AN HISTORICAL GEOGRAPHY OF THE NINETEENTH CENTURY BUFFALO BONE COMMERCE ON THE NORTHERN GREAT PLAINS

By

Le Roy Barnett

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Geography

1979

ABSTRACT

AN HISTORICAL GEOGRAPHY OF THE NINETEENTH CENTURY BUFFALO BONE COMMERCE ON THE NORTHERN GREAT PLAINS

By

Le Roy Barnett

Traditionally the grasslands of late nineteenth-century North Dakota, Montana, and the Canadian Prairie Provinces have been defined economically in two terms: ranching and farming. Contemporaneous with these two endeavors, however, was a third occupation that often played a more interesting and equally significant role in the development of these areas. Because this competing enterprise was based on a widespread and limited resource, its duration was never very prolonged in any one place. As a result of its ephemeral nature, the activity received little local or national attention and its importance in the settlement of the Northern Great Plains escaped notice. This overlooked industry was the commerce in buffalo bones, and it is the purpose of this study to reveal the history and geography of that trade.

The business of gathering and selling bison remains first started in the study area around 1884, when carbon and

fertilizer works in the Midwest expressed an interest in buying the ruins. With a value suddenly placed on the wreckage of the herds, large numbers of people began scouring the prairies in search of buffalo bones. Soon millions of skeletons, rising like little white mountains above the landscape, were piled at nearly every siding along the routes of the Northern Pacific, Great Northern, and Canadian Pacific Railroads. Since most of the cargo carried by these lines was destined for points in the west, the firms welcomed the osseous freight as paying ballast for their returning box-cars. This export of bones from the Northern Great Plains continued for about a decade, amounting in the average year to about four hundred trainloads. Soon the last sun-bleached relic was gathered and hauled to a frontier market, and the trade in bison remains became a thing of the past.[1]

As the buffalo's spoils disappeared from the scene, so too did recognition of their former significance to the economy of the Northern Great Plains region. Subsequent arrivals in the area, viewing prairies devoid of bones, were unable to appreciate what the traces of the herds had meant to the early settlers and railroads. Evidence of this enterprise, however, was preserved in records created during and after the trade, and by consulting these sources it is possible to reconstruct the business and assess its contributions. In recognition of this fact, the author has carefully perused all known primary and secondary sources

relating to the bone commerce and then organized his findings in a chronological/geographical fashion to trace the development of the industry and its impact on the land. Through this approach it has been possible for the first time to tell the story of the traffic in bison remains and show its spatial characteristics.

In specific terms, this dissertation initially documents the existence of the buffalo bone commerce and its variable nature from place to place. Concurrently, the study examines the exploitation of an unusual resource on the Northern Great Plains and the impact that this enterprise had on the landscape. Secondly, this treatise reconstructs the geography of the trade in bison remains by determining its range, tracking its migration across the study area, revealing how a syndicate organized space to control the traffic, determining the commodity flows created by the business, indicating areal differences in bone values, and showing evidence of the commerce in regional place names. Each of these sections in the text are fully complemented by an abundance of maps, pictures, and charts showing visual evidence of the industry or its areal differentiation.

---

[1]Kenneth Hammer, "Buffalo Bones," American West Review, 15 March 1967, p. 14.

ACKNOWLEDGMENTS

Though only one person is recognized as having authored this work, the study could not have been possible without the assistance of a number of other individuals. In a general way I must give thanks to the many librarians, archivists, and curators of historical collections across the country who furthered my research by helping me to find materials relating to the buffalo bone trade. Without the cooperation of these professionals this investigation of a forgotten industry would have been severely hampered.

Among the supporting cast for this work are some personalities who deserve to be singled out for attention because of the special roles they played in its production. In this regard appreciation is due Dr. Clarence Vinge, under whom this inquiry was begun, for encouraging me to continue with my research at times when the critics of this work caused me to question its value. To Sherman Hollander, cartographer and remote sensing specialist for the State of Michigan, goes credit for the well-executed maps and graphs that accompany the text. Recognition is also deserved by Frank Vyzralek, Archivist for the State Historical Society of North Dakota, who discovered many of the references cited

in this study and did much to keep my spirits alive. And, finally, a note of gratitude is in order for Dr. Ian Matley, the major professor of this dissertation, who motivated me to complete this examination of the bone trade after it had nearly been abandoned for other interesting projects.

On the personal level, I would like to give recognition to my parents for the support and encouragement they have provided during the course of my higher education. This treatise is, in many respects, the end product of their numerous contributions over the years. My wife, too, deserves some consideration for the patience and understanding that she exhibited while this study was in progress. Because of her enduring aid it is perhaps appropriate to say that the following pages are not mine, but ours.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

INTRODUCTION

Everything seemed to be quite normal on the Northern Great Plains until late in 1884. That is when the fact was finally revealed that a great commerce had developed in bison remains. Describing this peculiar industry, a reporter observed that "the Dakota plains will soon be cleared of buffalo bones. The bleached heads strewn along the Northern Pacific have given the tourist a special sense of getting his money's worth of romance as he sped on toward the Missouri and the mountains. Now the stretches of prairie rarely show the gleaming white spots, and at nearly every station can be seen piled up for shipment the chaotic anatomy of countless thousands of buffalo. Farmers are paid $2.00 and $3.00 a wagon load for them. For months carload after carload, to the number of hundreds, has passed St. Paul on the way to eastern cities, where they are turned to account as fertilizers. Even the bones that surveyors have stood up as sighting points have been picked up and carried off, such is the demand for them."[1]

---

[1] Northwest Magazine 2 (September 1884):20. New York Times, 26 December 1884, p. 3.

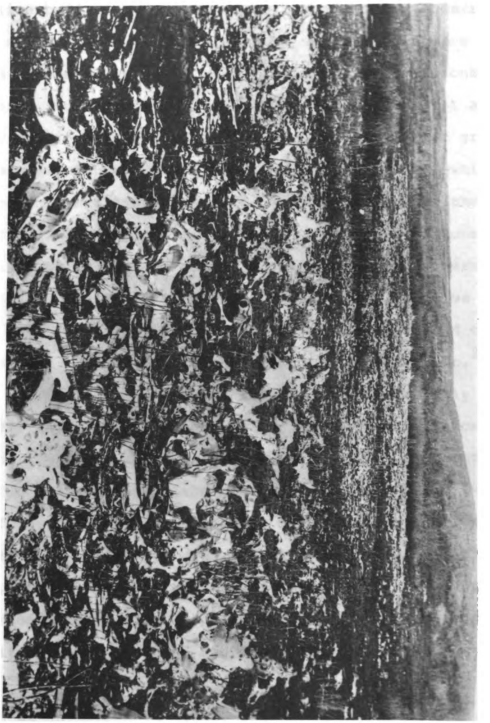
Illustration 1. Bones on the Prairie.

For centuries the Indians of the Northern Great Plains hunted the buffalo as a source of food and hide. This harvest appears to have been about equal to the annual increase of the animal, keeping the bison population at a fairly stable level. Such a balance was maintained until around 1830, when steamboats began operating on the Missouri and Yellowstone Rivers permitting cargoes to be shipped out from the region. There were few products in the area at that time which had any commercial value, but one article for which there was a great demand was furs and buffalo robes. In response to this market, many northern tribes began killing more animals each year for the sole purpose of selling their hides. As a result of this activity, the skins of from "fifty to one hundred thousand" bison were annually shipped downstream to sell at eastern markets.

The commerce in buffalo robes remained at this level until 1876, when the Northern Pacific Railroad finally reached the Missouri River at Bismarck. This new transfer point greatly shortened the distance that exports from Dakota and Montana had to be carried by expensive water transportation, and the reduction in freight costs enabled buyers of the hides to offer more for the commodity. As the bison's skin increased in value so too did the numbers sought, causing waste of the animal to substantially increase. Such slaughter, however, was small when compared to what started in 1880, the year the Northern Pacific began building west through the last range of the buffalo. This new construction happened to coincide with the annihilation of the southern herds, prompting many hunters from that region to head for the Yellowstone country. The concurrent arrival of the railroad and more hidemen left no doubt as to the bison's fate, and within four years nearly all of the beasts had been tracked down and destroyed. Only the bones of these creatures were left to betray their former presence, as evidenced by the skeletons strewn about this prairie scene.[a] (Courtesy Public Archives of Canada)

---

[a]Frank Roe, The North American Buffalo. Toronto: University of Toronto Press, 1970, pp. 447-466.



A traveler through Dakota on the Northern Pacific line that same year also commented on the trade. "Although the live buffalo had disappeared," he recalled, "his remains were still abundant. His bleaching bones, which were everywhere scattered over the plain, were being industriously gathered together to be ground into bone manure. At almost every station along the line was a heap of bones of greater or less magnitude, ready to be loaded on the cars; while hundreds of men and teams were busy with wagons, gathering and bringing in more bones. It was said that the bones realised $8.00 per ton on the spot, and that they were shipped to Philadelphia to be ground."[1] So intensive was this business that by winter the Dakota settlers had collected and shipped East the relics of 80,000 buffalo.[2]

The American scene, however, was not the only place in 1884 where this strange enterprise was taking place. "Along the Canadian Pacific Railway, as along the Northern Pacific further south, the old bones of the buffalo [were] carefully gathered up and carted off for manure." "Great piles of bones," remembered one witness, "ready for shipment, [could] be seen at many of the stations. The little creek on which Regina, the present capital of the Northwest Territories, now stands, had long been a favourite camping

---

[1]Miller Christy, "The Last of the Buffaloes," The Field 72 (November 10, 1888):697.

[2]Rocky Mountain News, 26 November 1884, p. 2.

ground of the Indians, and was known as the Wascana or Pile-of-Bones Creek, on account of the great heaps of bones . . . which existed there until the year 1884 when the railway was completed to the point and the whole heap was shipped off to Philadelphia."[1]

These glimpses of the buffalo bone trade stimulate a desire for more details in most inquisitive people, but the beginning of the story is actually a tale familiar to all Americans. It starts when the last herds of bison on the Northern Great Plains fell to the hunter's rifle in 1883. The hides were stripped from these animals, as from so many bison before, and the carcasses left to rot on the prairie where the bullets had brought them down. Before long the grassland carnivores, aided by the elements, consumed the flesh of these creatures and reduced them to sinew and bones. These skeletons joined millions of others that had earlier yielded their skins, contributing to an osseous cloak that covered much of the terrain.[2]

The waste of the bison that littered the land was allowed to rest in peace only briefly. Soon the region was visited by agents from Midwestern states who represented businesses that processed bones. These companies were carbon

---

[1]Miller Christy, "The Last of the Buffaloes," The Field 72 (November 10, 1888):697.

[2]Tom McHugh, The Time of the Buffalo (New York: Alfred Knopf, 1972), pp. 277-280.

and fertilizer works that used skeletons in making their products, and they had sent men to North Dakota, Montana, and the Canadian Prairie Provinces to find raw materials for their mills. After the emissaries of these firms had arranged for merchants in some towns to act as buyers, they announced to the public that bones were worth money if brought in to one of their dealers. Eager to earn some money or credit with which to buy supplies, many settlers and Indians picked bison remains to vend as a quick cash crop. The skeletons that were reaped by these pioneers or natives were hauled to the nearest market, there to be weighed and sold to a trader commissioned by the factories. Soon such activities were taking place across much of the Northern Great Plains, and it was this industry that the preceding accounts had brought to the attention of the country.[1]

The literature on this subject is all of a general nature, and nowhere is it possible to find anything but a superficial treatment of the trade in bison remains. For this reason few people appreciate the impact the business had on the North American steppe. Research on this matter, however, has shown that the commerce in skeletons radically altered the appearance of the Great Plains, changing a bone-littered landscape into a barren prairie in the course

---

[1]David Dary, The Buffalo Book (Chicago: Swallow Press, 1974), pp. 134-141.

of a few decades.[1] In addition to this bearing on the area's physical features, the enterprise greatly affected the human elements thereby enabling many residents to survive at a time when no other source of income was present.[2] The burgeoning railroads of the region, some struggling for existence like the settlers, were also able to gain substantial profits from shipping the relics of the herds.[3] Because of these contributions the trade in skeletons played a major role on the frontier, but ignorance of the industry has meant that its importance has gone unrecognized. The purpose of this study, then, is to tell the story of the buffalo bone commerce and its influence on the environment.

To undertake this task for the entire midcontinent section would nearly take an individual's lifetime. Therefore, to reduce this project to manageable proportions the investigation has been restricted to the Northern Great Plains. This territory has been chosen because it was the last portion of the western American prairie to experience

---

[1]Cy Martin, The Saga of the Buffalo (New York: Hart Publishing Company, 1973), pp. 145-157.

[2]Martin Garretson, The American Bison (New York: New York Zoological Society, 1938), pp. 160-165.

[3]Joel Allen, The American Bisons, Living and Extinct (Cambridge: University Press, 1876), pp. 190, 200; Harper's Weekly 31 (15 January 1887):39.

the buffalo bone trade.[1] Consequently, there is a greater abundance of information about the commerce of this realm than there is for any other. Another reason why the region was selected is due to the fact that nearly all of the skeletons exported from it were sent to the Middle West,[2] an area in which it is convenient for the author to conduct research activities. Finally, the Northern Great Plains province was singled out for attention because one organization controlled most of the trade within the district, thus offering more unity to this study area than would probably be found elsewhere.[3]

Writing a description of a nearly unknown activity poses many difficulties to the researcher, the greatest of which is probably finding information. To acquire the data needed for this study the author went to a number of repositories around the country looking for relevant facts. Undoubtedly the most fruitful places to visit were local newspaper offices and libraries that had early periodicals or monographs documenting the trade in skeletons. Other

---

[1]Francis Haines, The Buffalo (New York: Thomas Crowell Company, 1970), pp. 201-202; Douglas Branch, The Hunting of the Buffalo (Lincoln: University of Nebraska Press, 1962), pp. 221-224.

[2]Major I. McCreight, Buffalo Bone Days (DuBois, PA: 1950), pp. 82-83.

[3]Letter from Fred Stoltze to Captain Heerman, 17 April 1913, Edward E. Heerman Papers, Minnesota Historical Society, St. Paul.

valuable inputs came from archives and historical societies, which contributed such things as manuscript records, business journals, drawings, and photographs. Supplementing the holdings of the public institutions were a few private collections in the Great Plains region offering personal papers and other materials pertaining to the buffalo bone commerce.

Once information concerning the trade in bison remains had been surveyed, it became apparent that one aspect of the business merited special attention. This distinct perspective was the industry's historical geography, and such a study represents the problem that this dissertation seeks to address. When describing an enterprise from such a viewpoint, the focus in on a variety of man/land and space/time relationships. To answer the questions raised by such an approach to the buffalo bone commerce it is necessary to:

1. Describe the variable character of the trade from place to place.
2. Document the impact of the commerce on the landscape.
3. Reconstruct the geography of the industry.
    a. Determine its spatial dimensions.
    b. Trace its diffusion across the study area.
    c. Ascertain how a syndicate organized the territory in order to control the commerce.
    d. Define the trade structure created by the business.

e. Indicate areal differences in bone values.

f. Reveal evidence of the commerce in past and present place names.

The pages that follow will consider these properties of the traffic in bison remains and illustrate them with numerous pictures, maps, and graphs. Items one and two will be a description of the trade in skeletons as it spread across the Northern Great Plains, and an examination of the spatial patterns that emerged during or as a result of that progression. The last item, three, will then analyse and explain these temporal and areal variations in the buffalo bone commerce.

Though the subject of the buffalo bone trade is unfamiliar to most geographers, the way in which the topic will be handled by this study certainly is not. The matters of concern outlined above solidly stand upon eight confirmed areas of research pursued by members of the discipline. The first, and perhaps most basic, of these traditions is that of man-land relationships, as recognized by such scholars in the profession as William Pattison, H. Roy Merrins, and Rhoads Murphy. A related pillar of geography supporting this investigation is a concern with human impact on the environment, and by looking at man as an agent in landscape change this dissertation will fall within a part of the field that has been established by such noted men as George Perkins Marsh, Nathanial Shaler, and William Thomas. Another foundation upon which this study will be built is that of

regional analysis, and by attempting to delimit the extent of the buffalo bone trade this undertaking rests upon a cornerstone of chorographic science layed by such individuals as Nevin Fenneman, Robert Dickinson, and Roger Minshull. Spatial organization has long been accepted as a legitimate part of the profession, and by noting how the Northwestern Bone Syndicate arranged the study area for its own benefit the author will be following a methodological trail earlier blazed by such pioneers as Carl Sauer, H. C. Darby, and W. Gordon East.

Research on the diffusion of phenomena has increasingly become a part of geography, so as this work traces the spread of the bone trade across the Northern Great Plains it will be adopting an approach recently developed by the likes of Torsten Hagerstrand, Fred Kniffen, and William Bunge. Areal interaction or movement is a related concern of the discipline that has been explored by such scholars as Jan Broek, Preston James, and Derwent Whittlesey, and this dissertation will follow their example by noting the relationships established between the study region and the Midwest on account of bison remains. The scope of geography also includes a search for relic features on the landscape, and by identifying place names created by the bone trade this thesis will be concerned with a facet of the discipline practiced by such individuals as J. B. Mitchell, Albert Perry Brigham, and Ellen Churchill Semple. Finally, the science of space has customarily attempted to reconstruct

landscapes of the past in the fashion of Ralph Brown, Andrew Clark, or Charles Paullin, and by documenting the early bone cover of the Northern Great Plains this inquiry will be able to describe a terrain that few people realize existed.

Late August glares, a wagon filled with bones,
Strange harvest from the prairies seeks the town.
The buyer pays a dollar for a ton.

The square, squat houses, the low shedlike stores
Weathering unpainted, toe the littered street
That finds the railway station. By the track,
A fenced lot heaped with well bleached skeletons,--
Mountainous wreckage, shin and back confused,
Crowned with horned skulls grotesquely menacing.

So ends the buffalo. Five years since he tossed
In great earth-shaking herds his shaggy mane;
Now not one calf. Once furious bulls did roar
The challenge moving terribly to fight.
Dry bones--the price one dollar for a ton.[1]

---

[1]Edwin Ford Piper, Barbed Wire and Other Poems (Chicago: Midland Press, 1917), p. 3.

CHAPTER 1

THE BUFFALO BONE TRADE ALONG THE NORTHERN PACIFIC RAILROAD

In the spring of 1881 Borden Mills Hicks moved from Michigan to Jamestown, North Dakota, to homestead on nearby government land. He farmed the property that first summer,[1] but apparently found sodbusting not to his liking since by 1882 he had built a home in the city and was operating a fuel company there.[2] This enterprise acquired a new dimension the following year when Hicks expanded his business to include the buying of buffalo bones.[3]

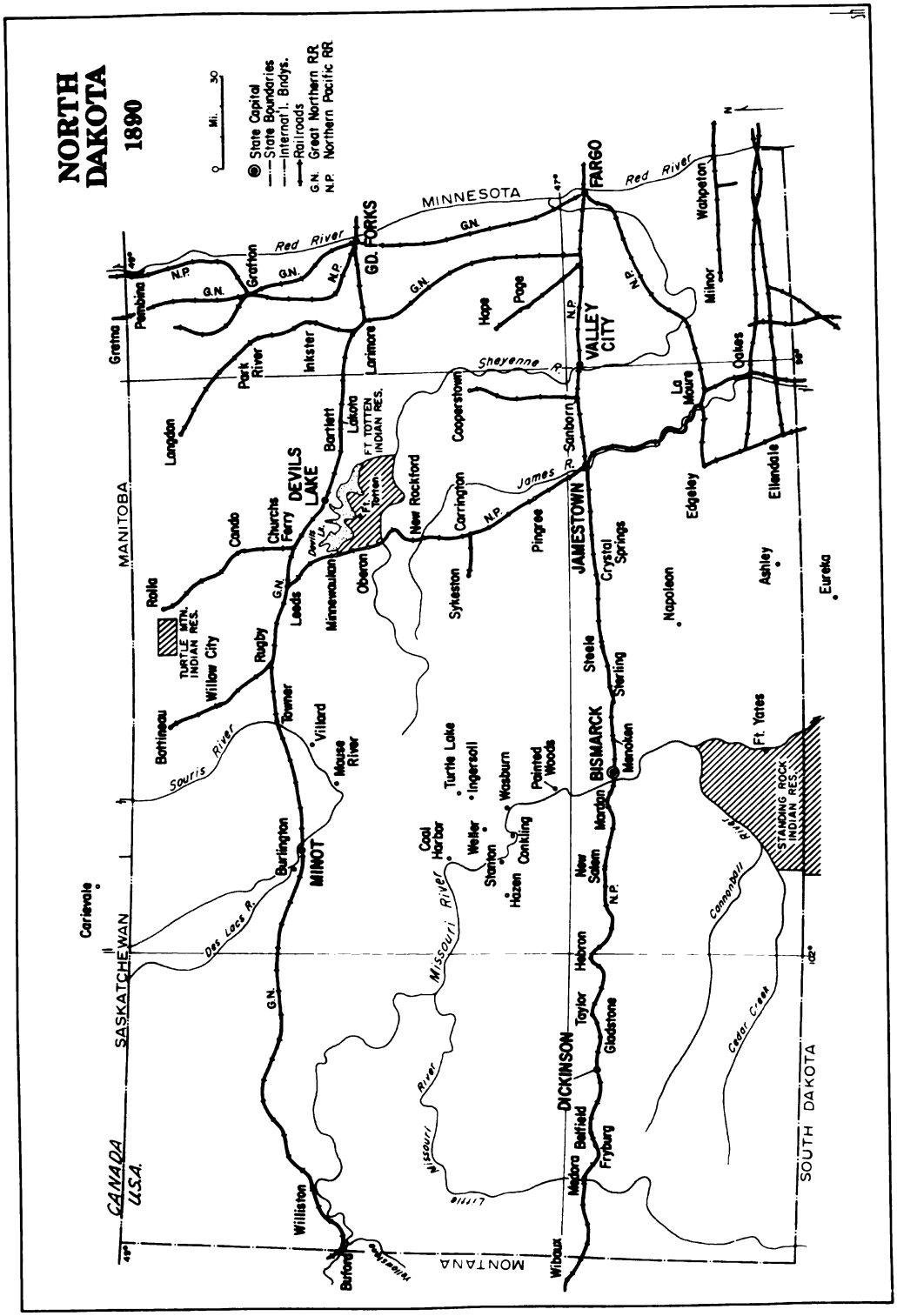
This strange venture was made possible by the osseous legacy of the bison which covered much of the area around Jamestown and "lay gleaming white as far as the eye could see." These skeletons had generally been left undisturbed since the great beasts had been slaughtered years before by hunters. But agents from fertilizer and carbon

---

[1]Borden Hicks, "Obituary of Captain Borden Mills Hicks," typescript in the possession of Mrs. Robert Schmitt, Minneapolis.

[2]Stutsman County Record, 17 December 1931, p. 1.

[3]Borden Hicks, op. cit.


NORTH DAKOTA
1890
Mi. 30
State Capital
State Boundaries
Internatl. Bndys.
Railroads
G.N. Great Northern RR
N.P. Northern Pacific RR
MINNESOTA
MANITOBA
SASKATCHEWAN
CANADA
U.S.A.
SOUTH DAKOTA
MONTANA
FARGO
Red River
GD. FORKS
VALLEY CITY
DEVILS LAKE
JAMESTOWN
BISMARCK
MINOT
DICKINSON
Sheyenne R.
James R.
Souris River
Des Lacs R.
Missouri River
Cannonball River
Cedar Creek
Little Missouri River
Grafton
Pembina
Langdon
Park River
Inkster
Larimore
Hope
Page
Wahpeton
Minor
Oakes
La Moure
Sanborn
Cooperstown
Carrington
New Rockford
Lakota
FT. TOTTEN INDIAN RES.
Churchs Ferry
Leeds
Minnewaukan
Oberon
Sykeston
Pingree
Crystal Springs
Edgeley
Ellendale
Ashley
Eureka
Napoleon
Steele
Sterling
Rolla
Rugby
Willow City
TURTLE MTN. INDIAN RES.
Bottineau
Towner
Villard
Mouse River
Burlington
Carievale
Williston
Burford
Wibaux
Medora
Belfield
Fryburg
Gladstone
Taylor
Hebron
Glen Ullin
New Salem
Morton
Menoken
Turtle Lake
Ingersoll
Washburn
Painted Woods
Coal Harbor
Weiler
Stanton
Hazen
Carkling
Ft. Yates
STANDING ROCK INDIAN RES.

works in Detroit, Chicago, and St. Louis announced their willingness to pay $10.00 a ton for these ruins, prompting many "Jimtown" folks to comb the surrounding plains for bones.[1]

The commerce in bison remains got underway at Jamestown in late summer of 1883.[2] This fledgling business caught the attention of the city newspaper, which observed on August 10 that "there have been five or six carloads of buffalo bones shipped from this place last week."[3] Local efforts to corner the market on this commodity briefly engendered some vigorous competition, but within a few weeks the Weekly Alert was able to announce the winner. "B. M. Hicks & Co.," it said, "the rustling coal and wood dealers, are now extensively engaged in the bone shipping industry, [exporting] large invoices to the far east. Several teams are constantly employed in collecting the skeletons of late lamented buffaloes."[4] Thru November the resident pickers heaped their rigs to the top with sun-parched relics, bringing several wagonloads of chaotic anatomy into town for

---

[1]Laura Sanderson, In the Valley of the Jim (Bismarck: Bismarck Tribune, 1933), p. 33.

[2]Jamestown Weekly Alert, 3 August 1883, p. 4.

[3]Jamestown Weekly Alert, 10 August 1883, p. 4.

[4]Jamestown Weekly Alert, 9 November 1883, p. 4.

Hicks each day.[1] By the end of the month their labors for the year had filled twenty boxcars with bones, making Jamestown one of the major exporters of bison remains in North Dakota.[2]

Winter put a temporary end to the pursuit of spoils from the herds, but by spring the local gleaners were once again out searching for vestiges of the slaughter. Announcing this fact the Morning Alert in May of 1884 noted that some "enterprising farmers have commenced the profitable business of collecting buffalo bones. Two loads have made their appearance in town during this week."[3] The fruits of these labors were taken to Hicks in exchange for merchandise or cash, then dumped in the freight yards to form what looked like a vast uncovered cemetery. When a sufficient volume of bones had been amassed along a railroad siding, the Northern Pacific line would be asked to bring in some rolling stock so that the relics could be shipped out. This situation had been reached by June according to the Jamestown newspaper, as it reported on the twenty-ninth of the month that "B. M. Hicks & Co. were loading four cars with buffalo bones yesterday from their immense [supply] of that useful commodity."[4]

---

[1] Jamestown Weekly Alert, 16 November 1883, p. 4.

[2] Jamestown Weekly Alert, 23 November 1883, p. 4.

[3] Jamestown Morning Alert, 17 May 1884, p. 2.

[4] Jamestown Morning Alert, 29 June 1884, p. 4.

Hicks, however, was not content to ship bones from Jamestown only, and by early June he had pretty much cornered the market at Page[1] and, soon after, New Rockford.[2] The commerce in skeletons had actually commenced at New Rockford in November of 1883, when local farmers began scouring the surrounding plains in quest of the buffalo's ruins.[3] An item in the local newspaper on the sixteenth of that month noted that "the bone trade has become a very important industry in this town. Bones are collected for miles around, brought to this place, and shipped to St. Louis, Missouri. For the past ten days there has been an average each day of about fifteen loads of bones, which would make about as many tons. The value of this industry can be seen when it is known that one man with a team can gather in a day about a ton of bones, for which he receives in the local market from $8.00 to $10.00 in cash."[4] Prompted by such handsome returns, the grangers near New Rockford gathered the bison's remains until December snows hid them from view.

---

[1]A. A. Schmirler, Our Page, 1882-1957 (Fargo: North Dakota Institute for Regional Studies, 1958), p. 13.

[2]New Rockford Transcript, 5 September 1884, p. 3.

[3]New Rockford Transcript, 9 November 1883, p. 3.

[4]New Rockford Transcript, 16 November 1883, p. 3.

By April of 1884 the bone trade at New Rockford had assumed importance again,[1] with large numbers of pickers bringing in their sun-bleached cargoes to sell at Strong & Chase's store.[2] The local newspaper, noting this activity, remarked in May that the traffic in skeletons "has been very brisk for the past week or two. Large loads may be seen coming in at all hours of the day. There are at present several huge piles heaped up near the railroad track and a great many millions of these bones are being put to account. In picking them employment is furnished at good wages, which in these hard times is an important matter. Besides, an excellent fertilizer is provided for market. This industry has become quite extensive over this part of the country, and it will be but a short time before these prairies will be cleaned of this article which can be turned to such value."[3]

Approximately 125 tons of bones were exported from New Rockford each month in 1884[4] until demand for the resource dropped abruptly in the latter part of June. "The market in the East on this article is at present overstocked," explained the town newspaper, " and consequently

---

[1] New Rockford Transcript, 25 April 1884, p. 3.

[2] New Rockford Transcript, 30 May 1884, p. 3.

[3] New Rockford Transcript, 30 May 1884, p. 3.

[4] Pierre Free Press, 27 June 1884, p. 2.

not as many are shipped as were a short time since."[1] With factories reluctant to accept any more consignments of bison remains, the local bone dealers were forced to stop buying the product. Most of the New Rockford merchants were caught with large quantities of skeletons on hand, and not until September was the last of the bones finally loaded onto cars and shipped out.[2]

The market for bones was active again in the spring of 1885, and once more wagons rolled into town loaded high with remnants of the herds.[3] But the best prices for skeletons were then being offered to the north in the settlement of Minnewaukan, and most of the pickers took their wares to that station where their profits could nearly be doubled.[4] Hicks, Topliff & Company, the major bone dealer in New Rockford, transferred its operations to the west shore of Devils Lake where business conditions were better.[5] The loss of this buyer severely crippled the local buffalo bone commerce, and trade in the commodity at New Rockford became a fraction of its former self.

---

[1] New Rockford Transcript, 27 June 1884, p. 3.

[2] New Rockford Transcript, 5 September 1884, p. 3.

[3] New Rockford Transcript, 17 June 1887, p. 1.

[4] Fargo Daily Argus, 17 August 1885, p. 7.

[5] New Rockford Transcript, 5 September 1884, p. 3.

A few loads of bones periodically straggled into town until 1887, when traffic in skeletons resumed again in the vicinity of New Rockford.[1] The cause of the revival was an influx of Indians from the Turtle Mountain district seeking new sources of bison remains since the plains near their home had been cleaned. These busy people found that earlier pickers had overlooked many bones near New Rockford, so they began a more thorough harvest of the buffalo's denuded framework.[2] "It is wonderful," crowed the local newspaper, reporting on the work of the Indians, "to see the amount of buffalo bones that are being marketed in this city this summer. Two or three years ago there were piles of them near the depot that contained dozens and dozens of carloads, and they were being shipped out very regularly, too. Last fall it was thought that the bone market was dead, so far as this city was concerned, but there has been enough marketed here already, if taken together, to make two or three train loads. The Indians and breeds have nothing particular to do at this time of the year, so they go bone picking."[3] These visitors from the Turtle Mountain country must have had much success in their labors, for sometimes as many as thirty of

---

[1] New Rockford Transcript, 17 June 1887, p. 1.

[2] New Rockford Transcript, 27 May 1887, p. 1.

[3] New Rockford Transcript, 17 June 1887, p. 1.

them would drive into town with loads of bones.[1] During most of the summer they sold their gleanings to the station agent, A. D. Greene, continuing to work the New Rockford area until not a vestige of the bison was left.[2]

Though the Indians did not gather buffalo bones south of New Rockford, a brisk trade in the relics did occur not far away in that direction. The site of the commerce was Carrington, and the person controlling the commerce there was Archibald Miller, the town's first dealer in farm machinery, lumber, and coal. Miller's business was financially troubled in 1883 because locally it had been a bad agricultural year. A number of Carrington farmers had purchased merchandise from him on credit, but the substandard harvests of that summer prevented most of them from paying their bills. These penniless grangers anxiously searched for a way of discharging their debts, and one sodbuster, named Olson, suggested that Miller take bones on account. The collecting and selling of bison remains was a big business elsewhere, and Olson believed that a similar trade could be started at Carrington. Miller was not acquainted with the commerce in skeletons, but he promised his hard-pressed customers that he would look into the strange enterprise.[3]

---

[1]New Rockford Transcript, 1 July 1887, p. 4.

[2]New Rockford Transcript, 20 May 1887, p. 1.

[3]Charles Sinnett, "Notes on the Early History of Carrington, North Dakota," Manuscript Collection, State Historical Society of North Dakota, Bismarck.

Upon inquiry Miller learned that bison remains were in great demand by manufacturers who made manurial phosphate and animal charcoal products. Midwestern carbon and fertilizer works paid a high price for the bones, he was told, and would take every carload of skeletons that he could ship to their mills. Miller spent two months investigating transport costs for the osseous freight, and then decided he could profitably enter the commerce. After contracting with a St. Louis firm to insure himself of a market, Miller offered to pay $8.00 a ton to anyone who brought him bones.[1]

One of the Carrington settlers to respond to Miller's bid was the man who first recommended that the merchant buy bison remains. An item from the local newspaper announced this fact when it said that an industrious "Swede named Olson, living three miles north of town, is shipping a carload of buffalo bones this week. His children gathered them up in piles and they were collected in leisure moments. They are worth $8.00 a ton in Carrington, so that at almost no cost an item of about $80.00 is added to this enterprising settler's income. Another farmer, named Jones, is also shipping a carload."[2]

Olson, Jones, and other grangers were not the only ones picking bones, for the buyer himself had a number of

---

[1]Charles Sinnett, "Notes on the Early History of Carrington, North Dakota," Manuscript Collection, State Historical Society of North Dakota, Bismarck.

[2]North Dakota Inter-Ocean, 22 September 1883, p. 1.

teams out searching for skeletons. Miller attached big hayracks to the sides of three "prairie schooners" and sent all eight of his children out to fill the boxes with bones. "The girls, armed with gunny sacks," gathered the bones into piles and the boys then loaded the assembled ruins on the wagons as they drove around the plains. Throughout each day they scoured the land for bison remains, returning to town with their gleanings at dusk or when the rigs had been filled.[1] The bones were then arranged in ricks at a siding by the station, later to be placed onto freight cars and shipped out to processing plants.[2]

"With the help of all these busy hands," Miller once reminisced, "buffalo bones began to be scarce around the Carrington area." As bison remains diminished from the tributary country, the pickers were forced to range farther afield in quest of the sun-parched relics. One of the places the Millers found where skeletons still abounded was many miles away from town "up by Cottonwood Lake." The family erected a shanty on the shores of this glorified pond, and used the shack as a base of operations while working in the neighborhood. All bison remains gathered near the lake were hauled back to the hut, there to be guarded from men who

---

[1]Charles Sinnett, "Notes on the Early History of Carrington, North Dakota," Manuscript Collection, State Historical Society of North Dakota, Bismarck.

[2]Usher Burdick, Tales from Buffalo Land (Baltimore: Wirth Brothers, 1940), p. 211.

Illustration 2. The Money Crop.

A British tourist, journeying through North Dakota in 1885, remarked that "quite an extensive industry has recently arisen in connection with the gathering up of the old buffaloes' bones which strew the plains, and shipping them eastward for the purpose of making artificial manure. Large heaps, a yard or two in height, are to be seen at most of the stations along the Northern Pacific, and I saw men and wagons at work bringing in more. . . ."[a] Often entire families would work to collect the relics that the writer had seen lining the tracks, and this fact was illustrated by Ernest Burke in 1962 as an oil on canvas entitled, "The Money Crop." It should be noted, however, that there is no evidence in the literature to support the belief that wheelbarrows were used in the bone-gathering forays. (Courtesy Kennedy Galleries, Inc., New York)

---

[a]The Field (London), vol. 65, no. 1,672 (January 10, 1885), p. 57.

might want to take the labor out of picking. After a few days of hunting bones, when about ten tons had been amassed, the skeletons were taken to Sykeston to be loaded on a railroad car.[1]

The buffalo bone agent in Sykeston did not like to see competition there, so he tried to find ways of getting his rival to go back to Carrington. Once when the Miller boys were bringing in a load of skeletons to the Sykeston station, they overheard the local buyer send back the boxcar their father had ordered. "They'll dump their bones then, and sell them cheap," the dealer reportedly said. But his plans went awry when the boys told their father and he retrieved the car.[2]

On another occasion the Sykeston agent offered increased rates for bones, hoping to capture the bulk of the trade and force Miller out of town. The dealer apparently bid as high as $14.00 a ton,[3] but not many pickers sold to him even though he had a better price. Mr. Olson obviously expressed the feelings of most bone hunters

---

[1]Charles Sinnett, "Notes on the Early History of Carrington, North Dakota," Manuscript Collection, State Historical Society of North Dakota, Bismarck.

[2]Ibid.

[3]Walter Spokesfield, The History of Wells County, North Dakota, and its Pioneers (Valley City: 1929), p. 82.

when he said, "That Miller, he started the thing and we stick with him."[1]

Miller's involvement in the Sykeston bone trade proved to be a stimulus, for business became so good there that on just one occasion twenty-eight carloads were shipped out. The skeletons had been stacked in a huge pile which, according to accounts, was more than thirty feet in height and over a city block long. Smaller amounts of bison remains were exported quite regularly, providing a steady income for many Sykeston residents. The bones were truly a blessing, recalled one of the pioneers, for they offered "a way of securing some cash while establishing residence and opening up a farm."[2]

Unfortunately such a source of income did not continue on the prairies very long, for like any unrenewable resource the supplies of skeletons were soon exhausted. In the summer of 1886 Miller shipped the last load of bones from Carrington, "consisting of the smaller bones which at first had been thought to be of little worth."[3] The commerce in bison remains at Sykeston was able to survive a few months

---

[1]Charles Sinnett, "Notes on the Early History of Carrington, North Dakota," Manuscript Collection, State Historical Society of North Dakota, Bismarck.

[2]Walter Spokesfield, The History of Wells County, North Dakota, and its Pioneers (Valley City: 1929), p. 82.

[3]Charles Sinnett, "Notes on the Early History of Carrington, North Dakota," Manuscript Collection, State Historical Society of North Dakota, Bismarck.

longer, with Ben Russell bringing in the last 100 tons from the Antelope Valley in November.[1] After that new settlers in the area had to find other means to "make ends meet," for the trade in the buffalo's ruins had gone the way of the great beast itself.

Directly east of Carrington was the last place on the Northern Pacific line to join the bone trade in 1883. During the summer of that year the railroad built a spur track from its main route at Sanborn to the settlement of Cooperstown. The arrival of the iron horse at that site meant that bulk goods could be profitably shipped from the area, and one of the first commodities hauled out by the railroad was carloads of buffalo bones. The bison remains were brought in by farmers to the newly established depot and sold to dealers who paid as much as $10.00 a ton for the relics. That kind of money was a welcome addition to any sodbuster's income, so many wagons were filled with skeletons and driven to the freight yards for cash. Throughout the fall most of the Cooperstown grangers capitalized on the high price for bones, continuing to harvest the remnants of the herds until the ruins were hidden by snow.[2]

---

[1] Jamestown Alert, 14 October 1886, p. 8; 18 November 1886, p. 8.

[2] North Dakota, Collections of the State Historical Society of North Dakota, Volume I (Bismarck: 1906), pp. 140-141.

