age cohorts are located on the vertical axis with the youngest age at the bottom to the oldest age at the top. The horizontal axis is reserved for the percentage of males on the left and the females on the right (Pressat 1972:263-264). The percentage of each sex at each age cohort is calculated on the basis of the grand total of the population.

The age cohorts are shown in percentages to show the differences or changes in proportional size in each age-sex group within the population (Shryock et.al. 1973:238). An open-ended category at 85+ years was used for the oldest age cohort because of the small number of people age 85 or older. If data available for the oldest groups were presented in the standard interval, until the end of the life span, the upper end of the pyramid would have an extremely elongated needle shape which would convey very little information (Shryock et.al. 1973:237). This may still be seen even with the open-ended age cohort.

A population's vital rates can be estimated from changes in its age-sex structure (Coale 1957:84). The length of the rectangle representing each five-year age

cohorts depends on three factors: (1) the total at birth of the group, (2) the amount of reduction by mortality, and (3) the amount of migration (Pressat 1972:272). These population structures, shown by a census, give a static picture of the consequences at a particular time of past fertility, mortality and migration.

For example, high fertility during one period will produce, a generation later, a comparatively large number of women of childbearing age, and consequently a comparatively large number of births. Or mortality caused by war, will tend to deplete the numbers of young adult males in a population and will thus be reflected some fifty years later as a relatively small number of elderly men (Newell 1988:31).

Fertility has a much more dramatic impact on the shape of an age distribution than either mortality or migration (Coale and Zelnik 1963:74; Newell 1988:32). A decline in fertility affects the structure by narrowing its base as the number of births fall. Over the years it will work its way through the community to affect the older ages. High infant mortality tends to produce similar results by affecting first the youngest ages and only gradually working through to the whole age range (Ibid. 1988:31).

Mortality, on the other hand, is not concentrated in one age group but is distributed unevenly over all age cohorts (Newell 1988:32). However, high mortality due to famines, epidemics, and wars can have a significant effect on a population that will noticeably impact the age structure for years.

Migration tends to be concentrated among young adults and a significant migration event from an area will result in bottom heavy structures, or conversely, top heavy structures in areas to where people migrated. Thus the numbers of births, deaths and migration events occurring in a population is both determined by and a powerful determinant of the age and sex composition of a population (Newell 1988:31).

POPULATION CHANGE

As a result of changing patterns of fertility, mortality, and migration, populations change in size and composition over time. The rate at which a population is changing affects not only its size and numerical increase, but also its composition (Bogue 1969:3). Demographers strive to find out what changes occurred in a population and why those changes occurred.

Population, in this anaylsis, refers to the total number of Chippewa-Cree tabulated at the end of each given census year. Change is the growth or decline of the total population. It is measured by the difference between population sizes at different dates (Shryock et.al. 1973:372). From 1917-1937, the course of population change over four-year periods was described.

Change can be expressed as both absolute values and percentages. The absolute amount of change is calculated from the actual numbers in the population. That figure is obtained by subtracting the population at the earlier date from that at the later date (Shryock et.al. 1973:372).

$$\text{Abs. Change} = \text{Total Pop.}^{1921} - \text{Total Pop.}^{1917}$$

The percent of change is obtained by dividing absolute change by the population at the earlier date (Shryock et.al. 1973:372).

$$\text{Percent Change} = \frac{\text{Absolute Change}^{1921-1917}}{\text{Total Pop.}^{1917}}$$

Rates of population change were calculated for the periods of 1917-1921, 1921-1925, 1925-1929, 1929-1933, and 1933-1937. All calculations were done using the absolute population number for the year, as it was not possible to derive mid-year population numbers from the available census data.

DEMOGRAPHIC RATES

Crude rates were calculated to provide a measure of the demographic events in the Chippewa-Cree population during specific time periods. Although crude rates cannot account for variations in age or sex, they do permit a yearly comparison of the population.

The figures on the number of births and deaths from the census rolls and Superintendent's Annual Narrative and Statistical Reports are somewhat questionable. The number of births and deaths represent only reported cases, and cannot be taken as being wholly accurate. Many vital events doubtlessly occurred distant from the agency and were not recorded. It would be hard for researchers to identify all births and deaths that occurred in a given year and to report them. The calculated rates should therefore be taken as a measure of the proportion of births and deaths from one year to another, rather than the actual magnitude of those occurrences.

FERTILITY

Fertility refers to the number of births that occur to an individual or in a population (Shryock et.al. 1973:7).

It is the actual reproduction and not the capacity to reproduce (fecundity).

Crude Birth Rate

The Crude Birth Rate (CBR) is the most basic rate. It is also the most easily obtained measure of fertility used. It is calculated as the number of babies born in a census year divided by the total population at the end of the census year. That is:

$$CBR = \frac{\text{Number of births}}{\text{Total population}} \times 1000$$

The CBR is expressed as the number of births per 1,000 population (McFalls 1991:7). The number of births in a census year was tabulated from an actual counting (within the census rolls for the selected census year) of each child that was less than one year old and still alive at the time the census was taken. Additionally, births recorded in other census years pertaining to the selected census year were added to that tabulation. The addition of these births provides a more realistic picture of the fertility pattern in each census year. The number of reported births in the statistical reports were not taken into consideration other than to make comparisons as to the accuracy of the statistical reports.

The Crude Birth Rate is considered as a crude measure of a population's fertility. The rate does not take into account the age and sex structure of the population (De Jong 1972:34; Newman and Matzke 1984:81).

General Fertility Rate

A more specific birth rate is the General Fertility Rate (GFR). The GFR is defined as the number of births that occur within the census year per 1000 women of childbearing age, restricts the denominator to those actually 'exposed' to the risk of childbearing (De Jong 1972:34).

$$GFR = \frac{\text{Number of Births}}{\text{\# Women Age 15 to 49}} \times 1000$$

The total number of births, regardless of the age of the mother, is employed in the numerator and the female population 15 to 49 years of age is employed in the denominator (Shryock et.al. 1973:472). The 15 to 49 age group was used as the denominator, because if the entire population was used, the denominator would be weighted down by the whole population (Pressat 1972:358).

Child-to-Woman Ratio

Another useful estimator of the general fertility rate from census data is the Child-to-Woman Ratio (CWR). CWR is calculated as the number of children less than five years

of age divided by the number of women of childbearing ages, usually 15 to 49 (Shryock et.al. 1973:500).

$$CWR = \frac{\#\ \text{Children} < 5\ \text{years old}}{\#\ \text{Women Ages 15 to 49}} \times 1000$$

The CWR is a measure of effective fertility since it takes into account child mortality during the first five years of life and there is less under-enumeration of children under five years old than of children under one year of age (Shryock et.al. 1973:501). Although some mothers are left out, they have contributed so few of the children under five that the inclusion of women outside of 15 to 49 age range would include mostly women who were "not at risk" for pregnancy. Children under five may have been borne up to five years prior to the census date when the women were up to five years younger (Shryock et.al. 1973:500).

The Child-to-Woman Ratio is directly affected by the underenumeration of young children. Mortality also affects CWR by effecting both women of childbearing ages and children under the age of five who are survivors of births in the preceding five years. Since the survival rate is higher for women than children, the ratios always understate recent fertility. The great advantages of the Child-to-Woman Ratio is that it does not require a special question in the census (Shryock et.al. 1973:501) and is a

valuable estimator of general fertility rates when vital events data are absent or unreliable (Campbell and Swan 1989:61).

Age-Specific Birth Rate

A more detailed analysis of fertility patterns by age is possible with the Age-Specific Birth Rate (ASBR), which is defined as the number of births to women of a given age group per 1,000 women in that age group (De Jong 1972:35).

$$\text{ASBR} = \frac{\text{\# births to women in age cohort}}{\text{\# women in age cohort}} \times 1000$$

The Age-Specific Birth Rate is important because the rate of childbearing is not uniform throughout all ages, and allows for precise determination of where reproduction is occurring in a population (Newman and Matzke 1984:83). The ASBR provides data for the calculation of the Total Fertility Rate (TFR), one of the most sensitive cross-sectional measures of fertility (De Jong 1972:35).

Total Fertility Rate

The Total Fertility Rate is an estimate of the number of children, which a group of 1,000 women would bear if they all went through their reproductive years exposed to Age-Specific Fertility Rates that were in effect at a particular time (De Jong 1972:35). The TFR is computed by summing the Age-Specific Fertility Rates for all age

cohorts and multiplying by five, the interval into which the age cohorts are grouped (McFalls 1991:5-6).

$$TFR = \sum_{ASBR\ (15-19)}^{ASBR\ (50-54)} X \quad 5$$

Although the TFR is a synthetic rate, it gives a synthetic measure to the average number of children in a family for a given population.

MORTALITY

Crude Death Rate

The Crude Death Rate is computed as the number of deaths in a census year divided by the total population at the end of the census year (Shryock et.al. 1973:7).

$$CDR = \frac{\text{Number of deaths}}{\text{Total population}} \times 1000$$

The Crude Death Rate measures the proportion of a population that died each year. The rate is strongly influenced by the age structure of the population (McFalls 1991:9-10; Pressat 1972:357).

The number of deaths in a census year were tabulated from an actual counting (within the census rolls for the selected census year) of each individual that was crossed off the census list and labeled as having died within the

census year. Additionally, deaths recorded in other census years pertaining to the selected census year were added to that tabulation. The number of reported deaths in the statistical reports were not taken into consideration other than to make comparisons as to the accuracy of the statistical reports.

It is important to note that I only used those deaths labeled with a month and year for calculation of the crude death rate. This enabled the analysis to be consistent throughout the entire study period. It also eliminated mistakes or inaccurate information on behalf of the enumerator. There were several instances where a name had been crossed off and labeled "Died" but no date was attached. Utilization of this particular data would have been irrelevant, as no one knows when the person had died. However, one can recover this data by looking at the previous year's census in which that person appears, especially since it is known when each census was done.

Yet, the quality of the mortality statistics is poor within the censuses. In the 1917, 1933, and 1937 census years, no deaths were recorded at all within the census year. This is highly improbable.

Computing the Age-Specific Death Rates was possible, but statistically not useful because of the small numbers

of deaths. Instead, a simple ratio was used to establish what ages were dying within the population compared to the total deaths. For example, in 1921, five out of the eight total deaths were children age five or younger. This trend shows that out of all the deaths, 62.5 percent were young children. These ratios provide rough sketches of where mortality is occurring in the population and are useful when more specific data is unavailable. A comparison of the number of deaths by sex was also examined.

MIGRATION

Migration is the movement of persons from one geographical area to another. Migration differs from mortality and fertility in that it is neither inevitable like death, nor a prerequisite for the survival of a species (Wrong 1977:93). It is a human activity.

Migration is, however, an important component of population change. Population change in an area is determined partly by the level of natural increase, the difference between births and deaths, and partly by the level of net migration, the difference between the number of individuals moving in and moving out (Newell 1988:82). Migrants change the prevailing age-sex composition of the

population to the extent that their age-sex composition plus their natural increase differs from that of the general population (Shryock et.al. 1976:141).