The trade in skeletons came to life again in May of 1884, with large numbers of settlers picking bison remains to sell at the Cooperstown station. The local newspaper, commenting late in the month about the commerce, said "250 tons of buffalo bones are now waiting shipment at this point, representing at least 10,000 animals. The price is now $8.00 per ton, cash. The shipment is made to Detroit, Michigan, where the bones are ground up into fertilizers to enrich less productive lands than ours."[1] Eight dollars a ton was $2.00 below the going rate of the previous season, a fact which would ordinarily have caused the market in bison remains to decline. But many immigrants came to the Cooperstown area in 1884, and the pickings of these pioneers helped to compensate for the volume of bones lost due to the drop in price. For the rest of the year old and new settlers alike sold the buffalo's ruins to local merchants, and carloads of skeletons rolled out of the freight yards destined for mills in the East.[2]

Under normal circumstances the bone trade at Cooperstown would probably have declined and then ended in 1885. All of the skeletons within a radius of about ten miles had been collected in the two previous years, and at $8.00 a ton men had little incentive to go beyond that

---

[1] Cooperstown Courier, 30 May 1884, p. 1.

[2] Cooperstown Courier, 19 September 1884, p. 1.

distance in search of the buffalo's wreckage. But competition between two local merchants eventually raised the value of bones to $20.00 a ton, and all around Cooperstown pickers hitched up their wagons and set out to fill the rigs with bison remains.[1]

John Syverson and the Whidden Brothers were the men who struggled for control of the Cooperstown bone trade, outbidding one another for skeletons in an effort to attract customers to their stores. As early as May, Syverson was offering $12.00 a ton for bison remains, and was receiving for his generosity about a carload of chaotic anatomy each day.[2] To counter Syverson's success the Whidden Brothers matched his price for buffalo bones and announced that they were willing to buy 2,000 tons of the sun-parched relics.[3] This rivalry became so intense that by the end of the month the local newspaper could remark that "several hundred tons of buffalo bones await shipment at this point. Messrs. Whidden and Syverson will have a duel over the bone business yet. The jaw bone of a buffalo is a good weapon, competently handled."[4]

---

[1]Myrtle Porterville, "Griggs County Story," Manuscript, North Dakota Institute for Regional Studies, Fargo.

[2]Cooperstown Courier, 22 May 1885, p. 1.

[3]Cooperstown Courier, 22 May 1885, p. 8.

[4]Cooperstown Courier, 29 May 1885, p. 1.

Though the town weekly was able to joke about the competition for bison remains, the opponents involved in the conflict did not take the matter so lightly. By the second week in June, Whidden and Syverson were paying $18.00 a ton for bones, and about six men were said to be on watch day and night for teams bringing in the buffalo's ruins. These lookouts must have been very busy finding wagonloads of bones for their employers, for by June 12 the newspaper could report that $6,000 had been "paid out in Cooperstown for the denuded framework of the American bison. The trade for 1885," the item speculated, "will amount to about $8,000."[1]

Most of this money found its way into the pockets of settlers living in or around Cooperstown, but residents of other areas also benefited from the local bone trade. Some pioneers near Hope, for example, eager to profit from the high price offered for skeletons, drove to Cooperstown with their pickings and doubled the return of their loads.[2] Hope had a bone trade of its own ongoing since early 1884, but buyers there could not match the quotations of Syverson and Whidden and lost a good deal of business as a result.[3]

---

[1] Cooperstown Courier, 12 June 1885, p. 1.

[2] Hope Pioneer, 29 May 1885, p. 1; 5 June 1885, p. 1.

[3] Hope Pioneer, 30 May 1884, p. 1.

The trips of bone hunters from Hope to Cooperstown were short-lived journeys, however, for by July the price war was over with the Whidden Brothers apparent victors.[1] In the absence of competition the rate for skeletons dropped to $10.00 per ton, and pickers from other communities returned to trading with their local agents. Only settlers near Cooperstown continued to deal with buyers there, bringing in bones from far afield to sell at the local market.[2]

A representative of the Northern Pacific Company, visiting Cooperstown in July of 1885, remarked that, in the area surrounding the city, "picking up the buffalo bones off the prairie and hauling them to the railroad is an important industry. As I write," the observer continued, "a considerable hill of these bones is growing apace from the constant contributions from farmer's wagons. Some say they are ground up to make fertilizer in Chicago, and others declare that they are burned to refine white sugar in New York. Whichever is the fact, they are in active demand, and the sale of them has kept the wolf of poverty from many a poor settler's door. A little ready money is the great need of the farmers in a new country, and this need becomes sorest after they have been on their land a year or two and

---

[1] Cooperstown Courier, 7 May 1886, p. 1.

[2] Northwest Magazine 3 (July 1885):10.

have expended small reserves of cash they brought with them. The harvest of buffalo bones has proven a great help to them." For the rest of the year many penniless grangers sold skeletons at Cooperstown, living off the ruins of the bison as others once survived on its flesh.[1]

Some fragments of the vanished herds had been missed by farmers who earlier covered the district, so a handful of scavengers continued to freight bones to Cooperstown in 1886. The Whidden Brothers offered $12.00 a ton that year for dry, clean bison remains, but required all of the pickers to take out their earnings in trade.[2] This meant that the purchasing agent was able to profit twice from each sale, a fact which disturbed some bone hunters who wanted cash for their wares.[3] The controversial practice, however, did not last very long, for soon there were no more skeletons to exchange at the Whidden store. By the end of summer the last of the bones had been gathered from the neighborhood, and men who dealt with the resource had to move on to whiter pastures.

One of the more promising new areas for bone pickers on the Northern Pacific line was Bismarck, where the practice of gathering the sun-bleached relics began in 1884. By mid-May of that year the local newspaper felt compelled to note that "one of the enterprises which is bringing a

---

[1] Northwest Magazine 3 (July 1885):10.

[2] Cooperstown Courier, 7 May 1886, p. 1.

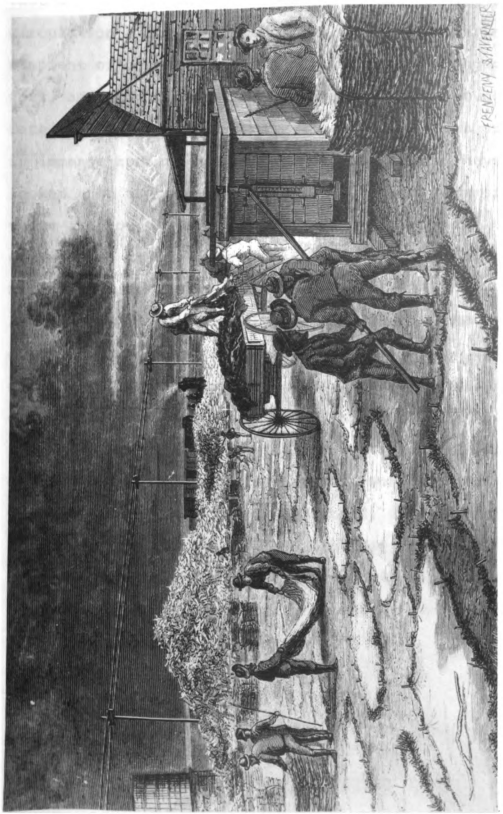
[3] Edgeley Mail, 17 June 1937, p. 5.

Illustration 3. Curing Hides and Bones.

This picture, "Curing Hides and Bones," was drawn by two vagabond artists, Paul Frenzeny and Jules Tavernier. The illustration was described as representing "a frequent scene along one of the Northwestern railroads. The large heap of bones seen in the background has been collected out on the plains, ready to be shipped Eastward to be used for various manufacturing purposes. Hundreds and thousands of such heaps may be seen along the tracks of these railroads."[a]

---

[a]Harper's Weekly 18 (April 4, 1874):307-308.


FREDERIC REMINGTON

vast amount of money into the country and putting it in circulation among the farmers is . . . the gathering and shipment of bones. Hundreds of teams are now engaged in the work, and hundreds of tons of bones are being bought at the rate of $8.00 per ton. While these bones, which are strewn in immense numbers over the prairie in Dakota, have been looked upon as useless by the settlers, they are of great value and now the men who are making from five to twenty dollars per day in gathering them and bringing them to market realize this fact."[1]

The Bismarck weekly, continuing with its report, observed that between $250 and $400 were being paid out each day for bison remains, giving "farmers and laborers an opportunity to make a neat sum outside of their regular income. The myriads of buffalo horns and heads and various other bones of the animals that were wont to roam over these rolling plains are, when ground, the very best fertilizing material known. . . ."[2] Because of this fact, the first skeletons collected from around Bismarck were shipped to a Philadelphia firm where they were rendered into manurial phosphate.[3]

---

[1]Bismarck Weekly Tribune, 16 May 1884, p. 1; Medora Bad Lands Cowboy, 5 June 1884, p. 3.

[2]Bismarck Weekly Tribune, 16 May 1884, p. 4.

[3]St. Paul Weekly Pioneer Press, 22 May 1884, p. 8.

So great was the influx of bison remains that thoughts were given to erecting a bone mill at Bismarck. The principal local buyer, J. C. Nudd, expressed his intention to build an apparatus that would grind up his purchases and make them more economical to ship. With this thought in mind, he rented a structure in the downtown area as a place from which to conduct business. The money for acquiring a machine, however, was more difficult to generate than the idea, and the proposed equipment was never installed.[1]

Nudd was not the only bone dealer who had trouble getting funds. His major competitors in the business, Ansley & Knapp, also experienced some problems due to a shortage of available cash. According to the local newspaper, "there was a lively rattling in the bone yard [in early June] by the arrest of Messrs. Ansley & Knapp, who have been buying bones [in Bismarck] for some time." These two men had "been purchasing loose bones from farmers with the understanding that payments should be made every Saturday night. Numerous farmers and laborers left their work to haul bones expecting to realize a little sum from the enterprise. The farmers discovered that the money was not forthcoming as per agreement, and began a vigorous remonstrance. Attorneys have been retained and it now looks as though the bone magnates [will] fare rather roughly

---

[1]Bismarck Weekly Tribune, 16 May 1884, p. 4.

at the hands of the law. They were arrested upon the charge of obtaining the property under false pretenses. Those who are informed say that the amount due farmers in the aggregate [comes] to nearly $2,000."[1]

Ansley & Knapp were released pending trial, but their troubles were far from over. A number of unpaid pickers went to Ansley's boarding house and demanded to receive their money. When the owed funds were not delivered, George Gibbs, one of the complainants, began to talk about hanging the defaulting bone dealer. Obviously upset at this idea, Ansley grabbed a pistol and shot Gibbs, "the ball taking effect just below the nose and passing through to the back of the neck, where it lodged. Gibbs fell upon the sidewalk, and at first it was thought he had been instantly killed. He soon revived, and the first words he said were, 'I'm a pretty good man yet.' Ansley escaped to the Main Street sidewalk, giving himself over to" the police chief. Gibbs was taken to a nearby home, where doctors worked to save his life.[2]

Ansley was immediately lodged in jail, as much for the crime as for his own protection. "In order that no injustice be done" to the defendant, a reporter for the Bismarck paper sought an interview with the accused and asked him to present his side of the story. Ansley said

---

[1]Bismarck Weekly Tribune, 13 June 1884, p. 3.

[2]Bismarck Weekly Tribune, 13 June 1884, p. 8.

that the claim he and Knapp had defrauded the farmers was "totally and absolutely untrue. We have paid out about $8,000 along the line of the Northern Pacific, several thousand of which has been paid to the farmers and laborers of Burleigh County. The statement that we owe nearly $2,000 in this county for bones is false, as $500 will cover every cent of our indebtedness. We have to our credit in the Bismarck banks and coming to us from the bone business, not less than $3,000. There are large piles of bones along the banks of the river, which we have paid for to these very men who are now causing us this embarrassment."[1]

While Ansley was describing his problems to the reporter, three Bismarck physicians worked to prevent the charge of murder from being added to his list of woes. The efforts of these practitioners were successful, and Gibbs was spared from almost certain doom.[2] With his recovery well under way,[3] the wounded man said that he did not wish to prosecute Ansley, but simply wanted the "revolver to show the boys in after years."[4] As a result of this gesture, Ansley was released on $1,000 bail, whereupon he immediately

---

[1]Ibid.

[2]Bismarck Weekly Tribune, 20 June 1884, p. 8.

[3]Bismarck Weekly Tribune, 27 June 1884, p. 8.

[4]Bismarck Weekly Tribune, 4 July 1884, p. 8.

left town.[1] One week later Gibbs started hemorrhaging,[2] and within a few days he was dead from loss of blood.[3] Ansley was subsequently indicted by a grand jury for murder, but he was never found and brought to trial.[4]

Through all of this controversy and violence the trade in bison remains continued to boom in and around Bismarck.[5] A local newspaper, for example, saw fit to note during May and June that a number of wagons heaped high with skeletons were coming into town enroute to the other bone dealers.[6] And just across the river on the west bank, one businessman was offering $100 cash to anyone who would gather and load ten tons of the buffalo's relics at any telegraph station between the Northern Pacific Missouri River bridge and Miles City.[7] Perhaps in response to this overture the Mandan Pioneer was able to report that "E. R. Knapp, the gentleman who lately went through [this city]

---

[1]Bismarck Weekly Tribune, 25 July 1884, p. 3.

[2]Bismarck Weekly Tribune, 1 August 1884, p. 8.

[3]Bismarck Weekly Tribune, 15 August 1884, p. 8.

[4]Bismarck Weekly Tribune, 14 November 1884, p. 5; 12 December 1884, p. 8.

[5]Bismarck Weekly Tribune, 27 June 1884, p. 8.

[6]Mandan Pioneer, 30 May 1884, p. 4; 5 June 1884, p. 4.

[7]Palma Fristad, Historic Mandan and Morton County (Mandan: 1970), pp. 30-31.

with five wagons for the purpose of collecting bones, was in town yesterday arranging for more men and teams. He has been very successful so far in his search, and at last accounts was finding rich fields in the vicinity of New Salem."[1] Apparently Mr. Knapp's recruiting pitch was well received, for just two weeks later the New Salem correspondent announced that "about twenty tons of bones have been brought in by settlers and are now awaiting shipment east."[2]

A similar activity was underway about forty miles up the tracks at Hebron, where the commerce in bison remains also started in 1884 when Harvey Haven arrived from Minnesota and began picking bones for a living.[3] He was soon joined in this enterprise by Swen Swenson,[4] but no other competition appeared until the following year when John Kreutz commenced chasing after relics on the plains.[5] All three men sold their osseous harvests at the Krauth and

---

[1]Mandan Pioneer, 16 May 1884, p. 4.

[2]Mandan Pioneer, 30 May 1884, p. 1.

[3]C. B. Heinemeyer and B. Janssen, History of Mercer County, North Dakota (Hazen: 1960), p. 19.

[4]Marion and Theodore Mark, Early Hebron (Hebron: 1935), p. 11.

[5]Palma Fristad, Historic Mandan and Morton County (Mandan: 1970), p. 31.

Leutz store in Hebron, where they received from six to seven dollars a ton for their efforts.[1]

These three men had the trade to themselves until 1886, when a large caravan of German immigrants from Russia arrived in town. This group made a "permanent camp north of Hebron and immediately began to gather bones and haul them to the railroad."[2] Perhaps as a result of their efforts, the Mandan newspaper reported in June that skeletons "have been pouring in [to Hebron] and about four or five carloads are on hand ready for shipment. The bone piles seem to be curiosit[ies] for every passenger on trains number one and two, and many [individuals] generally leave the train and get possession of a [souvenir] in the form of an elk or buffalo horn."[3]

A few other settlers came to the Hebron area in 1886 after the Germans, and out of economic necessity they too were obliged to pick "bones to exchange for groceries."[4] The "skeletons were pretty much scattered over the prairies," recalled one of these old-timers, and "sometimes it would take three or four days to gather a ton." Such an

---

[1]Ibid. Marion and Theodore Mark, Early Hebron (Hebron: 1935), p. 11.

[2]C. B. Heinemeyer and B. Janssen, History of Mercer County, North Dakota (Hazen: 1960), p. 27.

[3]Mandan Pioneer, 4 June 1886, p. 3.

[4]C. B. Heinemeyer and B. Janssen, History of Mercer County, North Dakota (Hazen: 1960), p. 98.

investment of time and effort might produce small dividends, "but nevertheless it was this unique industry that kept the wolf from the doors of so many of the early pioneers."[1]

In 1887 some more penniless plowmen came to west central North Dakota, and like those before them they made a living picking bones "until farming was well underway."[2] Some of these aspiring grangers traveled forty miles or more to reach Hebron with a load of sun-parched ruins. It was not uncommon for such trips to require three or more days, with the total receipts amounting to between $10.00 and $15.00.[3]

Additional sodbusters reached the Hebron area in 1888, hoping to homestead some land. With little money and no immediate crop to harvest, they adopted the customary practice of scouring the plains for bones.[4] The fruits of their search were taken by wagon to town, where the local shopkeepers gave $10.00 a ton in trade for the buffalo's wreckage.[5] With one hundred pounds of flour selling for a dollar, and good work shoes for eighty-five cents, the proceeds from a load of bones could help support a family until their farm began to produce.[6]

The supply of bones for the indigent newcomers could not last forever, and by 1890 the last remnants of

---

[1]Ibid., p. 28. [2]Ibid., p. 93. [3]Ibid., p. 28.

[4]Ibid., p. 106. [5]Ibid., p. 96. [6]Ibid., p. 106.

Illustration 4. Clearing Bones Before Plowing.

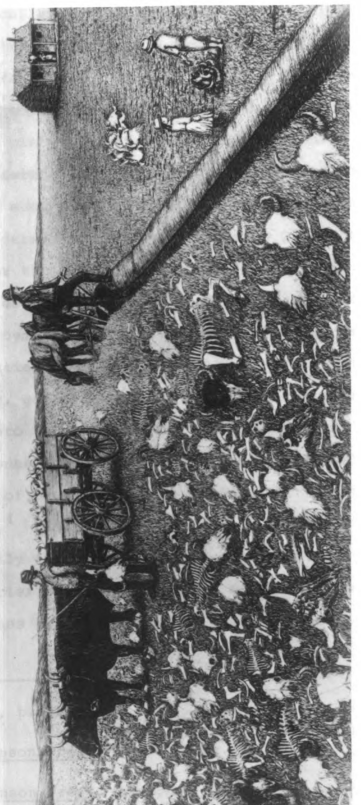
This illustration was drawn by Martin Garretson for his book, The American Bison.[a] While his pen has greatly exaggerated the actual number of skeletons found lying upon the plains, his depiction of the need to remove such ruins before tilling the soil is accurate. A. G. Divet, a young North Dakota farmhand in the 1880s, complained that bison remains "were an obstacle to the breaking of the land, and had to be removed from the path of the plows."[b] F. J. Clifford, writing about the buffalo bone picking industry, noted that many of the sun-bleached relics "had to be gathered anyway before the sodbuster could mow any of the prairie grass, as one of the hard bones was sure to break the sickle of his mower."[c] Thus, many grangers had to harvest the remnants of the herds before they could plant their first crop or cut the hay.

---

[a]New York: New York Zoological Society, 1938. Opposite p. 172.

[b]Fargo Forum, 3 February 1950, p. 6.

[c]Dearborn Independent, 16 June 1923, p. 12.



the herds were collected and hauled to Hebron.[1] Though the local skeleton trade had finally expired, residents in the area were able to benefit from the business much longer than their neighbors. At nearby Dickinson, for instance, the commerce in bison remains lasted for only three years, though at a different level of intensity. As was the case elsewhere along much of the Northern Pacific line, the bone industry got underway at Dickinson early in 1884. By mid-May of that year the town newspaper reported the developing trade, and suggested that "quite a number of men and teams" could find employment in the new enterprise.[2] In response to this observation scores of people began combing the surrounding plains, gathering up the buffalo's ruins and hauling them into town. Since at first one man could easily get a ton of bones on each trip,[3] it was not unusual for up to sixty loads of skeletons to be mustered at the freight yards each day.[4]

Initially the pickers sold their gleanings to a colorful character named Tom Evans, a small-time operator who shipped bones by the carload to mills in the St. Louis

---

[1] Ibid., p. 110.

[2] Dickinson Press, 24 May 1884, p. 1.

[3] Dickinson Press, 7 August 1915, p. 4.

[4] George Aberle, From the Steppes to the Prairies (Bismarck: 1963), p. 163.

area.[1] But when the profitable nature of his dealings became apparent to other merchants, they maneuvered for a share of the commerce by offering higher prices for the bones. Of the various businessmen competing for the traffic in bison remains, the partnership of Becket & Foote nearly gained complete control of the market. Within just a few weeks of their entry into the venture of buying bones, they had purchased seventy-five tons of the remnants and were asking for 1,000 tons more.[2]

It would have taken the local residents quite some time to meet the needs of Becket & Foote had the pickers not received a good deal of assistance from a group of teamsters to the south. Many freighters hauling goods to Deadwood, in the Black Hills, from points along the Northern Pacific, decided in June of 1884 that they might make more money gathering bones.[3] Accordingly, a number of these bullwackers, some with up to twenty-seven yoke of oxen, began driving about the Dickinson area in quest of the buffalo's ruins.[4] Most freighters had at least one big wagon that could carry a five-ton load, and some had a

---

[1]Dickinson Press, 20 February 1915, p. 4.

[2]Dickinson Press, 7 June 1884, p. 1; 14 June 1884, p. 1.

[3]Dickinson Press, 14 June 1884, p. 1; Medora Bad Lands Cowboy, 29 May 1884, p. 4.

[4]Dickinson Press, 28 June 1884, p. 1.

couple of smaller vans fastened on behind as trailers. Into these rigs the South Dakota teamsters heaped all of the skeletons they could find, returning to town with their cargoes when the vehicles had been filled.[1] The pickers brought in the fruits of their labors to Dickinson, Belfield, and Medora, but most of the bones were apparently sold at Sully Springs, now a ghost town west of Fryburg.[2]

After about three weeks of collecting bones and selling them at $8.00 a ton, the bulk of the teamsters returned to their old routines of carting goods south.[3] Few of the drivers found their incomes improved when working as skeleton hunters, and of the two occupations most preferred that of hauling freight. But the money received for the bison's remains was welcome lining to many pockets, so some bullwackers resumed harvesting bones on their journeys back from the Hills. As most teamsters left Deadwood empty when returning to pick up more loads, they filled their wagons with bones on the way to sell at the Dickinson market. Throughout the summer these freighters

---

[1]Wayne Gard, The Great Buffalo Hunt (Lincoln: University of Nebraska Press, 1968), p. 301.

[2]George Aberle, From the Steppes to the Prairies (Bismarck: 1963), p. 163.

[3]Medora Bad Lands Cowboy, 19 June 1884, p. 4; 10 July 1884, p. 4.

brought the buffalo's ruins to town, helping Becket & Foote meet their contract for 1,000 tons of bones.[1]

Winter put an end to bone picking activities on the prairies around Dickinson, but by spring of 1885 the business had been revived. Scenes of the previous year were repeated as wagons heaped with skeletons queued at the depot, and trainloads of the buffalo's ruins rolled out for mills in Chicago and St. Louis.[2] Becket & Foote continued to be the major dealers in town,[3] buying bones from local settlers and industrious freighters returning from the south. Some of the teamsters with sizable outfits brought in over ten tons at a time, enough sun-bleached relics to completely fill a Northern Pacific boxcar.[4] Such quantities of bison remains must have frequently been discharged at the station, for during the year nearly 5,000 tons of bones were shipped from the Dickinson freight yards.[5]

In early May of 1886 the bone trade resumed in town, though on a smaller scale than had been the case the picking seasons before.[6] After two years the bulk of the

---

[1] Dickinson Press, 5 July 1884, p. 1.

[2] Dickinson Press, 20 June 1885, p. 2.

[3] Dickinson Press, 6 June 1885, p. 1.

[4] Dickinson Press, 26 September 1885, p. 1.

[5] Northwest Magazine, August 1886, p. 19.

[6] Dickinson Press, 8 May 1886, p. 3.

bison remains had been cleaned from the nearby plains, and the routes used by the Deadwood freighters were devoid of skeletons.[1] A few loads of sun-bleached relics were collected from some spots missed earlier, but they amounted to little more than a hundred tons at best. The buffalo's ruins could still be found in profusion beyond the Cannonball, and many people went south of the river to fill their wagons with bones. But the best price offered for the skeletons was $10.00 a ton at Gladstone, so most of the pickers took their loads to that station and abandoned the Dickinson market.[2]

---

[1] Mandan Pioneer, 2 July 1886, p. 4.

[2] Mandan Pioneer, 9 July 1886, p. 4.

CHAPTER 2

THE BUFFALO BONE TRADE ALONG THE MISSOURI AND YELLOWSTONE RIVERS

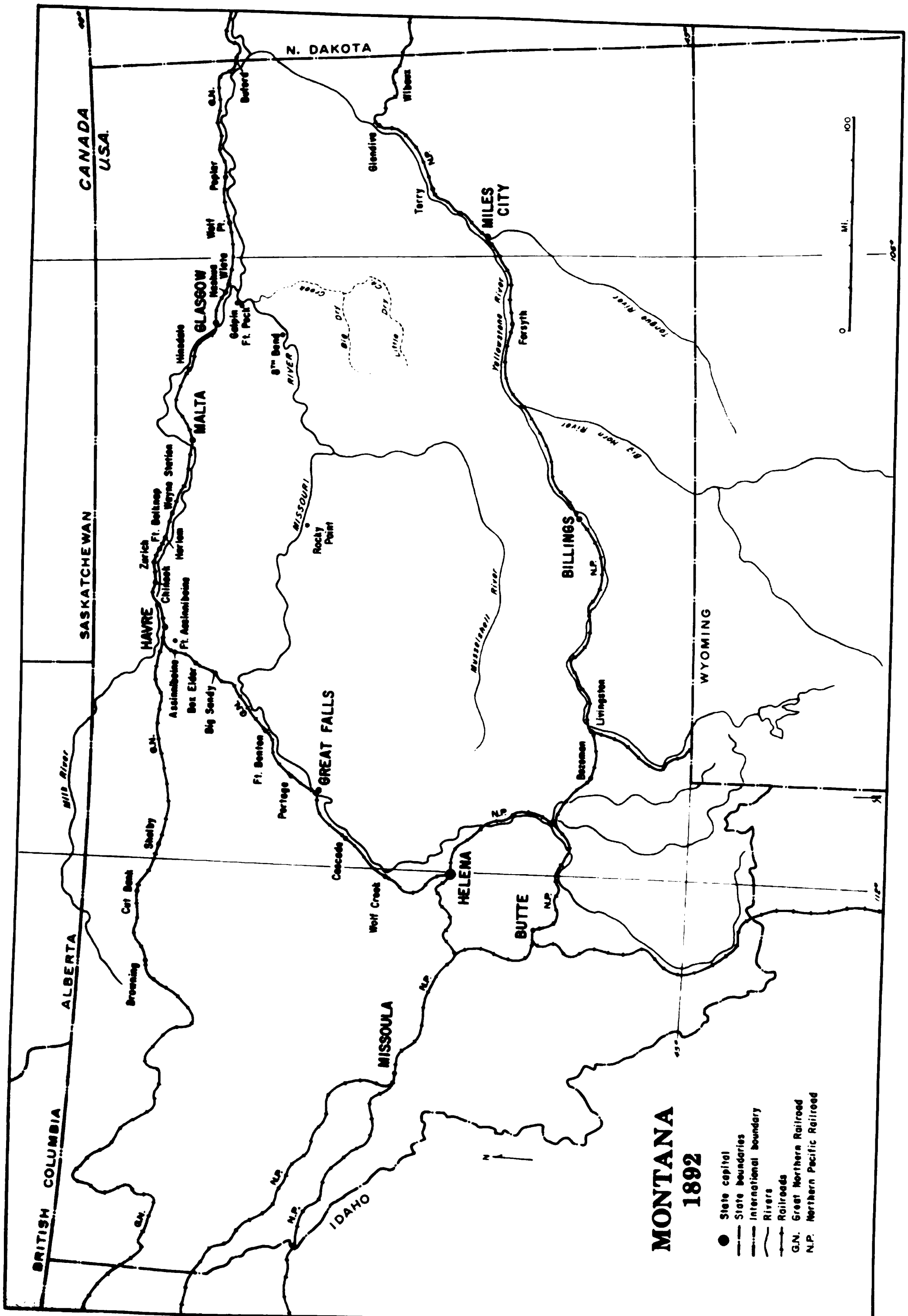
At the same time that Dickinson was witnessing an end to its buffalo bone trade, a similar conclusion to a once-thriving industry was occurring to the west in Montana. Though there is evidence that the Northern Pacific began shipping skeletons from the Yellowstone Valley as early as 1883,[1] the commerce in bison remains did not fully develop there until the following year.[2] In 1884 personnel from Midwestern firms began visiting towns along the river, contracting with dealers at various points to buy all of the skeletons they could supply. The Michigan Carbon Works, of Detroit, proved to have the most aggressive field agents, and it was able to purchase "most of the bones" that pickers gleaned from the surrounding territory.[3]

---

[1]E. W. J. Llindesmith, "Miles City Parish Records, 1883-1885," Llindesmith Collection, Archives of the Catholic University of America, Washington, D.C.

[2]Glendive Times, 7 June 1884, p. 3; 4 October 1884, p. 3.

[3]Glendive Times, 23 August 1884, p. 3; Miles City Weekly Yellowstone Journal, 4 October 1884, p. 1.


MONTANA
1892
State capital
State boundaries
International boundary
Rivers
Railroads
G.N. Great Northern Railroad
N.P. Northern Pacific Railroad
CANADA
U.S.A.
N. DAKOTA
SASKATCHEWAN
ALBERTA
BRITISH COLUMBIA
IDAHO
WYOMING
HAVRE
MALTA
GLASGOW
GREAT FALLS
HELENA
BUTTE
MISSOULA
BILLINGS
MILES CITY
Livingston
Bozeman
Forsyth
Terry
Glendive
Wibaux
Poplar
Wolf Pt.
Hinsdale
Ft. Peck
Zurich
Chinook
Harlem
Ft. Belknap
Wayne Station
Ft. Assinniboine
Assinniboine
Box Elder
Big Sandy
Ft. Benton
Portage
Cascade
Wolf Creek
Shelby
Cut Bank
Browning
Rocky Point
Missouri
Musselshell River
Yellowstone River
Big Horn River
Tongue River
Milk River

The going price for buffalo bones in 1884 was $7.00 per ton at the Northern Pacific freight yards as far upstream as Miles City.[1] But by 1885 they had significantly increased in value, with the Michigan Carbon Works offering $12.00 a ton for skeletons hauled to its mill by the railroad. An additional $6.00 per ton was paid for bison remains that were carried from the Yellowstone Valley by boat, the extra sum being given because the bones had to be crushed and bagged before loading.[2] This meant less work for the factories in reducing the relics to dust, so they were able to offer a premium rate for remains that were shipped out by water.

Considering the additional labor required of those who sent skeletons by boat, it would seem surprising that the paddlewheelers could get any bones to carry at all. But many of the men who went north of the Yellowstone in search of the buffalo's ruins could not get their wagons across to the railroad where no freight restrictions applied. Thus, a large number of pickers were compelled to move their harvests at least part of the way to market by water, a fact which kept some vessels on the river competing with the Northern Pacific line. Just one group of prairie

---

[1] Miles City Weekly Yellowstone Journal, 23 August 1884, p. 3.

[2] William T. Hornaday, "The Extermination of the American Bison," Smithsonian Report, 1887, pt. 2 (Washington, D.C.: 1889), p. 446.

scavengers, working near Miles City with eight wagons, reportedly sent 200 tons of skeletons downstream in 1885. Similar loads of bones were shipped from other landings along much of the lower valley, providing strange cargoes for the craft that plied the lower Yellowstone River.[1]

By 1886 the fragments of the bison within forty miles of the Yellowstone had been gathered from the ground and hauled to market by pickers operating in the valley. William T. Hornaday, leading a hunt out of Miles City early that year for the Smithsonian Institution, reported the earth devoid of the buffalo's ruins as far north as the landform "Red Buttes." From that point onward, he later reminisced, one could "see where the millions had gone," as the wreckage of the vanished herds lay thickly on the prairie beyond. The carcasses rested precisely as they had fallen only a few years before, with most of the bones still held together by the strength of some dried-up ligaments. "Go wherever we might," said Mr. Hornaday, "on divides, into bad lands, creek bottoms, or on the highest plateaus, we always found the inevitable and omnipresent grim and ghastly skeleton, with the bones of the body bleached white as chalk." It was often possible to see forty or fifty of these remains at one time decorating the

---

[1]William T. Hornaday, "The passing of the Buffalo," The Cosmopolitan 4 (October 1887):85-88.

terrain, with some places baring up to "seventeen skeletons on a little more than an acre."[1]

Such concentrations of the buffalo's wreckage continued to attract the prairie scavengers, despite their need to travel forty miles in order to reach the remains. One source claimed that twenty tons a day were being collected north of the Yellowstone by the bone men,[2] with some of the relics apparently being loaded onto barges for transport to St. Louis.[3] By the end of 1886 "thousands of tons" of the bison's anatomy had been freighted from east-central Montana,[4] making profitable cargoes for the railroad and steamers serving that part of the state. But the gathering activities pushed the unharvested ruins farther back from the river valley, leaving too great a distance between the skeletons and the shippers for picking to pay any more. Thus 1886 was the last year on record in which the buffalo's spoils were floated down the Yellowstone, and any later movement of bones by boat was done on the Missouri River.

---

[1]William T. Hornaday, "The Extermination of the American Bison," Smithsonian Report, 1887, pt. 2 (Washington, D.C.: 1889), pp. 509-510.

[2]Mandan Pioneer, 15 May 1886, p. 4.

[3]Charles Aubrey, "Letterbook," Correspondence dated February 28, 1886, p. 250. Property of Mrs. Herbert Swett, Dickinson, North Dakota.

[4]William T. Hornaday, "The Extermination of the American Bison," Smithsonian Report, 1887, pt. 2 (Washington, D.C.: 1889), p. 510.

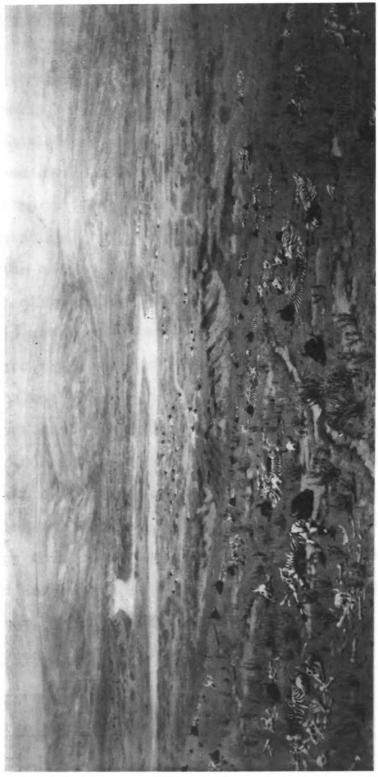
Illustration 5. Where the Millions Have Gone.

Teddy Roosevelt spent part of the mid-1880s in western North Dakota working on a cattle ranch. Writing about what he observed as a cowpuncher, the future president said "no sight is more common on the plains than that of a bleached buffalo skull, and their countless numbers attest the abundance of the animal at a time not so very long past. On those portions where the herds made their last stand, the carcasses, dried in the clear, high air, or the mouldering skeletons, abound. Last year, in crossing the country around the heads of the Big Sandy, O'Fallon Creek, Little Beaver, and Box Alder, these skeletons or dried carcasses were in sight from every hillock, often lying over the ground so thickly that several score could be seen at once. A ranchman who at the same time had made a journey of a thousand miles across northern Montana along the Milk River told me that, to use his own expression, during the whole distance he was never out of sight of a dead buffalo and never in sight of a live one.

Thus, though gone, the traces of the buffalo are still thick over the land. Their skulls, which last longer than any other part of the animal, are among the most familiar of objects to the plainsman, [and] their bones are in many districts so plentiful that it has become a regular industry, followed by hundreds of men (christened "Bone-hunters" by the frontiersmen), to go out with wagons and collect them in great numbers for the sake of the phosphates they yield."[a] This oil on canvas, possibly painted on location near where Roosevelt worked, is a portrayal of the above description. Executed in 1888 by John Henry Moser, and entitled "Where the Millions Have Gone," the illustration is now in the possession of the Smithsonian Institution. (Courtesy National Collection of Fine Arts, Washington, D.C.)

---

[a]Theodore Roosevelt, Hunting Adventures in the West (New York: Putnam's Sons, 1927), pp. 186-187.



The bison's denuded framework became an item of commerce in 1884 along much of the Missouri River, about the same time that it acquired economic value in the Yellowstone valley. In response to this fact the Indians at Standing Rock began combing their reservation for bones, hauling the products of this search to Fort Yates where the steamboats could take them away.[1] Commenting on this effort, a local correspondent noted that "our dusky friends, having finished putting in their second crops and broken sufficient prairie for the coming year, have turned their attention to the gathering of bones. Up to the present they have hauled in and shipped about 150 tons. The [packet] General Terry on her downward trip took on board about 100 tons of bones, and expects to take as many more on her trip up."[2]

A short distance to the north, at Washburn, the buffalo bone industry also got underway in 1884 when seventeen teams set out from town to gather the sun-bleached relics.[3] Those men engaged in the new enterprise hauled their pickings to points along the river, where the bones were unloaded and banked at a landing for the steamboats to take downstream. When sufficient amounts of bison remains had been amassed at a given place, a paddlewheeler would

---

[1] Pierre Free Press, 6 June 1884, p. 1.

[2] Bismarck Weekly Tribune, 13 June 1884, p. 8.

[3] Washburn Times, 16 May 1884, p. 1.

tie-up there and the bones would be piled on deck. The skeletons were then carried to the port facilities at Bismarck, where the cargo could be transferred to boxcars and dispatched to the processing mills.[1]

The local rate for buffalo bones was $8.00 per ton, and at that price it was not long before more of the bison remains near Washburn had been tossed into wagons and hauled to the Missouri River. With the easiest pickings gone from the plains, some bone scavengers left the trade and turned to other kinds of work that were not so tiring. But at least ten teams stuck with the task of hunting skeletons, and for the rest of the season they brought in loads to the local riverboat landings.[2]

The Washburn bone trade resumed again in the spring of 1885, but pickers received $3.00 a ton less for their efforts than they did the preceding year. Ordinarily settlers would not have collected bones if prices fell so far, but when wheat got off to a dubious start many sod-busters saw bison remains as insurance against failing crops. Recognizing that many farmers might respond to appeals for bones, a number of buyers encouraged grangers to harvest skeletons.[3]

---

[1] Northwest Magazine 2 (September 1884):20.

[2] Northwest Magazine 2 (September 1884):20.

[3] Washburn Times, 19 June 1885, p. 1.

Examples of this urging appeared in the town newspaper when advertisements announced the commencement of that year's picking activities. "Captain Braithwaite, of the Steamer Undine," said one item, "will pay $5.00 per ton for bones delivered at the Washburn landing. This is a good chance for farmers and others to improve dull seasons and make fair pay by gathering the bones which are scattered over the prairie and hauling them to Washburn. The Undine arrives here every Sunday morning, and the captain will pay cash for all delivered during the week."[1]

Some local men also decided to get involved in the buffalo-bone commerce and compete with the riverboat skipper for the wreckage of the herds. George Robinson, at Coal Harbor, and O. B. Wing from town, both offered to purchase skeletons delivered to landings nearby.[2] But their business, and that of Braithwaite, was hampered by the fact that they had no way of measuring the bison remains they bought. Not until their investments were ferried to Bismarck and placed on the railroad scales were the dealers able to settle affairs with the men who had sold them bones. This problem was solved in late July when Washburn finally acquired "a first-class Fairbanks" instrument for weighing heavy loads.[3] Thereafter the pickers received immediate

---

[1] Ibid.