Generally, in countries where fertility is much higher than mortality, natural increase is much more important than net migration as a determinant of population change. Net migration plays a more important role in countries where both mortality and fertility are at very low levels, such as developed countries (Newell 1988:82).

In this study, only fertility and mortality were considered as components of population change. The data do not allow for the utilization of migration. The population census is not useful as a source of migration data (Wunsch and Termote 1978:200). There is no specific question on migration in the census questionnaire. Only rough estimates can be made to determine if migration occurred.

One such method is the Birthplace Question. This method looks at where an individual was born and compares it to where the individual was enumerated to determine if the person migrated (Newell 1988:90). This is not a satisfactory method in that most of the Chippewa-Cree were not born on Rocky Boy's Reservation.

Another method, the Vital Statistics Method, subtracts out the natural increase from the difference in population

growth between two time periods to estimate net migration (Wunsch and Termote 1978:209). Any error in enumeration, i.e. total population, births or deaths, will be reflected in this estimate. Additionally, any one migrating to Rocky Boy's Reservation would typically be recorded in the Superintendent's Annual Narrative and Statistical Reports as being added "to the rolls" in order to receive rations and other resources.

SEX RATIO

The Sex Ratio is expressed as the number of males per 100 females.

$$\text{Sex Ratio} = \frac{\text{\# of males}}{\text{\# of females}} \times 100$$

A sex ratio above 100 denotes an excess of males and a sex ratio below 100 denotes an excess of females (Shryock et.al. 1973:191). At birth, the sex ratio is slightly over 100, there being more males born than females. It generally decreases slowly following birth, as females tend to have lower death rates and live longer than males (Thornton 1987:173).

AGE RATIO

Age is the most important variable in the study of mortality and fertility (Shryock et.al. 1973:201). The American Indian population has been and is far younger than non-Indian populations (Thornton 1987:171). An age ratio is computed as the number of individuals under the age of 20 divided by the total population multiplied by 100.

$$\text{Age Ratio} = \frac{\text{\# of people < age 20}}{\text{Total population}} \times 100$$

The Indian population is a young population. Half of the Indian [populations] are less than 20 years of age in contrast to the [non-Indian] population where only one-third of the people are under twenty (Hadley 1957:29).

DEGREE OF INDIAN BLOOD

Biological migration is the migration of non-Indian genes into the American Indian population (Thornton 1987:174). In the 1929, 1933, and 1937 censuses, degree of blood was an added category on the census rolls.

Degree of blood is a measurement of blood status of an individual of mixed parentage. The physiological fact of mixed heritage meant little in earlier time, but U.S.

Indian policy complicated social relationships by fostering economic competition and factionalism along blood lines by establishing differential policies based on blood quotas (Meyer 1982:58). Individuals had to verify descent from an Indian tribe (i.e. tribal blood) for membership and enrollment purposes. Once an individual was enrolled on the reservation, they were allowed to receive aid from the United States Government.

Traditionally, degree of blood is measured as a fraction of a whole. With a multitude of fractional possibilities, it was simpler to convert fractions into percentages. Percentages were computed on different degrees of blood to examine the overall picture of biological mixing of the Chippewa-Cree with non-Indian populations.

The data did not allow for calculations of Indian blood by tribe. The degree of intermixing between the Chippewa, Cree and other Montana tribes prior to the reservation period resulted in numerous combinations. Most of the individuals on the Rocky Boy Reservation are of Chippewa and/or Cree descent.

One hundred percent full blood are individuals who are 100 percent descendants of American Indians no matter what tribe and/or tribes they originate from. Ancestrally, one

would have to go back further than one's grandparents to find someone who was non-Native.

Seventy-five to ninety-nine percent mixed blood are individuals who at least one grandparent or less would have had to been non-Native for these individuals to be less than 100 percent Native American.

Fifty to seventy-four percent mixed blood are individuals who at least one parent or less would have had to been non-Native for these individuals to be less than 75 percent Native American.

Twenty-five to forty-nine percent mixed blood are individuals who at least one grandparent or more was Native American for these individuals to be greater than 25 percent Native American.

There were no individuals on the Rocky Boy's Reservation that were enumerated at less than 25 percent Native American. Several individuals on the reservation were married to "Not-Enrolled" individuals. These "Not-Enrolled" individuals were not counted in the total population nor was any data provided for them on the census rolls.

For the census years 1921 and 1925, the statistical reports recorded the number of full bloods and mixed bloods. The mixed bloods were not broken down further.

They were just lumped together as "mixed bloods." These recorded numbers provide early estimates on the reservation of the degree of blood of the Chippewa-Cree. No degree of blood was recorded for the census year 1917.

Demographically, the degree of blood of individuals in the population can provide insight to how biological diversity influences fertility and mortality. In this study, degree of blood is only used to highlight percentages of population diversity within the Rocky Boy's Reservation.

CHAPTER 4

RESULTS

DEMOGRAPHY OF THE CHIPPEWA-CREE AT ROCKY BOY'S RESERVATION: 1917-1937

POPULATION STRUCTURES

Figures 2 through 7 present the age-sex structures of the Chippewa-Cree in five year cohorts for the six census dates. In the 1917 age-sex structure (Figure 2), the initial Chippewa-Cree population which settled on the reservation reveals a rather irregular age-sex structure. This erratic structure is typical of a population where fertility is high, "but where simple stochastic fluctuations in births, deaths and migrations would produce eccentricities" (Campbell 1987:161). The 35-39 age cohort rectangle shows an excessive indentation on both sides. Usually this is indicative of excessive emigration of persons in this age cohort in recent years (Shryock et.al. 1976:141).

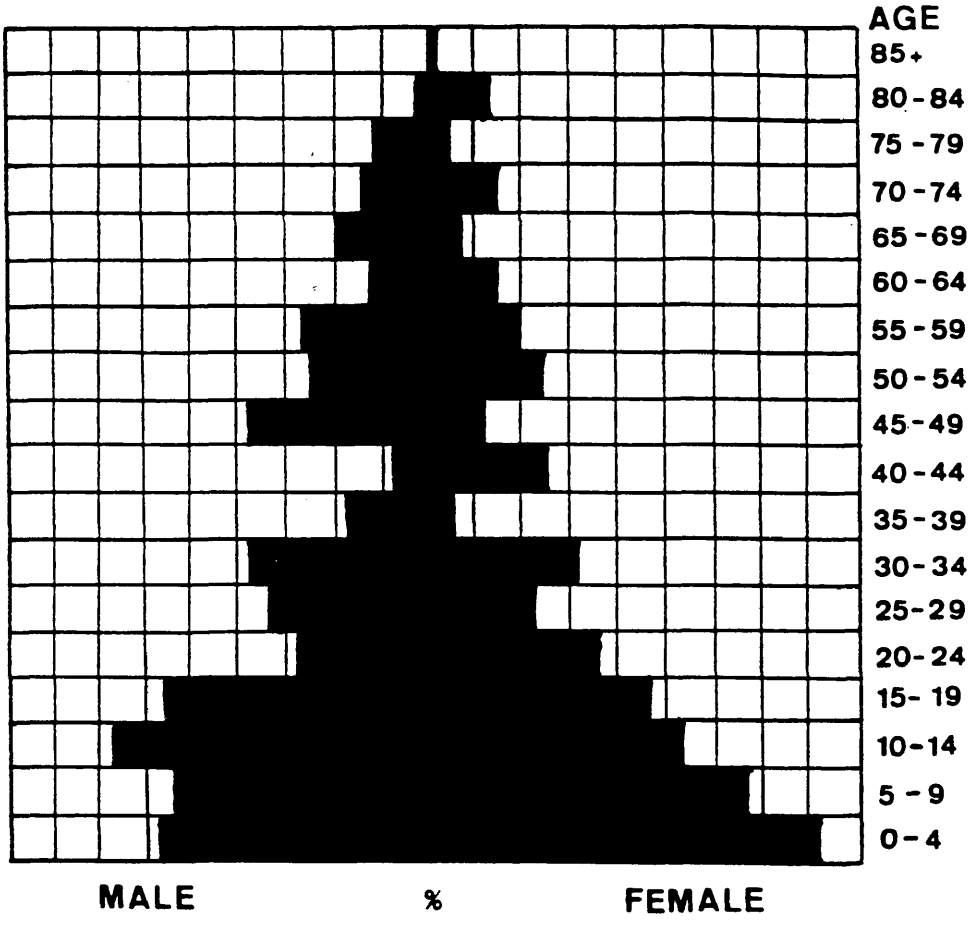


Figure 2. Chippewa-Cree Age-Sex Structure, 1917

The Chippewa-Cree population structure shows a young population with most people falling into the age groups below the age of 34. The step-structure of 0-4, 5-9, 10-14, 15-19, 20-24, 25-29 rectangles in the females suggest a higher rate of mortality than in males for those age groups.

In 1921 the irregular age-sex structure persists and the sides of the pyramid are even more staggered and pronounced (Figure 3). The broad base of the pyramid in the 0-4 age cohort represents a moderately high fertility. The 5-9 age cohort displays a noticeable reduction from the 1917 census. The Narrative Report of 1921 stated that "several of the young children died of pneumonia" (Narrative Report 1921). The 40-44 age cohort still exhibits extreme indication.

The 1925 population indicates a rise in fertility with a wide base at the 0-4 age group in both males and females (Figure 4). The 0-4, 5-9, 10-14, 15-19 are short compared to it. The 5-9 age cohort exhibits an extreme marked reduction compared to the 1921 census. The step-structure for both males and females of 0-4, 5-9, and 10-14 suggests a higher rate of mortality among these age groups than in other age groups.

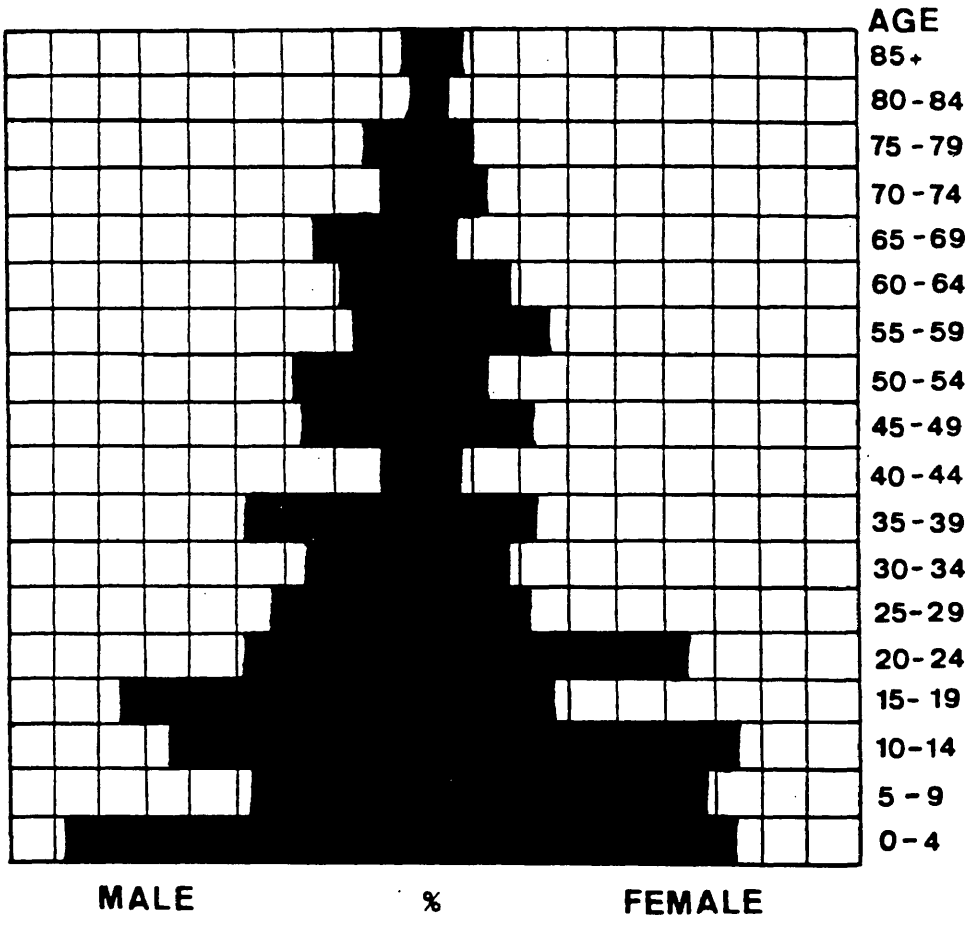


Figure 3. Chippewa-Cree Age-Sex Structure, 1921

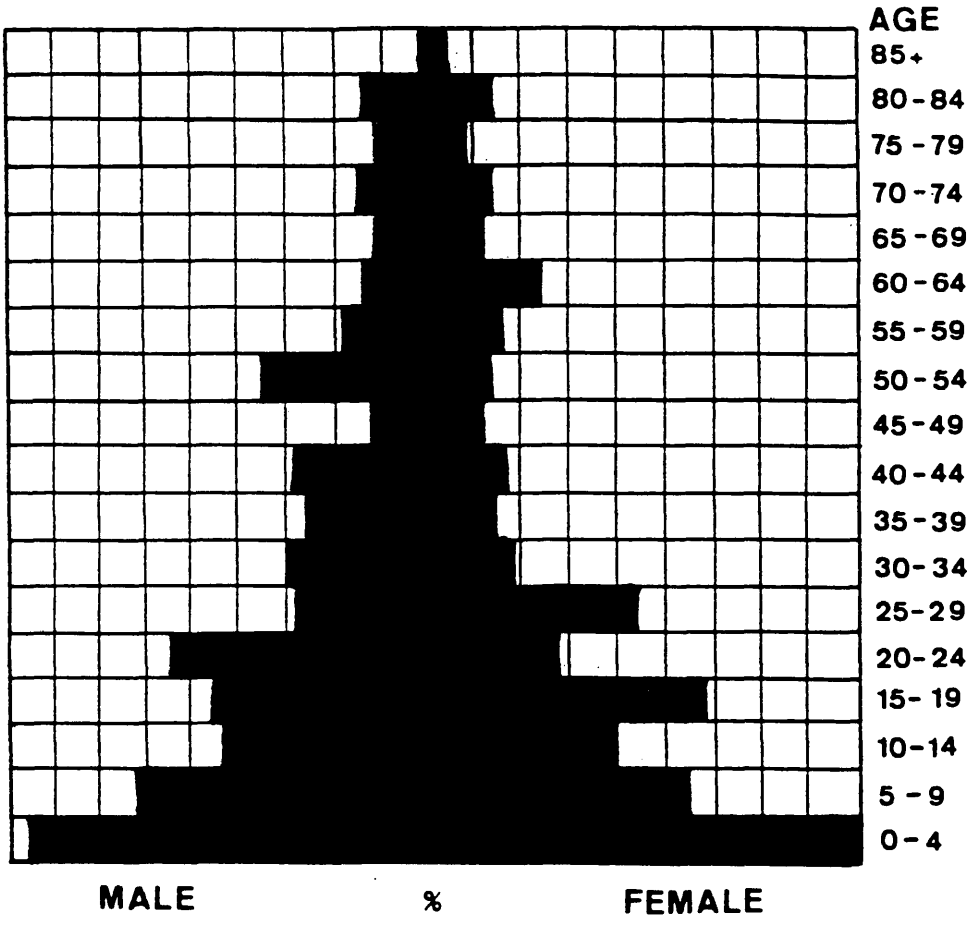


Figure 4. Chippewa-Cree Age-Sex Structure, 1925

In the three years prior to the 1925 census, it was reported in the narrative reports that "a number of young children died of pneumonia (Narrative Reports 1922, 1923, 1924). Additionally, 60% of the deaths recorded in 1925 were of children age five or younger.

From the 30-34 age group to the 80-84 age group, the ratio of people at each category roughly remains the same width with the biggest indentation at 45-49. The indentation at 45-49 follows the group of individuals who started out in 1917 at the 35-39 age group. The 1925 population structure shows a higher proportion of older ages compared to 1917 and 1921. This indicates that mortality or emigration had not affected these age cohorts drastically.

1929's population is another irregular age-sex structure (Figure 5). There is a severe reduction in females at the 15-19 age group and a marked restriction in males at the 0-4 age group. Wessel reported from his analysis of the 1928 census data that the death rate was 3 to 4 percent of the population and the children under the age of five accounted for nearly two-thirds of the death rate (Wessel 1975:126). At the top of the structure males

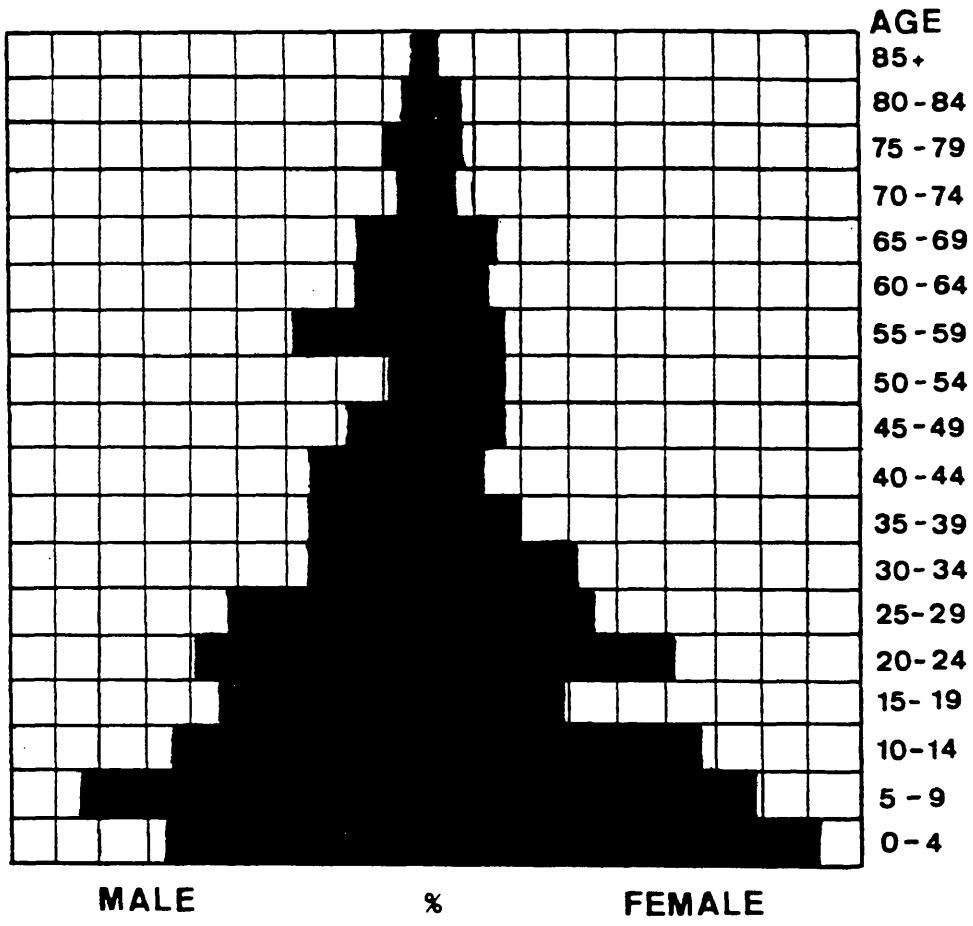


Figure 5. Chippewa-Cree Age-Sex Structure, 1929

slightly outnumber females for the first time at these age categories in this analysis.

The shape of the 1933 structure (Figure 6) shows a fairly young population. It has a very broad base and the age groups 5-9 and 10-14 are large compared to the rest of the structure. This indicates a rise in fertility. The age groups from 15-19 to 45-49 remain fairly regular with no drastic increases on indentations with the exception of an increase of males at 25-29 years of age. The population declines rapidly at 50-54 and the proportion of the population older than 50 is relatively smaller than in 1929.