[2] Washburn Times, 19 June 1885, p. 1.

[3] Washburn Times, 24 July 1885, p. 1.

payment for their wares, and the trade in bison remains increased on account of the new procedures.[1]

For the rest of the season Washburn citizens gathered the buffalo's ruins and sold them to one of the three local dealers who vied for the sun-parched relics.[2] During that time the industry brought in substantial funds to the town, enabling many poor residents to survive a rather lean year. These people lived from the bones of the bison as others once fared on its flesh, making skeletons the most abundant crop harvested on some Washburn homesteads in 1885.

Apparently the traffic in bison remains was revived the following spring, but there is no indication that it amounted to very much. Farming conditions had improved in 1886, giving grangers less incentive to go searching for buffalo bones. The impact of picking from previous seasons had also made skeletons scarce, discouraging all but a penniless few from harvesting what was left.[3] So the trade in the bison's relics nearly vanished from the Washburn scene, and the commerce stayed in a dormant state for three consecutive years.

---

[1] Washburn Times, 7 August 1885, p. 1.

[2] Washburn Times, 17 July 1885, p. 1.

[3] I. P. Baker Papers, "Letterbook 12," July 28, 1886 - March 18, 1887, p. 24, State Historical Society of North Dakota, Bismarck.

In 1889 hard times again plagued the farmers of North Dakota, and many sodbusters were forced to seek some way of increasing their incomes. The grangers in the Washburn area, having weathered bad seasons before, simply returned to collecting bones to get some additional money. The bison remains near the river had long since disappeared, so the skeletons that were assembled came mostly from the outlying districts. From Turtle Lake, Ingersoll, Conkling, and Weller the pickers hauled bones in to Washburn, taking them down to the front of the flour mill to sell to a local merchant.[1] "The buffalo bone gatherers are abroad in the land," observed the town newspaper, "and wagon load after wagon load are being brought in to Mr. P. Christiansen who pays $5.50 per ton for them in cash."[2]

The dealer in Washburn must have found rates on the river too high for transporting bones, for instead of floating his purchases to Bismarck he had them moved there by land. A paragraph in the town newspaper of late May 1889 said that "Al and Jack Sheldon started four teams to Bismarck hauling bones for Mr. P. Christiansen. Mr. C. has about 300 tons to ship and accompanied the outfit."[3] And the next issue of the Washburn weekly noted that the same

---

[1] McLean County Mail, 22 June 1889, p. 3.

[2] McLean County Mail, 15 June 1889, p. 3.

[3] McLean County Mail, 25 May 1889, p. 3.

crew had "made two trips, with four wagons, to Bismarck this week in hauling bones for Mr. P. Christiansen, returning laden with goods for our merchants."[1]

Freighting cargo overland to Bismarck when a water route proved too expensive was a feasible option when the railroad ran nearby. But what worked for the Washburn dealer was impossible for Charles Aubrey, a bone buyer 400 miles away on the upper Missouri River. Aubrey, an agent for T. C. Power and Brothers, ran the trading post at Wolf Point, one of the major supply depots upstream from the Northern Pacific bridge. Discovering in 1884 that there was a market in the Midwest for bones, the frontier merchant sought to profit from the buffalo's relics that littered the surrounding country.[2] Aubrey announced that he would pay $4.00 a ton for skeletons banked between Rocky Point and Buford, a rate below that offered on the Yellowstone where railroad competition raised the price.

Though most potential pickers thought the figure too low to be accepted, some men along the river did respond to the trader's deflated offer.[3] The Indians at the Fort Peck Reservation, for example, anxious to get some additional

---

[1] McLean County Mail, 1 June 1889, p. 3.

[2] T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letter dated 7 May 1884, Montana Historical Society, Helena.

[3] Ibid. Letters dated 5 July 1884 and 31 October 1885.

supplies, "gathered and sold 150 tons of buffalo bones" to Aubrey within six weeks of his call for the commodity.[1] Other parties of local Indians, under the direction of a headman hired by Aubrey, began picking in the Milk River Valley, returning to Wolf Point with their loads.[2] And woodcutters along the Missouri, some with free time on their hands, hauled in skeletons to such now-forgotten landings as Walker, Sanders, and Eighth Bend.[3]

Those men who banked the buffalo's ruins along the Missouri River could not immediatley benefit from their labors because there was no way of measuring the value of the bones they had collected. Not until each pile had been separately ferried to Bismarck, and its weight determined on the Northern Pacific scales, was Aubrey able to settle accounts with the individual pickers.[4] For this reason most of the skeletons gathered were brought directly to Aubrey's

---

[1]U.S. Department of the Interior, Annual Report of the Commissioner of Indian Affairs (Washington, D.C.: Government Printing Office, 1884), p. 116.

[2]T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letter dated 21 July 1884, Montana Historical Society, Helena.

[3]Ibid. Letters dated 18 May 1884; 5 July 1884; 10 July 1884. I. P. Baker Papers, "Steamer Helena Freight Book," October 1, 1884, State Historical Society of North Dakota, Bismarck.

[4]T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letters dated 4 November 1884 and 1 September 1885.

headquarters at Wolf Point.[1] There the harvested relics could be weighed on the spot and, after a deduction of 10 percent for dirt and moisture, the amount of bones quickly computed.[2] Each picker was given a written receipt indicating the worth of his load, and was required to take his wages out in goods at the T. C. Power store.[3]

Charles Aubrey did not find it easy, however, to arrange for the movement of bison remains from Wolf Point and elsewhere along the Missouri. From the outset in 1884 the Benton Transportation Company, the only shipping firm west of the Yellowstone, refused to carry bones as cargo unless they were bagged in one-hundred pound lots.[4] To satisfy this requirement Aubrey considered buying a portable steam crusher with which he could reduce the buffalo's ruins down to the size of coarse sand.[5] Such a machine, however, proved to be too heavy and expensive, leaving Aubrey with

---

[1]Ibid. Letter dated 21 July 1884.

[2]I. P. Baker Papers, "Letterbook 7," 28 April 1884 to 25 August 1884, pp. 276-277.

[3]T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letter dated 5 July 1884; another with no date, 1884.

[4]I. P. Baker Papers, "Letterbook 7," 28 April 1884 to 25 August 1884, p. 96.

[5]T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letter dated 7 May 1884.

increasing numbers of skeletons on hand and no way to get them to market.[1]

A break in this situation came when the Coulson Steamship Line, which served the Yellowstone Valley, offered to float bones down the Missouri in gross form instead of crushed. The company decided that for $10.00 per ton it could haul the bison remains "loose," using wooden boxes with side handles to facilitate loading operations. Such a transport rate was outrageous, and few shippers accepted the deal, but the custom of carrying bones in sacks or barrels was finally changed for the more practical bulk technique.[2] This new method of conveying freight forced the competition to respond in kind, and by August the Benton Transportation Company was accepting bones from Wolf Point at $6.00 per ton.[3]

Working with Captain I. P. Baker, manager of the Benton Line, Aubrey arranged to have the skeletons he had purchased taken downstream at the reduced rate. From Bismarck, where the bones were loaded onto railroad cars for the carbon works at St. Louis, the freight charges came to $7.50 a ton. As transfer costs from boat to boxcar were

---

[1] Ibid. Letter dated 30 July 1884.

[2] T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letter dated 18 May 1884.

[3] I. P. Baker Papers, "Letterbook 7," April 28, 1884 to August 25, 1884, pp. 276-277.

about forty cents per thousand pounds, Aubrey was left with shipping expenses of $14.25 per ton. Added to these freight costs was the $4.00 a ton that Aubrey had paid for the bones, leaving him a margin of $3.75 per ton from the factory buying price of $22.00.[1]

Though the income from the bone trade along the Missouri was small for those picking and selling, a number of people besides Charles Aubrey seemed to find the business attractive. In late July of 1884 some teams came up from Bismarck to look for bison remains on the Dry Forks south of Nashua. They gathered skeletons along these streams and placed them in large piles throughout the region, then later hauled them to the river for shipment to buyers in the East.[2]

A few people managed to make a living from the buffalo bone trade along the Missouri,[3] but if Aubrey's problems are any guide most of them earned every cent they received. For example, it was found at Fort Berthold that the Indians were hauling in skeletons during the day and

---

[1] Ibid.

[2] T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letter dated 30 July 1884.

[3] Ibid. Letters dated 18 May 1884; 9 November 1884. I. P. Baker Papers, "Steamer Helena Freight List, 1883-1884," trip number 9, 1884. Fort Benton River Press, 5 November 1884, p. 1.

Illustration 6a. Old Bone Man of the Plains.

Rufus Zogbaum, an artist traveling up the Missouri River on the steamboat Batchelor in July of 1884, met a picker named James at Saunders Point who was gathering skeletons for shipment to Detroit. This solitary character, in the process of cooking a catfish while surrounded by mosquitoes, was sketched on the spot[a] and then later put in finished form as the "Old Bone Man of the Plains." In describing the completed drawing, it was said that "the 'outfit' of the bone-hunter is a familiar spectacle in the Territory of Montana and in other portions of the West where the slaughter of buffaloes by the wholesale has been of comparatively recent date. A picture of one of these scavengers of the plains is shown . . . , and will be recognized as very familiar by all travelers through the Northwest. Beyond question this old 'bone-hunter' was formerly a 'skin-stripper,' and is retracing his way over the path of slaughter which he pursued several years ago. He has halted for the noonday meal, which he is preparing unconcernedly, and will devour with as much relish as though his occupation were of the most appetizing character."[b] (From Harper's Weekly 31 (15 January 1887):36.)

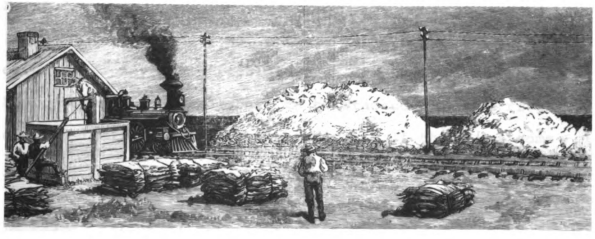
Illustration 6b. Bones and Hides Awaiting Shipment.

Another frontier draftsman, Paul Frenzeny, visited the Great Plains during the middle 1880s and recorded the sight of buffalo bones piled beside the railroad waiting for transportation East. (From the Illustrated London News, October 29, 1887, page 521).

---

[a]Rufus Zogbaum, "Diary, 1884" (Laramie: Western History Center, University of Wyoming), p. 26.

[b]Harper's Weekly 31 (15 January 1887):39.



stealing them back at night.[1] To see that he did not end up paying twice for the same load of bones, Aubrey had to store all of the bison remains he bought inside the trading post corral. The sun-bleached relics kept the hay and horses company until just before time for shipment, when they were hauled down to the Wolf Point landing and loaded on board a Benton steamboat.[2]

Although Aubrey was able to cut his losses to the nocturnal Indian pickers, there were other claims on his bone stocks that were not as easily stemmed. Grass fires, a rather common occurrence on the prairie, could burn entire piles of skeletons if provisions had not been made to protect them. To prevent such disasters from happening during the periods of high fire risk, Aubrey had someone watch each bone heap he had purchased at landings remote from Wolf Point.[3]

If flames did not consume the bones, then water often did. Any bison remains ready for shipment on the Benton Company's vessels had to be stacked near the river's edge to facilitate loading operations. If there was some

---

[1] I. P. Baker Papers, "Letterbook 7," April 28, 1884 to August 25, 1884, pp. 276-277.

[2] T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letters dated 10 July 1884; 21 July 1884.

[3] T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letter dated 5 July 1884.

delay in the arrival of the boats, or if they came down full and had to leave the bones, high water sometimes claimed what the steamers had left behind.[1] In just one year alone Aubrey lost over fifteen tons of skeletons to caving banks along the Missouri.[2]

Aubrey's greatest problem, however, was getting the riverboat skippers to transport his waiting piles of bones. Captain Baker, sitting in his Bismarck office, was eager enough for the business, but the shiphands who had to load the cargo held contrary ideas. Transferring tons of bones from shore to deck was a strenuous, all-night proposition, and one that was very unpopular with the Missouri River stevedores. To keep peace with their men, the officers of each vessel had to resist carrying Aubrey's malodorous freight until ordered to do so by Baker. As a consequence, the Wolf Point bone buyer was forced to wage a constant struggle to have his investments moved downstream.[3]

Because of the reluctance of the riverboat captains to carry the bones for Aubrey, he was left with a large

---

[1] I. P. Baker Papers, "Letterbook 7," April 28, 1884 to August 25, 1884, pp. 276-277. Charles Aubrey, Letterbook, correspondence dated 6 May 1885, p. 60; 22 June 1885, p. 91; 23 June 1885, p. 98.

[2] Ibid. Correspondence dated 1 September 1885, pp. 146-147. T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letter dated 13 September 1885.

[3] T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letter dated 5 November 1884. Charles Aubrey, Letterbook, correspondence dated 1 June 1885, p. 75; 22 June 1885, p. 91.

amount of them on hand when the shipping season ended in 1884. At least 100 tons of the sun-parched ruins had to be stored in the corral at Wolf Point,[1] and another twelve to fifteen tons remained at Galpin, Walker, and Denvall Point. Most of these skeletons had already been taken in exchange at the trading post, so Aubrey was forced to carry them on his books until the following year. This situation was a risky and unprofitable way to conduct a business, but it was just another problem of the trade to those engaged in the buffalo bone commerce.[2]

In the spring of 1885, when activity resumed on the river, Aubrey found that the cost of shipping skeletons had increased 8 percent over the preceding year. But the price paid for bones at St. Louis had also risen by $2.00 a ton, more than making up for the additional expenses incurred in transportation.[3] Anxious to get the bison remains stored at Wolf Point downstream while rates were favorable, Aubrey began banking the chaotic anatomy for loading on the Benton steamers.[4] By mid-June all of the skeletons had been

---

[1]Ibid. Correspondence dated 6 May 1885, p. 60.

[2]Ibid. Correspondence dated 1 September 1885, pp. 146-147.

[3]I. P. Baker Papers, "Benton Transportation Company Journal," January 1, 1885 to February 16, 1886; Book 2, August 13, 1855, p. 51.

[4]North Dakota Outdoors, Volume 24, Number 7 (July 1961), p. 33.

hauled from the trading post corral to the landing, and the first boatload of over eighty-five tons had been ferried to the railroad at Bismarck.[1]

While Aubrey was busy sending buffalo bones to factories in the Midwest, he was not very active in buying more skeletons from pickers along the Missouri. The going rate for bison remains in 1885 was $4.50 a ton banked near the river's edge.[2] Though this figure represented an increase of fifty cents from the year before, few of the prairie gleaners were willing to work at that price. The easily acquired remnants of the buffalo had been gathered in 1884, and only those that lay some distance from "Big Muddy" were left for the picking gangs. It did not pay the bone men to travel great distances when the value of their product was low, so most of them found other jobs that summer and waited for the market to improve.

Still Aubrey was convinced that he would be able to buy buffalo bones at $4.50 per ton in 1885, and in a letter to his boss he predicted that he could get 200 to 250 tons by fall.[3] Approximately 175 tons of the skeletons he

---

[1] I. P. Baker Papers, "Steamer Benton Freight List, 1885," June 19, 1885. Bismarck Weekly Tribune, 2 July 1885, p. 3.; Fort Benton River Press, 17 June 1885, p. 5; 8 July 1885, p. 5.

[2] Charles Aubrey, Letterbook, correspondence dated 22 June 1885, p. 91.

[3] T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letter dated 21 June 1885.

Illustration 7. Receipt for Transport and Sale of Bones.

This receipt is from the Bismarck office of the Benton Transportation Company to T. C. Power & Brother, crediting the Montana merchant with $750.31 for the sale of buffalo bones. The skeletons were sent to the St. Louis Carbon Works, and the freight charges for this trip amounted to about 60 percent of the total value of the shipment.[a] After deductions are made for what Power paid for the bones, his net profit on the deal was probably less than $400. (T. C. Power Papers, Montana Historical Society)

---

[a] I. P. Baker Papers, "Benton Transportation Company Journal," Book 2, January 1, 1885 to February 16, 1886, p. 51.

"Original"

Statement of "Bones" shipped by Powers & Bro Wolf Pt on Str Benton Trip #2 - 1885.

To proceeds of Six Cars bones 154480# @ $24.00 per Ton		$1853.76
Less. Str Benton's freight on Same.	$517.95	
" Rail Road " " Bismarck to St Louis.	$585.50	
		$1103.45
Amount placed to Credit of T. C. Powers & Bro this day.		$750.31

Bismarck August 13th 85.

expected to purchase were to come from the Indians at Poplar Creek,[1] but the tribe at that station chose to cut wood for the steamers rather than hunt bones for the Wolf Point agent. This situation meant that very few pickers brought in cargoes to the trading post, and Aubrey's plans for another big year in bison remains proved illusory.[2]

Aubrey's hopes for a "good bone season" were further tarnished by a return for shipping troubles. The problems he had in 1884 getting the riverboats to accept his osseous freight were compounded in 1885 when even Captain Baker seemed to have difficulty persuading his men to load the skeletons. After the first cargo of sun-bleached relics was taken downstream in June, Aubrey was unable to get the rest of his bone stocks moved from the banks of the Missouri. Only by complaining to T. C. Power about the intolerable shipping situation was he able to get action on his transportation needs.[3] Through the influence of his boss the Wolf Point agent soon had steamers calling at the landing for bones, and by November all of the skeletons had been floated to Bismarck that had

---

[1] North Dakota Outdoors, Volume 24, Number 7 (July 1961), p. 33.

[2] Charles Aubrey, Letterbook, correspondence dated 1 September 1885, pp. 146-47.

[3] Ibid. Correspondence dated 22 June 1885, p. 91. T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letters dated 11 September 1885; 13 September 1885.

been held over from 1884.[1] These bison remains totaled "over a million pounds" in weight,[2] and averaged about seventy tons per boatload. The bones were simply piled loose on deck wherever space allowed, making the Benton vessels look like uncovered graveyards as they made the trip back to home port.

With the backlog of bison remains finally removed from the trading post corral, Aubrey was free to devote his attention to restoring the local bone trade. At last realizing that a price of $4.50 per ton would bring him few if any bones, Aubrey let it be known in the fall of 1885 that he would pay $6.00 per ton for skeletons banked along the Missouri the following spring. Though it was late in the season, some of the pickers responded to this offer and began piling up the buffalo's wreckage in safe places between Buford and Rocky Point. These ricks of chaotic anatomy, looking like white castles near the river, were ready to be turned in an account to Aubrey when the shipping season resumed in 1886.[3] But those who had gathered the

---

[1] T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letter dated 31 October 1885. I. P. Baker Papers, "Steamer Batchelor Freight List, 1885," September 23 - November 20, 1885, trip 5.

[2] Mary Williams, Pioneer Days of Washburn, North Dakota, and Vicinity (Washburn: Washburn Leader, 1936), p. 10.

[3] T. C. Power Papers, Case 67, "Wolf Point & Poplar River," letters dated 31 October 1885; 24 November 1885.

bison remains were unable to profit from their labors, for the trading post at Wolf Point was closed in May and no dealer was left to buy the bones.

It is not known why the trading post was abandoned and Charles Aubrey quit the buffalo bone business, but one of the reasons must certainly have been the matter of increasing costs. Aubrey had managed to cope with Indian tricks, the problems of fire and water, and the reluctant steamboat men, but adverse economics was one hindering factor completely beyond his control. Freight tolls on the river increased again in 1886, and the price paid for skeletons by the processing firms declined from the previous year.[1] Under these conditions Aubrey probably realized that there was no longer any money to be made in handling bones, so he left the trade in bison remains for some more promising pursuit.

Along the Missouri River, particularly on the southern shore, were left untouched many heaps of skeletons that had been gathered for Aubrey in the fall of 1885. These piles were not disturbed until 1889, when some enterprising trader mustered over 32 tons of bones from ricks left in the vicinity of Round Butte and had the Benton line

---

[1] Fort Benton River Press, 9 June 1886, p. 5. I. P. Baker Papers, "Letterbook 12," July 28, 1886 to March 18, 1887, p. 24.

float them downstream to Bismarck.[1] The rest of the bone piles stood untouched until 1892, when six Glasgow residents built their own craft and plied the Missouri River collecting skeletons. The men gathered the abandoned heaps of bison remains from between the Milk and Musselshell Rivers, and then floated them to Wiota where they were transferred to boxcars and shipped east. Later in the season, when the Milk became too shallow for navigation, the bones were unloaded near the Galpin telegraph station and then hauled by team to Nashua for export. The crew kept bringing in the buffalo's remnants throughout most of the summer months, continuing their freighting activities until all of the bone ricks were gone.[2]

The proximity of the Great Northern line made it possible for these six men to export the deserted piles of bison remains. But it was also the presence of this railroad that had helped to bring an end to the Missouri River bone trade and leave the skeletons stranded on the shore. Transportation costs were much less on land than by water, and with the coming of tracklayers the steamboats found they could no longer compete for business. While this situation badly hurt the shipping interests, it was good news for the pickers because it raised the price of their product. With

---

[1] I. P. Baker Papers, "Steamer Rosebud Freight List," July 1888 to November 1890, trip of June 9 to July 13, 1889.

[2] Glasgow Courier, 4 August 1949, p. 9.

the expense of sending bones to market reduced, buyers were able to offer higher rates per ton to those searching for the remnants of the herds. This increase in price had finally justified the effort of collecting the derelict bone ricks and conveying them to the railroad. Such an economic stimulus had earlier swept across most of northern Dakota, a process which began in and around the town of Devils Lake.

CHAPTER 3

THE BUFFALO BONE TRADE ALONG THE GREAT NORTHERN RAILROAD

The Great Northern day coach, attached to a string of boxcars, jerked to a halt at the end of the line in the spring of 1885. Only two passengers disembarked at the terminal station, called Devils Lake, to be received by a band of North Dakota Sioux who had come to see the fire-wagon and hear its steam war whoop. One of the two riders detraining that day was a twenty-year-old bank clerk from Pennsylvania who had followed Greeley's advice and gone west for adventure. Picking up his carpet bag and lunch box, the travelworn tenderfoot, Major Israel McCreight, set out to start his new life by looking for some kind of job.[1]

As McCreight left the railroad depot of Devils Lake he was confronted by a pile of bones nearly one hundred feet long and a dozen feet high. This great stack of skeletons, the Indians tried to tell the curious Easterner, was the product of a commerce that was fast changing the

---

[1] Westerners Brand Book, Book 6 (Los Angeles Corral, 1956), pp. 91-93.

looks of the regional landscape. Only a few years before the surrounding grasslands had been covered with an osseous mantle, the residue of the great slaughter that had destroyed the American bison. But the arrival of the iron horse had made it possible to ship these ruins to Midwest manufacturers and a demand was created for the buffalo's remains in Devils Lake.[1] Indians, Metis, and pioneers--stimulated by the offer of $6.00 per ton--set forth with carts and wagons to gather up the fragments of the vanished herds. These scavengers of the plains brought large quantities of bones to the Great Northern Railroad freight yards, and the rick of sun-bleached relics that had captured McCreight's interest was a monument created by that trade.[2]

As early as 1883 people had reportedly started collecting bison remains for the Devils Lake market. Indians at the Fort Totten Reservation accumulated 700 tons of bones that year and piled them up at the southern end of the lake. Captain Edward Heerman, skipper of the local ferry boat, hauled these pickings in barges across to the northern shore

---

[1]Ibid.

[2]Major I. McCreight, Buffalo Bone Days (DuBois, PA: 1950), pp. 76-78. Usher Burdick, The Old Time Cow-men of the Great West (Baltimore: Wirth Brothers, 1957), p. 166.

Illustration 8. Bone Pile Near Devils Lake, North Dakota.

"The bone picker," said one newspaper correspondent, characteristically "sallies forth from a frontier town in a wagon. He scours the prairie for a cargo. If he comes upon the ghastly [ruins] of an Indian scrimmage, that is clear gain, for the osseous remains of the red citizen help to complete the load. A party of individuals thus engaged is called an 'outfit,' [and] the number of outfits annually sent forth indicates a business already extended to an extraordinary degree. Middlemen do the shipping, and purchase the bone-picker's cargo as fast as it is gathered, paying at the railway station $5.00 per ton. The price fluctuates, however, and furnishes the local population with the excitement of a small stock exchange, 'bulls' (in skeleton) of course predominating."[a] This picture offers an example of the temporary landforms created by the industry described above. It is a pile of buffalo and other bones assembled near Devils Lake by the Indians, said to have filled 150 boxcars when finally hauled away by the railroad, perhaps in 1885. (Courtesy State Historical Society of North Dakota)

---

[a] Bozeman Times, 2 February 1875, p. 4.

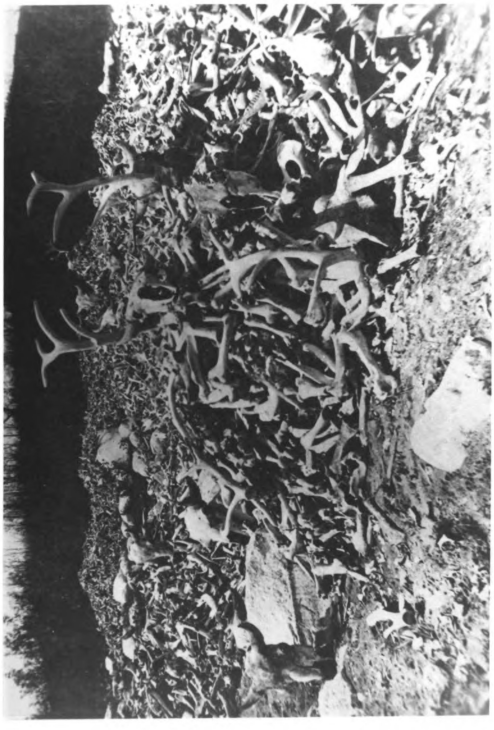


Illustration 9a. The "Minnie H" Loading Bones.

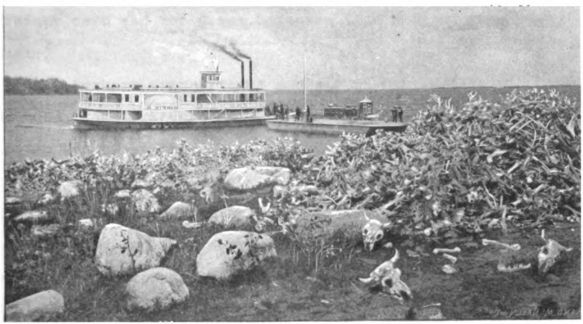
At Devils Lake, near Fort Totten, the Cuthead Sioux had assembled "hundreds" of carloads of bison remains sometime around 1884. Captain Edward Heerman, skipper of the steamer "Minnie H," hauled the bones in barges to the north shore where the Great Northern Railroad shipped them out. (From F. I. Whitney, Valley, Plain and Peak [Chicago: Rand, McNally & Company, 1894], pp. 32-33.)

Illustration 9b. Bone Pickers Practicing Their Trade.

"The first year he spent on the land, the pioneer often planted only potatoes and earned some money picking up buffalo bones. The prairie was strewn with them, and every railroad station was a market. Piles of bones became a common sight along the railroad tracks. Most merchants dealt in bones, giving receipts which others honored and which were called "buffalo-bone money." At six dollars a ton, a load of two or three tons brought a sizeable sum."[a] Settlers in the Devils Lake area joined in the search for skeletons, and like the men in this picture they filled their wagons with bison remains and hauled them into town. (From Illustrated London News, 29 October 1887, page 521)

---

[a]Elwyn Robinson, History of North Dakota (Lincoln: University of Nebraska Press, 1966), p. 161.



where they were unloaded at a railroad siding.[1] The Indians then packed the relics into about one hundred freight cars and the Great Northern line shipped them East.[2]

Perhaps even greater amounts of the buffalo's denuded framework were brought in to Devils Lake the following year when the Metis and settlers became involved in the profitable trade.[3] The Indians were really not inclined to gather bones, for their superstitions counseled against the activity and most did not have the wagons and horses with which to transport the remains.[4] But the so-called "half-breeds" had no compunctions about collecting the scattered ruins, and with their Red River carts they soon became the principal figures in the local buffalo bone commerce. Their labors, in addition to those of the

---

[1]Major I. McCreight, Buffalo Bone Days (Sykesville, PA: Nupp Printing Company, 1939), p. 5. Note by Edward Heerman on verso of photograph at State Historical Society of North Dakota, Bismarck.

[2]Letter from Fred Stoltze to Captain Edward Heerman, 17 April 1913, Edward E. Heerman Papers, Minnesota Historical Society, St. Paul.

[3]Devils Lake Inter-Ocean, 16 May 1885, p. 1. Fargo Daily Argus, 12 June 1884, p. 2.

[4]Letter from Fred Stoltze to Captain Heerman, 17 April 1913, Edward E. Heerman Papers, Minnesota Historical Society, St. Paul.

whites, produced "large quantities" of sun-bleached relics for the Devils Lake market in 1884.[1]

The buffalo bone industry had started big again in 1885, and with the enterprise such an important feature of the Devils Lake economy it was natural that McCreight's search for employment should involve him in that trade. Within a few days after his arrival the young Easterner was working as an agent for one of the major bone buyers in town, negotiating with incoming pickers for the purchase of their loads. Those with fragments of the bison to sell would come to the greenhorn from Pennsylvania to find out how much he would offer for their cargoes. If the quoted price was acceptable, the owners of the carts or wagons would guide their bone-laden vehicles onto the scales by McCreight's office and have the gross weight recorded on a ticket. Then with the receipt in hand, the teamsters would drive their osseous freight to the dumping grounds at the railroad and return to the scales to have their rigs weighed empty. After some calculations to determine the net weight, McCreight would pay the holder of each voucher in cash for the value of his load.[2]

The bones that had been discharged by the pickers at the freight yards remained piled by a siding until

---

[1] Devils Lake Inter-Ocean, 16 May 1885, p. 1.

[2] Major Israel McCreight, Buffalo Bone Days (Sykesville, PA: Nupp Printing Company, 1939), pp. 25-28.

arrangements could be made for their dispatch. Once some rolling stock had been placed for that purpose by the railroad, McCreight would hire a couple of men to load the skeletons on board. When about ten tons of the bison's ruins had filled a box to the top, the doors of the car would be shut and sealed and the cargo sent on its way. Most of the relics that left Devils Lake were shipped to carbon and chemical works in Chicago, Detroit, and St. Louis. These bone-hungry mills, receiving hundreds of carloads each month, processed the raw material into charcoal filters and fertilizer.[1]

McCreight had other duties to perform for his employer, but buying and shipping the remains of the vanished herds took much of his working time. As early as May 1885, there were about twenty teams a day bringing the legacy of the hide hunters into town, and each wagon had to be guided through the weighing and unloading process.[2] During June the burden increased as a Metis train of approximately sixty carts began making weekly visits to the local buffalo bone market.[3] This large influx of bison remains continued at Devils Lake until the early part of July,

---

[1]Major Israel McCreight, Buffalo Bone Days (Sykesville, PA: Nupp Printing Company, 1939), pp. 39-40.

[2]Devils Lake Inter-Ocean, 30 May 1885, p. 1.

[3]Devils Lake Inter-Ocean, 20 June 1885, p. 1; 27 June 1885, p. 1.

when the business, and McCreight's hectic labors, nearly ceased.[1]

The cause of the reduction in the buffalo bone commerce was the community of Bartlett, about twenty miles east on the Great Northern main line. The trade in bison remains had started there in 1884 with prices comparable to those in Devils Lake.[2] But by 1885, as local supplies dwindled, Bartlett merchants became eager to attract the Metis who were taking most of their pickings to points further west. With this objective in mind, dealers in Bartlett decided to compensate for the longer haul to their town by raising the value of bones to $12.00 per ton.[3] At first the Indians viewed this rate increase as just a temporary fluctuation in the market, and continued to trade in the Devils Lake area.[4] But as time slowly proved the stability of the new price, more and more bone trains began driving the additional distance to take advantage of the higher return. Within about two months Bartlett had captured

---

[1]Devils Lake Inter-Ocean, 25 July 1885, p. 2.

[2]Fargo Daily Argus, 12 June 1884, p. 2.

[3]Devils Lake Inter-Ocean, 30 May 1885, p. 1. Port Emma Times, 11 June 1885, p. 2.

[4]Devils Lake Inter-Ocean, 6 June 1885, p. 1.

nearly all of the bone traffic from Devils Lake, and McCreight had little but time on his hands.[1]

Bartlett maintained its hold on the buffalo bone commerce for nearly a month before the Devils Lake merchants chose to react in late July. Believing that they did not have to match the Bartlett figure to regain a competitive position, the Devils Lake buyers abandoned their old rate and began offering $10.00 per ton for skeletons. The dealers felt that the Metis would accept their slightly lower price and return to a more convenient trading center, but whether or not they were correct in their assumption soon became an academic point.[2]

The increase in the value of bones at Devils Lake, and the scramble by local agents to obtain a share of the trade, upset the equilibrium of the market. Hardly a week had elapsed before rivalry between dealers advanced the price of bison remains to $20.00 per ton. Such a high quotation was unheard of at the time, and within just a few days the bone mart at Bartlett was abandoned and the focus of the commerce returned to Devils Lake.[3] No longer did

---

[1]Devils Lake Inter-Ocean, 25 July 1885, p. 2. Pioneer Stories Written by People of Nelson County, North Dakota (Lakota, ND: American Print, 1926), p. 9.

[2]Devils Lake Inter-Ocean, 25 July 1885, p. 2.

[3]Devils Lake Inter-Ocean, 8 August 1885, p. 1. Washburn Times, 14 August 1885, p. 1.

pickers have incentive to sell their sun-bleached cargoes at points east, and McCreight's office was once again the scene of great activity. Not until 1887 was Bartlett able to recover much of the traffic it had lost to Devils Lake, but by then most of the buffalo's ruins were gone from the plains and the big money was out of the business.[1]

The local newspaper reported that the Metis were "hustling" on account of the high price for bones, and indeed the rate increase did prompt large numbers of them to bring bison remains to Devils Lake.[2] McCreight later recalled that these Indians filed into town with their carts and wagons heaped with the buffalo's ruins, forming processions that sometimes stretched for a mile across the plains.[3] Each rig, depending upon the size of its box, held from 500 to 1,200 pounds of skeletons,[4] and one entire caravan might bring in as much as $200 worth of relics even when the price was low.[5]

The most common form of transport used by the Metis bone pickers was a carrier regionally known as the Red River

---

[1]Devils Lake Inter-Ocean, 30 April 1887, p. 4; 11 June 1887, p. 4.

[2]Devils Lake Inter-Ocean, 8 August 1885, p. 1.

[3]Devils Lake World, 11 July 1928, p. 2.

[4]Major I. McCreight, Buffalo Bone Days (Sykesville, PA: Nupp Printing Company, 1939), p. 25.

[5]Devils Lake World, 11 July 1928, p. 2.

cart. These sturdy, large-wheeled conveyances, some with basket racks built along the sides, were constructed entirely of wood and held together by the adroit use of wooden pegs. To these heavy rigs, McCreight observed, the Indians "harnessed and hitched, with raw hide thongs and ropes, whatever domestic beast they happened to possess that was large enough to drag it along." Such vehicles, each loudly squeeking its own high-pitched tune, often wandered into Devils Lake piled up with bison remains.[1]

The Metis seldom took their Red River carts and went alone looking for bones. McCreight remembered that about fifty or more families would usually band together and travel to a campsite where the bison remains were thick. Then, as a group, they would spend a few days leisurely roaming about the prairie filling their rigs with the relics of the vanished herds. As the various parties secured their loads, they would customarily drive to an agreed rendezvous and wait for the other members to finish their work. When all of the carts had been packed to capacity, the entire troop would form into line and set out for the buffalo bone market.[2]

According to McCreight nearly all of the Metis bone trains had an established order of march. Most of the

---

[1]Major I. McCreight, Buffalo Bone Days (Sykesville, PA: Nupp Printing Company, 1939), p. 25.

[2]Devils Lake World, 11 July 1928, p. 2.

Illustration 10. Metis Bone Picker and Red River Cart.

Nearly all of the Metis bone pickers used Red River carts which, with a single oxen, could handle a load of one thousand pounds. Those individuals "with the bigger investments represented by basket racks and horse teams" could haul "from a ton to 2,500 pounds per trip. The horses in use were generally of the cayuse type, small and tough and suitable for the purpose. When picking was conducted more than a day's journey from a railroad loading point, the men chose to travel together, and caravans of carts and wagons stretching and screeching for more than a mile on the trail were seen quite often. In those . . . trains the favored positions were at the front, and there the best horses and [their owners] enjoyed the prestige of leadership and freedom from dust."[a] An example of the kind of vehicle seen in such a parade is shown in this picture taken at Devils Lake on July 19, 1885. (Courtesy Travel Division, North Dakota State Highway Department)

---

[a]Grant MacEwan, Entrusted to My Care (Saskatoon: Modern Press, 1966), pp. 48-49.

congregations traveled in single file with the chief of the outfit in the van. Behind the headman followed the other male adults, each one walking in front of his team to keep it in pace with the leader. Atop the bones that filled each rig perched the baggage, women, and young of the owners, while the offspring able to ride or walk usually ranged alongside the family cart. Those men without a vehicle to tend often spread out along the line of advance to hunt for some small game that could fill the evening pot. And in the rear of the procession, or sometimes scattered within its midst, came the retinue of dogs, ponies, and livestock that accompanied every tribe.[1]

These bands of Metis pickers moved across the open prairie towards town, literally screeching to a halt about half a mile from its borders. There, at a place with abundant grass and water, they unloaded the equipment from their carts and prepared to make camp. While the women busied themselves setting up tepees, the chief and his counselors walked into Devils Lake to get bids on the tribe's sun-bleached cargoes. Once the leaders had received what they felt to be the highest price for bones, they returned to the wagons and brought in their loads to the buyer who had made them the best deal. Then, in a ritual already described, the vehicles were scaled, unloaded, and reweighed before crowds of curious onlookers. When each picker had been paid

---

[1]Devils Lake World, 11 July 1928, p. 2.

in full for the value of his labors, the members of the tribe regrouped and drove their rigs back to camp.[1]

Upon returning to their bivouac the teamsters approached a remarkable addition to the prairie scene. What had a few hours before been open grassland had become, through the efforts of women and children, a city that could rival Devils Lake in population. The new settlement, marked by the smoke from many fires, comprised a large number of tepees irregularly clustered about a favorable site chosen by the chief. Each lodge in the colony was surrounded by a vociferous pack of dogs, the usual quota of kids, and the variety of camping paraphenalia that accompanied every family. The entire community was, in turn, temporarily ringed by a motley herd of tethered and hobbled fauna that served as food and transportation for members of the tribe. This combination of strange sights and sounds formed quite an attraction for the local settlers, and day or night they could be found, McCreight said, visiting the foreign village.[2]

When they reached this new community, McCreight records, the returning bone pickers arranged their carts in a circle around its margins. After the enclosure had been

---

[1]Major I. McCreight, Buffalo Bone Days (Sykesville, PA: Nupp Printing Company, 1939), pp. 26-28.

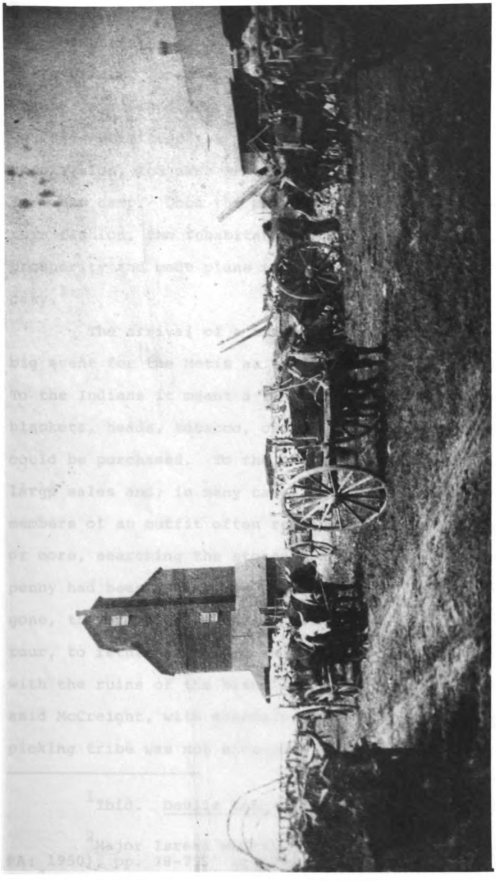
[2]Major I. McCreight, Buffalo Bone Days (DuBois, PA: 1950), pp. 78-79.

Illustration 11. Discharging Bones at Devils Lake, North Dakota.

"Bone picking," said one observer on the Great Plains, "is a regular industrial pursuit, involving the collection, assortment and sale of the skeletons of defunct buffaloes. These skeletons are plentifully scattered over the uncultivated western area(s) . . . , and parties of half a dozen or more, with wagons, go in search of them and bring them into the railroad stations for shipment East. These skeleton-searching parties are called 'outfits,' and hence the phrase 'bone-picking outfit.' The extent of this singular pursuit is really surprising. There are hundreds of men engaged in it, and all the border railroad towns have bone-middlemen who make a business of buying and shipping the gatherings of the pickers."[a] In this picture a Metis outfit like that described above is shown discharging its cargo of buffalo bones at the town of Devils Lake in 1885. The Red River carts, seen at the right, were easily unloaded by simply unhitching the draft animal. (Courtesy State Historical Society of North Dakota)

---

[a]New York Tribune, 27 November 1874, p. 3.



made complete as possible, the drivers unharnessed their weary beasts, loosed the other animals, and placed them in the improvised corral to pasture. This barrier of vehicles permitted the livestock to graze under minimum supervision, and also helped to exclude unwelcome visitors from the camp. Once the Metis town had been secured in this fashion, the inhabitants celebrated their increased prosperity and made plans to spend it in the white man's city.[1]

The arrival of a bone train at Devils Lake was a big event for the Metis as well as the local businessmen. To the Indians it meant a festive period when items like blankets, beads, tobacco, cheap meats, and other supplies could be purchased. To the shopkeepers it meant a time of large sales and, in many cases, even greater profits. The members of an outfit often remained near town for a week or more, searching the stores for bargains until every penny had been spent. Then, when all of their money was gone, the group would strike camp and set out on another tour, to return once more when their carts had been filled with the ruins of the bison. And so the summers passed, said McCreight, with scarcely a day in which some bone-picking tribe was not encamped on the city's outskirts.[2]

---

[1]Ibid. Devils Lake World, 11 July 1928, p. 2.

[2]Major Israel McCreight, Buffalo Bone Days (DuBois, PA: 1950), pp. 78-79. Devils Lake World, 11 July 1928, p. 2.

Since the supply of buffalo bones around Devils Lake had nearly been consumed in 1884, the Metis were forced to drive increasing distances in quest of the bison's remains. So thoroughly had the prairies been gleaned near town that their search for bones sometimes took the Indians up to 150 miles in advance of the railroad. Rather than haul their loads of sun-parched relics back to the end of the line, some pickers sold the fruits of their labors at reduced prices to buyers set up along the Great Northern right-of-way. But most of the Metis preferred to trade at Devils Lake where they could get a higher return and superior goods.[1]

The long hauls of the bone pickers continued until 1886[2] when the Great Northern Railroad, which had been stalled at Devils Lake, began pushing west towards the Souris River. As the ribbons of steel were extended that year, new points for buying the buffalo's ruins were established along the way. Churchs Ferry, Leeds, Rugby, Towner, and Minot--all located nearer the remaining sources of bones--rapidly gained favor with the Metis outfits at the expense of their former trading center. Fewer and fewer wagons full of the bison's denuded framework made their way to the Devils Lake market, and this time the lure of higher

---

[1]Major Israel McCreight, Buffalo Bone Days (DuBois, PA: 1950), pp. 71, 79.

[2]Devils Lake Inter-Ocean, 29 May 1886, p. 1.

returns could not bring the bone hunters back. By the summer of 1886 McCreight was unable to compete with fellow merchants up the line, so he left the business and returned to Pennsylvania.[1]

Some fragments of the great herds had been missed by those who had earlier scoured the district, so a handful of pickers continued to freight bones to Bartlett and Devils Lake.[2] Such efforts were bound to be short-lived, however, and soon even these last relics were thrown into carts and hauled to market. Just a few years before the remnants of the bison had been one of the region's major exports, stimulating community development and bringing funds to local merchants. But by the end of 1887 the inhabitants of the area could no longer find skeletons on the prairie, and the role of bone-buying center passed on to another town.

One community that inherited the trade which once thrived at Devils Lake was a settlement to the west named Minnewaukan. The bone business did not begin at this site until 1885, when an approaching railroad gave promise that bulk goods could soon be shipped out from the place. Anticipating the arrival of this new mode of transportation and the benefits it would bring, the local residents began to

---

[1]Major I. McCreight, Buffalo Bone Days (DuBois, PA: 1950), p. 82.

[2]Devils Lake Inter-Ocean, 30 April 1887, p. 4; 11 June 1887, p. 4.

glean skeletons from the surrounding countryside. So abundant were the sun-bleached relics that before the railroad even reached town pickers had brought in seventy-five carloads of bones to the Minnewaukan depot.[1]

Most of the people who initially gathered bones were pioneers who had made homestead claims in the vicinity. These sodbusters, usually faced with insufficient cash to meet expenses, found the ruins of the buffalo a welcome source of income. Thomas Wardrope was one of a number of men who maintained their families for a time by collecting bison remains. Like many other grangers, he spent the first four days of the week breaking the prairie soil. Then on Fridays, to rest the horses, he and his children would comb the nearby plains in search of buffalo bones. The following day Mr. Wardrope would drive his wagon to Minnewaukan and sell his pickings, obtaining in return enough money to buy some much-needed goods and supplies.[2]

Ozias Burdick was another local farmer who relied upon the Minnewaukan bone market to meet his family's needs. He would hitch a team of oxen to a wagon when time allowed, fill the box with two or three tons of bones, and then haul the load to town to exchange for wares. Since nearly every

---

[1] Jamestown Morning Alert, 19 May 1885, p. 4.

[2] Orin Libby Papers, "Notes taken by Miss Lizzie May Brown, 1915-16," State Historical Society of North Dakota, Bismarck.

merchant in Minnewaukan was also a dealer in bison remains, Burdick had little difficulty finding a buyer for his freight. But because money was relatively scarce on the North Dakota frontier, cash was seldom paid to those who gathered the buffalo's ruins. Instead, most of the pickers took out their earnings in trade from the businessman who purchased their bones, and Burdick was one of many who participated in the system.[1]

"Upon delivery of the bones," recalled Burdick, we would be given credit at the store for our load and, in case we did not choose to spend all our proceeds at that time, the balance would be written on a neat receipt in language and figures as follows:

> Minnewaukan, Dakota Territory, June 6, 1885.
> Received from Ozias W. Burdick three tons of buffalo bones at $6.00 per ton.
> Total credit $18.00
> Goods received in payment $11.00
> Balance due in trade . . . . . $ 7.00
> (Signed) J. W. Brown, Merchant

These receipts were called buffalo bone money, as the balance due would be redeemed by the merchants in goods to the original holder or his assignee if properly endorsed. We could trade at Devils Lake or any other buffalo bone market . . . and receive full credit in goods and merchandise for the remaining $7.00."[2]

---

[1] Devils Lake Daily Journal, 28 June 1957, p. 4.

[2] Ibid.

Those merchants who purchased the remnants of the herds had a good thing going for themselves, for not only did they gain from the bison remains they bought, they also made a profit on the goods they gave as payment. It is not surprising, then, that strong rivalry soon developed between some Minnewaukan businessmen for a greater share of the buffalo bone trade. By early August of 1885, only two months after the railroad had reached town, competition raised the value of the bison's anatomy from $6.00 to $23.00 per ton.[1] At that price people could not afford to do anything else but pick buffalo bones, and scores of wagons set out in quest of skeletons. Even many shopkeepers closed their stores and went searching for the buffalo's ruins.[2] Within a period of a few days these eager scavengers sold enough relics to the opposing bone dealers to fill over seventy boxcars.[3] The fruit of this great harvest was arranged like cordwood along a sidetrack near the Minnewaukan depot, there to await shipment to processing plants in the East.[4]

---

[1]Devils Lake Inter-Ocean, 15 August 1885, p. 1.

[2]Orin Libby Papers, "Notes taken by Miss Lizzie May Brown, 1915-16," State Historical Society of North Dakota, Bismarck.

[3]Fargo Daily Argus, 17 August 1885, p. 7.

[4]Edna Waldo, Dakota (Caldwell, ID: 1936), p. 335.

The Chippewas of the Turtle Mountain Reservation had been gathering bones near Devils Lake, but the good prices at Minnewaukan brought some of them to that station where they could earn up to $40.00 per week.[1] Frank Weisz, a local resident, remembered that these Indians and Metis would often come in caravans of wagons heavily burdened with the fragments of the buffalo. These groups would usually consist of from twenty to forty Red River Carts, and due to their regular visits Minnewaukan soon had bones heaped "50 feet wide, 300 feet long, and 12 or 15 feet high awaiting a train to ship them out."[2]

To the west of Minnewaukan the traces of the herds "were found everywhere, [and] the pioneer could pick up a wagon load in no time at all. Indeed, to do a proper job of plowing it was often necessary to clear the field" of buffalo bones. Where the farmer had not yet settled, men like Ole Berg, who had three outfits working for him in 1886, were cleaning the land of bison remains and selling them for $8.00 to $10.00 a ton. Due to these efforts skeletons that had once been easy to find soon became scarce or available only in remote areas. Consequently, recalled one frontier resident, "we had to take our ox team and

---

[1] The Rural New-Yorker 44 (5 September 1885):602.

[2] Orin Libby Papers, "Notes taken by Miss Lizzie May Brown, 1915-16," State Historical Society of North Dakota, Bismarck.

Illustration 12. Bone Gathering Outfit at Minnewaukan, North Dakota.

A visitor to Minnewaukan in 1885 "saw a long procession of Red River carts loaded with buffalo bones and driven by Chippewa Indians and half-breeds who had come from the Turtle Mountains, about seventy miles distant. Some of the carts were drawn by ponies and some by oxen. The drivers of the oxen walked in front of their teams, instead of beside them as white men do, and coaxed the animals along by constant motions of the whip."[a] These convoys, remembered one pioneer, "squeeked so badly that you could hear that they were coming long before you could see" them.[b] The famous photographer, Frank Haynes, was in Minnewaukan on May 24, 1886, when one of these bone-picking outfits came to town. Before discharging their loads at the railroad station the prairie gleaners posed for these two pictures. (Courtesy Haynes Foundation, Bozeman)

---

[a] Northwest Magazine 3 (November 1885):30.

[b] Orin Libby Papers, "Notes taken by Miss Lizzie May Brown, 1915-16," State Historical Society of North Dakota, Bismarck.

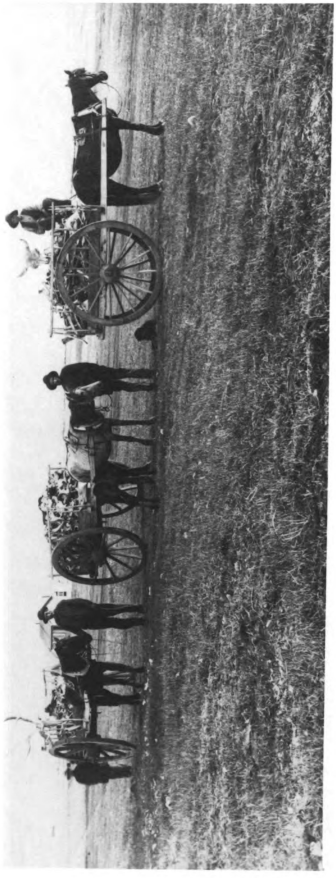
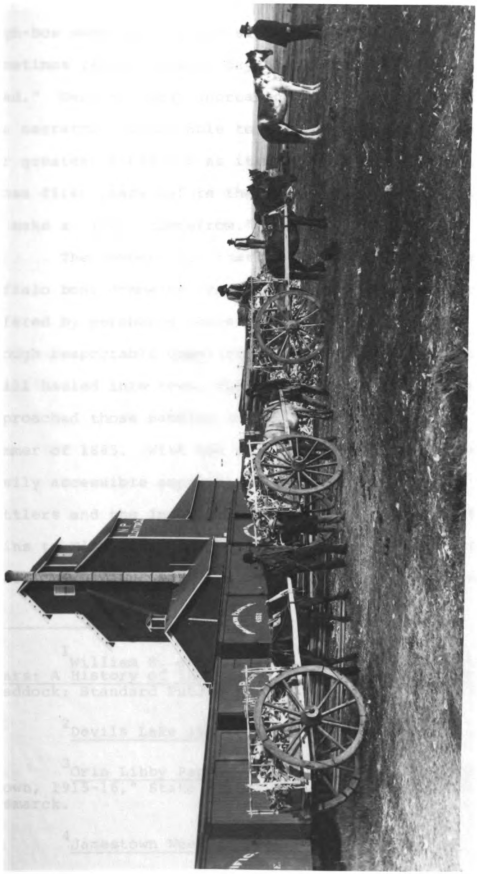


Illustration 13. Unloading Bones at the Freight Yard.



high-box wagon and go out still further and further away, sometimes taking several days to gather and bring home a load." Despite these increasing difficulties, continued the narrator, "being able to sell buffalo bones was one of our greatest blessings as it was a means of support in those first years before the land was under cultivation to make a living therefrom."[1]

The competition that had spurred Minnewaukan's buffalo bone commerce ceased within the year, and the price offered by merchants there dropped to about $10.00 per ton.[2] Though respectable quantities of sun-bleached relics were still hauled into town, the amounts sold never again approached those handled during the boom period in the summer of 1885. With the value of bones reduced, and the easily accessible supplies of skeletons gone, only a few settlers and the Indians continued to bring the buffalo's ruins to Minnewaukan. Throughout 1886[3] and 1887[4] the traffic in bison remains declined, until finally there was

---

[1] William E. and Stanley O. Stiles, The First Fifty Years: A History of the Community of Maddock, North Dakota (Maddock: Standard Publishing Company, [1951]), pp. 8-16.

[2] Devils Lake Inter-Ocean, 15 August 1885, p. 1.

[3] Orin Libby Papers, "Notes taken by Miss Lizzie May Brown, 1915-16," State Historical Society of North Dakota, Bismarck.

[4] Jamestown Weekly Alert, 28 April 1887, p. 1.

no longer enough trade to support even one local dealer in the business.

Not far south of Minnewaukan Abram Baldwin "was persuaded to open a small general store for the convenience of the new settlers." Since he had limited means, the goods in his business were restricted to the bare essentials. With most residents in the area even more destitute than he, Baldwin received many requests to trade goods for buffalo bones. By attempting to accommodate his customers at from $8.00 to $12.00 per ton, the merchant soon had all of his assets tied up in bison remains. Because of this situation, he was forced to close his market and seek employment near Grand Forks in order to support himself. When the railroad extended its line to the site of his store a few months later, Baldwin was able to load his purchases on boxcars and ship them out as the first freight to leave Oberon.[1]

As the supply of skeletons diminished in the Minnewaukan region the bone-gathering industry looked for other areas that could supply its needs. One large, mainly untapped territory was made accessible to pickers in 1886 when the Great Northern Railroad finally began building west from its terminal at Devils Lake. The first evidence of a bone trade in this new district came when a missionary named John Blegen visited North Dakota. While traveling

---

[1]Devils Lake Journal, 17 June 1933, p. 4.

from Burlington to Devils Lake he stopped overnight at Broken Bone, a small settlement near Rugby. The initial thing Blegen saw when approaching the town was a huge mass of buffalo bones, the relics after which the community had been named. This was not a surprising sight, as the cleric had observed such heaps of sun-parched ruins throughout the Mouse River Valley. "One sees on every farm," he wrote, "great piles of broken buffalo bones which the settlers have gathered up from the prairie. These piles are often so great that they reach up above the houses [and contain] hundreds of wagonloads. The buffalo bones have been a source of revenue for the settlers out here, [as] last year they brought $15.00 a ton.[1]

By the time Blegen passed through Rugby the price of bones had dropped to about $10.00 per ton.[2] This decline, though, did not discourage men from continuing the practice of searching for the bison's wreckage. A testament to this fact was James Lockwood, who came to Rugby in 1886 to buy bones and earned $1,500 at the job in just his first year.[3] Lockwood's income was a source of irritation to some

---

[1]Theodore Blegen, "A Missionary Journey on the Dakota Prairies in 1886," North Dakota Historical Quarterly, volume 1, number 3 (April 1927):28-29.

[2]O. T. Tofsrud, Fifty Years in Pierce County (Rugby: 1943), pp. 22-23.

[3]Ogle (George A.) & Company, Compendium of History and Biography of North Dakota (Chicago: 1900), p. 1348.

pickers, however, since the gleanings they sold him never weighed more than $2.50 a load regardless of the amount brought in. This irregularity was due to the absence of any kind of large scale in town, leaving the buyer to determine the size of a ton of bones.[1]

Lockwood's low prices were the only ones offered in Rugby until about 1890, when Frank Sikes, the first sheriff of Pierce County, decided to try for a piece of the action. Rivalry in the bone business helped to stimulate the trade, and more people were inclined to comb the prairies for skeletons. Two local brothers who chose to profit from the competition were L. A. and Severn Larson. After seeding was done they each hitched their oxen to a wagon and traveled southwest of town to the lakes and sloughs where bones were most commonly found. The next day the pair wandered randomly together over the plains filling their rigs with the remnants of the herds. Returning home with full loads on the third evening, the men took their pickings to Frank Sikes to get some cash. According to L. A. Larson, Frank "backed up to the hind wheel of the wagon, grabbed a spike in each hand, raised it off the ground and said, 'That's a ton, alright. I'll give you $10.00 for it.'"[2]

---

[1] O. T. Tofsrud, A History of Pierce County (Rugby: 1936), p. 109.

[2] Pierce County Tribune, 4 June 1936, section 2, p. 9.

Ten dollars a ton was a good price compared to what folks further north were getting. At Bottineau, for example, the trade began in 1887 with the arrival of the railroad. There "the first crop taken from much of the land was buffalo bones, sometimes running a ton to the acre." The average sum offered for this harvest was only $6.00 per ton, but the low rate did not discourage people from participating in the commerce.[1] Testifying to this fact was the local newspaper which observed in early June that "farmers and Indians continue to scour the prairies in all directions in search of bones of different animals, and long trains of wagons laden with the relics of the past century can be seen every day wending their way into town."[2]

While the bone trade was booming at Bottineau, similar activity was occurring about the same distance from Rugby to the east. The place was Churchs Ferry, and the town newspaper, in describing the scene, announced that "there are a large number of breeds now encamped on the south side of the railroad track and the numerous tepees, two-wheeled carts, and grazing ponies--with a contingent of children and dogs--form an interesting picture. Those now here show no signs of leaving and their number is receiving

---

[1] A Brief History of the County of Bottineau, North Dakota [Bottineau: 1959], p. [3].

[2] Bottineau Pioneer, 9 June 1887, p. 1.

daily additions from the vagrant bone gathers who bring the result of their toil to this market."[1]

The population of Metis bone hunters remained near Churchs Ferry for a few weeks after this account was written, and then moved north to another site. Lamenting this turn of events, the local weekly said that "the bone trade is rather slack these days, owing to the fact that parties in Cando are buying them and paying about the same price as has been paid here. In this case it seems to be the short haul that catches the bones of the breeds."[2] However, a few wagonloads of bison remains continued to arrive at the depot, where pickers received $6.00 a ton for their cargoes. By the middle of July, when the newspaper reviewed the season's totals, it was able to report that "about 345 tons of bones have been shipped from this town during the past three months, which shows that the defunct buffalo is still of considerable importance."[3]

The Churchs Ferry bone trade, like that at Rugby, continued to survive for a few years,[4] but its volume quickly declined as the commodity became increasingly scarce. To keep pace with the demand for skeletons, pickers

---

[1]Churchs Ferry Sun, 21 May 1887, p. 4.

[2]Churchs Ferry Sun, 18 June 1887, p. 4.

[3]Churchs Ferry Sun, 16 July 1887, p. 4.

[4]Churchs Ferry Sun, 16 June 1888, p. 4.

were forced to continue their westward march into the unexploited districts. One of the members of this migration was Charles Milwaukee Sivyer, the first white child born in the town for which he was named. Earlier while living in Kansas, he had learned that gathering bones could be a profitable enterprise. Consequently, when his wanderings brought him to the skeleton-littered plains of North Dakota, he decided to try his hand at the business of buying bison remains. Working out of Minnewaukan, Sivyer set up a number of temporary trading posts along the proposed route of the Great Northern Railroad and encouraged people to bring him the ruins of the buffalo.[1]

Possibly the first place visited by Sivyer in his search for skeletons was the now extinct hamlet of Villard. Stopping briefly at the office of the local weekly in May of 1886, he told the publisher that he had two loads of goods with him for the purpose of opening a store at nearby Scriptown. The merchandise he would sell for cash, said Sivyer, but he preferred to exchange it for bones. To encourage this type of barter, he placed an advertisement in the newspaper announcing "500 tons of bones wanted at the new store in Scriptown. Come and see me, and bring your bones."[2]

---

[1] Milwaukee Sentinal, 1 August 1909, part 4, p. 2.

[2] Villard Leader, 8 May 1886, p. 4.

Sivyer offered $4.00 a ton for the bison's sun-bleached relics, and in response a number of settlers and Indians began scouring the surrounding plains for bones.[1] By early June these pickers were bringing in to Sivyer an average of five tons per day,[2] and later in the same month this rate increased to nearly one hundred tons a week.[3] This grisly harvest continued until around the middle of August, when all of the easy gleanings were gone and the influx of bones declined. Seeing that most skeletons had been cleaned from the locale, Sivyer left Scriptown and headed west to look for other opportunities.[4]

The great heap of chaotic anatomy that Sivyer had purchased remained in Scriptown after his departure because there was no way to ship it out. The hoped-for railroad had gone north of the settlement, and transporting the bones to market presented a problem. This difficulty was overcome in June of 1887 when some men were contracted to move the pile to Norwich. Making a trip a day, and hauling "from 3,000 to 3,500 pounds each load," the teamsters carried Sivyer's

---

[1] Villard Leader, 29 May 1886, p. 1.

[2] Villard Leader, 12 June 1886, p. 1.

[3] Villard Leader, 19 June 1886, p. 1.

[4] Villard Leader, 21 August 1886, p. 2.

investment to the Great Northern freight yards where the bones were placed on boxcars destined East.[1]

Norwich was not the only place from which Sivyer shipped bison remains. Near what is now Towner, for instance, he assembled on a high elevation 600 tons of bones in a pile that could be seen forty miles away.[2] And not far from Burlington he owned a heap of sun-bleached relics that in May of 1887 was moved to Minot and shipped out to St. Louis.[3] These and other accumulations of the buffalo's wreckage Sivyer mainly got through the efforts of about 250 Metis who were employed by him to gather skeletons at various points ahead of the advancing Great Northern Railroad. These Indians came from the Turtle Mountain district north of Devils Lake, and it was due to their labors that Sivyer soon became known as the "bone king of the Northwest."[4]

In the spring of 1886, "as soon as the grass was high enough for the ponies and horses to graze," Sivyer outfitted his first contingent of Metis and accompanied them into the field. The Indian band brought along about one hundred carts, a few wagons, plus sufficient camping gear for a summer campaign. Sivyer, in turn, came equipped with

---

[1] Villard Leader, 25 June 1887, p. 4.

[2] Northwest Magazine 18 (August-September 1900):27-29.

[3] Jamestown Weekly Alert, 19 May 1887, p. 1.

[4] Northwest Magazine 18 (August-September 1900):27-29.

several large wagons loaded with supplies and three tents to serve as stores. Riding in his buggy with a guide, Sivyer led this entourage to an area west of Devils Lake where he organized his people and prepared to harvest bones.[1]

Sivyer divided his forces into three units, situating the groups about twenty miles apart on high ground near a lake or river. At each encampment he put up a tent with a stock of goods, assigning an employee to run the store and receive the incoming bones. From these bivouacs the three troops of Metis traveled in ever-widening circles to search for bison remains. The spiral-like wanderings of the picking gangs continued until their wagons were full, at which time they returned to camp to sell the fruits of their labors. When the bone caravan arrived, the contents of each cart were weighed on a 500-pound capacity scale and the cargoes deposited in a pile. The Metis were then given certificates showing the worth of the loads they had gathered, and allowed to redeem the script for goods at Sivyer's portable store.[2]

This ritual continued at a given place until most of the bones within a forty-mile radius had been gleaned. When a particular area no longer yielded suitable returns, Sivyer

---

[1] Ibid.

[2] Northwest Magazine 18 (August-September 1900):27-29.

would move his camps about twenty miles further west and resume collection activities. Occasionally some other bone hunters would encroach upon the territory Sivyer had selected, prompting the Metis to protect themselves from what they considered to be trespass. The Indians dealt with competitors by rushing the disputed district and gathering all of the bones for miles around. The newcomers were then compelled to either stay in camp and guard their meager pickings, or sell their holdings at a discount. To prevent retaliation for this practice, and to discourage theft by his own employees, Sivyer hired watchmen to secure the piles of bones that he had purchased.[1]

As Sivyer and his band moved west ahead of the Great Northern Railroad, they left heaps of bones adjacent to the surveyed right-of-way. This stockpiling was retarded somewhat by late summer because the tall grass hid many skeletons from view. To eliminate this problem, the Metis would set fire to the prairie and "burn off thousands of acres" for the purpose of exposing their quarry. Such action enabled the Indians to continue harvesting large quantities of bison remains well into fall, after which they returned to their homes in the Turtle Mountains and waited for the next picking season to begin.[2]

---

[1] Ibid.

[2] Northwest Magazine 18 (August-September 1900):27-29.

By spring of 1887 the Metis were back in the field with Sivyer gathering bones in western North Dakota. Their travels eventually took them to the Milk River country in eastern Montana, where they found the remnants of the bison "so thick that a person could step from one to another." In this district Sivyer was able to assemble two great piles of bones before the snow began to fly, putting an end to the year's activities. The 400-mile ride back home was an exhausting journey for the troop, making everyone aware that another circuit west could not be made the following year. Realizing that the best bone-gathering grounds were now beyond his range, Sivyer sold his bison remains for $15,000 and retired from the business.[1]

During the two seasons that Sivyer spent working with the Metis he claimed to have collected "152 carloads of bones, the remains of nearly 150,000 buffaloes, averaging sixteen and one-half tons to the car, or about 2,500 total tons. "The stock," he recalled, "was sent to Chicago and St. Louis, and I received for them $19.00 a ton delivered. After the freight and the expenses were paid, there remained a net profit of about $100 a car, or $6.00 a ton."[2]

While Sivyer obviously had great success in collecting bison remains, he accounted for only a fraction of

---

[1]Ibid.

[2]Ibid.

the relics that littered the areas where he worked. Proof of this fact was the bone trade at Minot, a town which developed in the midst of a region that Sivyer's people had covered while moving across North Dakota. The business of gathering skeletons actually started at Minot a year before Sivyer and his crew came to the territory. During 1885, when Devils Lake was the major market for bones, a number of Metis apparently drove their Red River carts as far west as the Souris River in their search for the buffalo's wreckage. They found abundant supplies of their quarry on the plains in the vicinity of Minot, and hauled back to the railhead at Devils Lake 225 tons of bones before the season came to an end.[1]

The following year brought Sivyer and other pickers to the bone-covered valley of the Souris, but this time they did not need to draw their harvests over one hundred miles to Devils Lake. The approach of the Great Northern system in 1886 meant that goods could soon be sent direct from Minot, so all of the bones collected in the vicinity were piled to await the iron horse. Mounds of skeletons appeared on the landscape in anticipation of the coming rails, forming temporary memorials to the bison along the graded right-of-way. These macabre monuments stood in place until the first locomotive reached town, when preparations

---

[1] The Record, volume 2, number 5 (November 1896), p. 6.

were made to dismantle the heaps and transport them to the East. There were few months left in 1886 when the freight crews began this work, but by year's end they had shipped 600 tons of bones from the railroad depot at Minot.[1]

The trade in bison remains had started big at Minot, and its future promised even bigger things to come. But these bright prospects dimmed in 1887 when an economic depression swept the country and forced many of the bone works to close. This drop in the market for skeletons, coupled with an 8 percent increase in freight rates, quickly reduced the need for pickers to harvest the buffalo's ruins.[2] Such a decline in the demand for bison remains caused a similar slide in their value on the plains. Reporting this fact, a local newspaper said in May that "the price of bones has dropped considerably within the last year, being at the present time worth $5.00 per ton at Minot and $4.00 west of that point."[3] Few people were willing to gather sun-parched relics for such a low return, and the commerce of the Souris Valley suffered as a result.

Despite the poor quotations, some pickers did stay active in the trade. In late June a Minot weekly boasted that "quite a number of Indians and half-breeds [are] on

---

[1] Fargo Daily Argus, 30 November 1890, p. 5.

[2] Jamestown Weekly Alert, 28 April 1887, p. 1.

[3] Jamestown Weekly Alert, 19 May 1887, p. 1.

Illustration 14. Wagonloads of Bones at Minot, North Dakota.

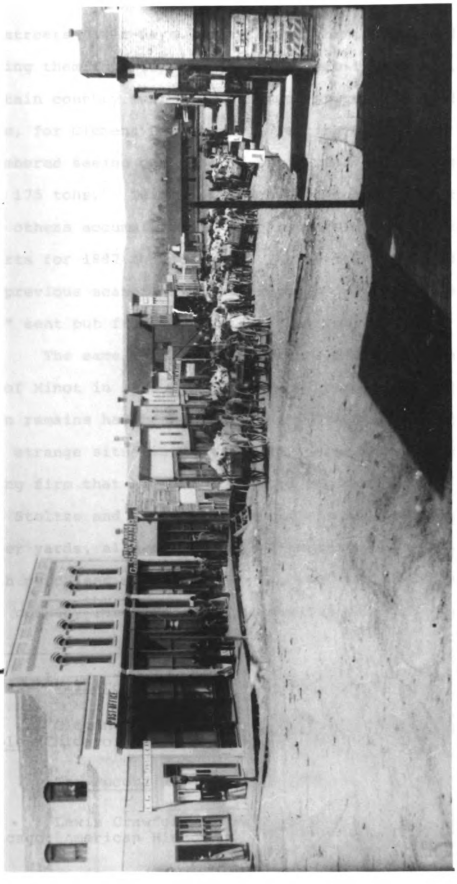
An early visitor to North Dakota said that when he first came to the state in 1887 "heaps of bones, mainly of buffalo, were commonly found at the stations along the Northern Pacific and Great Northern Railways." Huge "piles of bones were often seen near the sidetrack, waiting until enough more were brought in to load one or more [box] cars for shipment to fertilizer plants."[a] "From along the line of the Great Northern railway hundreds of cars" of these skeletons were exported,[b] with Minot accounting for a substantial part of the trade. This scene of Main Street in that city, taken in 1890 looking north, shows wagons loaded with buffalo bones waiting to be weighed on the scales at the Great Northern freight yard.[c] (Courtesy Minot State College)

---

[a]Vernon Bailey, "A Biological Survey of North Dakota," North American Fauna, U.S. Department of Agriculture, Bulletin 49 (Washington, D.C.: Government Printing Office, 1926), p. 24.

[b]Great Northern Bulletin 8 (April 1897):9

[c]Ward County Independent, 27 June 1935, p. 25.



our streets now-a-days. They are gathering bones [and] drawing them into town."[1] These nomads from the Turtle Mountain country must have had much success in filling their carts, for Clement Lounsberry, visiting Minot that year, remembered seeing one pile of bison remains that weighed over 175 tons.[2] This rick of chaotic anatomy, combined with others accumulated later, brought Minot's bone exports for 1887 to 375 tons.[3] While this was a drop from the previous season, it still represented the "chief commodity" sent out from the station that year.[4]

The same volume of skeletons, 375 tons, was shipped out of Minot in 1888, though a much greater quantity of bison remains had been harvested by those in the trade.[5] This strange situation was due to the practice of a bone-buying firm that had cornered much of the business in town. Fred Stoltze and Eli Warner, operators of some Dakota lumber yards, also owned the Northwestern Bone Syndicate which purchased remnants of the herds throughout the state. This company invested in bison remains whether there was a

---

[1]Villard Leader, 25 June 1887, p. 4.

[2]Clement Lounsberry, North Dakota History and its People (Chicago: Clarke Publishing Company, 1917), p. 34.

[3]The Record, 2 (November 1896):6.

[4]Lewis Crawford, History of North Dakota, vol. 1 (Chicago: American Historical Society, 1931), p. 198.

[5]The Record 2 (November 1896):6.

call for them or not, and later sold their stocks to manufacturers when the going price for skeletons was high. In 1888 there was little demand for raw materials by fertilizer plants in the East, but the Syndicate kept buying at Minot and holding them for when the market improved.[1] So even though statistics show that some fragments of the bison did leave town that year, most of the incoming buffalo bones were left at the freight yards for storage. The mound of chaotic anatomy that was created as a result extended almost three blocks from the depot.[2]

The speculators of the Syndicate reaped their reward in 1889, for the nation's economy recovered and the value of their goods shot up. A spur track was built to the skeletons that Stoltze and Warner had collected, and the relics were loaded onto boxcars for the factories of St. Louis.[3] The advancing price for bison remains also meant a better rate for pickers, and great numbers of people were encouraged to seek the fragments of the once vast herds. Lewis Crawford, writing the History of North Dakota, claimed that for months the discharge of bones at Minot totaled one hundred

---

[1]Letter from Fred Stoltze to Captain Heerman, 17 April 1913, Edward E. Heerman Papers, Minnesota Historical Society, St. Paul.

[2]Minot Daily News, 25 June 1935, p. 11.

[3]Ibid.

loads a day.[1] While this is an obvious exaggeration, the statement does not bend the truth by much. An item from a local weekly in May of 1889 said that "there was nearly 300 wagon loads of bones unloaded in the yards here last week, and still they come. Bones are worth $10.00 a ton at the present time."[2] The photograph on the following page, taken two months after this report, gives visual proof that the Minot trade was all that the newspaper claimed.

Many of the incoming wagons at Minot belonged to homesteaders, pioneers who made important contributions to the trade in bison remains. This was particularly true between 1887-1889 when a dearth of precipitation forced many grangers to harvest bones instead of grains. These sod-busters found the buffalo's ruins their principal cash crop in those years,[3] and loads of skeletons were brought to town "like loads of wheat in the fall."[4] One resident of the time recalled that, for a while on account of the drought, his family had to give up farming and search for the remnants of the herds. "My father, my two sisters, and I," he wrote, "used two teams and two wagons on our bone-gathering forays." Leaving early each morning, "my oldest sister and I would

---

[1]Lewis Crawford, History of North Dakota (Chicago: American Historical Society, 1931), vol. 1, p. 198.

[2]Villard Leader, 1 June 1889, p. 1.

[3]Minot Daily News, 25 July 1953, p. 5.

[4]Ward County Independent, 5 April 1928, p. 2.

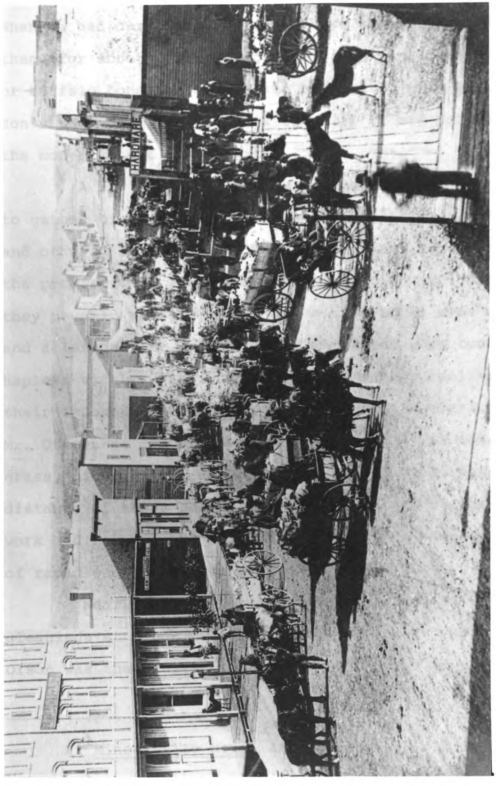
Illustration 15. Bone Pickers Waiting to Have Their Harvests Weighed.

"After buffalo hunting was over, there developed a traffic of some importance in the bones that were thickly strewn over certain portions of the west Missouri country. Large numbers of them were hauled to the railroad and river towns by small ranchers and farmers, who were badly in need of cash. They were shipped east where they were used as fertilizer and as carbon for use in the refining of sugar. Indians, as well as whites, gathered them, often building fires to burn the grass, making it easier to locate and collect them. Great stacks of [bison remains], from ten to twelve feet in height and often a quarter of a mile in length, consisting of hundreds of tons, were piled along the railroad tracks for shipment."[a] The creators of these bone heaps were the subject of this scene by Carl Brown, a frontier photographer, who took this picture of skeleton-filled wagons in Minot on July 3, 1889. One hundred and three teams, accompanied by about 500 Metis, hauled loads into town that day to be on hand for the Fourth of July celebration.[b] (Courtesy Minot Daily News)

---

[a]Harold Briggs, Frontiers of the Northwest (New York: Appleton-Century Company, 1940), p. 178.

[b]Fargo Forum, 4 November 1962, section C, page 1; Ward County Independent, 21 March 1935, p. 4.



take our outfit and my dad and younger sister the other. When we had our loads, we would take them to town and sell them [for about] $12.00 per ton. [We] hauled fourteen tons of buffalo bones to Minot, and believe me when I say, I don't know how we would have lived if it had not been for the money we got that way."[1]

A few misguided settlers came to Minot specifically to gather bison remains. "Railroad publicists, land agents, and others" lured some gullible immigrants to the area with the promise they would get rich picking bones. But what they usually gained instead was a sore back, some callouses, and a lesson. Mr. and Mrs. Ole Otterness were two of these hapless victims, and with the proceeds they realized from their labors they hoped to buy some good farmland. While Mr. Otterness combed the foothills looking for bones in the grass, his wife got as many as she could find within walking distance of their shack. By the end of the summer their work had netted them less than $100, and a couple's dreams of rapid wealth had vanished like the herds.[2]

Nearly all of the prairie scavengers sold their gleanings at Minot to the Northwestern Bone Syndicate. Olaf Olson was the principal representative for the concern, but

---

[1]Minot Daily News, 25 July 1953, p. 5.