The 1937 population structure shows a constricted base indicating either a decline in fertility or a significant rise in mortality in the early age cohorts (Figure 7). In 1936 one of the worst droughts in history struck the northern plains, that some labeled "hell moved west" (Wessel 1975:156). The structure shows a young population with most people falling into the 0-4, 5-9, 10-14, and 15-19 age groups. Hillery and Essene state that this population structure is typical of underdeveloped countries where there is "a greater proportion of children and

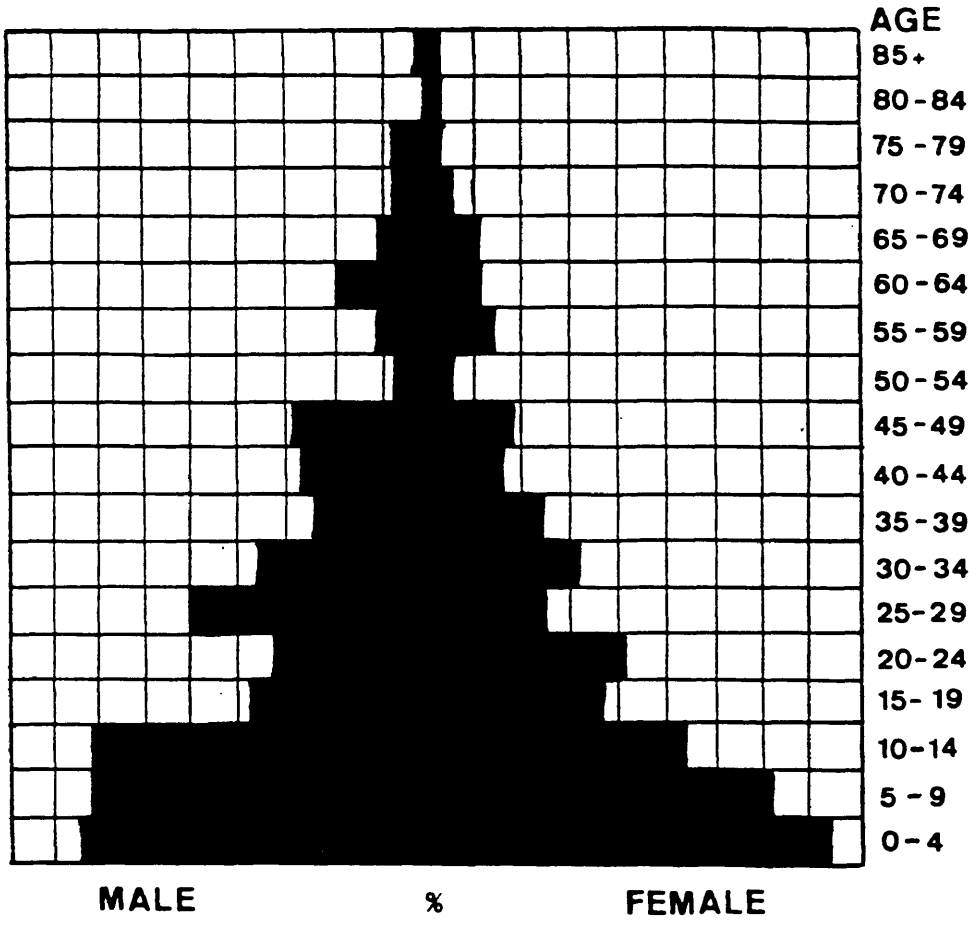


Figure 6. Chippewa-Cree Age-Sex Structure, 1933

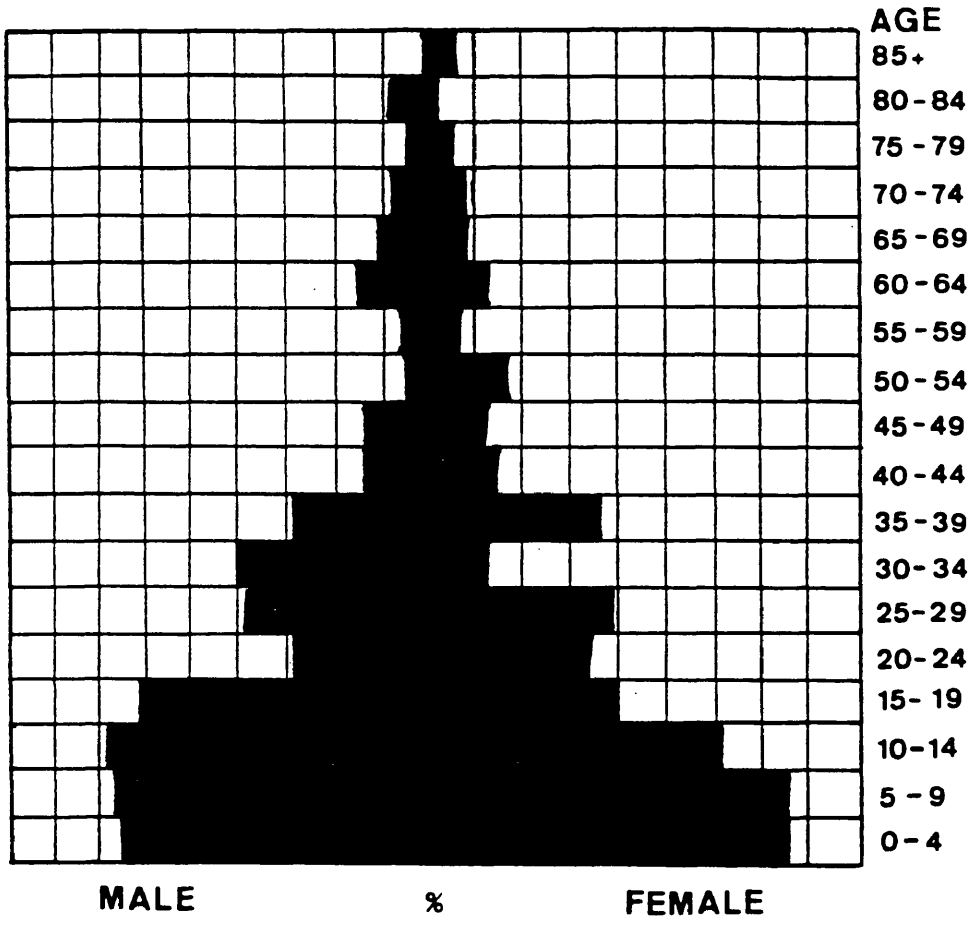


Figure 7. Chippewa-Cree Age-Sex Structure, 1937

substantially fewer representatives of each succeeding age group" (Hillery and Essene 1963:302).

POPULATION CHANGE

The degree of population change for the Chippewa-Cree, from 1917-1937, is illustrated in Figure 8. The Chippewa-Cree exhibit a steady pattern of population growth. The absolute and percent rates of change are provided in Table 1. Rocky Boy's Reservation, as a whole, increased by 59.33 percent in the two decades between 1917 and 1937. The highest growth was from 1929 to 1933 when the population grew by 23.39 percent. This increase of growth was the result of the Indian Office adding two individuals to the census rolls in 1930 and forty individuals in 1931 (Statistical Reports 1930, 1931).

Rocky Boy's Reservation experienced a natural increase in its population from 1917-1937. The two main exceptions to this natural increase were the additions to the population mentioned above and a decrease in the population in 1928. Superintendent Shotwell showed a decrease of four individuals in the total population that year. Correspondence between Shotwell and the Indian Office did

Figure 8. Population Change on the Rocky Boy's Reservation, 1917-1937

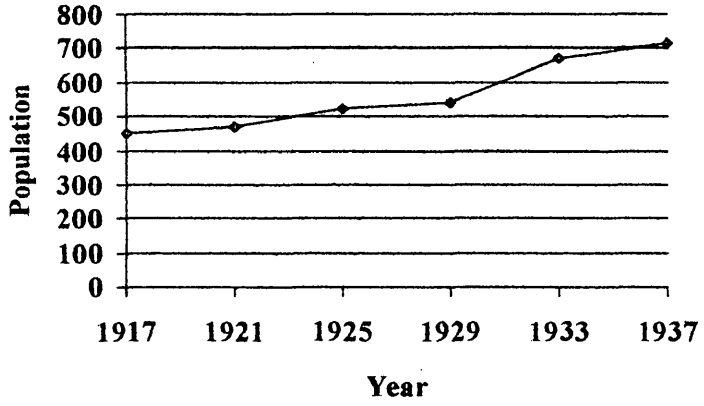


Table 1. Rates of Chippewa-Cree Population Change, 1917-1937

YEAR	POP. TOTAL	FEMALES	MALES	% CHNGE	ABS. CHNGE
1917	450	223	227		
1921	471	223	248	4.67	21
1925	522	247	275	10.83	51
1929	543	264	279	4.02	21
1933	670	315	355	23.39	127
1937	717	341	376	7.01	47

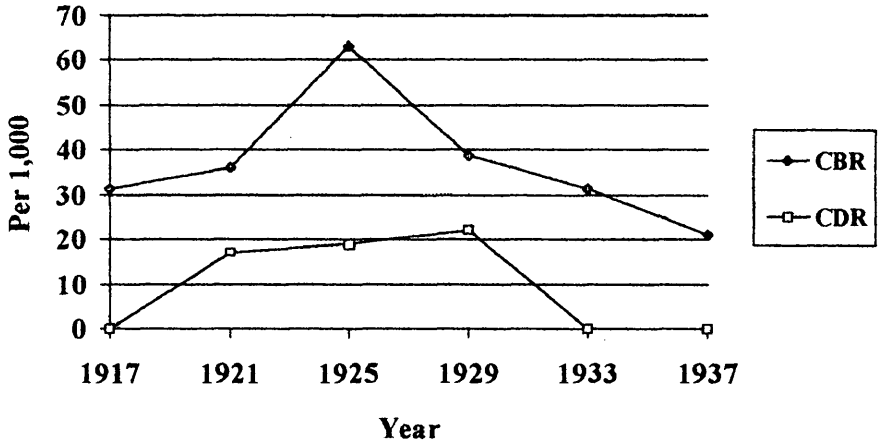
not show significant reason for the decline (Narrative and Statistical Reports 1928). Deviations and inconsistencies in reporting from census year to census year can, and mostly likely did, contribute to the statistical error.

FERTILITY

In Figure 9 and Table 2, the Crude Birth Rates (CBR) are shown and illustrated. When first settled on the reservation, the Chippewa-Cree experienced a slight rise in their birth rate from 1917 to 1921, and then nearly doubled their birth rate in 1925 with it drastically dropping off by 1937. The highest crude birth rate was in 1925 with 63.22 and the lowest was in 1937 with 20.92. On the average, the Chippewa-Cree experienced a birth rate of 36.9 births per 1,000 women.

A possible explanation for a high birth rate in 1925 is the high enumeration of these births in later censuses. Fifteen births were originally recorded in the 1925 census, while eighteen additional births in 1925 were recorded in later census years. The lowest birth rate in 1937 was probably a result of the severe drought that struck the

Figure 9. Crude Birth and Death Rates on Rocky Boy's Reservation, 1917-1937



Note: No deaths recorded in 1917, 1933, and 1937.
High enumeration of 1925 births in later censuses.

Table 2. Chippewa-Cree Crude Birth and Death Rates, 1917-1937

YEAR	CRUDE BIRTH RATE	CRUDE DEATH RATE
1917	31.11	0
1921	36.09	16.99
1925	63.22	19.16
1929	38.67	22.10
1933	31.34	0
1937	20.92	0

Note: No Deaths Recorded in Census Years 1917, 1933, and 1937

northern plains in 1936. The drought drastically reduced any progress the Chippewa-Cree had made in farming or stock raising in the prior years (Wessel 1975:157).

The number of births on the Rocky Boy's Reservation is shown in Table 3. From 1917 to 1925, a few more males were born than females. However, from 1929 to 1937, female births nearly doubled male births.

Child-Woman Ratios

The Child-Woman Ratio results are shown in Table 4. The child-woman ratio steadily rose from 1917 to 1925 where it reached its highest at 902 children per 1,000 women of childbearing ages. Again, this could be a result of the high enumeration of births in 1925. The ratio dropped to its lowest point in 1929 at 714. The average child-woman ratio on the Rocky Boy's Reservation from 1917-1937 was 788.7 children per 1,000 women of childbearing ages.