[2]Minot Daily News, 19 August 1961, part 2, section C, p. 5. Fargo Forum, 4 November 1962, section C, p. 1.

he was assisted by other local agents like Carl Aurland, J. Long, and P. Lee.[1] Providing competition to the firm of Warner and Stoltze was a buyer named Ed Kelly, the only independent dealer in town. Kelly, it is said, once bid up the price to $18.00 per ton, but when the pickers came to him he said that he was filled up and sent them to the other merchants. After the Syndicate had purchased bison remains at the inflated rate for several days, it caught on the Kelly's curves and the market returned to normal.[2] Such rivalry between Kelly and the others must have been good for Minot's bone trade, for between them the operators shipped 2,775 tons in 1889.[3]

By the following year nearly all of the bones within forty miles of town had been thrown into carts or wagons and pulled to the Great Northern yards.[4] But the lengthening hauls required of those involved in the trade did not seem to have any effect on the quantities of skeletons they collected. Statistics show that in 1890 over 2,200 tons of bones were sold to dealers in Minot for

---

[1]Ward County Independent, 5 April 1928, p. 2; Minot Daily News, 25 June 1935, p. 11.

[2]Ward County Independent, 5 April 1928, p. 2.

[3]The Record 8 (February 1902):40.

[4]Minot Daily News, 25 June 1935, p. 11.

a return of $8.00 per ton.[1] Many of these pickers were Metis from the Turtle Mountain country who regularly visited town with loads of the buffalo's spoils. Sometimes the rigs of these natives would stretch for eight blocks through the city when they came to the Minot depot.[2] Other Indians from the Fort Berthold area brought bones to the local market, traveling "a distance of from 50 to 60 miles" to exchange their harvests for goods.[3]

While these and other pickers continued to haul bones into Minot during the summer of 1890, only 780 tons of their gleanings were sent out before the price of the commodity fell and local buyers were left with a huge inventory on their hands. The unshipped bison remains, amounting to 1,400 tons,* had been placed close to a siding to facilitate loading operations. But with the decision to hold the bones until the market improved, the railroad agent had to insist that the ruins be moved for the winter. A contract was let for this purpose, probably by Warner and Stoltze,

---

[1] The Record 2 (November 1896):6.

[2] Minot Daily News, 25 June 1935, p. 11.

[3] U.S. Commerce Department, Eleventh Census of the United States, 1890, "Report on Indians Taxed and Indians not Taxed in the United States," volume 10 (Washington, D.C.: Government Printing Office, 1894), p. 517.

* Hamlin Russell, in his article "The Story of the Buffalo" (Harper's New Monthly Magazine, vol. 86, no. 515, p. 797), says the pile "was estimated at over five thousand tons."

and the skeletons transferred away from the tracks at a cost of $400.[1]

Clement Lounsberry was in Minot when the bison remains were changing residence, and he had a chance to compute the contribution each carcass had made to the pile. "I found that the bones of the buffalo," he wrote, "after bleaching on the prairies, weigh from 45 to 52 pounds." Calling the average fifty pounds for each animal, the skeletons moved in the fall of 1890 represented the anatomy of over 56,000 beasts. If Lounsberry correctly assessed the weight of the bison's denuded framework--and his estimate is more conservative than that given by the Bone Syndicate--then the ruins of a quarter-million buffalo were brought to Minot in the six years after its founding.[2]

The trade in bison remains resumed in 1891 with the stock of bones at Minot being shipped to mills in the East. These skeletons were partially replaced by others that the settlers and Metis brought in, with some of the teamsters coming to town from as far away as Canada.[3] But the increasing distances the pickers were required to drive for

---

[1] The Record 2 (November 1896):6.

[2] Ibid. Letter from Fred Stoltze to Captain Heerman, 17 April 1913, Edward E. Heerman Papers, Minnesota Historical Society, St. Paul.

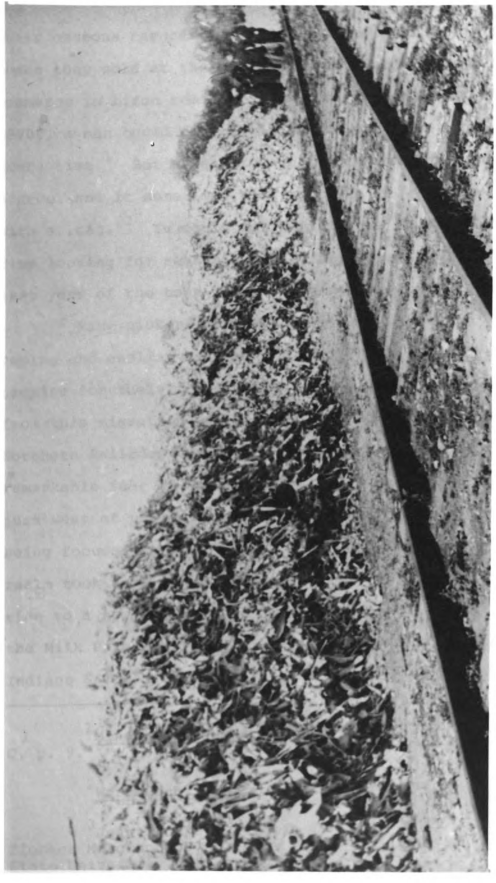
[3] John Hawkes, Saskatchewan and its People, vol. 2 (Chicago: Clarke Publishing Company, 1924), p. 1087.

Illustration 16. Skeletons Assembled for Export at Minot, North Dakota.

One early resident south of Minot remembered the prairie blazes that raced across much of the area during the 1880s and the fear such conflagrations raised in the settlers. However, he conceded, "sometimes these fires served a useful purpose," as when they exposed buffalo bones to view. "At this time," recalled the pioneer, the landscape "was covered by thousands of buffalo skeletons [hidden] by heavy layers of grass. As these [relics] could be easily located after a fire, many farmers and their wives would hurry to the scene to pick bones." These remnants "were in good demand for use in refining sugar and brought $8.00 to $10.00 a ton at any railroad siding." Some pioneers sold enough skeletons in times "of crop failures to buy most of their year's groceries."[a] Most of these bison remains ended up at the Great Northern freight yards in Minot. This picture shows part of the chaotic anatomy that had been amassed there, probably in the summer of 1889. (Courtesy State Historical Society of North Dakota)

---

[a]North Dakota Historical Society, Trails and Smoke Signals, vol. 3, no. 4 (April 1969), p. 7.



their osseous cargoes was finally reducing the volumes of bones they sold at the Great Northern yards. When the commerce in bison remains dawned in Minot back in the mid-1880s, a man could fill a wagon with bones in about three hours time.[1] But after five years the commodity was getting scarce, and it sometimes took up to "a week to come back with a load."[2] It could not pay pickers to spend that much time looking for remnants of the herds, so 1891 marked the last year of the bone trade for Minot and vicinity.

Many pickers had seen this inevitable situation coming and earlier moved on to areas that offered greater promise for their trade. The region that benefited most from this migration was northern Montana, which the Great Northern Railroad opened up in 1887 when it performed the remarkable feat of extending its line from Minot to a point just west of present-day Havre.[3] While most attention was being focused on this accomplishment, a newspaper of the realm took time to note that the laying of tracks had given rise to a new industry. "Eastern parties have an agent in the Milk River Valley," observed the weekly, "who pays Indians $4.00 a ton for all buffalo bones delivered at

---

[1] Minot Daily News, 19 August 1961, part 2, section C, p. 9.

[2] Ward County Independent, 5 April 1928, p. 2.

[3] Jean Crockett, "The Memoirs of William T. Cowan, Pioneer Merchant of Northern Montana" (M.A., Montana State University, 1957), p. 40.

sidings." Evidence seemed to show, continued the report, that "probably one hundred car loads will be collected and shipped this fall."[1]

The commerce in bison remains proved up to its initial billing, and by spring of the following year the business had expanded in scope. One of the new participants in the trade was David Cowan, a merchant who had recently opened a store near Fort Assinniboine. Dealing with Borden M. Hicks, representative of the Northwestern Bone Syndicate of Minneapolis, the pioneer shopkeeper managed to get a guaranteed price for skeletons at $8.00 per ton, freight on board.[2] With his market assured, Cowan offered $6.00 a ton in trade for all sun-bleached relics brought to his establishment.

Taking immediate advantage of this opportunity were the mixed-blood Indians near Assinniboine who had arrived from Canada after the Riel Rebellion. They set out with their carts and wagons in quest of the buffalo's ruins that littered the countryside, and brought them back to the Cowan store to exchange for food and supplies.[3] To capture the commerce that could not come to his market, Cowan

---

[1] Fort Benton River Press, 26 October 1887, p. 5.

[2] Jean Crockett, "The Memoirs of William T. Cowan, Pioneer Merchant of Northern Montana" (M.A., Montana State University, 1957), p. 40.

[3] Ibid., p. 41.

obtained a portable folding scale and visited points between Big Sandy and Zurich buying bones from the local pickers. These distant prairie gleaners, like those working near the Fort, had to take out their earnings in merchandise at Cowan's place of business.[1]

In 1889 Cowan moved a few miles away from his original location to the settlement of Box Elder.[2] From this site he resumed his practice of buying buffalo bones, again reaching Zurich in his travels east but extending his range south to Great Falls.[3] Between these distant towns the Metis continued to search for the remnants of the herds, bringing their harvests to the railroad for Cowan to weigh and credit to their accounts. This exercise was recognized by the Fort Benton River Press on June 19 when it declared that "this forenoon a colony of about thirty half-breeds came to the city to buy provisions. For the past few months they have been working from the mouth of the Teton up gathering bones and hauling them to the Benton depot and other stations along the road and loading them on cars.[4]

---

[1] Ibid., p. 45.

[2] Ibid., p. 44.

[3] T. C. Power Papers, Letterbooks: December 1, 1888 to May 3, 1889; May 3, 1889 to August 16, 1889; August 17, 1889 to February 17, 1890, Montana Historical Society, Helena.

[4] Fort Benton River Press, 19 June 1889, p. 5.

One month later an even larger band of pickers came to Fort Benton, prompting the local newspaper to announce that "a colony of over 75 half-breeds is camped on the Teton near here, their occupation being gathering bones and shipping them to Chicago for fertilizing purposes. The prairies in this vicinity," declared the item somewhat ruefully, "are being thoroughly cleared of the once numerous buffalo bones."[1] This assessment of the changing landscape proved to be correct, for 1889 was the last year in which any noteworthy volumes of skeletons were mustered at sidings in the Fort Benton area.

By 1890 the business of collecting Montana's bison remains had moved back to the Milk River country. This fact was proclaimed by a district newspaper near the end of May when it wrote that "the buffalo bone gathering industry is assuming large proportions. At Minot, N.D., was recently organized a company containing over one hundred families, mostly Breeds, and representing several hundred wagons, for the purpose of gathering bones from that point as far west as Malta, at which place there is at present thirty cars sidetracked waiting to be loaded with tons upon tons of bones already there."[2]

The local Indians had undoubtedly accounted for the large stock of chaotic anatomy on hand at the Malta

---

[1] Fort Benton River Press, 17 July 1889, p. 5.

[2] Chinook Opinion, 29 May 1890, p. 4.

station. Mabel Lux, who as a child witnessed their picking activities, once described how the natives had gone about their business. Playing on the floor beneath the kitchen window of her parents' frontier home, she remembered looking up to see the wrinkled features of "a Gros Ventre squaw, her face pressed against the [glass], staring in at us. She made no sound until mother turned around. Then, holding up a bone in one hand and gesturing with the other, first toward the bone [and] then in the general direction of the farm, she looked at us [inquiringly]. Mother nodded assent and the squaw slid away from the window. She was asking permission to gather bones."[1] Ms. Lux went on to explain that although the Indians "were on reservations, they were permitted to leave with their wagons for short periods to gather up the vast harvest of bleached buffalo bones scattered over the countryside. These they hauled into Harlem to be shipped east for fertilizer." The settlers, she explained, recognized the destitution of the natives and "graciously permitted them to make this final gathering." "Besides," added Ms. Lux, "the bones were in the way of the plows."[2]

Throughout the picking season of 1890 the Indians and Metis performed the ritual described by Mabel Lux,

---

[1]Mabel Lux, "Honyockers of Harlem," Montana: The Magazine of Western History, volume 13, number 4 (Autumn 1963), p. 9.

[2]Ibid.

searching out the spoils of the bison and bringing them back to the railroad. Their success in this endeavor was triumphed in late August by the Chinook Opinion, which advised that "the Great Northern is distributing its freight cars all along the line between Assinniboine, Montana, and Minot, Dakota, preparatory to shipping the enormous amount of bones that have been accumulated at various points during the past summer. At Malta are several hundred tons awaiting cars, and in fact at nearly every station between Chinook and Minot there are sufficient bones on hand to keep the freight department busy for many months to come. The several bone gathering companies that were formed this summer seem to be realizing more from this industry than could possibly be foretold by any previous calculations, and they are accordingly jubilant over the fact of their great success."[1]

The joy expressed by the pickers was reflected by such bone buyers as David Cowan, who had by this time extended his operations from Wolf Creek, about forty miles southwest of Great Falls, along the railroad as far east as Glasgow. At many of the intervening points the shopkeeper from Box Elder was busy shipping to St. Louis the vast amount of skeletons that he had taken in exchange for goods. However, Cowan's satisfaction over a good business year was tempered by the knowledge that this great harvest was for

---

[1]Chinook Opinion, 21 August 1890, p. 4.

him the last of the buffalo bone crop. Nearly all vestiges of the bison had been removed from the plains, and the spoils that remained were not sufficient to warrant his attention so far from home. Thus, after having purchased hundreds of carloads of chaotic anatomy, Cowan left the business to those individuals who were willing to spend the time and effort necessary to obtain the last traces of the herds.[1]

One such eager buyer was R. P. Lewis, of Glasgow, who owned the general store in town. Through his encouragement the bone traffic continued in and around the lower Milk River Valley, with French-Cree Indians apparently doing most of the work.[2] These Metis continued to bring in the fruits of their labors until the objects of attention were gone in mid-1895. Mr. Lewis wrote to Borden Hicks in Minneapolis and asked about a price for this final evidence of the bison. On June 17 Mr. Hicks answered by saying:

> Dear Sir:
> Replying to yours of the 14th offering 45,000 pounds of bones, I beg to state that I can pay you for clean dry bleached prairie bones F.O.B. cars at your place $5.00 per ton. Railway rates at Minnesota transfer to be basis of settlement. Cars must contain twelve tons or over. If this is all you have perhaps you could load them all in one furniture car such as the Great Northern runs.[3]

---

[1]Jean Crockett, "The Memoirs of William T. Cowan, Pioneer Merchant of Northern Montana" (M.A., Montana State University, 1957), p. 65.

[2]Glasgow Courier, 30 November 1937, p. 22.

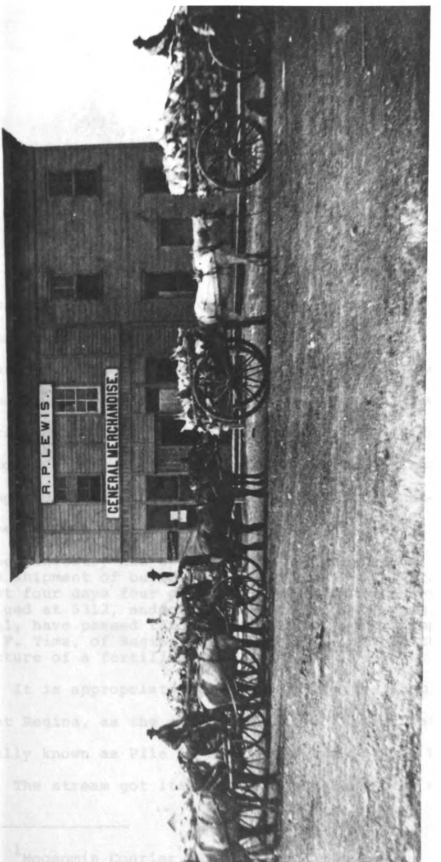
[3]Joseph Howard, Montana: High, Wide, and Handsome (New Haven: Yale University Press, 1943), p. 21.

Illustration 17. Bone Collecting Caravan at Glasgow, Montana.

One youth who had spent a summer near Glasgow, Montana, remembered in his later years seeing the bone pickers come into town. "The Indians had been out gathering bones (buffalo, cattle, or sheep) and brought them in to sell in twenty or thirty wagons coming from the north at a trot. Then the Indian men drove the wagons around in front of the trading post to the scales" where the vehicles were weighed. "As each one came off the scale it was [hauled] across the railroad track, unloaded, and trotted back to where the tepees and families had been left. Each team was unhitched, and the Indians poured into the store to trade for the amount of bones they had deposited."[a] This picture illustrates the activity described by the old-timer, as it shows a wagon train of buffalo bones posing in front of the R. P. Lewis store in Glasgow, Montana, before proceding to the Great Northern freight yards to dump its cargo. (Courtesy Montana Historical Society)

---

[a]Mat Jones, Fiddlefooted (Denver: Sage Books, 1966), pp. 141-142.


A. P. LEWIS.
GENERAL MERCHANDISE.

CHAPTER 4

THE BUFFALO BONE TRADE ALONG THE CANADIAN PACIFIC RAILROAD

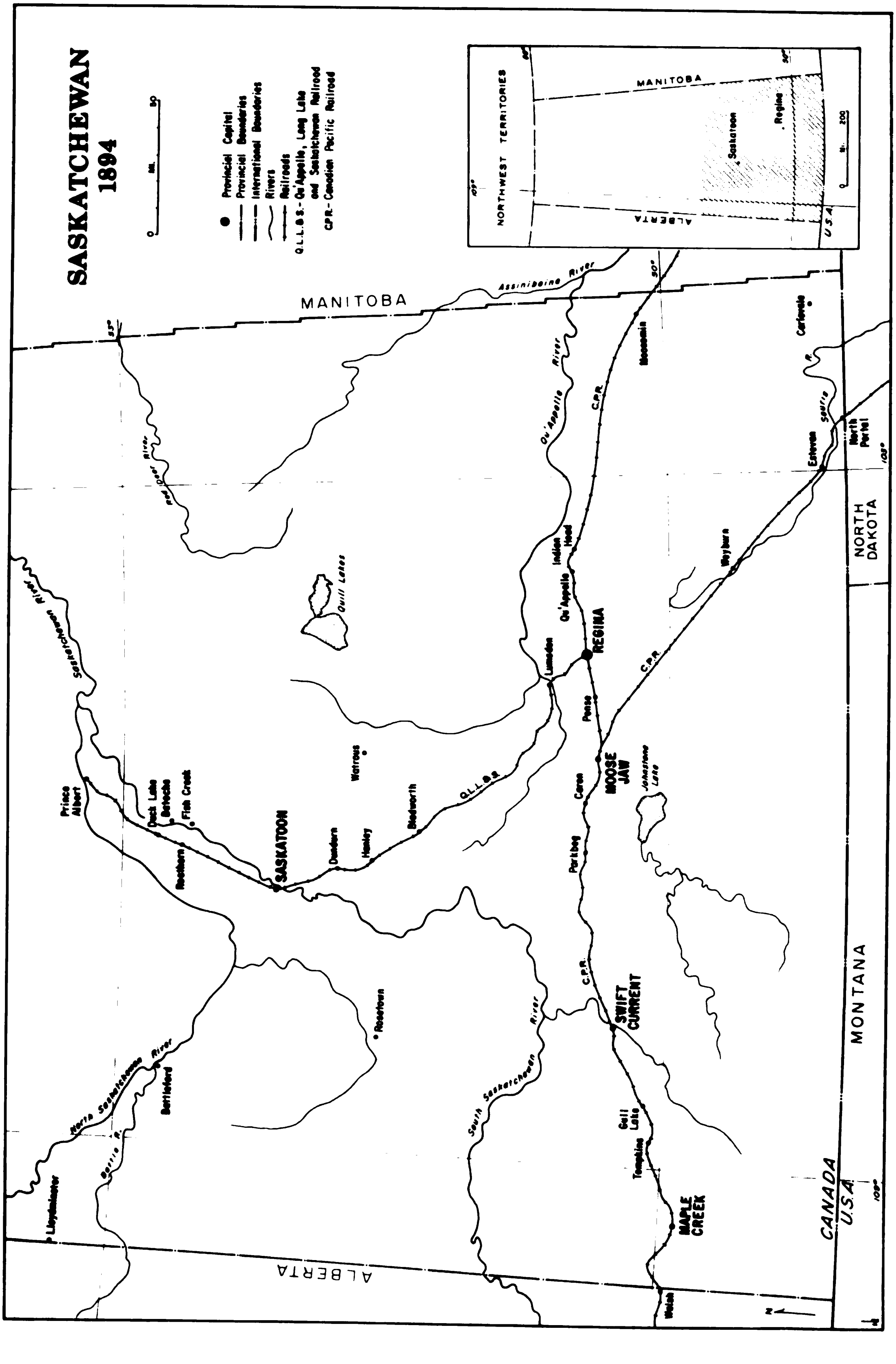
With the acceptance of Hicks' offer the Montana bone business finally came to a close, and with it ended the trade in skeletons which had been changing the U.S. prairies for twenty-five years. The final chapter in the history of the Great Plains region was still being written, however, as settlers and Indians north of the border searched for the last spoils of the bison. The bone commerce in Canada had been ongoing since 1884, a fact which was first noted in a newspaper column saying:

> A new industry has sprung up in the Northwest. It is the shipment of buffalo bones to St. Paul. During the past four days four carloads of buffalo bones--48 tons--valued at $312, and consigned to M. L. McKenzie, of St. Paul, have passed through here. They were shipped by F. F. Tims, of Regina. The bones are used in the manufacture of a fertilizer.[1]

It is appropriate that this enterprise should have begun at Regina, as the site of the town is on a watercourse originally known as Pile o' Bones and today called Wascana Creek. The stream got its name from a nearby heap of

---

[1] Moosomin Courier, 23 October 1884, p. 3.


SASKATCHEWAN
1894
Provincial Capital
Provincial Boundaries
International Boundaries
Rivers
Railroads
Q.L.L.B.S.-Qu'Appelle, Long Lake and Saskatchewan Railroad
C.P.R.-Canadian Pacific Railroad
NORTHWEST TERRITORIES
MANITOBA
ALBERTA
U.S.A.
Saskatoon
Regina
MANITOBA
Assiniboine River
Qu'Appelle River
C.P.R.
Moosomin
Carlevale
Souris R.
Estevan
North Portal
NORTH DAKOTA
Weyburn
Red Deer River
Quill Lakes
Saskatchewan River
Indian Head
Qu'Appelle
REGINA
Lumsden
Pense
MOOSE JAW
Johnstone Lake
Watrous
Prince Albert
Duck Lake
Batoche
Fish Creek
SASKATOON
Rosthern
Dundurn
Hanley
Bladworth
Q.L.L.B.S.
Caron
Parkbeg
C.P.R.
SWIFT CURRENT
MONTANA
Rosetown
North Saskatchewan River
Battleford
Battle R.
South Saskatchewan River
Gull Lake
Tompkins
MAPLE CREEK
Lloydminster
ALBERTA
Walsh
CANADA
U.S.A.

buffalo skeletons about six feet tall and forty feet in diameter that the Indians appear to have assembled. This mound of relics stood until 1885, when the prairie scavengers hauled it to the railroad station in return for $7.00 per ton.[1]

It would have taken little effort for the natives to raise the mysterious Pile o' Bones, for the surrounding countryside was heavily littered with the ruins of the bison. Gathering these remains proved to be a profitable business, and in 1886 alone $1,500 worth of skeletons were shipped from the Regina depot.[2] Most of this volume was assembled by "an outfit of Half-breeds from Wood Mountain," who also brought in over 100 tons of spoils to the market at nearby Pense and a slightly smaller quantity at the neighboring town of Belle Plain.[3] This activity continued through 1887, by which time the Metis had cleaned the area of all readily available bones.[4]

About the time the bone trade got underway at Regina, the same enterprise became active in and around

---

[1]A. R. Turner, "Wascana Creek and the 'Pile o' Bones,'" Saskatchewan History, vol. 19, no. 3, pp. 111-114. John M. Gibbon, Steel of Empire (New York: Bobbs-Merrill Company, 1935), p. 236.

[2]A. R. Turner, "Wascana Creek and the 'Pile o' Bones,'" Saskatchewan History, vol. 19, no. 3, pp. 111-114.

[3]Saskatchewan Herald, 26 July 1886, p. 4.

[4]Regina Leader, 28 June 1887, p. 4; 6 September 1887, p. 4.

Moose Jaw.* A Mr. Doolittle, an agent for some Philadelphia firm, managed to gather and ship three carloads of the buffalo's ruins by November, when the coming winter put a temporary end to the business.[1] Everyone expected the commerce to resume the following spring, but because of the Reil rebellion there was little or no activity. The American buyers, seeing this state of affairs, assumed that the Canadian trade was lost for the year and directed their attention, instead, to North Dakota and Montana.[2]

By early summer of 1885 the "uprising" was over, and the Metis returned to harvesting bones, bringing great quantities of them into Moose Jaw.[3] The local merchants accepted these pickings in trade for various goods, but had

---

*Though Mr. Evert Hawkes seems to indicate in Saskatchewan History (volume 6, number 1, Winter 1953, p. 9) that there was a market for bones in the vicinity as early as 1882, there is no other evidence to support this claim. R. G. MacBeth, in his book on the Canadian Pacific Railway (Toronto: Ryerson Press, 1924, pp. 168-169), also says on pages 168-169 that the engineer in charge of building the line had his "men gather up the bones and pile them in great heaps along stations and sidings . . . Thus the railroader, who got the material for the cost of gathering, made good profits for the Railway and at the same time cleared the land of an encumbrance." It strains one's credulity to believe that the C.P.R. allowed track-laying to cease while its crews wandered about looking for bones.

[1]Moose Jaw News, 7 November 1884, p. 1.

[2]Jamestown Morning Alert, 13 May 1885, p. 4; Fargo Daily Argus, 14 May 1885, p. 7.

[3]Grant MacEwan, Entrusted to my Care (Saskatoon: Modern Press, 1966), p. 48.

to leave their investments piled at the station until the American agents came back. By the time a buyer from Minneapolis finally arrived on the scene, the bone heap at Moose Jaw had become large enough to fill 250 freight cars.[1]

In the spring of 1886 the bone business at Moose Jaw returned with its previous intensity, with Messrs. Baker and Lee doing most of the buying.[2] But by the end of the summer an "enterprising" merchant named Plante had captured much of the market, and was said to be receiving about 25 carloads a day.[3] This dealer's success continued into 1887, when more bones were shipped from Moose Jaw than from any other point in Canada.[4] Mr. Plante purchased the remnants of the buffalo through 1888,[5] after which time Mr. T. B. Baker again became a major figure in the trade. By 1891 the area for miles around Moose Jaw had been picked clean, so the prairie scavengers were forced to range far south in quest of the buffalo's ruins. Their efforts in this area brought Mr. Baker about 100 tons of bones by late

---

[1] Letter from Fred Stoltze to Captain Heerman, 17 April 1913, Edward E. Heerman Papers, Minnesota Historical Society, St. Paul.

[2] Regina Leader, 29 June 1886, p. 1.

[3] Regina Leader, 12 October 1886, p. 4.

[4] Medicine Hat Times, 18 June 1887, p. 4.

[5] Regina Journal, 30 August 1888, p. 5.

June,[1] but there seems to have been little business after that as the Metis turned their attention toward more promising districts.[2]

One source claims that the bone trade at Swift Current began in 1884, coincidental with that in Regina and Moose Jaw.[3] However, the remnants of the bison probably laid undisturbed at this hamlet until late in 1886. By 1887 "an unusually large number of half-breeds" were reported picking bones in the area, shuttling back and forth between the surface graveyards of the buffalo and the C.P.R. depot in town.[4] The remains that they gathered "became the first and, for years, the only cash crop to leave the district."[5]

A great stimulus to the commerce was the freighting that took place between Swift Current and Battleford, which had Metis going north with supplies and returning south with empty carts. To make the trip back to the railroad productive, the teamsters began harvesting bones along the way and

---

[1] Moose Jaw Times, 26 June 1891, p. 3.

[2] Moose Jaw Times, 12 June 1891, p. 2.

[3] Don C. McGowan, Grassland Settlers (Regina: Canadian Plains Research Center, 1975), p. 23.

[4] Regina Journal, 23 June 1887, p. 8; S. B. Steele, Forty Years in Canada (Toronto: McClelland, Goodchild & Stewart, 1915), p. 247.

[5] Don C. McGowan, Grassland Settlers (Regina: Canadian Plains Research Center, 1975), pp. 11-12.

selling them to agents at the station.[1] In 1889 it was observed that "freighters along the road and the residents on the South Branch are doing a flourishing business in gathering buffalo bones, for which they find a ready market in Swift Current at $8.00 a ton."[2]

This heavy traffic in bison remains appears to have continued until 1890, when an extension line of the C.P.R. reached Saskatoon and made it the supply point for Battleford. Of necessity the teamsters took their rigs to the new railroad, and the buffalo bone trade that they had nourished at Swift Current practically ceased. The departure of these draymen was a blow to the local economy, for their labors had brought in about 300 carloads of chaotic anatomy to the town and surrounding points.[3] But the pickers were not absent long, for the shorter northern supply route meant that fewer transports were needed, leaving many of the freighters unemployed. A search for work brought some of the Metis back to Swift Current, where by 1892 they were gathering skeletons for a living. During the next three years they brought in over 100 carloads of bones to Charles

---

[1] Saskatchewan Herald, 26 June 1889, p. 1.

[2] Saskatchewan Herald, 15 May 1889, p. 1.

[3] James Woodsworth, Thirty Years in the Canadian Northwest (Toronto: McClelland, Goodchild & Stewart, 1917), p. 151.

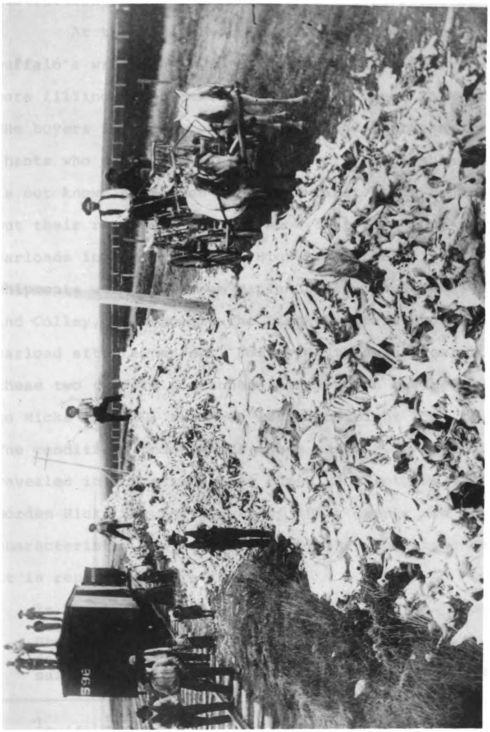
Illustration 18. Bone Pile at Gull Lake, Saskatchewan.

When John Gordon came to the Prairie Provinces in the 1890s he was "captivated by the . . . huge piles of whitened buffalo bones" that lay north of the Canadian Pacific Railway near the Battleford Trail. These great heaps "were shaped like pyramids, with bases about twenty feet in diameter and altitudes of fifteen feet. Some other piles had existed before" in the neighborhood, "as evidenced by the compacted vegetation." These skeletons, he was told, "had been gathered by Halfbreeds and Indians for contractors who were shipping bones to Chicago where they were used, in some manner, in a sugar refining process."[a] The accumulations of bison remains seen by Gordon were probably created by pickers who had decided to first gather the bones in the area and then haul them to market. The end result of this process may be witnessed in this picture by Trueman and Caple of Metis at the Gull Lake, Saskatchewan, railroad siding sometime during the 1890s. (Courtesy Glenbow-Alberta Institute, Calgary)

---

[a]John Gordon, "True Tales of Days That are Gone," The Brooks Bulletin, 5 February 1970, section 2, page 3.

Interview by Le Roy Barnett in Calgary, 9 September 1970.



Reid, the town merchant, removing all traces of the destruction that had once littered the surrounding plains.[1]

At the same time that freighters were hauling the buffalo's wreckage to Swift Current, other Metis to the west were filling their carts and trailing bones to Maple Creek. The buyers in that area were the Dixon Brothers, local merchants who dealt in practically every imaginable good. It is not known just when these men first began handling bones, but their remaining records show that they sent sixteen carloads in 1889 to Borden Hicks in Minneapolis. These shipments were made from Maple Creek, Crane Lake, Sidewood, and Colley, and brought the Dixon Brothers about $26.00 per carload after expenses. Following this successful year, these two traders consigned thirty-seven carloads of bones to Hicks in 1890, seven in 1891, and eight more in 1892.[2] The conditions under which these sales were made are revealed in a contract that the Dixon Brothers had with Borden Hicks for the season of 1892. Since the agreement is characteristic of those signed by the other bone dealers, it is reproduced here in full:

> It is hereby mutually agreed by and between the Northwestern Bone Syndicate of St. Paul, Minnesota, and Dixon Brothers of Maple Creek, North West Territory, as follows: That said Dixon Brothers will buy and sell to said Syndicate all the clean, dry buffalo bones they

---

[1] Swift Current Sun, 23 April 1907, p. 2.

[2] "Buffalo bone ledger," Dixon Brothers Papers, Glenbow-Alberta Institute, Calgary.

> handle during the season of 1892. That they will load the same when clean and dry into cars containing not less than 12 tons each, and ship the same to said Syndicate at Minnesota Transfer and that railroad weights at Winnipeg shall be a basis of settlement. Said Syndicate agrees to pay said Dixon Brothers for the bones so leaden and shipped seven dollars (7 dollars) per ton f.o.b. at stations where loaded, and that their territory shall extend from Walsh east. They further agree to honor a sight-draft bill of lading attached for 75 dollars and exchange on each car, and to promptly remit all balances due on each car as soon as the railroad weight is reported. They also agree to send a weight ticket of each car showing the destination weight of the car at Minnesota Transfer at 8 percent less than railroad weights, this ticket being for the use of Dixon Brothers in settling with the Breeds. They further agree that should there be any advance in the price of bones to give said Dixon Brothers the advantage of such advance. Said Syndicate also agrees at the end of the season to make final settlement with Dixon Brothers based upon destination weights at 7.50 dollars per ton and to pay said Dixon Brothers the difference between this amount and the amount paid them in railroad weights.[1]

The year after this contract was made a severe economic depression hit the States, causing many businesses to close. With little market existing for bones, the Dixon Brothers stayed out of the trade in 1893. Conditions improved somewhat the following years, so the two merchants sent seven boxcars of skeletons to Hicks in 1894 and five carloads in 1895.[2] Though some picking continued in the area later in the decade, the gleaners changed their

---

[1]"Letterbook," November 28, 1891 to October 2, 1893, pp. 207-208, Dixon Brothers Papers, Canadian Plains Research Center, University of Regina, Saskatchewan.

[2]Buffalo bone ledger, Dixon Brothers Papers, Glenbow-Alberta Institute, Calgary.

destination to Gull Lake and the bone trade came to an end at Maple Creek.[1]

James Sanderson, an educated and enterprising Metis, controlled the buffalo bone trade around Medicine Hat from its inception in 1886.[2] Like the Dixon Brothers, Sanderson was an agent for Borden Hicks and the Northwestern Bone Syndicate.[3] Because of his heritage, Sanderson was able to work closely with the mixed-blood Indians and encourage them to gather the buffalo's ruins. His efforts toward this end proved to be effective, for by 1887 he was annually earning $1,100 from the bone business[4] and shipping about nineteen carloads of skeletons to St. Paul.[5] This average yearly income and volume continued through 1890,[6] a level that was maintained with the help of German settlers from the Seven Persons Colony who joined the Metis in their

---

[1]Hugo MaGuire, Stories of the West, "Reminiscences of incidents in the Maple Creek, Gull Lake, and Shaunavon, Saskatchewan, areas" (Calgary: Glenbow-Alberta Institute).

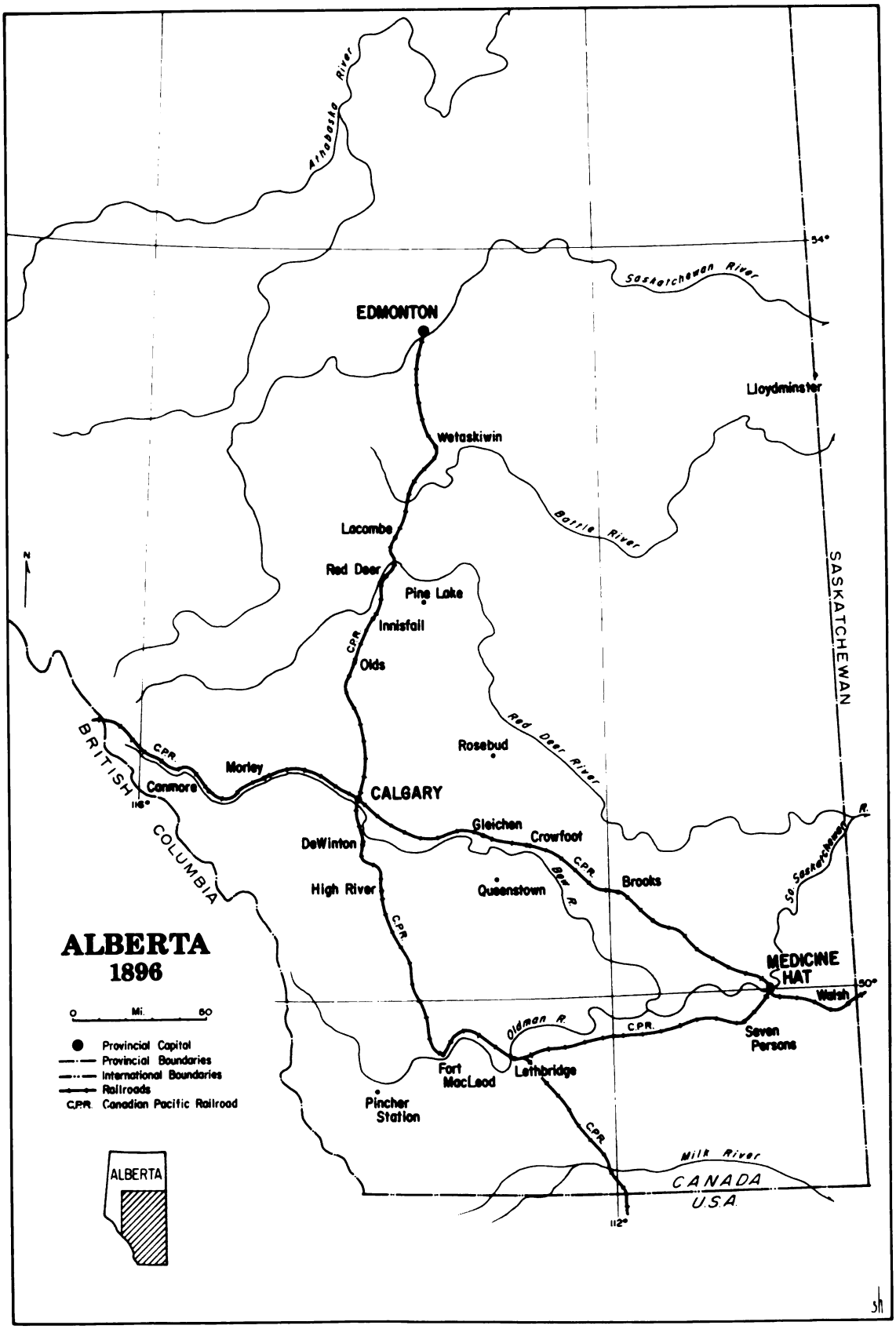
[2]Medicine Hat Times, 22 July 1886, p. 1.

[3]Medicine Hat Times, 30 April 1887, p. 4; 18 June 1887, p. 4; 2 July 1887, p. 4.

[4]Medicine Hat Times, 3 November 1887, p. 4; The Emigrant (Winnipeg), February 1888, vol. 2, no. 9, p. 146.

[5]Medicine Hat Times, 10 May 1888, p. 4.

[6]Medicine Hat Times, 10 August 1889, p. 4.


Athabasca River
54°
Saskatchewan River
EDMONTON
Lloydminster
Wetaskiwin
Lacombe
Battle River
Red Deer
Pine Lake
Innisfail
C.P.R.
Olds
SASKATCHEWAN
BRITISH
COLUMBIA
C.P.R.
Morley
Canmore
115°
CALGARY
Rosebud
Red Deer River
Gleichen
Crowfoot
DeWinton
C.P.R.
Bear R.
Brooks
So. Saskatchewan R.
High River
Queenstown
C.P.R.
MEDICINE HAT
Walsh
50°
Oldman R.
C.P.R.
Seven Persons
Fort MacLeod
Lethbridge
Pincher Station
C.P.R.
Milk River
CANADA
U.S.A.
112°
ALBERTA
1896
0 Mi. 60
Provincial Capital
Provincial Boundaries
International Boundaries
Railroads
C.P.R. Canadian Pacific Railroad
ALBERTA

grisly harvest.[1] The favorable market at Medicine Hat finally slumped in 1891 when an increase in freight rates dropped the price for bones to $4.50 per ton and took much of the profit out of the trade.[2] Sanderson hung on for the remainder of the year giving work to his men and four teams,[3] and then apparently left the business for some pursuit that offered more remuneration. Some pickers continued to work the area through 1893, but their harvest was miniscule when compared to what had been gathered before.[4]

The flurry of activity in 1886 that characterized the bone trade along much of the C.P.R. even extended to Lethbridge, where a "party of men with several carts" collected and shipped a few carloads of spoils from the vanished buffalo herds.[5] These bone hunters, like many others that year, may have ignited the surrounding prairie to make their quarry more visible. This practice was very hazardous to life and property, so to avoid being blamed for the ensuing destruction the pickers were careful to see that their fires were started near the tracks of the railroad. This made it appear as if sparks from a locomotive

---

[1] Lethbridge News, 18 June 1890, p. 3.

[2] Medicine Hat Times, 18 June 1891, p. 4.

[3] Medicine Hat Times, 8 May 1890, p. 4; 1 October 1891, p. 4.

[4] Medicine Hat Times, 31 August 1893, p. 4.

[5] Lethbridge News, 3 July 1886, p. 5.

were responsible for each blaze, but the C.P.R. was not fooled. The Vice-President of that line, writing to the Lt. Governor of Saskatchewan in 1886, observed that "the evidence seems pretty clear that most [fires] have been set by the bone hunters, . . . and [this incendiarism is] naturally attributed to us." In response the government official agreed that the "Half breeds [were] burning the prairie for the purpose of more easily gathering the buffalo bones," but he encouraged the railroad to improve upon its fire abatement efforts.[1]

The bone trade remained active around Lethbridge after 1886, and the problem of fires set by pickers continued with it. In 1893 the local newspaper observed that "Mr. J. H. G. Bray, who is engaged in picking buffalo bones on the prairie in this vicinity, came in from Woodpecker [recently]. He has quite a stock of bones on hand at the different stations on the A. R. & C. Co. railway, but owing to the stringency in the money markets of the States he will not begin shipping until the latter end of [November]."[2] Apparently Mr. Bray or his predecessors had been torching the grass to find some of these ruins, for complaints were registered about their use of fire. The divisional police superintendent at Lethbridge, addressing this problem in

---

[1]S. Raby, "Prairie Fires in the North-West," Saskatchewan History, vol. 19, no. 3 (Autumn 1966), pp. 82-83.

[2]Lethbridge News, 28 September 1893, p. 3.

1893, noted that "the buffalo bones have been pretty well gathered up by this time, so that this incentive to mischief will not exist much longer."[1]

Those people gathering bison remains near Lethbridge employed techniques, in addition to fire, that were typical of nearly everyone in the trade. Characteristically the bone pickers were Metis families who had banded together for security and companionship. Beginning in May these outfits would travel about the prairie until they reached an area well endowed with the destruction of the buffalo. There, usually at a spring or stream, the party would set up camp and begin collecting activities. Bone harvesting started early each morning and lasted until late at night.[2] The women and children would scour nearby tracts of land for the wreckage of the once great herds, putting their finds into small piles to make it easier for loading later.[3] Driving their rigs, the men traveled further afield in search of bones. When everyone in the troop had filled their

---

[1]S. Raby, "Prairie Fires in the North-West," Saskatchewan History, vol. 19, no. 3 (Autumn 1966), p. 83.

[2]Interview with James Gladstone, Calgary, 8 September 1970.

[3]Mari Sandoz, The Buffalo Hunters (New York: Hastings House, 1954), p. 249; Wayne Gard, The Great Buffalo Hunt (Lincoln: University of Nebraska Press, 1968), p. 302.

vehicles to the top, they would form a caravan and drive to the nearest depot to sell their cargoes.[1]

When the wagonloads of bones were brought to town, the local buyer would first inspect them to be certain they were clean, dry, and bleached. Such an examination was necessary since the skeletons were purchased by weight, and some pickers would soak their wares in a nearby stream before hauling them to the scales.[2] Others, just as eager to unfairly increase their assets, had been known to place part of the prairie in their vehicles along with the gleanings.[3] The merchandise had to be bleached since only white bones were certain to be free of flesh and oil, a characteristic preferred by the carbon works.[4]

Once the quality of the wares had been established, the carts were weighed and driven to the bone pile adjacent to a railroad siding. There the Metis would unload the fruits of their grisly search, return to the scaleman for a second measurement, and then take their receipt of net weight to the buyer for payment. Settlement, though sometimes made in cash, was often in the form of goods, since

---

[1]Hugo MaGuire, Stories of the West, "Reminiscences of incidents in the Maple Creek, Gull Lake, and Shaunavon, Saskatchewan, areas" (Calgary: Glenbow-Alberta Institute).

[2]Major Israel McCreight, Buffalo Bone Days (Sykesville, PA: Nupp Printing Company, 1939), p. 25.

[3]Real West, vol. 7, no. 36 (July 1964), p. 63.

[4]Medicine Hat Times, 10 August 1889, p. 4.

many pickers were required to take out their earnings in trade with the merchant. This practice enabled the purchaser of the bones to profit twice from the same transaction.[1]

Though the system was not always fair, it did prove effective in bringing to market the bones needed by American industry. Testifying to this fact was Julian Ralph who, with a companion, traveled west over the Canadian Pacific Railroad in 1888. "We found," he said, "that the bison's remains had been made the basis of a thriving industry. At the outset we saw a few [buffalo] bones dotting the grass in white specks here and there. Soon we met great trains, each with many boxcars, laden with nothing but these weather-beaten relics. Presently we came to stations where, beside the tracks, mounds of the bones were heaped and men were swelling the heaps with wagonloads garnered far from the railroad. A great business has grown up in collecting these trophies. For years the business of carting them away has gone on."[2]

All of this activity was for the purpose of providing raw material for the fertilizer and carbon works in Chicago, Detroit, and St. Louis. Since the early 1870s

---

[1]Major Israel McCreight, Buffalo Bone Days (Sykesville, PA: Nupp Printing Company, 1939), pp. 27-28.

[2]Cy Martin, The Saga of the Buffalo (New York: Hart Publishing Company, 1973), pp. 154-157.

these manufactories had relied upon the plains of the American West to fulfill their needs. But by the middle 1880s the bone resources of the States were starting to dwindle, and the field agents of these mills turned to the prairies north of the border for supplies.[1] To the U.S. fertilizer plants the wreckage of the Canadian herds meant a good source of manurial phosphate when properly ground and treated. For carbon factories the bones represented an ability to continue producing charcoal filters to decolor and neutralize sugar. And to other minor industries the Canadian bison remains formed the basis for bone china, knife handles, combs, and buttons.[2]

In the course of supplying this demand for bones, the pickers were constantly searching for new areas to exploit. One such tract was the Qu'Appelle Valley, an area that was "literally white with buffalo bones" in 1889.[3] Stimulated by an offer of $7.00 a ton for these relics by Messrs. Crawford & Osment of Indian Head, the Metis began scouring the district for the vestiges of the bison.[4] Their

---

[1]David Dary, The Buffalo Book (Chicago: Swallow Press, 1974), p. 139.

[2]Martin Garretson, The American Bison (New York: New York Zoological Society, 1938), pp. 160-164.

[3]Major Israel McCreight, Buffalo Bone Days (DuBois, PA: 1950), p. 32.

[4]Qu'Appelle Vidette, 11 July 1889, p. 3; Regina Journal, 18 July 1889, p. 1.

labors soon had five carloads of skeletons heaped up at the station, and more were coming in almost daily. The following year saw about twice the volume assembled, with H. A. Axford cornering most of the business.[1] By the middle of 1890 nearly all of the readily accessible bones had been mustered at the Indian Head depot, leaving many pickers waiting for one of several proposed branch lines to open up new areas for their trade.

One region that the pickers looked forward to exploiting was the country between the Qu'Appelle Valley and the Saskatchewan River. In 1890 rails were laid out of Regina across this skeleton-littered terrain toward the town of Saskatoon,* and bone scavengers assembled all along the right-of-way to harvest the remnants of the herds. By August these hunters of the bison's anatomy, mainly French-Canadian Indians from the north, had brought "some $7,000 worth of bones" to railway sidings between Lumsden and the end of the line.[2] Other Metis, unable to find work near Battleford, began collecting the vestiges of the buffalo that lay between the elbow of the North Branch and the South

---

[1] Qu'Appelle Progress, 4 July 1890, p. 4.

*The actual name of this branch line was the Qu'Appelle, Long Lake and Saskatoon Railroad. But since the route was leased by the Canadian Pacific Company, it is treated in this article as just an extension of the main tracks to the south.

[2] Regina Leader, 5 August 1890, p. 4.

Saskatchewan River.[1] By fall they and other prairie gleaners were said to have delivered "as many as 50,000 heads at Saskatoon, together with as many of the other bones of the carcasses as the pickers could find."[2]

Mr. W. H. Duncan had opened a store at Saskatoon in 1890, and as the pickers began bringing wagonloads of bones into town he offered to take them in trade for goods. The idea was readily accepted by the Metis, since barter was a way of life with them, so hundreds of tons of bison remains were hauled to Duncan's market in exchange for credit.[3] From distances of up to fifteen miles the pickers came with their osseous cargoes, eager to receive from the pioneer merchant between $5.00 and $7.00 per ton.[4] Duncan left records indicating that his bone business attained rather impressive dimensions, for his diary showed four carloads of skeletons shipped out on September 6, 1890, "seven carloads on the 9th of the same month, four on the 10th, and six on the 17th."[5]

---

[1] Saskatchewan Herald, 23 July 1890, p. 1.

[2] Regina Leader, 16 June 1891, supplement.

[3] Grant MacEwan, Entrusted to My Care (Saskatoon: Modern Press, 1966), p. 49.

[4] Gordon Hewitt, The Conservation of the Wildlife of Canada (New York: Charles Scribner's Sons, 1921), opp. page 114.

[5] Grant MacEwan, Entrusted to My Care (Saskatoon: Modern Press, 1966), p. 49.

As the trade in bison remains progressed in 1890, the volume of sun-bleached relics brought in to Saskatoon exceeded the capacity of the railroad to haul them away. When this occurred, the bone dealers were forced to stack their investments along the sidings at the station while additional supplies of freight cars were sought. The unshipped skeletons were organized into neat rectangular piles about eight feet wide, eight feet high, and thirty-three feet long--the same dimensions as a boxcar--"thus making it easy for the owners to take inventory of the stock on hand."[1] Each rick was constructed by interlocking the horns on the buffalo skulls to form a perimeter, with the loose bones making up the center. At one time the remnants of over 25,000 animals were arranged in this fashion at the Saskatoon depot, waiting for transportation to processors in the United States.[2]

Mr. Hugh Lumsden had an opportunity to see and photograph these bone blocks during a visit to Saskatoon in 1890. A civil engineer by trade, and thus presumably good at gauging distances, Mr. Lumsden estimated that these ricks stretched for about 800 feet along the tracks. A similar sight, he said, could be seen at nearly every siding between Duck Lake and his namesake, with

---

[1] Ibid.

[2] Gordon Hewitt, The Conservation of the Wildlife of Canada (New York: Charles Scribner's Sons, 1921), opp. page 114.

accumulations varying in length from 50 to 400 feet. Eventually the Canadian Pacific line managed to secure additional cars, and by winter the bone heaps seen by Lumsden had been shipped out to buyers south of the border.[1]

With the coming of spring in 1891 sheets of flame raced across the broad expanses of open prairie near Saskatoon. As was their custom, the Metis bone-farmers had fired the vegetation to facilitate harvesting their crops. "Extensive damage" was reported on the west side of the river on account of the incendiary activities, and "great stretches of wood" were destroyed.[2] But despite the ruin it caused, the method employed by the pickers to expose the bison's remains proved to be a very effective one. A pioneer, traveling across a freshly burned-over section, remarked that "the buffalo bones showed white and the whole country looked like a very stony Ontario summer-fallow."[3]

The sun-bleached spoils of the bison, conspicuous on the fire-blackened plains, made easy pickings for the Metis. From the time they started igniting the prairie until the middle of June, these people brought the remains

---

[1] Illustrated London News, 11 June 1892, p. 731.

[2] Regina Leader, 12 May 1891, p. 1; Saskatchewan Herald, 29 May 1891, p. 1.

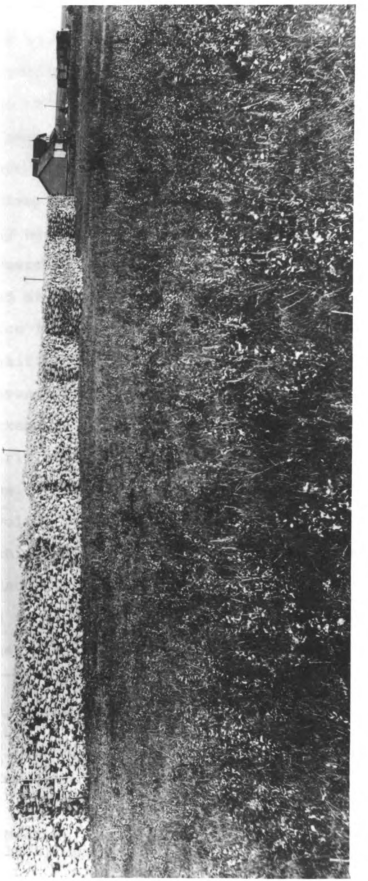
[3] Grant MacEwan, Entrusted to My Care (Saskatoon: Modern Press, 1966), p. 51.

Illustration 19. Bone Ricks at Saskatoon, Saskatchewan.

The Canadian correspondent of the Liverpool Journal reported briefly to his readers on the peculiar commodity leaving his assigned country. "The gathering of bones in the Northwest is becoming quite an industry," he advised, and many shipments are being sent south.[a] An indication of how great the trade had become can be seen in this photograph by Hugh Lumsden of the skeletons assembled at Saskatoon in 1891. The rapid accumulation of bison remains there completely outstripped the ability of the railroad to haul them away, requiring the pickings to be temporarily stored at the Canadian Pacific freight yards. These bone ricks, the same size as a boxcar, are waiting for additional rolling stock carry them to factories in the U.S. (Courtesy Glenbow-Alberta Institute, Calgary)

---

[a]The Field (London), vol. 69, no. 1,775 (January 1, 1887), p. 22.



of over 100,000 animals to the Saskatoon market.[1] W. H. Duncan, the principal bone-buyer the previous season, was pretty much out of the business in 1891 and the Metis were selling their osseous freight to James Leslie, Andrew Blair, and Grace Fletcher.[2] Mrs. Fletcher had the first store on the river's west side and, on account of her location, "probably had the biggest share of the bone trade in the earliest years."[3] By the end of June she and her competitors had shipped thirty-five carloads of the buffalo's relics from Saskatoon, and many more were piled at the depot waiting for transportation.[4]

The scavengers of the plains continued to haul the buffalo's wreckage to Saskatoon in large quantities even after new prairie grass had again hidden many of the remnants from view. So abundant were their pickings that, as in 1890, the volume of bones delivered by the Metis soon exceeded the shipping capacity of the railroad. By the first week in August the remains of about 168,000 buffalo were estimated to be in just one pile near the station, and there were other smaller ricks in the yards as

---

[1] Regina Leader, 16 June 1891, supplement.

[2] Regina Standard, 17 June 1892, p. 7; Regina Leader, 13 October 1891, p. 1; Grant MacEwan, Between the Red and the Rockies (Toronto: University of Toronto Press, 1952), p. 83.

[3] Grant MacEwan, Entrusted to My Care (Saskatoon: Modern Press, 1966), p. 49.

[4] Regina Standard, 26 June 1891, p. 1.

well.[1] "It was no unusual sight at the depot," said one witness, "to see 50 or 60 cords of these [bones] stacked up waiting shipment."[2] At times the skeletons temporarily stored at Saskatoon extended from "23rd Street to a point at the riverbank," a distance of nearly five blocks."[3]

By the summer of 1891 the bone hunters trading at Saskatoon had to travel over 20 miles from town in order to find the bison's spoils.[4] As the Metis began ranging so far afield in quest of the buffalo's remains, they once again banded together into "bone-picking outfits." The caravans of carts and wagons created by these mergers usually searched for the remnants of the vanished herds as a unit, often forming a train that stretched, when in motion, for a mile or more across the plains. "Positions at or near the front of the procession were competed for," with the better horses and men enjoying "the prestige of leadership" while the slower animals and subordinate drivers "sweated amid the dust at the rear."[5]

---

[1] Saskatchewan Herald, 7 August 1891, p. 1.

[2] The Western Producer, 16 July 1970, p. 28.

[3] Grant MacEwan, Entrusted to My Care (Saskatoon: Modern Press, 1966), p. 49.

[4] Regina Leader, 16 June 1891, supplement.

[5] Grant MacEwan, Between the Red and the Rockies (Toronto: University of Toronto Press, 1952), p. 83; Entrusted to My Care (Saskatoon: Modern Press, 1966), pp. 48-49.

The most common transports in these caravans were the all-purpose Red River carts, light rigs made entirely of wood bound together with rawhide and pegs. These conveyances, some pulled by oxen, could hold from 800 to 1,200 pounds of bones when carefully packed, giving the teamster a return of about $3.00 a load. But the more affluent pickers had basket racks "12 or 14 feet long and three feet high" attached to the sides of their vehicles, enabling them to haul nearly 2,500 pounds per trip behind a team of horses.[1]

The wheels of these transports were fitted to an axle hewn from the trunk of a tree, and the two turned against each other without the benefit of lubrication. Grease, if used, would only "pick up the fine dust so plentiful on the plains in dry weather," causing rapid wear or a binding of the wheels to the axle. But because lubrication was not used, "the ungreased wheels rubbing on the dry axles produced a terrific screech, like a thousand fingernails being scratched across a thousand windowpanes." When a train of about 60 or more of these carts set out toward Saskatoon as a group, "no one needed to go ahead to announce their coming."[2]

---

[1]Grant MacEwan, Between the Red and the Rockies (Toronto: University of Toronto Press, 1952), p. 83.

[2]Francis Haines, The Buffalo (New York: Thomas Crowell Company, 1970), p. 130.

The owners of the Red River carts--mainly Metis from Fish Creek and Batoche--did much of the buffalo-bone picking in the Saskatoon vicinity. They were joined in the field occasionally by Sioux Indians from the reservation west of Dundurn, but the religious beliefs of these people kept most of them away from the trade. Homesteaders, and even residents in some of the settlements, also indulged in the search for bison remains, with more than one pioneer managing to get a grubstake or a few supplies with the money he had earned by selling bones.[1]

With the bison remains close to the railroad depleted, the Metis, Indians, and settlers alike mainly concentrated on the cutbanks and coulees where small herds might have been stampeded to their deaths. In the rough country south and west of Saskatoon some lucky pickers found aggregations of bones "totalling up to 40 or 50 tons at one place," and more than 100 carloads of skeletons were said to have been collected from the countryside around Hanley. Other areas with great accumulations of buffalo bones proved to be the Goose Lake district, near present-day Rosetown, and the Blackstrap Coulee southeast of Dundurn.[2]

Bison remains from these lowland areas were hauled to Saskatoon throughout the summer of 1891, but due to a

---

[1]Grant MacEwan, Between the Red and the Rockies (Toronto: University of Toronto Press, 1952), p. 83; Entrusted to My Care (Saskatoon: Modern Press, 1966), pp. 48-49.

shortage of railway cars only a few loads of bones left the station each week.[1] "Corrals" of skulls were again built at the depot and filled with fragments of the vanished herds, making the local freight yards appear more and more like a huge uncovered cemetery.[2] Then, in mid-September, the Canadian Pacific managed to acquire additional rolling stock, and the export of bones began exceeding the supply that was brought in by the picking gangs. Just one agent, and there were at least four operating in the area, was said to be shipping ten to fifteen cars of skeletons every day.[3] Due to this accelerated rate of turnover the ricks of bones were finally leveled by December,[4] making a total of 270 carloads sent from the depot during the season.[5] When this volume was added to the amounts earlier exported, it was calculated that the remains "of no less than 200,000 buffalo had been shipped from Saskatoon alone since August of 18[9]0."[6]

Those men who went searching for buffalo bones in the spring of 1892 discovered that the remnants of the herds

---

[1] Regina Leader, 1 September 1891, p. 1.

[2] Record Book 3, p. 9a, Ernest Brown Catalog, Provincial Archives of Alberta, Edmonton.

[3] Regina Standard, 18 September 1891, p. 8.

[4] Regina Leader, 13 October 1891, p. 1; 8 December 1891, p. 1.

[5] Illustrated London News, 11 June 1892, p. 731.

[6] The Western World, 8 January 1892, p. 8.

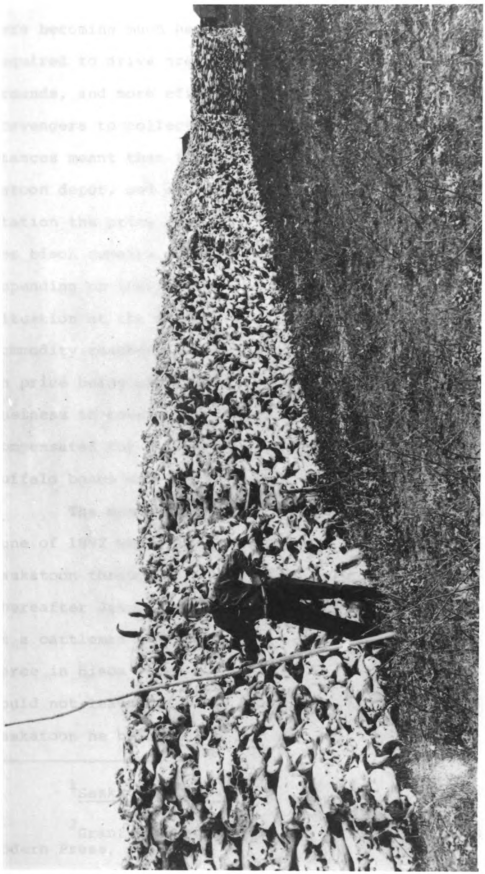
Illustration 20. Bones Ready for Shipment at Saskatoon, Saskatchewan.

The despatches from U.S. Consuls in Winnipeg to Washington, D.C., reported great quantities of buffalo bones being exported from Canada in 1891. In just the last three-quarters of that year over $36,000 worth of skeletons were said to have crossed the border headed south.[a] The bulk of these ruins were undoubtedly coming from the Saskatoon area, where most of the collecting was being done at that time. Testifying to the volume of bison remains being gathered in the district is this picture by Hugh Lumsden. Visiting Saskatoon on August 9, 1890, he photographed these buffalo bones stacked and waiting for freight cars along the Canadian Pacific Railroad.[b] (Courtesy Glenbow-Alberta Institute, Calgary)

---

[a]U.S. Department of State. "Despatches from United States Consuls in Winnipeg, 1869-1906." Consular Reports 588, 5 August 1891; 598, 29 October 1891; 606, 6 February 1892. National Archives, Washington, D.C.

[b]Gordon Hewitt, The Conservation of the Wild Life of Canada (New York: Charles Scribner's Sons, 1921), opposite page 114.



were becoming much harder to find. The pickers were required to drive greater distances to reach the gathering grounds, and more effort was needed on the part of the scavengers to collect a load for their carts. These circumstances meant that fewer skeletons were brought to the Saskatoon depot, and as the supply of bones diminished at the station the price offered for them went up. The going rate for bison remains in 1891 ranged from $5.50 to $7.00 a ton, depending on the quality of the product and the market situation at the time.[1] But by 1892 quotations for the commodity reached from $6.00 to $8.00 per ton, the increase in price being offered by the merchants to attract more business to town. This advance in the value of skeletons compensated for the longer hauls, and soon the trade in buffalo bones was thriving again in Saskatoon.[2]

The merchants setting prices for buffalo bones in June of 1892 were the same ones that had purchased them in Saskatoon throughout the previous year. But shortly thereafter James Leslie sold his store and set himself up as a cattleman at Brightwater Marsh near Dundurn. The commerce in bison remains, however, was a venture that Leslie could not leave, and soon following his departure from Saskatoon he began buying bones at his ranch. The

---

[1] Saskatoon Star-Phoenix, 7 April 1969, p. 4.

[2] Grant MacEwan, Entrusted to My Care (Saskatoon: Modern Press, 1966), p. 49.

ex-shopkeeper no longer had goods that he could trade for the sun-bleached spoils, so he began paying cash for all skeletons brought to his spread. This practice was nearly unheard of around Saskatoon at the time, prompting many pickers to deal with Leslie for money instead of merchandise.[1]

Despite Leslie's competition and novel buying habits at Dundurn, the bulk of the traffic in buffalo bones continued to go to Saskatoon. Throughout the summer and fall of 1892, companies of Metis drove their strange cargoes to the town's freight yards, repeating much of the activity that occurred there the season before. Huge ricks of carefully stacked ruins again lined the railroad sidings, and long strings of boxcars arrived at the depot to carry them south to the mills. By the time winter finally put an end to this business, Saskatoon and Canada had experienced their second most profitable season in buffalo bones.[2]

The smoke of burning grass in the following spring announced, as it had in previous years, the commencement of the buffalo-bone trade in the vicinity of Saskatoon.[3] But that season the fires were further than ever from the borders of the town, for most of the skeletons within a radius

---

[1]Ibid.

[2]Grant MacEwan, Between the Red and the Rockies (Toronto: University of Toronto Press, 1952), p. 81; Entrusted to My Care (Saskatoon: Modern Press, 1966), p. 48.

[3]Saskatchewan Herald, 21 July 1893, p. 4.

of fifty miles had been thrown into carts and hauled to market. Due to the depletion of bison remains in all of the nearby districts, the picking gangs were forced to expand their circle of activities to increasingly remote areas. By 1893 the search for sun-bleached relics was taking bone hunters far afield, most of them traveling to or beyond "where Watrous is now located on the East, Rosetown on the West, Rosethern on the North, and Bladworth on the South."[1] Again, to compensate the Metis for their additional investments of time and labor, the price of bones was raised at Saskatoon to between $6.50 and $8.50 per ton.[2] But this rate increase did not attract the pickers as it had done in the past, the most of them began taking their wares to Leslie at Dundurn.[3]

James Leslie, the ex-merchant from Saskatoon, had "signed a contract with the Northwestern Fertilizer Company of Chicago" in which the concern agreed to take all of the skeletons he could provide them. It was this guaranteed market that enabled Leslie to acquire most of the bone trade that had once gone to other dealers. His good fortune in the business continued until late in 1893, when a financial

---

[1]Grant MacEwan, Entrusted to My Care (Saskatoon: Modern Press, 1966), p. 48.

[2]Saskatchewan Herald, 21 July 1893, p. 4.

[3]Grant MacEwan, Between the Red and the Rockies (Toronto: University of Toronto Press, 1952), p. 83; Entrusted to My Care (Saskatoon: Modern Press, 1966), p. 50.

panic hit the States and the Chicago manufacturer had to close. "At once the importing firm refused to accept the carloads of bones coming from Leslie but, there being no agent at Dundurn, the shipper was not getting the telegram instructions to stop deliveries." Uninformed about the fate of his buyer, Leslie continued to send vestiges of the buffalo to the mills' receiving yards. Soon, thirty-five carloads of bones from Dundurn were resting at the Windy City, "with nobody to accept the responsiblity of paying for the freight. After some weeks the Chicago company returned to operations and began taking the Saskatchewan bones, but Leslie's losses were heavy nevertheless."[1]

Though Leslie was able to survive the depression of 1893, most of his professional colleagues did not fare as well. Many dealers around Saskatoon were forced out of business by the recession, while others who could see that the supplies of bones were nearly gone simply left the trade for a more promising pursuit. But despite their inability to weather the economic slump, buyers in the Saskatoon area made a respectable showing of themselves when better times rules the market. During the three years that bones were king they shipped perhaps 10,000 tons, a

---

[1]Ibid.

volume equal to nearly one half of the total exported from all of the Prairie Provinces.*

The Metis had eagerly anticipated in 1890 the C.P.R. extension from Regina to Saskatoon because it would give them access to a territory heavily carpeted with bones. Their reaction was the same in 1893 when the Soo Line began building south from Moose Jaw to the U.S./Canadian border. Even before tracks had been laid the Indians and settlers had gathered tons of sun-parched relics and piled them up along the right-of-way for eventual transport east.[1] Andrew Blair, a major buyer working out of Regina, managed to capture most of the market and shipped out "large quantities" of bones when the railroad opened up.[2] The following year proved to be even more rewarding for Mr. Blair, as he acquired fifty carloads of skeletons along the Soo in just a three-month period.[3]

---

*Grant MacEwan--writing in one of his entertaining books, Between the Red and the Rockies--says that from late 1890 until the month of the commercial crisis, James Leslie shipped 750 carloads of bison remains from the Saskatoon district with the other local dealers accounting for about 2,500 carloads more during the same three-year period. Since this volume would amount to about 40,000 tons, and the Prairie Provinces exported for all years only 22,000 tons, his figures are obviously mistaken.

[1] Moose Jaw Times, 1 September 1893, p. 4.

[2] Moose Jaw Times, 6 July 1894, p. 4.

[3] Moose Jaw Times, 5 October 1894, p. 8.

The Regina operator would surely have fared even better had he not had to share the pickings with the ever-present Borden Hicks. As the illustration on the next page shows, Hicks managed to claim at least one carload of bones from W. H. Dorsey, a North Portal merchant. The receipt, while interesting as a curiosity, is also valuable because of what it reveals about the economics of the trade in bison remains. By far the most expensive factor in the commerce was transportation, as it consistently cost between $115 and $130 to get a carload of bones from Canada to the States. This meant that shipping fees amounted to about two-thirds of the total value of the product. From the money that was left after settling with the railroads, the merchant had to pay the pickers an average of $7.00 per ton. The result was that the typical bone dealer netted, after some deceptive bookkeeping, approximately $1.50 on each ton that he sold.

At the same time that Andrew Blair was buying the ruins of the buffalo along the Soo Line, he was also initiating a similar trade along the new Edmonton-Calgary-Lethbridge branch of the C.P.R. The export of bones from Calgary and vicinity began in 1893* when Blair started buying "the ossified remains of the buffalo for the eastern

---

*An article in the Calgary Herald of March 23, 1935, page 32, puts the date at 1890 and the price at $8.00 per ton. While no supporting facts are available, the claim is conceivably accurate.

Illustration 21. Receipt from Borden M. Hicks.

A reporter covering Assiniboia in 1886 observed that "one hundred carloads (1,000 tons) of buffalo bones were shipped from this territory in 1885, and this year that amount will be doubled. Six dollars a ton is paid for them here."[a] Certainly one person who accounted for much, perhaps even most, of this harvest was Borden Hicks, the dealer who sought to control the trade in bison remains throughout the Northern Great Plains. A decade later, as this receipt shows, Hicks was still doing business with merchants in Canada. This document pertains to a load of bones shipped from Estevan, Saskatchewan, by Mr. W. H. Dorsey, a shopkeeper at North Portal. (Courtesy of Catherine Dorsey, Regina, Saskatchewan)

---

[a] The Emigrant (Winnipeg), June 1886, vol. 1, no. 1, p. 37.

#35

Minneapolis, Minn. Aug 14 1894

B. M. HICKS,

DEALER IN BUFFALO BONES.

In account with Mr. W. A. Dorsey
N. Portal

Date Shipment.		Stations Shipped From.	Car Int.	Car No.	Net Weight.	Price Per Ton.	Gross Settlement.	Balance Due on Each Car.
Jun	22	Estevan	L.P.	17784	26250	15.00	196.87	
		Less freight charges as follows						
		L.P. 8500	on	26550	@ 32½	86.29		
		Customs				1.45		
		Wis. Cent.	on	27300	@ 14	38.22		
		Switching				2.00	127.96	68.91
		Advance						50.00
		Balance due						$18.91

sugar refineries."[1] The price paid was about $6.00 per ton,[2] and nearly a dozen carloads were sent to Chicago and St. Louis before the season ended.[3] Freight costs for the trip averaged $9.00 per ton,[4] and all shipments were made via the "Canadian Pacific to Gretna on the international border south of Winnipeg and from there by the Great Northern" Railway to the mills.[5]

In 1894 Blair again came to Calgary seeking remnants of the vanished herds, but a depression in the United States had reduced the price for bones and his business was much lower than usual.[6] After spending six weeks in the city he was able to obtain only twenty carloads of skeletons for his clients.[7] Many of the pickers refused to sell at the deflated rates, and numerous piles of chaotic anatomy were left standing at the stations between Morley and Medicine

---

[1] Calgary Herald, 17 October 1893, p. 8; Regina Leader, 19 October 1893, p. 9.

[2] Letterbook, December 1892 to October 1893, p. 260, Wesley Orr Papers, Glenbow-Alberta Institute, Calgary.

[3] Ibid., p. 196.

[4] Ibid., p. 260.

[5] Ibid., p. 204.

[6] Ibid., p. 450; Calgary Herald, 15 May 1894, p. 8.

[7] Moose Jaw Times, 6 July 1894, p. 4; Calgary Herald, 10 July 1894, p. 8.

Hat waiting for conditions to improve.[1] By fall the owners of these bone heaps apparently could not hold out any longer, and all but about ten carloads of the sun-bleached relics were shipped out from points around Calgary.[2]

The following year Mr. Blair made his annual tour of the west in search of bones, and managed to get commitments for forty carloads.[3] This was a remarkable number for 1895, since by that date all skeletons within twenty-five miles of the railway had been gathered and hauled to a siding.[4] The Metis were willing to travel such distances in return for a reasonable wage. But when freight rates increased to $10.00 per ton and the price paid by the mills took a tumble,[5] most of the bone pickers left the trade and Blair's hopes for a good year were dashed. Seeing nothing but continuing trouble for dealers in bison remains, Blair apparently left the business to more industrious souls.

One such resourceful individual was Wesley Orr, a Calgary city councilman and local entrepreneur. Though the

---

[1]Letterbook, December 1892 to October 1893, p. 450. Wesley Orr Papers, Glenbow-Alberta Institute, Calgary.

[2]Letterbook, July 1894 to March 1896, p. 287. Wesley Orr Papers, Glenbow-Alberta Institute, Calgary.

[3]Regina Standard, 4 July 1895, p. 8.

[4]Letterbook, July 1894 to March 1896, p. 555, Wesley Orr Papers, Glenbow-Alberta Institute, Calgary.

[5]Ibid., p. 287.

bone trade was experiencing hard times in his district, he felt that with a slight increase in price and his supervision, thousands of tons of the bison's relics could yet be shipped from western Alberta.[1] Accordingly, on April 27, 1896, Orr signed a contract with Borden Hicks to provide up to fifty carloads of bones during the year.[2] Under the terms of the agreement Orr was authorized to pay $65 f.o.b. for a 12-ton carload of skeletons on the main line, and $60 per carload on the branches. The bones, however, had to be dry, bleached, and free "from all sand or dust or foreign substances." If the contents of the freight car weighed less than 12 tons, or if some had to be thrown out as unacceptable, Hicks was authorized to deduct 50¢ for every 100 pounds that the load was short.[3]

Having established a guaranteed market for bones, Orr began contacting various individuals to see if they would be interested in collecting the relics for him. Letters were sent to merchants and potential pickers at High River, Dewdney, Red Deer, Innisfail, Pine Lake, Morley, Gleichen, MacLeod, DeWinton, and Lameston alerting all to a revival of the bone trade and quoting the price to be

---

[1]Letterbook, March 1896 to November 1897, p. 19, Wesley Orr Papers, Glenbow-Alberta Institute, Calgary.

[2]Diary, January-July 1896, p. 50, Wesley Orr Papers, Glenbow-Alberta Institute, Calgary.

[3]Letterbook, March 1896 to November 1897, p. 74, Wesley Orr Papers, Glenbow-Alberta Institute, Calgary.

paid.[1] Each party was told that he would receive 80 percent of what was due him at the time of shipment,[2] and the remainder after the carload had reached its destination and been examined. If quality and weight were right, the balance would be forthcoming in about thirty days.[3]

In response to Orr's appeal, some Metis and a few settlers began scouring the plains for bison remains. At Gleichen, for example, the Mennonites from Crowfoot Creek were stimulated to collect bones, and a local character named Moujies hauled skeletons into town from as far away as Rosebud.[4] Once a sufficient quantity of gleanings had been amassed at Gleichen or any other point, Orr arranged to have a freight car "put in" so the osseous cargo could be loaded.[5] Most pickers chose to do their own lading, nailing wooden strips across the inside of the doors so that the bones could be piled in full.[6] But some, anxious to return to a particularly rich gathering ground, paid the going rate of $5.00 to have others do the loading for them.[7]

---

[1]Ibid., pp. 99, 100, 102, 104, 105, 108, 112, 115, 148, 186, 196.

[2]Ibid., p. 99. [3]Ibid., p. 212.

[4]Ibid., p. 225; Alberta Historical Review, vol. 10, no. 2 (Spring 1962), p. 6.

[5]Letterbook, March 1896 to November 1897, p. 195, Wesley Orr Papers, Glenbow-Alberta Institute, Calgary.

[6]Ibid., pp. 96, 97. [7]Ibid., p. 218.

Illustration 22. The Beginning of Better Things.

"After wolves, vultures, and decay were done with the carcasses, only the bones, strewn on the ranges, told where the buffaloes had been slaughtered. In places where the hunters had made stands, the bones formed a whiteness that could be seen for miles. They were a nuisance to farmers trying to break the virgin sod. Yet even the bones were not there for long. Early settlers--fool hoe men in the eyes of the cowmen--quickly discovered that the skeletons had a cash value. For the penniless granger, beset by drouth and grasshoppers and unable in some instances even to find wild game for the dinner table of his dugout or sod house, the bones were a godsend. He could load his wagon with them, drive into town, and trade his load for necessities that would last his family until the next trip. Except for the buffalo bones, many an early homesteader on the plains would have had to go back east as a failure. They enabled him to stay until he had a crop ready to sell."[a] Two Saskatchewan settlers who relied upon bison remains for income are shown in this photograph, entitled "The Beginning of Better Things," taken by Ernest Brown around 1885. (Courtesy Public Archives of Canada)

---

[a]Wayne Gard, "Gathering Buffalo Bones, The Cattleman, vol. 45, no. 10 (March 1959), p. 53; "Bygone Midwest Business: Trade in Buffalo Bones," Chicago Tribune, 11 October 1959, section f, p. 2.