Age-Specific Birth Rates

The Age-Specific Birth Rates for the Chippewa-Cree from 1917 to 1937 are illustrated in Figures 10 to 15. The calculated results are shown in Table 5. The age-specific birth rates among the Chippewa-Cree showed a high fertility at the 20-24 age cohort for each census year. The age

Table 3. Births on the Rocky Boy's Reservation, 1917-1937

YEAR	BIRTHS	FEMALES	MALES
1917	14	7	7
1921	17	8	9
1925	33	15	18
1929	21	15	6
1933	21	13	8
1937	15	11	4

Table 4. Chippewa-Cree Child-to-Woman Ratio, 1917-1937

YEAR	CHILD-WMN RATIO
1917	759.04
1921	809.52
1925	901.96
1929	714.29
1933	803.03
1937	744.53

Table 5. Age-Specific Birth Rates for the Chippewa-Cree, 1917-1937

	1917	1921	1925	1929	1933	1937
15-19	45.45	153.84	161.29	62.5	40.0	34.48
20-24	294.12	307.69	666.67	250.00	214.29	200.00
25-29	200.00	100.00	347.83	263.16	235.29	142.86
30-34	285.71	222.22	400.00	235.29	285.71	0
35-39	0	0	250.00	300.00	235.29	153.85
40-44	83.33	750.00	111.11	0	0	90.91
45-49	200.00	0	0	0	0	0
50-54	0	0	142.86	111.11	0	0

cohorts of 25-29 and 30-34 also regularly showed higher fertility rates than other age cohorts.

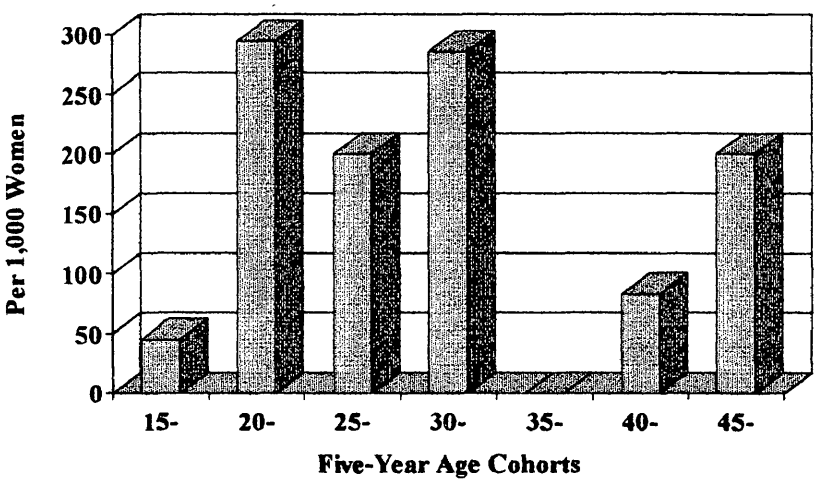
In 1917, the 20-24 and 30-34 age cohorts had the highest fertility at 294.12 and 285.71 children per 1,000 women in those age cohorts, respectively. The 25-29 and 45-49 age cohorts both showed 200 children per 1,000 women. No children were born to women age 35-39, as there were only three women in this age category.

In 1921, the 40-44 age cohort had 750 children per 1,000 women in that age cohort. Three out of the four women recorded in this age cohort had children. The 20-24 age cohort had 307.69 children per 1,000 women followed by the 30-34 age cohort at 222.22. Once again, no children were born to women in the age cohorts 35-39 or 45-49.

1925 showed remarkably high birth rates in most age cohorts. The 20-24 age cohort had 666.67 children per 1,000 women. Age cohorts 25-29 and 30-34 showed similar birth rates at 347.83 and 400 children per 1,000 women respectively.

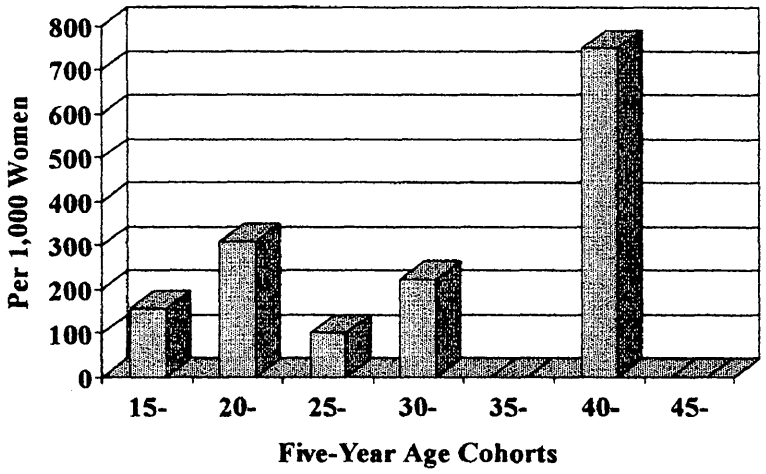
One woman out of seven women recorded in the age cohort of 50-54 had a child in 1925 to result in a 142.86 birth rate for this age cohort. Only in three census years

Figure 10. Age-Specific Birth Rates for Chippewa-Cree Women, 1917



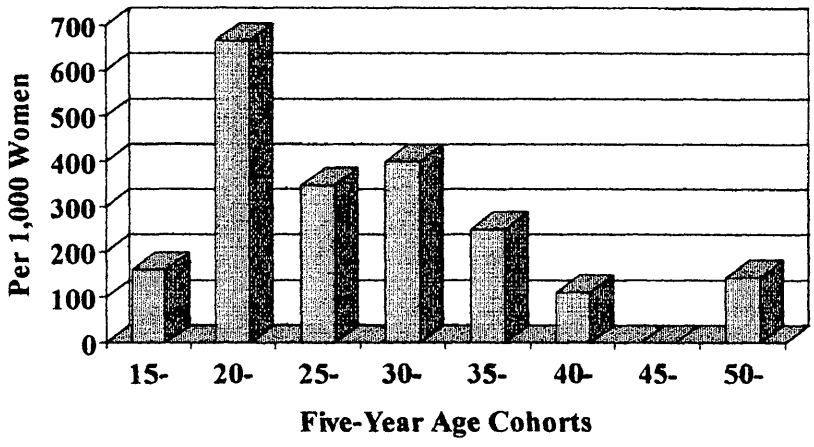
Note: Only three women were enumerated in the 35-39 age cohort. None of these women gave birth in the 1917 census year.

Figure 11. Age-Specific Birth Rates for Chippewa-Cree Women, 1921



Note: No women in the 35-39 and 45-49 age cohorts gave birth in the 1921 census year. Three out of four women gave birth in the 40-44 age cohort.

Figure 12. Age-Specific Birth Rates for Chippewa-Cree Women, 1925



Note: No women in the 45-49 age cohort gave birth in the 1925 census year. One woman in the 50-55 age cohort did give birth.

were women age 45 or older having children, 1917, 1925 and 1929.

In 1929, the birth rates from the 20-24, 25-29 and 30-34 age cohorts ranged from 235.29 to 263.16 children per 1,000 women. The highest rate in 1929 belonged to the 35-39 age cohort of 300 children per 1,000 women. Once again, a woman in the 50-54 age cohort had a child.

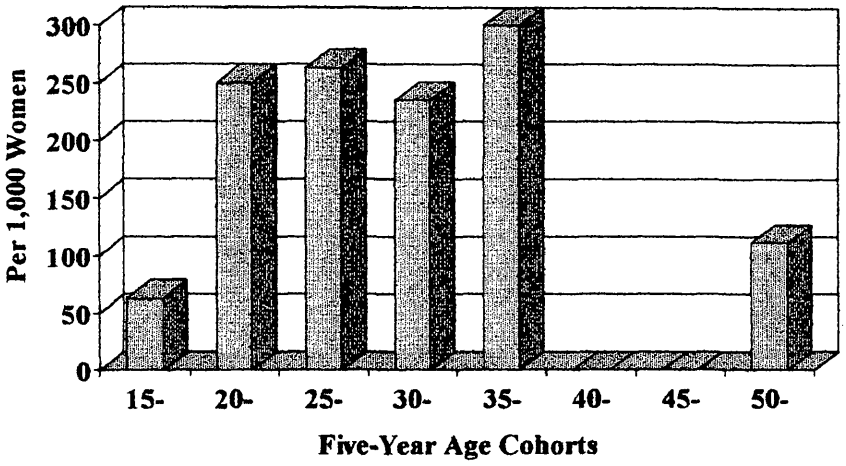
The highest birth rate in 1933 was 285.71 children per 1,000 women in the 30-34 age cohort. The age cohorts of 20-24, 25-29, and 35-59 centered their birth rates around 230.

The lowest birth rates for the entire two decades analyzed was 1937. The highest fertility rate was 200 for the 20-24 age cohort. The 25-29 and 35-39 age cohorts were next highest with 142.86 and 153.85 children per 1,000 women respectively.

Total Fertility Rates

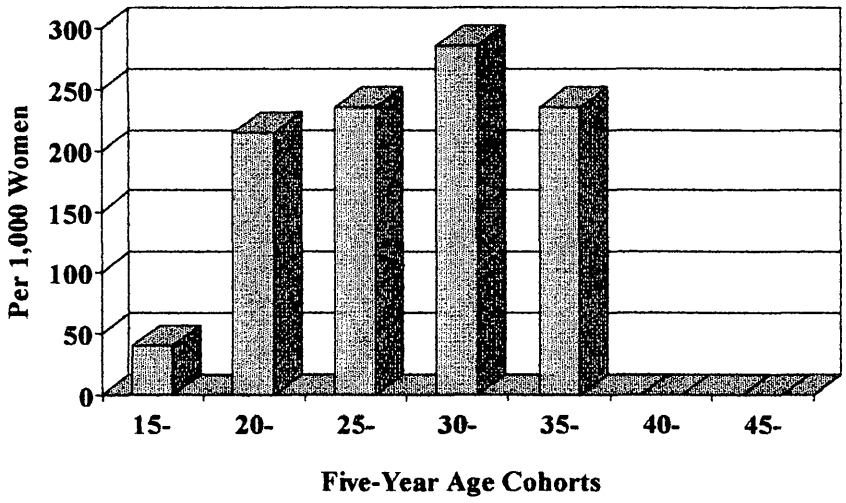
The Total Fertility Rates for the Chippewa-Cree were calculated from the Age-Specific Fertility Rates and the results are shown in Table 6. The Total Fertility Rates steadily increased from 1917 at 5.54 children per woman to maximum of 10.4 children per woman in 1925. The Total

Figure 13. Age-Specific Birth Rates for Chippewa-Cree Women, 1929



Note: No women in the 40-44 and 45-49 age cohorts gave birth in the 1929 census year. One woman in the 50-55 age cohort did give birth.

Figure 14. Age-Specific Birth Rates for Chippewa-Cree Women, 1933



Note: No women in the 40-44 and 45-49 age cohort gave birth in the 1933 census year.