Once a standard 33-foot boxcar was filled to the top, Orr made out six sets of clearance papers at the customs house and the shipment was ready for export.[1]

By June the bones within forty miles of the railroad had been collected, and Orr was forced to work more aggressively for business.[2] To aid him in this effort the C.P.R. gave him a pass between Innisfail and MacLeod and Gleichen and Morley.[3] With this free transportation he visited "the extreme points" of his ticket and " a good many intermediate" stops in an attempt to find more bison remains. At each station Orr first tried to buy up the small bone heaps that were left over from previous years, and he sought out parties who might want to serve as sub-buyers for him locally.[4] These promotional efforts made Orr and his trade more visible, and people from such distant points as Buffalo Lake, LaCombe, and Wetaskiwin made contact to say that there were "bones and also half breeds that would pick them."[5]

While Orr's endeavors to recruit more pickers were generally successful, this achievement was soon tempered by a series of unforeseen problems. The tall grass of 1896 made skeletons hard to find, and when the prairie was fired

---

[1]Ibid., p. 206. [2]Ibid., p. 122.

[3]Ibid., p. 91. [4]Ibid., pp. 195, 246.

[5]Ibid., p. 195.

Illustration 23. Loading Bones on a Boxcar.

The standard rolling stock of the late 1880s could hold somewhat more than twelve tons of bones, the smallest quantity accepted for shipment by the Canadian Pacific Railroad. This scene, photographed by an artist named Buell, shows some men about to fill a boxcar with the necessary volume of osseous freight. In order to pack in the maximum amount of cargo, the workers nailed slats across the door as they progressed with their task. (Courtesy Glenbow-Alberta Institute, Calgary)


PACIFIC

to make them more visible many of the relics were destroyed.[1] Then came a scarcity of cars to contend with, as the C.P.R. balked at shipping bones to the U.S. since it took their rolling stock off the line.[2] This obstacle was no sooner negotiated than concern over the November presidential election caused an economic decline and the market for bones took a dive.[3] Faced with such difficult circumstances, Orr decided to ship the bones he had and not buy any more until business conditions improved.[4]

By the time the economic situation had returned to normal in the States, it was too late in the year for collecting bones. But Orr felt that 200 carloads of the buffalo's wreckage could yet be gleaned from the plains of Alberta, so he began making plans for the season of 1897.[5] Realizing that his major expense was transportation, Orr sought to reduce costs by sending his product to some mills that were not so distant. Inquiries were made about freight rates to fertilizer plants in British Columbia and California, but because of the intervening mountains the charge to move them there was more than that from Calgary to St.

---

[1]Ibid., pp. 195, 246.

[2]Ibid., pp. 147, 148, 195.

[3]Ibid., pp. 246, 353. [4]Ibid., p. 267.

[5]Ibid., p. 423.

Louis.[1] Borden Hicks, the Minneapolis agent, explored the possibility of shipping to Fort Williams and from there via boat to Chicago, "but gave the matter up as not practicable."[2] With no means of reducing his transportation costs, and with the pickers insisting on more money to compensate for their increasingly long hauls, Orr found he could not make money buying bones and permanently left the business.

Orr's departure from the bone trade marked the end of an era in Canada. Small quantities of the buffalo's ruins continued to be exported in later years, but the volume was insignificant when compared to that shipped in previous times. By 1897 the search for bison remains had reached the extreme points of the animal's range, and no major accumulations of bones were left for the prairie gleaners. Coupled with depletion of the resource as a factor in the downfall of the trade was a sudden reduction in the market that existed for the product. Near the end of the century mineral phosphates were being used at an increasing rate to make fertilizer, and the demand for bone meal was rapidly declining by the plant-food industries. Furthermore, the sugar refineries had found an

---

[1]Letterbooks, December 1892 to October 1893, pp. 431, 450; July 1894 to March 1896, p. 312, Wesley Orr Papers, Glenbow-Alberta Institute, Calgary.

[2]Letterbook, July 1894 to March 1896, p. 731, Wesley Orr Papers, Glenbow-Alberta Institute, Calgary.

electrical means of filtering their product, so the need for bone char was beginning to wane.[1] The combination of these developments proved to be insurmountable, and the Canadian commerce in buffalo bones became a thing of the past.

---

[1] Regina Standard, 24 May 1894, p. 8; letter from Fred Stoltze to Captain Heerman, 17 April 1913, Edward E. Heerman Papers, Minnesota Historical Society, St. Paul.

O' I sit by my camp-fire so lonely
My faithful old watch dog and me;
With my mules near in sight
I have camped for the night,
While my wagon is close on the lea.

O' think of the poor bone pilgrim
Ye who are safely at home;
No one to pity me,
No one to cheer me,
As o'er the lone prairie I roam.

I pass by the home of the wealthy,
And I pass by the hut of the poor,
But none care for me
When my cargo they see,
And no one will open the door.

There's a place as we journey to market
Where the Ninnescah River doth flow;
There we camp on the strand
And fill each head with sand
To make up for shrinkage, you know.

Once I was cheerful and happy,
With dear loving friends and a home,
But hard times and drouth
Took the bread from my mouth,
And now a poor pilgrim I roam.[1]

---

[1]Scott Cummins, Musings of the Pilgrim Bard; A Book of Poems (Winchester, OK: 1903), pp. 230-231.

CHAPTER 5

SPATIAL CHARACTERISTICS OF THE INDUSTRY

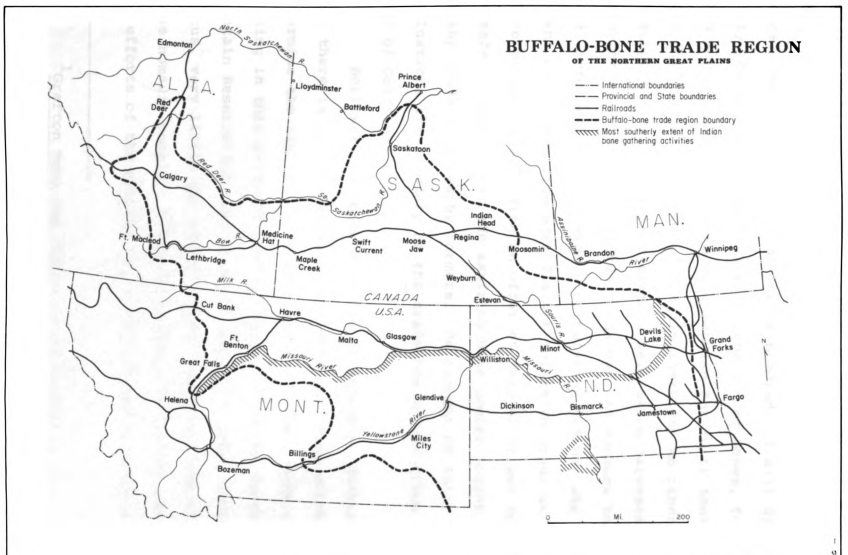
The Collecting Region Defined

The spatial dimensions of the buffalo bone trade are shown on map 5. The close relationship of this commerce with the railroads can easily be seen as irregular bulges protruding from an otherwise fairly uniform border. The boundary away from the transportation routes is rather difficult to determine, given the lack of information about picking activities in the more remote areas. Even where settlement was comparatively dense, there is some question as to the proper placement of the demarcation line. For example, an item in the Fargo, North Dakota, newspaper claimed that in the summer of 1884 "a man hauled into the city a load of buffalo bones from the uninhabited couteaus twenty-five miles southeast of Jamestown."[1] While this item would tend to indicate the presence of a bone trade at Fargo, there is no evidence to refute the belief that this was just an isolated incident.

Another situation requiring interpretation stems from an advertisement by E. K. Thomas which appeared in the

---

[1] Fargo Daily Argus, 10 December 1884, p. 7.


BUFFALO-BONE TRADE REGION
OF THE NORTHERN GREAT PLAINS
International boundaries
Provincial and State boundaries
Railroads
Buffalo-bone trade region boundary
Most southerly extent of Indian bone gathering activities
Edmonton
North Saskatchewan R.
ALTA.
Lloydminster
Prince Albert
Red Deer
Battleford
Saskatoon
Red Deer R.
Calgary
South Saskatchewan R.
SASK.
Indian Head
Assiniboine River
MAN.
Ft. Macleod
Oldman R.
Medicine Hat
Swift Current
Moose Jaw
Regina
Moosomin
Brandon
Winnipeg
Lethbridge
Maple Creek
Weyburn
Milk R.
CANADA
U.S.A.
Estevan
Souris R.
Cut Bank
Havre
Devils Lake
Ft Benton
Malta
Glasgow
Minot
Grand Forks
Great Falls
Missouri River
Williston
Missouri
N.D.
Helena
MONT.
Glendive
Dickinson
Bismarck
Jamestown
Fargo
Yellowstone River
Miles City
Billings
Bozeman
0
MI.
200
N

Grafton weekly, a newspaper published near Grand Forks. "Notice to farmers," it said. "I will pay cash for buffalo bones. Bring them in by the ton or hundred. I will give fifty pounds of the best twine for one ton of bones, for this month only, or a $40 sewing machine for forty tons. I want 5,000 tons this month."[1] Again there are no other facts to support the claim that skeletons were being harvested from the area close by Grafton. Instead, it appears that a local merchant, using a widely circulating medium, was trying to entice pickers from more distant points to trade at his place of business.[2] With an offer of only $1.00 per ton, it is safe to assume that the aspiring bone dealer bought few if any loads from nearby farmers. On account of this evaluation, the boundary of the trade region was drawn just west of Grafton.

Northwest of Grafton as far as Moosomin, Saskatchewan, there is little documentation available from which to determine the limits of the buffalo bone trade. Much of the picking in this area was done by Indians from the Turtle Mountain Reservation, and in part because of their social status, very little was written about the activities of these nomadic people. Although evidence is lacking about the efforts of the natives to collect skeletons north of the

---

[1] Grafton News and Times, 23 July 1885, p. 1.

[2] Larimore Pioneer, 4 June 1885, p. 5.

border, there is some record to show that Canadians were active in the business. Ernest Seton, writing in his Life Histories of Northern Animals, recalled that "in 1882, when first I went to live in western Manitoba, the prairie everywhere was dotted with old buffalo skulls."[1] That these relics soon became an item of value is attested to by the U.S. Consul in Winnipeg, who reported that $156 worth of bison remains had been shipped from Killarney in the summer of 1887.[2] This note is the only known proof of a bone commerce in Manitoba, and from it has been drawn much of the trade-region boundary through the province.

Throughout the rest of Canada the range of the buffalo bone industry is fairly well documented. The extent of the trade would probably have been a little greater were it not for such natural barriers as the Red Deer and Saskatchewan Rivers, but the volume of skeletons north of these valleys was comparatively small in any event. Based upon at least two references, the author has shown the bone commerce pushing beyond the Red Deer River along a belt

---

[1]Ernest T. Seton, Life Histories of Northern Animals (New York: Charles Scribner's Sons, 1909), p. 258.

[2]Despatches from U.S. Consuls in Winnipeg, 1869-1906, Consular Report 490, 20 October 1887, Records of the Department of State, National Archives, Washington, D.C. Aileen Garland, Trails and Crossroads to Killarney (Killarney: Killarney and District Historical Committee, 1967), p. 155.

adjacent to the Canadian Pacific Railroad.[1] This portion of the boundary could be questioned by some, however, since Frank Roe--probably the most knowledgable living authority on the history of the bison--said that he came to the area in 1894 yet "never heard of any bone-gathering in [the] region."[2]

The spatial limits of the Montana bone commerce were difficult to trace with any precision due to the dearth of information about picking activities there. Early newspapers from the study area have been poorly preserved, and available histories or accounts of the times seldom mention the industry. Without the discovery of some new source relating to the gathering of bison remains, the present boundary of the Montana trade region will stand as the most accurate that can be drawn for the state. It should be noted, however, that one reference credits Helena with being a major "shipping center" for skeletons.[3] In the absence of any evidence to support such a contention, the margin of the bone collecting area has been placed to the north of that capital city.

---

[1] Alberta Historical Review, volume 5, number 4 (Autumn 1957), verso of front cover.

[2] Frank Gilbert Roe, The North American Buffalo (Toronto: University of Toronto Press, 1970), p. 515.

[3] J. S. Qualey, "Prince of the Prairie Bone Pickers," Real West, volume 7, number 36 (July 1964), p. 62.

When establishing the maximum range of the trade in bison remains, a curious phenomenon appears. This interesting fact is that north of a line defined by part of the Missouri River the Indians did most of the picking, and south of that boundary--with the exception of the Standing Rock Reservation--they did no bone collecting at all. This situation is probably due to a variety of circumstances, none of which have been documented. The region avoided by the Indians was that portion of the study area most densely populated at the time the commerce in skeletons began. It is quite likely that the natives stayed away from these settled districts to avoid conflict with the whites due to trespass or competition for bones.

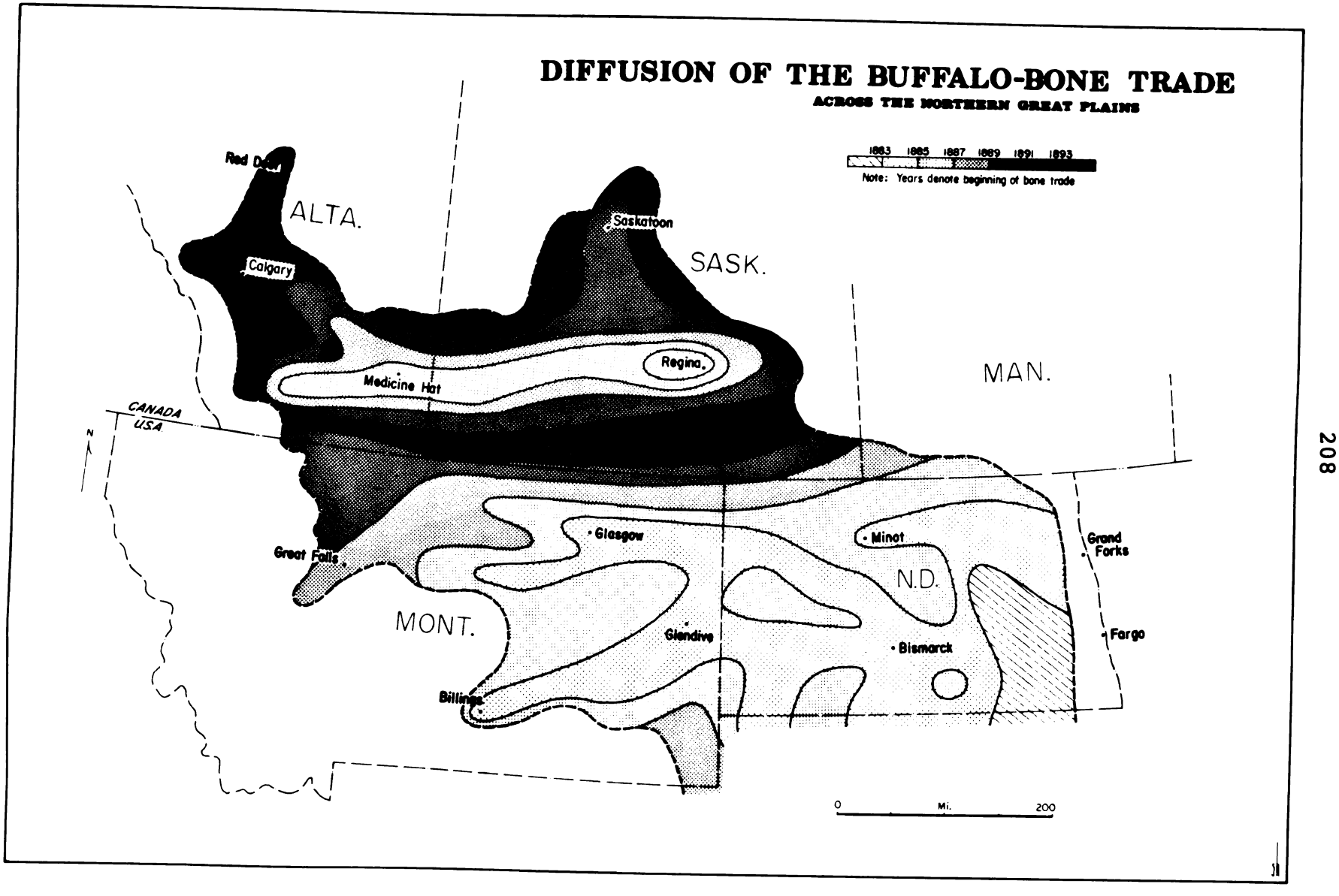
The skeletons north of the Missouri River were primarily gathered by Indians because that is where nearly all of the tribal groups lived, and the course of "Big Muddy" was perceived as being the boundary of their domain. Also, at the time of the buffalo bone industry much of the area south of the observed line was owned by agricultural or ranching interests, while most of the territory to the north continued to endure as open range. Faced with this kind of land ownership pattern, the Indians had little choice but to restrict their attention to the sparsely settled tracts. Finally, the probable reason why the natives had so much of the bone trade to themselves in the north is due to a matter of status. South of the Missouri there were no indigenous peoples searching for the relics of the herds,

so it was acceptable for whites to roam about the prairie collecting bison remains. But to the north, where the Indians did most of the picking, anyone involved in the act of gathering bones was given a low standing in society.

Diffusion of the Trade

As the preceding description of the bone trade has shown, the commerce did not appear uniformly in time over the Northern Great Plains. Instead, it advanced across the region, generally speaking, from east to west and from south to north. This movement is primarily attributable to the factors of distance from the market and available transportation routes. Since freight rates for commodities leaving the study area increased with the length of the haul, basic economics dictated that those skeletons closest to the points of consumption would be the ones harvested first. Map number 6 shows that this principle was followed throughout much of the bone-gathering territory, but the expected configuration is disrupted in some places, especially Saskatchewan.

This deviation from the anticipated pattern of migration for the bone business was due to a lack of individuals to gather bison remains in some areas nearest the processing firms. The inability of the trade to progress in a truly regular fashion across the plains was also attributable to the nature of the pickers to first search


DIFFUSION OF THE BUFFALO-BONE TRADE
ACROSS THE NORTHERN GREAT PLAINS
1883 1885 1887 1889 1891 1893
Note: Years denote beginning of bone trade
Red Deer
ALTA.
Calgary
Saskatoon
SASK.
Regina
Medicine Hat
MAN.
CANADA
U.S.A.
N
Great Falls
Glasgow
Minot
Grand Forks
N.D.
MONT.
Glendive
Bismarck
Fargo
Billings
0 Mi. 200

out the greatest concentrations of skeletons, rather than those most favorably located with respect to the rendering plants. Another factor disturbing the ideal diffusion model was the absence, in some towns more proximate to the mills, of merchants to buy the local supplies of bones. And finally, the partial failure of the industry to spread systematically over the prairies was caused by the late introduction of railroad connections at some points closest to the market place.

Cheap transportation was the key to the buffalo bone commerce, and this fact is well portrayed on the accompanying diffusion map. The southern route of the Northern Pacific Railroad is readily apparent as a zone from Fargo to Billings in which the collecting of bison remains started early and then moved out laterally over time. The same pattern is evident for the Missouri River trade, which is represented by a band of primary activity from an area south of Bismarck to a belt southwest of Glasgow. The Great Northern Line, running through the center of the study region, was the only railroad not completely built when the trade in skeletons began. Its pulsating development is partially shown by the initial advance of the industry from Grand Forks to Minot. A short time later, when tracks had been extended west, the buffalo bone commerce became active all along the route from Minot to Great Falls, gradually extending outward over time.

This slow but steady migration of the bone trade away from its source of transit is best represented by the diffusion structure along the Canadian Pacific. The path of this line is easily discernible from Regina to Medicine Hat, and the earliest efforts to collect skeletons were immediately adjacent to the tracks. However, as nearby bison remains became depleted, the gleaners were forced to travel greater distances to reach the remnants of the herds. Their movement was, of necessity, perpendicular to the course of the railroad, and it continued in either direction until the participants had gathered all of the bones or reached the economic limits of travel. Later, branch lines of the Canadian Pacific were built from Regina to and beyond Saskatoon and from Calgary on to Red Deer. These additions to the transportation network extended picking activities north, as the patterns of progression on the map illustrate. From these new routes the collection of skeletons spread linearly away from the tracks, until the maximum extent of the bone trade was reached and the industry came to a close.

Organizing Territory to Control the Business

In describing the bone trade at Devils Lake in 1885, reference was made to the fact that rivalry there "between dealers advanced the price of bison remains to $20.00 per ton." This competition for control of the commerce was between Borden Hicks, of Jamestown, and the

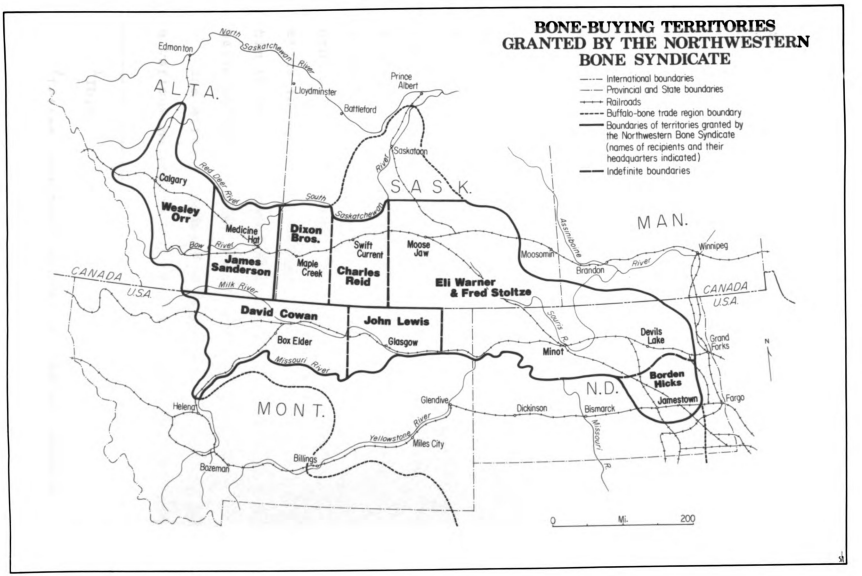
local Northwestern Lumber Company.[1] The struggle of these two parties for supremacy in the business was good for the Devils Lake pickers, but it meant that the buyers lost money on every ton of skeletons they got. After about a week of such self-destructive action, the individuals involved decided to join forces and monopolize the bone trade together. The result of this merger was the Northwestern Bone Syndicate, comprising Borden Hicks and the lumber company owners, Fred Stoltze and Eli Warner.[2]

To corner the market in bison remains, Hicks and his colleagues "made contracts with the different fertilizing and carbon works at the beginning of the year to furnish them with all of the dry buffalo bones they could use for that season at a stated price." Their "system and policy was to handle them all, and do so on such a close margin that no one else could afford to do anything with it." During its early years of business the partnership bought "bones by the carload from the country stores, who would take them from the farmers and half-breeds in trade." The merchants were paid "from $8.00 to $10.00 per ton" for the bones they had acquired, leaving Hicks and his associates

---

[1] Devils Lake Inter-Ocean, 8 August 1885, p. 1; Washburn Times, 14 August 1885, p. 1.

[2] Letter from Fred Stoltze to Captain Heerman, 17 April 1913, Edward E. Heerman Papers, Minnesota Historical Society, St. Paul.


BONE-BUYING TERRITORIES
GRANTED BY THE NORTHWESTERN
BONE SYNDICATE
International boundaries
Provincial and State boundaries
Railroads
Buffalo-bone trade region boundary
Boundaries of territories granted by the Northwestern Bone Syndicate (names of recipients and their headquarters indicated)
Indefinite boundaries
ALTA.
SASK.
MAN.
N.D.
MONT.
CANADA
USA
Edmonton
North Saskatchewan River
Lloydminster
Battleford
Prince Albert
Saskatoon
South Saskatchewan River
Calgary
Red Deer River
Bow River
Milk River
Missouri River
Yellowstone River
Assiniboine River
Souris R.
Mississippi R.
Wesley Orr
Medicine Hat
James Sanderson
Dixon Bros.
Maple Creek
Swift Current
Charles Reid
Moose Jaw
Eli Warner & Fred Stoltze
David Cowan
Box Elder
John Lewis
Glasgow
Moosomin
Brandon
Winnipeg
Minot
Devils Lake
Grand Forks
Borden Hicks
Jamestown
Fargo
Dickinson
Bismarck
Glendive
Miles City
Billings
Bozeman
Helena
0
Mi.
200
N

with "an average profit of about $10.00 per" carload. In addition, the Syndicate purchased skeletons at the various retail lumber yards owned by Warner and Stoltze, "which were located all over North Dakota at that time."[1]

It appears as if Warner and Stoltze put up the capital for this venture, leaving Borden Hicks to act as field representative. Working out of Jamestown, Hicks traveled over most of North Dakota, Montana, and the Canadian Prairie Provinces arranging with local merchants to buy all of the bones they could get. So that these individuals would not have to compete with one another for business--and to limit the number of people with whom it had to work--the Syndicate granted each of its dealers a territory in which to operate. By agreeing to purchase bones only from the designated agents in these districts, Hicks and his colleagues were generally able to exclude any others from the trade. If some rival did begin to buy skeletons in one of the assigned areas, it was difficult for him to sell his acquisitions since the Syndicate had exclusive agreements with all of the major processors.[2]

The effectiveness of Borden Hicks in working with these various merchants was illustrated by the fact that he

---

[1]Ibid.

[2]Letter from Fred Stoltze to Captain Heerman, 17 April 1913, Edward E. Heerman Papers, Minnesota Historical Society, St. Paul.

managed to acquire about a thousand carloads of bison remains per year. Each shipment of bones that he received was processed through the Minnesota Transfer switch yards in St. Paul and then forwarded to one of the plants with whom the Syndicate had a contract.[1] The dealer who sent the skeletons was required to provide Hicks with a bill of lading from the railroad, and on the basis of this evidence partial payment was made for the value of the buffalo bones. After the mill had indicated that the contents of the box-car were acceptable, the Syndicate mailed a check to the merchant for the balance of the amount due.[2]

With the spoils of about 800,000 buffalo leaving the Northern Great Plains each year, it was not long before pickings became quite scarce around most of the settlements. As a result of this situation, the town merchants were no longer able to obtain the quantity of bones required by the processing plants. To insure a steady supply of raw material for their clients, the Syndicate "organized outfits of half-breeds with a head man who could speak their language." These groups were furnished with provisions and then sent out into the remote areas where they would work "all summer hauling bones back to the railroads great

---

[1] Ibid.

[2] "Letterbook," March 1896 to November 1897, pp. 147, 195, Wesley Orr Papers, Glenbow-Alberta Institute, Calgary.

distances, sometimes more than 100 miles."[1] Under this new approach to collecting bison remains Hicks was not required to travel about making contact with local bone buyers, so in 1889 he moved from Jamestown to Minneapolis where he could more conveniently conduct the business.[2]

Borden Hicks handled the Syndicate's affairs at Minneapolis until 1891, when his association with Warner and Stoltze was terminated. The cause of this break up appears to have been an argument over whether or not to accept human bones from the pickers. "Several times the settlers would get into the Indian" cemeteries, recalled Stoltze, as some natives of the Northern Great Plains "buried their dead on platforms which later on became rotted and fell to the ground." The pioneers wanted to collect the Indian skeletons and sell them along with the others, "but we always drew the line on this and . . . refused to buy any bones of that kind."[3] The three men eventually disagreed over this policy, and Stoltze insisted on discontinuing the Syndicate when he found that, as bison remains "became scarcer, the

---

[1]Letter from Fred Stoltze to Captain Heerman, 17 April 1913, Edward E. Heerman Papers, Minnesota Historical Society, St. Paul.

[2]Borden Hicks, "Obituary of Captain Borden Mills Hicks," typescript in the possession of Mrs. Robert Schmitt, Minneapolis.

[3]Ibid. Letter from Fred Stoltze to Captain Heerman, 17 April 1913, Edward E. Heerman Papers, Minnesota Historical Society, St. Paul.

gatherers were bringing in increasing amounts of human bones."[1]

Though most traces of the herds had been cleared from the prairies by the time the partnership dissolved, Hicks felt enough spoils were left in Montana and Canada to warrant staying in the business. Accordingly, he elected to keep on buying bison remains as an independent operator, though for the sake of continuity he used the name of the Northwestern Bone Syndicate. This decision earned Hicks about 300 carloads of skeletons a year and maintained a flow of raw materials to his customers in the Midwest. By 1896, however, the articles of his trade were almost gone, and Hicks was able to see that he could no longer make a living as before. With his resource nearly exhausted and the mills turning to other supplies, Hicks left the buffalo bone business and the commerce of the Great Plains came to a close.[2]

Patterns of Commerce

The buffalo bone trade created a commercial relationship between the Northern Great Plains region and the Midwest. The extent of this connection can be documented in only a general way, however, since most of the

---

[1]Letter from John R. Stoltze, 17 October 1972, St. Paul, Minnesota.

[2]Borden Hicks, "Obituary of Captain Borden Mills Hicks," typescript in the possession of Mrs. Robert Schmitt, Minneapolis.

quantitative evidence has been destroyed. The records of the three major companies carrying bison remains to the East do not reveal the statistics needed to accurately determine the volume of this traffic. For example, the annual reports of the Northern Pacific Railroad disclose 212 tons of bones being shipped on that line before June 30, 1883, and no figures for subsequent years.[1] Another source shows "7,856 tons, or nearly 800" carloads, of bison remains leaving on the same route during the next twelve months, but there is no more information after that period.[2]

For the other two railroads involved in the bone trade there is even less freight data available. Around 1925 the Great Northern line was asked for facts regarding its shipment of skeletons, and James J. Hill replied that the records covering that time in his firm's past had been earlier destroyed by fire.[3] A similar response was received from the Canadian Pacific Railway, which said that its transportation statistics "were discarded long before any historical significance could be attributed to them."[4]

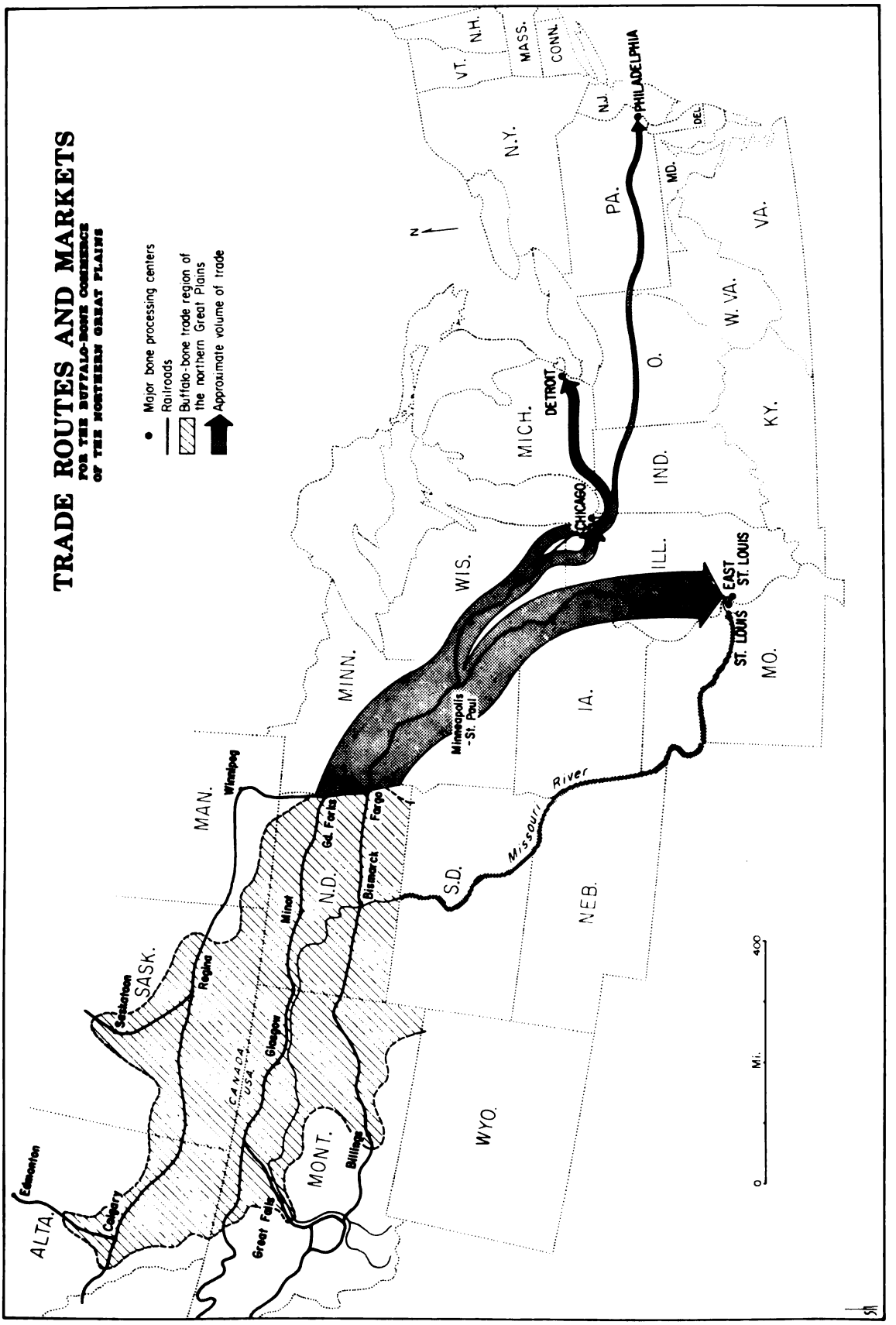
---

[1]Northern Pacific Railroad, Report of the President to the Stockholders at their Annual Meeting, 1883 (New York: Wells, Sackett & Rankin, 1883), p. 77.

[2]Harper's Weekly, 31 (January 15, 1887):39.

[3]Major I. McCreight, Buffalo Bone Days (DuBois, PA: 1950), p. 65.

[4]Letter, 29 December 1969, from Robert Rice, Manager, Public Relations, Canadian Pacific Railway, to Le Roy Barnett.


TRADE ROUTES AND MARKETS
FOR THE BUFFALO-BONE COMMERCE
OF THE NORTHERN GREAT PLAINS
Major bone processing centers
Railroads
Buffalo-bone trade region of the northern Great Plains
Approximate volume of trade
N
ALTA.
Edmonton
Calgary
Great Falls
MONT.
Billings
SASK.
Saskatoon
Regina
Moose Jaw
Glasgow
Minot
Gd. Forks
Fargo
Bismarck
N.D.
MAN.
Winnipeg
CANADA
USA
MINN.
Minneapolis
-St. Paul
WIS.
MICH.
DETROIT
CHICAGO
ILL.
IND.
O.
PA.
N.Y.
VT.
N.H.
MASS.
CONN.
N.J.
PHILADELPHIA
DEL.
MD.
W. VA.
VA.
KY.
MO.
EAST
ST. LOUIS
ST. LOUIS
IA.
S.D.
Missouri River
NEB.
WYO.
0
Mi.
400

While these losses seriously handicap research of the buffalo bone trade, the latter misfortune can be partially offset through records kept by the Canadian customs office.

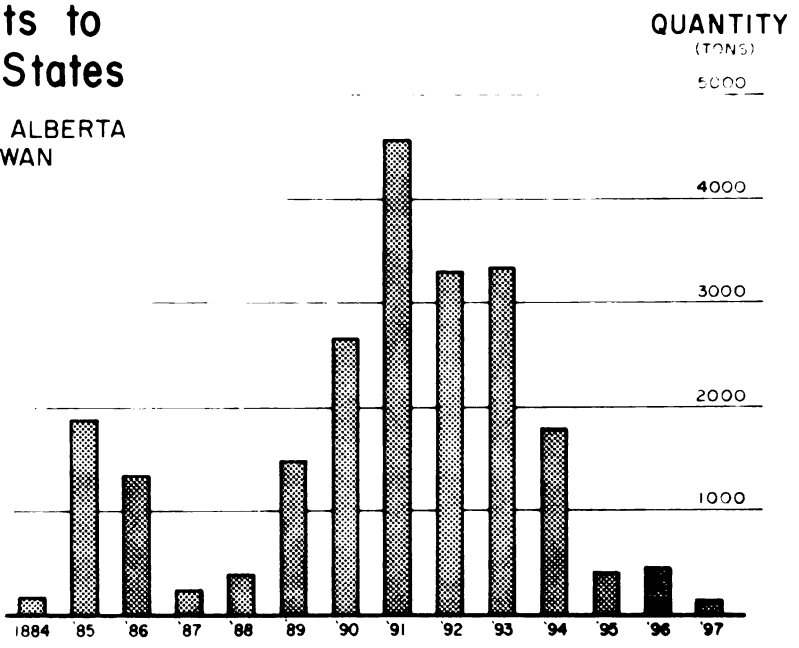
All commodities being exported from Canada had to be registered with the proper authorities before they were allowed to leave the country. The ruins of the buffalo were not exempt from this law, so every year the customs office was able to determine just how many bones had been sent to the United States. These annual figures were published in the Sessional Papers of Parliament, and they provide the only known continuing statistics of the trade in bison remains. What these numbers indicate is represented on graph 1, but in summary they show that between 1884 and 1897 American firms paid $157,929 to Canadians for 22,101 tons of bones. Though this exchange may not seem to be very significant, the sale of skeletons to U.S. mills was, on the average, the eighth ranking export of the Prairie Provinces during all but the last two years of the trade. While this fact is illustrated on graph 2, it should be noted that only furs and hides, livestock, fish, and grains consistently yielded more returns to those persons shipping products south of the border.[1]

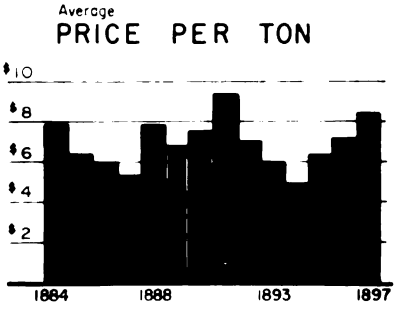
---

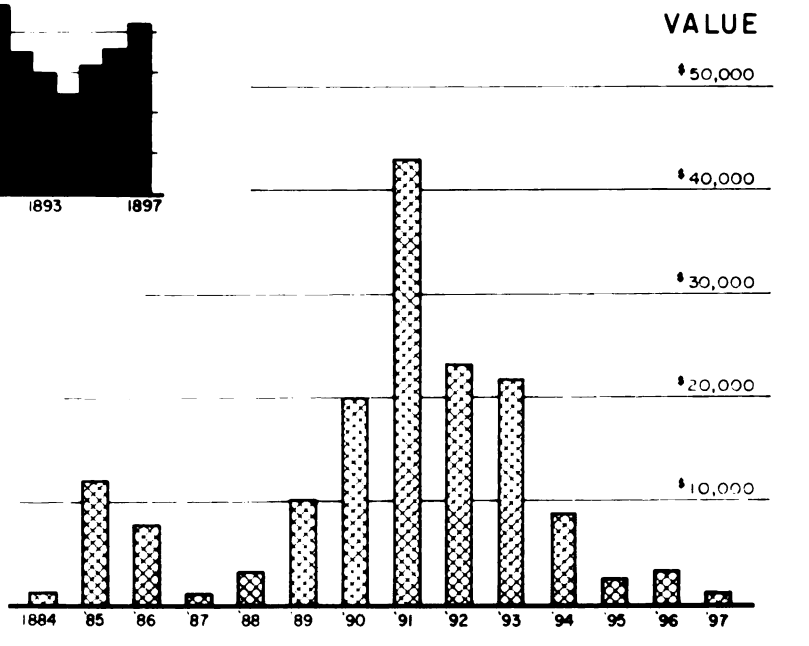
[1] Sessional Papers of the Parliament of Canada, 1886, volume 19, number 1; 1887, volume 20, number 1; 1888, volume 21, number 3; 1889, volume 22, number 1; 1890, volume 23, number 2; 1891, volume 24, number 3; 1892, volume 25, number 4; 1893, volume 26, number 4; 1894, volume 27, number 5; 1895, volume 28, number 4; 1896, volume 29, number 4; 1897, volume 31, number 4; 1898, volume 32, number 5; 1899, volume 33, number 5; 1900, volume 34, number 5.