Figure 15. Age-Specific Birth Rates for Chippewa-Cree Women, 1937

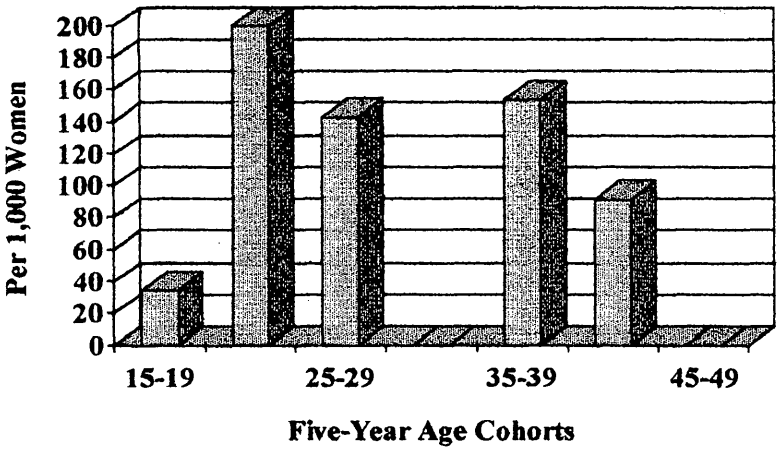


Table 6. Chippewa-Cree Total Fertility Rates, 1917-1937

YEAR	TOTAL FERTILITY RATE
1917	5.54
1921	7.67
1925	10.4
1929	6.10
1933	5.05
1937	3.11

Fertility Rates steadily declined from 6.10 children in 1929 to the lowest rate of 3.11 children per woman in 1937.

Findlay and Findlay state that total fertility rates are extremely high in most Third World countries compared with more developed countries. For example, Southeast Asia and Africa have total fertility rates of 5 and 7 respectively (Findlay and Findlay 1987:19).

MORTALITY

Crude Death Rates

Crude Death Rates for the Chippewa-Cree on the Rocky Boy's Reservation were illustrated along with the Crude Birth Rates in Figure 9 and Table 2. In 1917, 1933 and 1937 no deaths were recorded in these census years. Crude Deaths Rates for the Chippewa-Cree steadily rose from 1921 at 16.99 to 22.10 deaths per 1,000 people in 1929.

Wrong states that crude death rates between 12 to 14 is average for less developed nations and that crude death rates over 20 indicate especially poor health and living conditions (Wrong 1977:35). In 1925, Indian Service statistics show that for the Indian population in the state

of Montana, the Indian death rate was 20.4 (Brookings Institute 1971:200).

Table 7 shows the number of females and males that died on the Rocky Boy's Reservation from 1917-1937. Of the thirty deaths recorded in these two decades, fifteen were male and fifteen were female. Generally, in less developed areas, such as India and Asia, female mortality is higher than males probably due to worse malnutrition among young women and the risks of maternity (Newell 1988:30). This was seen on the Northern Cheyenne Reservation in Montana (Campbell 1987:155). Female mortality was higher than male mortality due to the relegation of women to the domestic sphere. Confinement to crowded, unsanitary living conditions and caring for the sick, increased female mortality (Ibid. 1987:155).

Table 7 also shows an age distribution of the deaths in each census year. Roughly 60 percent of all deaths in 1921, 1925 and 1929 were deaths of children age five or younger. Statistically this is twice as high as the Indian Service statistics for the Indian population in the state of Montana. Their statistics show that deaths under the age of three accounted for 29.3 percent of all Indian

Table 7. Deaths on the Rocky Boy's Reservation, 1917-1937

YEAR	DEATHS	FEMALE	MALE	< 5 YRS	OLDER AGE
1917	0	-	-	-	-
1921	8	3	5	5	2
1925	10	6	4	6	4
1929	12	6	6	7	5
1933	0	-	-	-	-
1937	0	-	-	-	-

deaths (Brookings Institute 1971:200). One must also realize that Rocky Boy's analysis computes two more years into this total. Reports that "a number of young children died of pneumonia" were stated in the narrative reports of 1922, 1923, 1924, and 1926 (Narrative Reports 1922, 1923, 1924, and 1926). The other 40 percent of the deaths on Rocky Boy's Reservation were to people age 39 or older, with one exception of a 16-year-old in 1921.

MORBIDITY

Morbidity is the rate of disease or proportion of diseased persons in a given locality (Webster's Dictionary 1970:925). The incompleteness and inaccuracy in reporting deaths, causes of death and the occurrence of health conditions make it impossible to determine accurately the extent to which any given disease takes its toll. The prevalence of tuberculosis and other diseases on Rocky Boy's Reservation were most likely underreported due to no permanent physician on staff.

Included in the Statistical Sections of the Indian Bureau Censuses is information pertaining to two main health problems that plagued the Indian Service during this

study period: tuberculosis and trachoma. An analysis of the number of deaths attributed to tuberculosis or other causes was not conducted in this study due to the lack of adequate and sufficient data. However, it is important to note the number of cases of these conditions mentioned in the 1921, 1925, 1929 and 1933 censuses and the significance of the health situation on Rocky Boy's Reservation.

Table 8 shows the number of reported cases of tuberculosis and trachoma as listed in the statistical reports of those census years. On average, tuberculosis was prevalent in 10 percent of Rocky Boy's population, with 1933 showing the highest reported cases. In 1931, the narrative report stated that approximately 50% of the population had tuberculosis.

Trachoma affected approximately 11% of the population, reaching a high of 24 percent of the population in 1929. Superintendent Keeley reported "considerable trachoma amongst the Indians of this reservation" in 1925 (Narrative Report 1925).

In 1925, 6.2 per 1000 of Montana's Indian population died from tuberculosis compared to the general population at 0.59 per 1000 (Brookings Institute 1971:200). Fort Belknap Reservation had the highest death rate from

Table 8. Cases of Tuberculosis and Trachoma on Rocky Boy's Reservation, 1917-1937

YEAR	TUBERCULOSIS	TRACHOMA
1917	0	0
1921	55	29
1925	18	42
1929	65	128
1933	90	40
1937	0	0

Note: No tuberculosis or trachoma cases recorded in 1917 and 1937

tuberculosis in 1925 with 15.0 (Brookings Institute 1971:202). A nurse from the State Board of Health visited Rocky Boy's Reservation in 1925 noting a number of cases of tuberculosis, but that the percentage was not nearly so large as the neighboring reservations she had visited (Narrative Report 1926).

In his narrative report in 1920, Superintendent Parker reported "several cases of tuberculosis amongst the children" (Narrative Report 1920). He further stated that there were no known cases of Trachoma at this time, "but a number of the children's eyes have been affected more or less by conjunctivitis" (Narrative Report 1920).

For both tuberculosis and trachoma, it is hypothesized that dietary deficiency could be a significant cause of each health condition in addition to the infectious and contagious theory (Brookings Institute 1971:193). Findlay and Findlay support this hypothesis by stating that a population's susceptibility to disease is due to nutritional deficiency (Findlay and Findlay 1987:16). Malnutrition is a significant factor in morbidity and mortality, especially among children and females of child-bearing age (Doyal 1979:97-99). Additionally, the lack of adequate health facilities and personnel to make timely

diagnoses only aided in the prevalence of tuberculosis and other health conditions.

During the winter months of 1920, an influenza epidemic swept through Rocky Boy's Reservation and Superintendent Parker reported around 152 cases amongst the children and adults. Astonishingly, only four deaths were reported as a result of influenza. The influenza epidemic was followed by 150 cases of the mumps, that mostly affected the older population (Narrative Report 1920).

In 1922, an epidemic of eczema occurred. Eczema is a disease of the skin characterized by inflammation, itching, and the formation of scales (Webster's Dictionary 1970:443). Superintendent Parker stated that the disease was "now under control and practically all of the cases have recovered" (Narrative Report 1922). "A number of cases of conjunctivitis" were reported as well as a few cases of trachoma (Narrative Report 1922).

An epidemic of smallpox near the reservation was reported in 1923 and nearly all of the Chippewa-Cree were vaccinated (Narrative Report 1923). Another reoccurrence of influenza in 1923 and 1924, affected the majority of the Chippewa-Cree but no deaths were reported. Several cases of tuberculosis were reported that attributed to "several

deaths" (Narrative Report 1923). In 1926, an epidemic of the measles hit the reservation but most of the cases were mild (Narrative Report 1926).

Morbidity data for the Chippewa-Cree in general reflect a seasonal pattern. The majority of the prevalence of disease occurred in the winter. Diseases such as measles, mumps, tuberculosis, and influenza broke out during the winter. During the summer, the disease pattern shifted to skin conditions such as eczema. Conditions of poverty on the reservation magnified the seasonal nature of morbidity among the Chippewa-Cree. Poor cramped housing conditions, the severity of the winters and malnutrition only served to increase the susceptibility and sustainment of disease.

SEX RATIOS

Table 9 shows the sex ratios for the Rocky Boy's Reservation from 1917 to 1937. In each census year, more males than females were in the population. The highest sex ratio was in 1933 when 112.7 males per 100 females was calculated. The 1921 and 1925 censuses had 111.2 and 111.3 males per 100 females, respectively, followed by 110.3

Table 9. Male-to-Female Sex Ratio of the Rocky Boy's Reservation, 1917-1937

YEAR	TOTAL POP	# FEMALES	# MALES	SEX RATIO
1917	450	223	227	101.8
1921	471	223	248	111.2
1925	522	247	275	111.3
1929	543	264	279	105.7
1933	670	315	355	112.7
1937	717	341	376	110.3

males in 1937. The lowest sex ratio was in 1917 when the reservation was first formed at 101.8 males per 100 females. Thornton states that for every decade until 1970, the sex ratio of American Indians was over 100 (Thornton 1987:174).

The high sex ratio among the Chippewa-Cree could be a result of higher female mortality. Although this was not shown in this research, the probability of higher female mortality in underdeveloped areas has been shown in Campbell's work (1987) on the Northern Cheyenne Reservation. Accurate enumeration by a permanent physician on the Rocky Boy's Reservation might have revealed these same results.

AGE RATIOS

Age ratios of the Chippewa-Cree population from 1917-1937 are shown in Table 10. An average of 48.5 percent of the population is under the age of twenty for the two decades analyzed on the Rocky Boy's Reservation. The highest percentage of the population under the age of twenty occurred in 1937 with 51.74 percent. The lowest percent of the population under twenty was in 1921 at 45.44

Table 10. Percentage of Population Under Age 20 on the Rocky Boy's Reservation, 1917-1937

YEAR	<20 YRS	TOTAL POP.	%
1917	219	450	48.67
1921	214	471	45.44
1925	249	522	47.70
1929	253	543	46.59
1933	336	670	50.15
1937	371	717	51.74

percent. All these figures represent a young population where close to half of the entire population is under the age of twenty. Hadley states that when half of the population is less than twenty years of age, it reflects a population with a high birth rate offset by a high death date in childhood (Hadley 1957:26).

DEGREE OF INDIAN BLOOD

Table 11 and Figures 16 through 20 represent the degree of blood among the Chippewa-Cree on the Rocky Boy's Reservation. From 1921 to 1937, the number of full blooded Chippewa-Cree declined 21.9 percent over the two decades from 1917 to 1937. More than 75 percent of the individuals listed on the census rolls for these years are greater than three-fourths Native American and none are lower than one-forth. Thornton states that in 1930, 46.3 percent of the American Indian population enumerated in the United States were full-blooded (Thornton 1987:175).

Table 11. Degree of Blood of the Chippewa-Cree on the Rocky Boy's Reservation, 1917-1937

	1917	1921	1925	1929	1933	1937
Full	-	268	269	252	267	256
Mixed	-	197	250	-	-	-
75-99% Full	-	-	-	200	250	288
50-74% Full	-	-	-	69	122	137
25-49% Full	-	-	-	22	31	36
0-24% Full	-	-	-	0	0	0

Note: No Degree of Blood Recorded in 1917 Census Year

Figure 16. Degree of Blood on the Rocky Boy's Reservation, 1921

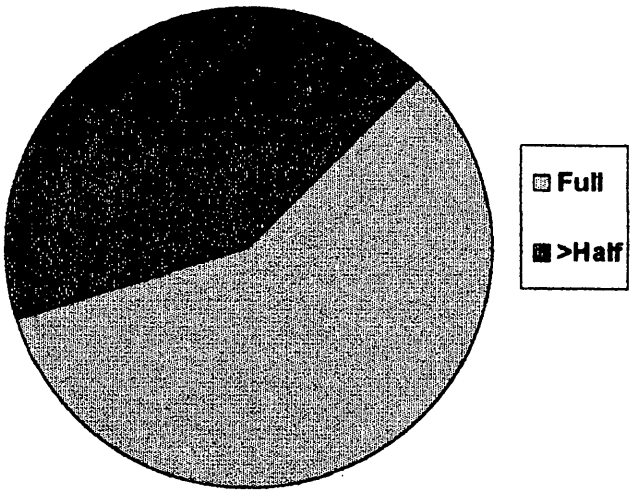


Figure 17. Degree of Blood on the Rocky Boy's Reservation, 1925

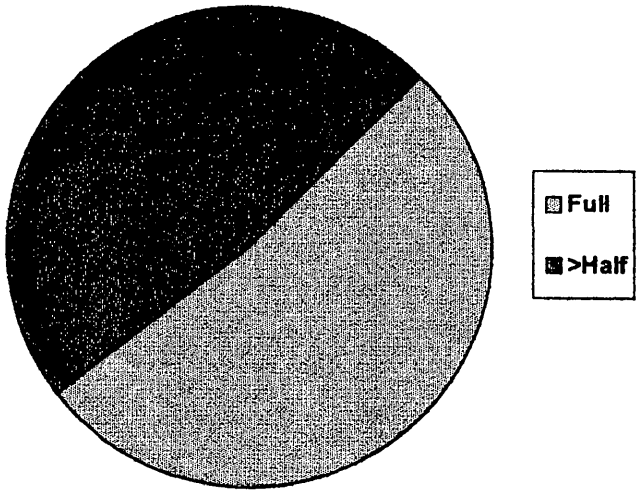


Figure 18. Degree of Blood on the Rocky Boy's Reservation, 1929

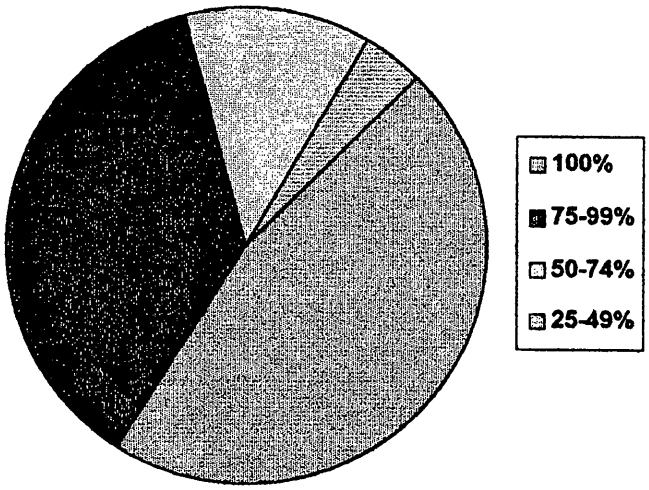


Figure 19. Degree of Blood on the Rocky Boy's Reservation, 1933

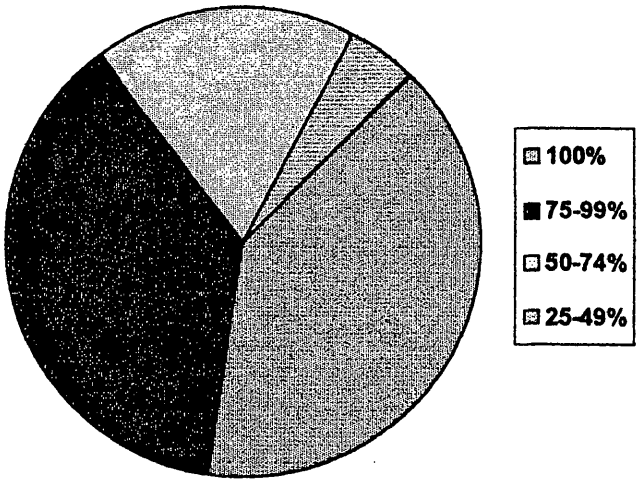
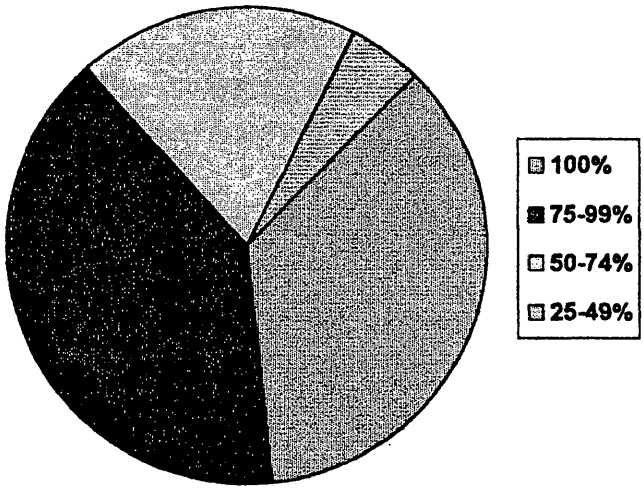


Figure 20. Degree of Blood on the Rocky Boy's Reservation, 1937



CHAPTER 5

DISCUSSION

Since 1887, the government leaned toward a policy of abandoning the reservation system while at the same time, was compelled to aid the Indians in achieving a self-supporting and independent status. Persistent pressure of influential citizens in Montana forced the hand of the government to establish a reservation during a time dedicated to ending reservations (Bryan 1985:72; Wessel 1975:56). The use of gratuity reimbursable funds to promote independence and the refusal to recognize tribal authority, placed the Chippewa-Cree in a greater state of dependence than they had previously experienced (Wessel 1975:57).

The Rocky Boy's Reservation is located in north central Montana south of the Canadian border. The reservation is situated in the Bear Paw Mountains, which ranges across the upper half of the reservation creating varied topography over that portion of land (United States Department of Interior 1978:90). Of the fifty-six thousand acres in the reservation, not more than 2,300 acres can be classified as agricultural land (Survey 1929:12520). The

average elevation of Rocky Boy's Reservation is nearly 5,000 feet. The climate is generally long and cold in the winter, with the summers being relatively short and hot.

CONDITIONS ON ROCKY BOY'S RESERVATION

In July 1929, the Subcommittee of the Committee on Indian Affairs in the United States Senate conducted a "Survey of Conditions of the Indians in the United States" at Rocky Boy's Reservation. Several tribal members, along with reservation superintendent, Mr. Luman Shotwell, answered questions, made comments and addressed issues on the conditions at Rocky Boy's Reservation. Walter Liggett, Special Investigator, discussed in great detail the health and economic conditions of Rocky Boy's Reservation.

When the Chippewas and Crees accepted the Rocky Boy's Reservation, it was their belief that land allotments would be given to each member and that each would own their own home. To their bitter dismay, they learned that Rocky Boy's Reservation was only a "camping ground" for the homeless Indians in Montana (Gray 1942:179).

The Chippewa-Cree were allowed to build on 160 acre tracts and could enjoy the use of the land so long as it was made productive (Survey 1929:12521). It was within the

power of the superintendent of the reservation to dispossess any Indian of his place and transfer it to another without proper compensation for improvements (Gray 1942:179; Survey 1929:12521). The Chippewa-Cree argued that there was no incentive to improve the land unless they knew it was going to pass on to their children. A tribal member testified that "whenever an Indian dies the widow and children are thrown off their land and someone else is put upon the place" (Survey 1929:12519). Indian Bureau officials continually argued that allotments would only "speedily" pass into possession of Anglos and further limit the area available for the Chippewa-Cree (Survey 1929:12521).

Health Conditions

Most of the people on Rocky Boy's Reservation lived in "little log shacks with dirt roofs, ...dirt floors, and a makeshift stove" (Survey 1929:12495,12498). On average, these log huts would house six people, but it was not uncommon to have eight or nine people occupy the small space. Shotwell stated that the Chippewa-Cree people "...are poor and crowded into those houses" (Survey 1929:12498). "...Conditions were anything but sanitary. Open toilets and other filth have been allowed to accumulate and many of the Indians used water from open

streams polluted by these conditions" (Narrative Report 1930). Liggett added,

> considering the prevalency of tuberculosis on the Rocky Boy Reservation, it is positively criminal to permit the continuance of these conditions. As a matter of fact, this situation was called to the attention of the Indian Bureau heads two years ago by Inspector C. R. Trowbridge in a comprehensive report, but practically nothing has been done in the interval to remedy this deplorable and disgraceful housing which annually takes its toll of human life (Survey 1929:12521).

In the first few years after the establishment of the reservation, no physician was retained. A physician from nearby Box Elder, fifteen miles away, was originally contracted to "visit the reservation whenever called upon and at least once a month" (Narrative Report 1921). The roads on the reservation were described as "the barest of trails" and at times were nearly "impassable" (Narrative Report 1927). Later, a physician was contracted in nearby Havre, forty miles away, to visit the reservation twice a month (Survey 1929:12490). This arrangement was impossible for the best physicians to properly treat serious cases at intervals of two weeks. "A number of Indians died because it was impossible to get to a physician on time" (Survey 1929:12524).

In 1926, Superintendent Shotwell wrote that several children died from pneumonia and that "their deaths were no doubt due to the unsanitary living conditions and the lack of adequate nursing" (Narrative Report 1926). He also stated that the contract physician never exceeded "three stops per month" at Rocky Boy's Reservation and "with such attention, no very large campaign of health improvements can be undertaken" (Narrative Report 1926).

To address this issue, a nurse was employed full-time at Rocky Boy's Reservation. Rapid turnover in nurses employed barely helped to improve the situation. The prevalence of tuberculosis and other grave diseases hastened the need for a full-time physician and a hospital (Survey 1929:12524).

Neither the contract physician nor the previous superintendents adequately surveyed the health situation on Rocky Boy's Reservation. Liggett later reported on the prevalence of disease,

> ...therefore must necessarily be a matter of guesswork when it comes to exact statistics, but it can be stated without fear of successful contradiction that the general health conditions are deplorably bad" (Survery 1929:12525). "Vital statistics worthy of the name are wholly lacking, but it can also be demonstrated that their death rate is disgracefully high. Part of this excessive mortality can be directly traced to an inexcusable lack of medical attention since

> they [the Chippewa-Cree] were located on the Rocky Boy Reservation (Survey 1929:12520).

There was an abnormally high percentage of tuberculosis on the reservation. A missionary stationed at Rocky Boy's Reservation for eight years informed Mr. Liggett that nearly every family was infected (Survey 1929:12525). Shotwell estimated that approximately twenty per cent of population had tuberculosis (Survey 1929:12492).

During the winter months, most of the Chippewa-Cree lived close to the agency so the children could go to the day school located there. Only twenty-seven houses were in this camp and individuals crowded into single room huts. The overcrowding, with little ventilation, only aided in the spread of tubercular infection. Liggett declared "that such a condition has been permitted to continue year after year reveals a criminal carelessness on the part of the Indian Bureau officials" (Survey 1929:12525).

Liggett noted that the majority of the Chippewa-Cree were undernourished. A missionary priest stated in the investigation that the people "are pretty well starved; they are hard up, especially during the winter months" (Survey 1292:12516). In 1917, a member of the Board of Indian Commissioners, noted the health of the people at the

reservation appeared generally low, "they have a predisposition toward scrofula and are undernourished" (Wessel 1975:85).

When John B. Parker was superintendent of Rocky Boy's Reservation, approximately 85 percent of the population were on the ration roll (Wessel 1975:101). In June 1924, John D. Keeley became the new superintendent and cut the ration roll by two-thirds (Wessel 1975:105). It was the new superintendent's intent to eliminate the ration issue altogether except for the aging and infirmed. Yet, Superintendent Keeley noted that the home and health conditions on the reservation were "perhaps the poorest of any reservation in the United States" (Wessel 1975:108).

In 1929, Superintendent Shotwell, who took over in February 1926, confirmed that approximately 70 people were on rations and that the rations amount to $1.20 for two weeks (Survey 1929:12499). The astounded subcommittee replied that a $1.20 worth of rations for two weeks would not keep anybody and "it just keeps one from starvation" (Survey 1929:12499). In his investigation, Liggett found the rations issued to the sick were "insufficient in quantity and inferior in quality" (Survey 1929:12525). Superintendent Shotwell admitted to Liggett that the supply of bacon was four years old and unfit for human consumption

(Survey 1929:12525). In his 1929 narrative report, Superintendent Shotwell wrote:

> These people, being by nature, wanderers upon the face of the earth and having been more or less dependent during the early years of their lives upon foods stuff found in garbage cans, still have a fondness for half spoiled foods and much prefer beef and other foods after they have become slightly tainted (Narrative Report 1929).

The Chippewa-Cree on Rocky Boy's Reservation were distinctly undernourished and as a result were easy prey to disease. Following World War I, an influenza epidemic swept the country and struck hard at Rocky Boy's Reservation. Approximately forty percent of the population came down with influenza, and fortunately, resulted in only four deaths (Wessel 1975:95).

The Montana State Board of Health conducted a survey in 1925 on Rocky Boy's Reservation. They estimated that twenty percent of the population suffered from tuberculosis and noted an abnormally high incidence of venereal disease (Wessel 1975:126). This survey, along with Liggett's investigation, concluded that the death rate was nearly four percent of the population and seemed to be increasing (Survey 1929:12525; Wessel 1975:127). In 1922, the superintendent wrote that infant mortality was the single biggest problem on the reservation (Wessel 1975:97).

Economic Conditions

Rocky Boy's Reservation has some of the richest grazing land in Montana and the abundance of shelter makes the country ideal for grazing purposes. This opportunity for economic independence was denied the Chippewa-Cree by the deliberate policy of the Indian Bureau to make them farmers (Survey 1929:12520).

In 1929, approximately 33,000 acres of prime grazing land had been leased to a single stock company for the astonishing rate of ten cents an acre (Survey 1929:12493). Mr. Liggett found in his investigation that this same tract of land was leased for $8,400 annually ten years before (Survey 1929:12523). East of Rocky Boy's Reservation on the Fort Peck Reservation, land not as good as at Rocky Boy's, was leased for fifteen cents an acre (Survey 1929: 12494).

The Chippewa-Cree expressed an interest to embark in the cattle industry and a few individuals were allowed to purchase cattle under a reimbursable plan. Each individual who had cattle was more than successful in supporting themselves (Survey 1929:12523). On the other hand, no one succeeded in farming.

Early in Rocky Boy's history, Superintendent Parker stated in his narrative report that he believed that the Chippewa-Cree would

> ...become self supporting the quickest by getting their land into hay meadows as soon as possible and engaging in the raising of stock, as farming conditions are too uncertain in this country on account of the prevailing dryness of the climate, and irrigation enterprises are very difficult on account of the roughness of the country (Narrative Report 1918).

Additionally, in 1920, Superintendent Parker wrote that "all the water on the reservation has been appropriated by white settlers of the surrounding country before this reservation was established; therefore, there is no water available outside of flood rights" (Narrative Report 1920).

The Senate subcommittee posed "that by no stretch of the imagination can it [Rocky Boy's Reservation] be considered good farming country, and that if there were sufficient land to put all the Indians on a piece of land that the late springs and early winters would make it poor for farming purposes" (Survey 1929:12491). Farming during the initial years on Rocky Boy's Reservation was futile, as a prolonged drought that lasted three years, 1917-1920, eliminated almost all the crops (Wessel 1975:88). In 1923 and 1933, a severe hailstorm destroyed a number of the crops (Narrative Report 1923; Wessel 1975:154). In 1936, a

severe drought swept through the northern plains that destroyed any progress the Chippewa-Cree had made prior to the drought.

Superintendent Shotwell, however, supported the congressional policy of farming, which would provide the Chippewa-Cree an opportunity to support themselves. He cited that neighboring homesteads had proven their ability to support a moderate sized family (Survey 1929:12522). However, he neglected to state that these neighboring homesteads had 320 acres, while there was not enough agricultural land within the reservation to give each head of a family an 80 acre tract (Survey 1929:12522).

Time and time again in his narrative reports, Superintendent Shotwell mentions that raising stock was the best way the Chippewa-Cree were to become self-supporting (Narrative Reports 1926, 1927, 1928 and 1929). However, in 1926 the reimbursable debt had grown to $18,000. The reimbursable debt was for purpose of purchasing machinery, wagons, harnesses and horses, not cattle (Narrative Report 1926). Superintendent Shotwell was reluctant to increase the amount of reimbursable debt by purchasing cattle, so instead he promoted the congressional policy of farming.

Inspector Trowbridge stated "there is grave doubt that these Indians can support themselves by farming alone in

this region, as many white settlers have failed in the attempt" (Survey 1929:12522). Another astounding revelation was the employment of a man as the agency farmer by Superintendent Shotwell, who had failed at farming his own land but yet expected to teach others to be successful.

A majority of the Chippewa-Cree owed an average of one hundred dollars advanced to them to purchase agricultural tools and seeds (Survey 1929:12523). The pressure to repay this reimbursable debt forced the Chippewa-Cree into a cycle of poverty. Debt payments left little for family support, making families dependent on government rations and further borrowing to purchase seeds and equipment for the next year (Wessel 1975:120).

The need for income, and the ever growing debt, forced many of the young men to leave the reservation to find employment (Bryan 1985:72; Wessel 1975:112). However, most of the temporary employment was found in the summer when tribal members were supposed to be hard at work trying to learn and practice agriculture on their lands (Bryan 1985:72).

When winter arrived, little employment off the reservation was available, and as a result, rations were distributed so that they could exist (Bryan 1985:74). To further complicate things, many of Rocky Boy's

Superintendents would withhold rations unless the Chippewa-Cree agreed to farm (Survey 1929:12523;Wessel 1975:89). This policy resulted in problems of malnutrition. Cato Sells, Commissioner of Indian Affairs, insisted that a "two-week ration issue was sufficient and that Little Bear should stop being critical since the reservation was already a considerable gift from the government" (Wessel 1975:89).

As Campbell concluded on the Northern Cheyenne Reservation in Montana, the policy of cutting or withholding rations only produced a cycle of poverty, dependency, and oppression (Campbell 1991:345). Conditions like these also led to high incidences of morbidity and mortality, particularly among the young and women of childbearing age who were most vulnerable under impoverished conditions (Campbell 1991:345). On observing these conditions, the subcommittee stated "that there is a great deal of poverty and suffering among these Indians [Chippewa-Cree] and they are probably worse off than any groups of Indians in the State" (Survey 1929:12491).

Campbell's work with the Northern Cheyenne Reservation and Choong's work with the Fort Peck Reservation are examples of similar situations where government policies failed dismally to promote self-sufficiency among tribal

Americans living on reservations (Campbell 1991; Choong 1992). Both of these reservations were established in the mid-1880's and the practices set forth came from Congress, and were still in effect thirty years later when Rocky Boy's Reservation was created.

CONCLUSION

During the early reservation period, 1917 to 1937, the Chippewa-Cree became increasingly under the control of the Bureau of Indian Affairs. The Office of Indian Affairs managed all of the Chippewa-Cree's resources and finances. In doing so, they pushed the Chippewa-Cree into ever-increasing debt and dependency.

After their settlement on the reservation, the Chippewa-Cree depended increasingly on rations for subsistence and survival. The ration issue was consciously reduced below an adequate level of subsistence to promote economic self-reliance among the Chippewa-Cree. The unsanitary living conditions and malnutrition prevalent on the Rocky Boy's Reservation increased the Chippewa-Cree's exposure to disease.

From 1918 to 1925, the health of the Chippewa-Cree was reported as being "good." Despite the superintendent's

claims to the contrary, many outbreaks of disease occurred. The morbidity patterns demonstrated by the Chippewa-Cree showed a significant deterioration in health. Yet, the Chippewa-Cree population grew demographically. However, research by Turshen (1977), Campell (1987), and Choong (1992) show that population growth does not imply improved health.

The demographic patterns of the Chippewa-Cree at Rocky Boy's Reservation reveal that underdevelopment on the reservation influenced and even created these conditions. The examination of the demographic data against the ethnohistorical record reveals that the Chippewa-Cree population structure is a result of the combination of environmental and cultural factors that were created by reservation life.

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