Bone Exports to the United States

FROM MANITOBA, ALBERTA AND SASKATCHEWAN

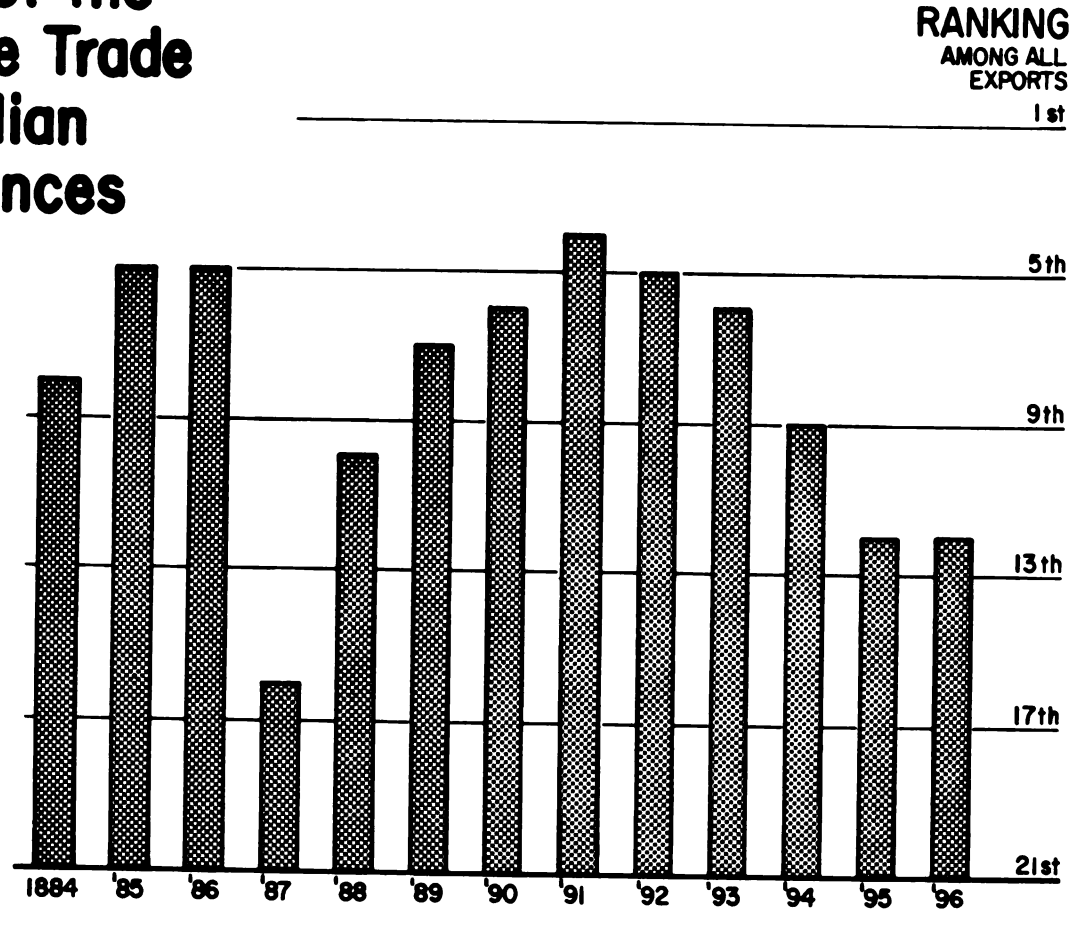






FROM SESSIONAL PAPERS OF THE PARLIAMENT OF CANADA

Importance of the Buffalo-Bone Trade to the Canadian Prairie Provinces



Buffalo-bone commodity averaged eighth among all exports for time period shown

FROM: SESSIONAL PAPERS OF THE PARLIAMENT OF CANADA

sh

The destination of these Canadian bones, and those from the United States as well, were mainly limited to a few American cities. The most remote site from the gathering grounds, and thus the place receiving the smallest number of shipments, was Baugh & Sons Company of Philadelphia. This business had for years used bison remains as the basis for its phosphate fertilizer,[1] but most of its supplies were carried in by boat from the prairies of Oklahoma and Texas.[2] As the skeletons in these two states became increasingly scarce, Baugh began looking to the Northern Great Plains for help in fulfilling its needs. The freight charges on such a haul prevented the trade from amounting to much, but some of the 100,000 tons of bones annually used by the firm did come from the study area.[3]

The major receiving centers for bison remains were in the Midwest, with Chicago being one of the principal markets.[4] The firm in the "Windy City" to which most of the

---

[1]The Manufactories and Manufacturers of Pennsylvania in the Nineteenth Century (Philadelphia: Galaxy Publishing Company, 1875), pp. 49-50.

[2]Letter from Paul Prosser, officer, Baugh & Sons Company to Le Roy Barnett, 7 May 1971; letter from Bob Dalchite, Archivist, Rosenberg Library, Galveston to Le Roy Barnett, 8 January 1970; Wayne Gard, The Great Buffalo Hunt (Lincoln: University of Nebraska Press, 1968), p. 300.

[3]"The Delaware River Chemical Works of Baugh & Sons Company," Circular in Accession 663, Invoices folder, p. 14, Eleutherian Mills Historical Library, Wilmington.

[4]The Rising Sun (Sun River, Montana), 26 August 1886, p. 3.

Illustration 24. Advertisement for Buffalo Bone Meal.

A number of firms purchased bison remains to use in manufacturing fertilizer. This fact was touted by Ames, Manning & Ames, which marketed a "Buffalo Bone Meal" to enrich the soil of worn out farms in the East. Our raw materials, said the company, "are collected on the western plains and shipped by railroad to our factory at great expense of transportation." This product is particularly well-suited for use as a manure, continued the description, "as the following analysis of buffalo bones in their natural dry state, as collected on the plains will show:

Gelatin	30.58 lbs.	Contain nitrogen	5.00 lbs.
Phosphate of lime	58.30 lbs.	Contain phosphoric acid	26.71 lbs.
Carbonate of lime	7.07 lbs.		
Fluoride of calcium	1.96 lbs.		
Phosphate of magnesium	2.09 lbs.	Contain phosphoric acid	1.13 lbs.
	100.00 lbs.	Total phosphoric acid	27.84 lbs.

Therefore a ton of buffalo bones contains 556 pounds of phosphoric acid and 100 pounds of nitrogen."[a] (Courtesy Hagerstown Public Library)

---

[a]Ames, Manning & Ames, The Celebrated Buffalo Bone Meal (Hagerstown: Mail Job Print, 1880), p. 5.

AMES, MANNING & AMES,

Manufacturers of

THE CELEBRATED BUFFALO BONE MEAL.

ALSO

PURE DOMESTIC GROUND BONE,

DISSOLVED BONE,

DISSOLVED BONE PHOSPHATE,

AND OUR

UNCHALLENGED FERTILIZER

for Quick Action.

EMERSON AMES. CHARLES F. MANNING. HUDSON B. AMES.

HAGERSTOWN, MARYLAND.

HAGERSTOWN, MD.:
MAIL JOB PRINT.
1880.

Preserve this for its Tables.

bones were consigned was the Northwestern Fertilizing Company, a plant that was owned by the Baugh interests of Philadelphia.[1] Like the other manufacturers of manurial dressings, this enterprise consisted of a large mill for the purpose of grinding up its purchases to the consistency of fine meal. This bone dust was treated with sulphuric acid to make it soluble in water, and then sold to farmers as superphosphate fertilizer.[2] Bison remains were particularly well suited for the making of such a product since they were "free from grease [or] fatty matter" and rich in plant nutrients.[3] Chicago, in turn, was a good place in which to prepare such a commodity given its location in the nation's agricultural heartland.

Detroit--somewhat more remote from the Great Plains, though still within the country's farm belt--was the site of another main purchaser of the bison's remains. This buyer, the Michigan Carbon Works, was a producer of fertilizer, but it also created from special retorts large volumes of bone black for a variety of industrial needs.

---

[1]Letter from North-Western Fertilizing Company, 24 September 1888, Dixon Brothers Papers, Glenbow-Alberta Institute, Calgary.

[2]Michigan, State Board of Agriculture, Thirty-seventh Annual Report (Lansing: Robert Smith Printing Co., 1899), p. 120. Rural New-Yorker 45 (11 September 1886), p. 595.

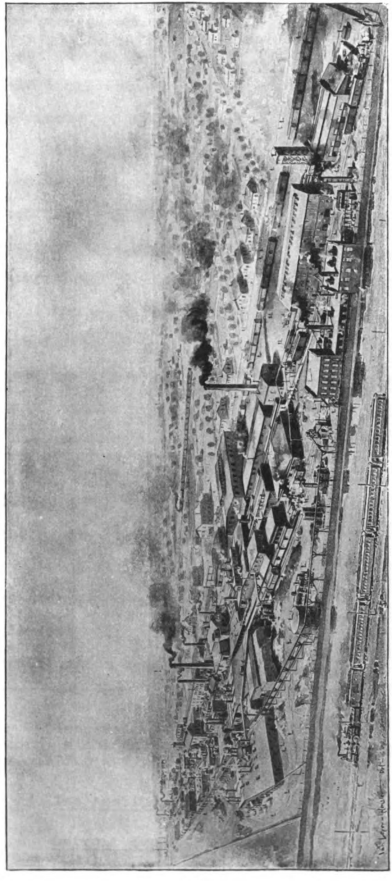
[3]Ames, Manning & Ames, The Celebrated Buffalo Bone Meal (Hagerstown: Mail Job Print, 1880), p. 5.

Illustration 25. View of the Michigan Carbon Works, Detroit.

In 1895 this bird's-eye view was drawn of the Michigan Carbon Works. It was "taken from a point looking east, and does not show the railroad yard at the right nor a tract of vacant land owned by the company in the immediate foreground. Beyond the factory buildings and railroad tracks are 44 cottages owned by the company and occupied by its workmen and their families, and in the far distance a schooner can be made out, lying at the dock on the Rouge. The two buildings and tower at the right are the sulphuric acid works, capacity 30 tons per day, and where pyrites are burned to make sulphuric acid. In front is the muriatic acid plant, with an overhead pipe line conveying the acid to the gelatine works. Then come a group of ten large buildings devoted to the manufacture of homestead fertilizers. Beyond these, where the two large stacks are seen, are the boneblack works and still farther beyond are four different gelatine factories, each devoted to a special line of gelatine. Beyond the gelatine factories and the office building is a filtering plant with a capacity of 750 gallons a minute, the phosphate of lime factory, carbonate of ammonia works, and other departments."[a] (From Detroit Journal, January 11, 1970, part 2, p. 22.)

---

[a] The American Fertilizer 4 (February 1896):98-99.



Since more information is available about this firm than for any of the others in the trade, a better understanding of the total industry can be gained by examining the development and functions of the mill in greater detail.

The Michigan Carbon Works was created in 1873 by Deming Jarves and William Hooper for the purpose of destructively distilling bones into animal charcoal. The product was in great demand in this country at the time as a material for filtering and purifying sucrose syrups, but most of the supplies used by American refiners were imported from European establishments. Realizing that immense quantities of bison remains were available from the prairie states, the company's organizers decided to enter the business and produce a domestic carbon.[1] With a total of $18,000 between them,[2] Jarves and Hooper purchased a building in Hamtramck and began preparing bone-char for use in the sugar industry.[3]

From such a modest beginning the Michigan Carbon Works soon expanded to manufacturing glue, fertilizer, neat's-foot oil, and related compounds from bones. This diversification into other products quickly increased the

---

[1]Manuscript and correspondence from L. P. Downham, Dearborn, Michigan, past employee of the Michigan Carbon Works, 1971.

[2]The American Fertilizer 4 (February 1896):98-101.

[3]Detroit Evening News, 27 March 1885, p. 4.

corporation's business, and within a few years the enterprise could boast of almost one hundred employees on its payroll and about four acres under roof. By 1879 the company had nearly outgrown even these expanded facilities, and a new place was sought that could better accommodate the additional needs of the firm.[1]

To enable itself to develop along with the rising demand for its goods, the Michigan Carbon Works bought in 1880 the Harbaugh farm in Springwells.[2] This 72-acre spread,[3] on the banks of the Rouge River near Delray, was converted by the following year into a $100,000 industrial complex with nearly five acres of floor space. In addition to the manufacturing facilities, the company constructed a two-story boarding house on Carbon Street capable of housing sixty of its single employees. Twenty-five duplex frame cottages were also built for the married workers to use, creating near the plant a little community which some droll folks in the neighborhood called "Boneville."[4]

The new factory gave the Michigan Carbon Works a much greater production capacity than it had at the old

---

[1] Industries of Michigan: City of Detroit (Chicago: Historical Publishing Company, 1880), p. 244.

[2] Detroit Evening News, 19 April 1881, p. 1.

[3] Industries of Michigan: City of Detroit (Chicago: Historical Publishing Company, 1880), p. 244.

[4] Detroit Evening News, 19 April 1881, p. 1.

mill, permitting operations to be conducted on a significantly larger scale. Almost immediately sixty additional laborers were hired at the relocated plant,[1] and industrial output was increased to about 5,000 tons of bone black, 4,000 tons of fertilizer, and 150 tons of glue per year.[2] These and other commodities distributed by the firm proved to be of unusually high quality, and consumer demand for such first-rate products further stimulated the company's growth. So brisk was the corporation's development, that within three years after moving to the Rouge River site it had become the "most extensive and complete carbon works in the United States."[3]

By 1885 the Michigan Carbon Works was doing over $50,000 worth of business a month,[4] marketing its "Homestead" fertilizers and bone-char products in practically every state east of the Mississippi.[5] To manufacture such a large quantity of goods the mill had to operate around the clock,[6] using in the process about thirty tons of

---

[1] Detroit Evening News, 27 March 1885, p. 4.

[2] U.S. Treasury Department, Report on the Internal Commerce of the United States, Fiscal Year 1881-82 (Washington, D.C.: Government Printing Office, 1884), p. 123.

[3] Detroit Evening News, 27 March 1885, p. 4.

[4] Detroit Free Press, 27 March 1885, p. 4.

[5] Detroit Evening News, 27 March 1885, p. 4.

[6] Detroit Free Press, 27 March 1885, p. 4.

bones and seventy-five tons of other raw materials per day.[1] The amount of bones rendered at the plant each year thus amounted to over 10,000 tons, a figure representing roughly 13 percent of the bison remains annually harvested on the plains.[2] Although the volume of buffalo bones used by the company was but an eighth of the total trade, the skeletons from the prairies were sent to enough different processors that the Michigan Carbor Works was actually "one of the largest places of consumption in the country."[3]

The Michigan Carbon Works continued the phenomenal rise from its humble origins throughout the next seven years. Its advancement in the business world was at such a rapid pace that by 1892 the firm had become "unquestionably the largest industry in Detroit." The size of the plant had expanded to cover one hundred acres of land, and 750 employees were required to operate the ten acres of facilities on the grounds. Output at the fifty-building complex nearly quadrupled beyond the 1882 production rates, with over 20,000 tons of fertilizer and substantial amounts of other bone-derived wares being manufactured each year.[4]

---

[1] Detroit Evening News, 27 March 1885, p. 4.

[2] Kenneth Hammer, "Buffalo Bones," American West Review, 15 March 1867, p. 14.

[3] Harper's Weekly 31 (15 January 1887):39.

[4] Detroit of To-day, The City of the Strait (Detroit: Phoenix Publishing Company, 1893), p. 132.

The accompanying illustrations, possibly taken in 1895, show that the resource demands of the Michigan Carbon Works were befitting its rank among Detroit industries. A trade journal, probably referring to the pictures, said that "several huge piles of bones are on the premises" of the company. "One of these piles has just been photographed. It seems to be about twenty feet high, twenty [feet] wide, and three hundred [feet] long. The total amount of bones in stock last month was over 5,000 tons."[1]

It was likely unusual for the Michigan Carbon Works to have a supply of bones on hand like that shown in the two photographs. But by the early 1890s it was evident to those in the business that the supply of bison remains would soon be exhausted.[2] In anticipation of that event, many of the processors bought large reserves of the buffalo's ruins while the resource was still available. The enormous pile of skeletons accumulated by the firm almost surely was a creation of that practice.

By 1896 nearly all of the sun-bleached relics had been gleaned from the Great Plains region, and plants that relied upon the wreckage of the herds were faced with a lack of needed resources. Many of the factories simply

---

[1] The American Fertilizer 4 (February 1896):98-101.

[2] Michigan, State Board of Agriculture, Thirty-seventh Annual Report (Lansing: Robert Smith Printing Co., 1899), p. 120.

Illustration 26. Stockpile of Bones at the Michigan Carbon Works, Detroit

For most of history bones had little if any value, but sometime in the late 1830s the soil-enriching properties of skeletons became appreciated in this nation and a demand for them arose.[a] In response to this new market urban poor began gathering the osseous fragments of various creatures that littered the streets and vacant lots of eastern cities and hauling their finds to local rendering plants.[b] Soon the towns were unable to provide sufficient remains to accommodate the fertilizer mills, and people began scouring the rural districts in quest of "country bones." Eventually even this source of supply was near exhaustion, prompting the manufacturers of artificial manure to look elsewhere for raw materials. This search for additional resources ultimately led abroad to places where the agricultural benefits of bone meal were unknown.[c] In these countries great quantities of skeletons still lay upon the landscape, and provisions were quickly made to have them harvested and shipped to the United States. From such distant points as Africa[d] and South America[e] these relics came, enabling the domestic fertilizer works to continue making dressings for the worn out fields of New England and the South. Transporting cargoes such great distances was expensive and unreliable, giving the industry cause to search for bone supplies closer to home. Such a source of raw materials became available shortly after the Civil War when railroads building west extended into the buffalo range. The slaughter of these "lords of the plains" was already underway, leaving in its wake many bison remains that could easily be freighted East. Taking advantage of this situation, the fertilizer plants bought the buffalo bones and had them hauled to their grinding mills, as evidenced by this mass of skeletons at the Michigan Carbon Works in Detroit. (Courtesy Burton Historical Collection, Detroit Public Library)

---

[a] Hazard's United States Commercial and Statistical Register, vol. 4 (Philadelpha: William Geddes, 1841), p. 205.

[b] Hunt's Merchants' Magazine, vol. 6 (January-June, 1842), p. 193.

[c] William Waggaman, Phosphoric Acid, Phosphates, and Phosphatic Fertilizers (New York: The Chemical Catalog Co., 1927), p. 42.

[d] New York Times, March 23, 1889, p. 8.

[e] F. H. Storer, Agriculture in Some of its Relations with Chemistry, vol. 1 (New York: Charles Scribner's Sons, 1889), p. 218.

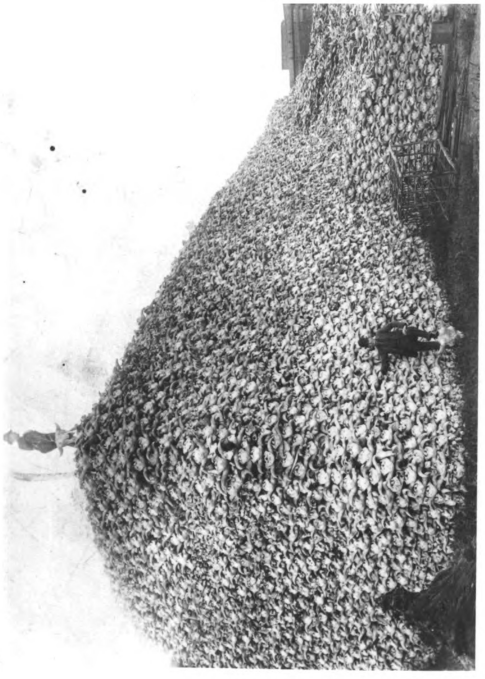
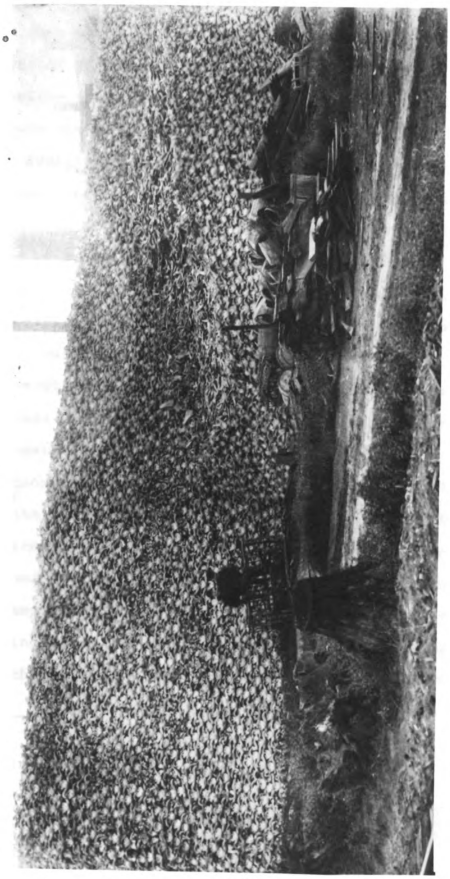


Illustration 27. Bone Yard at the Michigan Carbon Works, Detroit

The Michigan Carbon Works used great quantities of bones for manufacturing artificial manure and producing a char to be used in sugar refining. However, the company claimed in 1896 that it "could not afford to make . . . fertilizer of bone(s) unless [it] made other products in connection with them." This was due to the fact that skeletons had "advanced in price" on account of scarcity, requiring most firms to "substitute phosphate rock and other cheaper materials" as ingredients for soil dressing. Such a switch was temporarily averted by M.C.W. because, in the course of making animal charcoal, it produced "a large quantity" of phosphorus rich bone-black dust which was "too fine for the use of sugar, syrup, and glucose manufacturers. Instead of selling this dust," explained the firm, "it is used as a basis for our homestead fertilizer."[a] These two pictures show the stockpile of bones created by the Michigan Carbon Works to meet the raw-material needs for its products. (Courtesy Burton Historical Collection, Detroit Public Library)

---

[a] The American Fertilizer 4 (February 1896):99.



closed down when the supplies of bison remains ran out. But some of the bone mills were able to survive by finding alternative kinds of raw materials. The Michigan Carbon Works was one of those firms that continued normal operations, averting liquidation by using phosphate rock for fertilizer and bones from India for its other products.[1]

Though buffalo bones played a major role in the economy of Detroit, they had their greatest impact on St. Louis and vicinity where most of the skeletons were shipped. One receiving firm was the A. B. Mayer Manufacturing Company, established in 1863 as a dealer in paper, rags, scrap metal, and bones. A decade later, in response to a widespread demand for bone products and an increased supply of raw material from the Plains, the firm expanded into the production of fertilizer and carbon black. The manurial phosphate prepared by the company was made at the Anchor Fertilizer Works in St. Louis, while its char material was processed at the Anchor Bone Factory in nearby Lowell. About fifty employees were required to operate the two manufacturing plants, and the fruits of their labors were marketed throughout most of the southcentral United States.[2]

---

[1]Manuscript and correspondence from L. P. Downham, Dearborn, Michigan to Le Roy Barnett, 1971.

[2]J. W. Leonard, The Industries of St. Louis (St. Louis: J. M. Elstner & Company, 1887), p. 189. Pen and Sunlight Sketches of St. Louis (Chicago: Phoenix Publishing Company, 1891), p. 168.

Like most of its competitors, the Mayer Manufacturing Company had to actively seek dealers who could provide it with food for its mills. One of the methods commonly used to find required stocks of bones was to circulate handbills in the areas where skeletons were being bought. Large numbers of flyers, passed from hand to hand or nailed as posters on walls, were disseminated in such regions annually to broadcast the need for raw materials. Those firms who had recourse to handbills for commercial purposes frequently used obsolete bank notes as the medium for their message. There was a good deal of worthless money available after the Civil War, and some companies later employed the scrip as paper for printing their ads. Mayer was apparently one of businesses that cleverly used the currency, for the buffalo bone poster displayed on the following page is on the back of a $100 Missouri Defense Bond.[1]

Competing with the Mayer Manufacturing Company for spoils of the herds was the Empire Carbon Works, the largest bone processor in the country. This firm apparently started out in 1875 as the Western Fertilizer and Chemical Works,[2] erecting a bone mill and kiln on two and one-half

---

[1]John A. Musculus, Dictionary of Paper Money with Historical Specimens Illustrated (Bridgeport, PA: [1965]), p. [9c].

[2]Letter from Mrs. Fred Harrington, Librarian, Missouri Historical Society, St. Louis to Le Roy Barnett, 31 December 1969.

Illustration 28. Circular for Buffalo Bones.

This notice was distributed about the Great Plains in an effort to entice people to sell the bones they harvested to a St. Louis firm. When the carbon and fertilizer business was good, some manufacturers of these products used handbills to advertise their need for more raw materials. (Courtesy Dr. John Muscalus and the Historical Paper Money Research Institute, Bridgeport, Pennsylvania)

acres of land near the National Stock Yards of East St. Louis.[1] Within a month of its completion the business was receiving up to thirty carloads of bison remains a day for conversion into carbon and manurial phosphate. The fertilizer prepared from this raw material was primarily distributed in the south to restore cotton fields, while the bone black which was created went to the "sugar refinery of East St. Louis." Most horns of the buffalo, which were difficult to grind, were "sold to comb manufactories in Philadelphia,"[2] though other industries benefitted from this byproduct as well.[3]

By 1882 the East St. Louis firm was turning out "2,000,000 pounds" of carbon annually for the local sugar producer, and additional amounts were almost certainly being marketed in other towns as well.[4] Just three years later the business had grown to such an extent that its facilities had to be enlarged. This situation required the plant to temporarily close so that improvements could be made, and while this construction was taking place the factory "had agents in the western territories gathering up buffalo

---

[1] East St. Louis Press, 10 July 1875, p. 2.

[2] Robert Tyson, History of East St. Louis (East St. Louis: John Haps & Co., 1875, pp. 85-87.

[3] Scientific American 34 (8 April 1876):225.

[4] U.S. Treasury Department, Report on the Internal Commerce of the United States, Fiscal Year 1881-82 (Washington, D.C.: Government Printing Office, 1884), p. 284.

bones" so that an adequate supply would be on hand when operations resumed. As a result of this activity the company soon amassed 350 tons of bison remains, a volume which at that time was "the largest amount ever gathered together in one pile in this country."[1]

The Empire Carbon Works continued to buy the wreckage of the herds until the plains were cleared of skeletons. The president of the firm, asked in later years about his company's involvement in the trade, estimated that "70 percent of the buffalo bones shipments had been processed" in the St. Louis area. His mill alone, claimed the executive, had paid "from $18.00 to $27.00 per ton" for the relics and purchased "more than one and a quarter million tons" of bison remains at a total cost of about $28,000,000. When the remnants acquired by other enterprises are added to these figures, a sum of more than two million tons of bones, worth over $40,000,000, is arrived at for the entire industry.[2] The Topeka Mail & Breeze, writing about the business, said that the quantity of skeletons involved in the trade "would make a string of boxcars 7575 miles long--enough to more than fill two tracks from New York to San Francisco."[3]

---

[1]East St. Louis Gazette, 19 December 1885, p. 3.

[2]Major I. McCreight, Buffalo Bone Days (DuBois, PA: 1950), pp. 82-83.

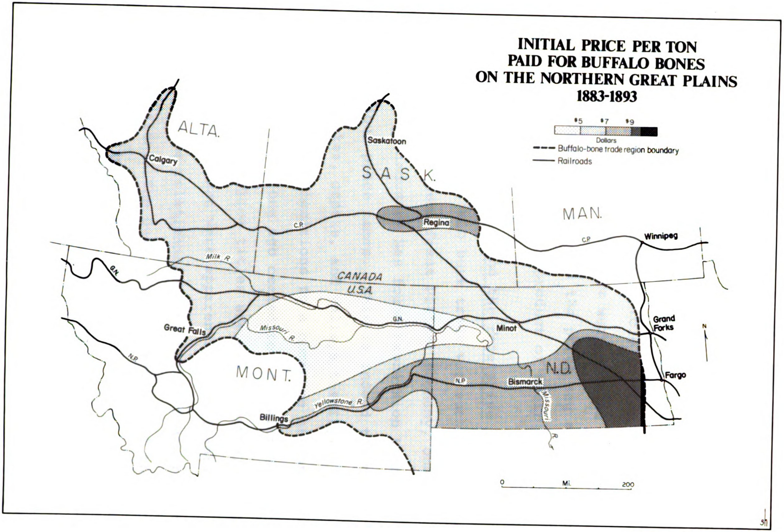
[3]Mari Sandoz, The Buffalo Hunters (New York: Hastings House, 1954), p. 358.

Areal Differences in Product Value

The amount paid for buffalo bones varied widely over the study area, depending on such matters as competition among local buyers, demand for skeletons by processing plants, and prevailing freight tariffs. However, basic economic theory would tend to assign the greatest influence on price structure to the factors of proximity to market and bulk transportation. To see if these considerations had any significant bearing on the trade in bison remains, the accompanying map was prepared to show the first sums offered for a ton of buffalo bones at points across the Northern Plains. The rate configurations that emerge from this cartographic show that, generally speaking, the highest amounts paid for the wreckage of the herds were in those areas nearest the Midwest, and the lowest quotations were offered in the more remote territories. The importance of good shipping facilities is also evident in the pattern of isolines, as returns for bone picking are greatest where the railroad network is best developed.

The fairly regular gradation of buffalo bone values from a high in the southeast portion of the study area to a low in the northwest sector is disrupted by a price depression along the upper Missouri River. This pocket of devaluation appears because the first bone hunters in the region were forced to export their harvests by vessel, as only water transportation served the district until 1887. Shipping bison remains on steamboats was costlier than

INITIAL PRICE PER TON PAID FOR BUFFALO BONES ON THE NORTHERN GREAT PLAINS 1883-1893



freighting them by rail, and the additional handling expenses involved raised the overhead even more. Consequently, in order for the bone trade to start in northern Montana as early as 1884, the pickers had to accept about $2.00 less per ton than the normal rate offered elsewhere. The account of Charles Aubrey's role as bone buyer at Wolf Point showed that some gleaners were willing to work for such meager compensation, and the price sag along the upper reaches of "Big Muddy" is a product of their activities.

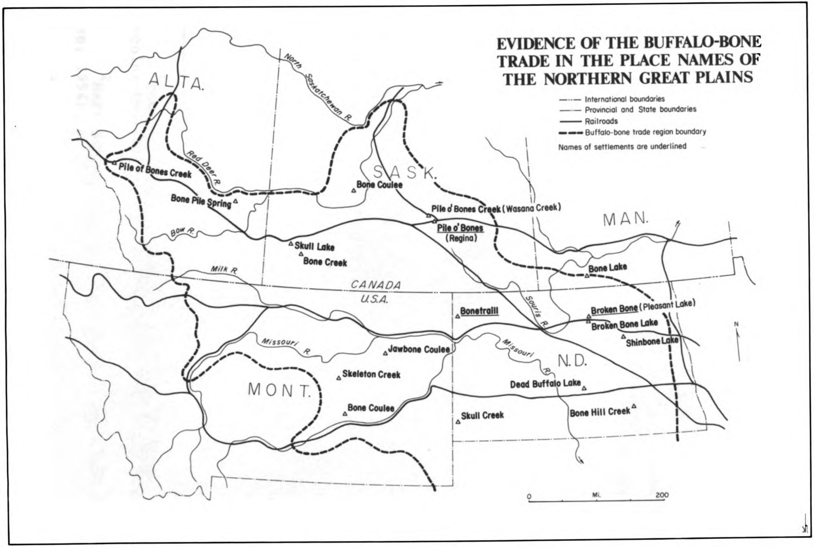
Place Names and the Enterprise

Since the buffalo bone trade was such an important feature of the Northern Great Plains' economy, one might assume that the industry has found expression there in the form of various place names. This is indeed the case, with some towns, lakes, creeks, and valleys testifying by their prior or present designations to a commerce or condition of the landscape that long ago ceased to be. With three exceptions, these relict titles are all toponyms, being physical features that were apparently once identified according to some relationship they had to bison remains or their collection. The overwhelming majority of these place names are found in the eastern portion of the study area where the buffalo bones were most numerous and, accordingly, the business of gathering them most intense. This was also the earliest and most heavily settled part of the region, a fact which would have offered more opportunity for things

to be named after landmarks that soon disappeared from the scene. Given the degree of difficulty in finding obsolete titles for places and features in the available literature, it is quite likely that other additions can eventually be expected to the map on the following page.[1]

---

[1]Canadian Board of Geographic Names, Gazetteer of Canada (Ottawa: Department of Energy, Mines and Resources, Alberta, 1960; Manitoba, 1955; Saskatchewan, 1957). Roberta Cheney, Names on the Face of Montana (Missoula: University of Montana, 1971). Eric and Patricia McHolmgren, Over 2,000 Place Names of Alberta (Saskatoon: Western Producer Prairie Books, 1976). Mary Williams, Origins of North Dakota Place Names (Bismarck: Bismarck Tribune, 1973).



EVIDENCE OF THE BUFFALO-BONE TRADE IN THE PLACE NAMES OF THE NORTHERN GREAT PLAINS

Springtime outran the furrowings of raw sod;
There must be bread; in August the bonepickers
Go harvesting the prairie, dragging out--
Rich roof for the hundred-legs and scurrying beetles--
From the fingers of the grass and spiderweb
Long curving rib and a broad white shoulder-blade.[1]

Wagons pull in from the prairie dry,
To ricks of bleaching bones piled high.
Four dollars a ton--but not for Sed,
A rattler was watching that buffalo head.
One settler less to tear up sod,
and pray for rain from a deaf old God.[2]

Picking up bones to keep from starving,
Picking up chips to keep from freezing,
Picking up courage to keep from leaving,
Way out West in No Man's Land.[3]

The bleaching bones of the buffalo
Were gathered and bartered for "eats,"
Like flour, coffee, and potatoes,
And once in a while for meats.[4]

---

[1]Douglas Branch, The Hunting of the Buffalo (Lincoln: University of Nebraska Press, 1962), p. 221.

[2]Mari Sandoz, The Buffalo Hunters (New York: Hastings House, 1954), p. 163.

[3]Robert Jordan, "Oklahoma," National Geographic 140 (August 1971):185.

[4]Hiram Drache, The Challenge of the Prairie (Fargo: North Dakota Institute for Regional Studies, 1970), p. 59.

SUMMARY

The destruction of the buffalo for flesh and hide was once considered by most people to be the end of the animal's place in North America's economic past. The ruins of the herds, if given any thought at all, were assumed by most to have been eaten by carnivores or destroyed by the harsh environment. But the bison, in death, actually gave rise to another important industry on the continent's central grasslands. This brief enterprise, following close in the wake of the slaughter, soon became the last phase in man's exploitation of the beast. The business, a forgotten episode in western prairie history, was the commerce in buffalo bones, and it has been the object of this study to document the character of this trade on the early Northern Great Plains.

As the preceding pages have shown, many a homesteader bought his first seed, supplies, and equipment with money he had earned by hauling bison remains to town. An even larger number of Indians and Metis, their hoofed commissary destroyed, survived by chasing over the plains in search of ruins from the creatures they previously hunted in the flesh. The frontier merchants, to whom the skeletons

were traded or sold, found that the bones often helped to sustain a business when their customers had no other means of exchange. And the struggling railroad companies, freighting these sun-bleached relics to processing plants in the Midwest, gained much additional income from a portion of their routes that otherwise offered little initial return. Thus, with classic irony, the once great herds became, when extinct, the salvation for some of their own executioners.

The intense exploitation of any unrenewable resource will eventually lead to its exhaustion, and the buffalo bone commerce soon discovered it was not exempt from this economic law. As the traces of the herds quickly disappeared from the prairie landscape, settlers in the area turned their attention to developing other natural assets. Before long new industries came to replace the trade in skeletons, and the role of the traffic in building the West was forgotten by most people. This is unfortunate, since the gathering and selling of bison remains did much to insure the success of pioneer life on the short-grass American steppe. A readily available means of support had to await most newcomers to the region if they were to survive the first precarious years, and the boney legacy of the hide hunters offered many a chance to maintain themselves until their situations improved. This contribution of the bison to the Northern Great Plains has generally been overlooked, so it is fitting that now, nearly one century later, the last chapter in the buffalo's story be written.

This new conclusion to the history of the wild North American bison has been written from four different geographical perspectives, and it is appropriate at this time to review the attitudes that have guided the author in his work. The initial step in preparing this account of the buffalo bone trade was to describe the enterprise and its differing nature from place to place. Toward this end:

1. The settlers and Indians who joined the commerce to pick bison remains have been identified and their respective spheres of activity separated by an east-west line mainly following the course of the Upper Missouri River.
2. The major trade centers along each transportation route have been located and their diverse tributary areas defined. All things being equal, these zones of influence extended about fifty miles from a given town. But under special circumstances--as at Devils Lake, Swift Current, and Dickinson--the "bone sheds" expanded greatly in scope to reach out over one hundred miles. Such differences in the size of collecting territories were primarily attributable to the situation of a particular market, the price its buyers paid for skeletons, and the presence of willing pickers.
3. The varying intensity of the bone trade over space has been observed across the study area, and its character related when possible to such factors as

the abundance of bison remains, state of the national economy, and existence of an active local buyer.

The second objective of this inquiry was to document the impact of the buffalo bone commerce on the Northern Great Plains landscape. This ambition was realized by:

1. Offering proof that the study area was once littered with the relics of the slaughtered herds and that, within a period of thirteen years, this mantle of destruction was completely removed by the practice of gathering and selling bison remains.
2. Showing that great piles of chaotic anatomy were created as a result of the buffalo bone commerce, and that these temporary but spectacular terrain features were the objects of great interest to local residents and visitors alike.
3. Demonstrating that a number of place names within the study area are the product of the trade in bison remains or the wreckage on the landscape that gave rise to the business.

The third purpose of this treatise was to discover the spatial characteristics of the buffalo bone industry, and this goal was achieved by:

1. Showing how the price offered for skeletons changed inversely with distance from the consuming site. This fluctuation was due to the fact that freight rates were understandably highest for the longest hauls and lowest from those districts closest to

the processing plants. Consequently, the further the bones had to be transported, the less a dealer could afford to pay for them since increased shipping fees reduced their value on the market.

2. Tracing the diffusion of the trade in bison remains across the Northern Great Plains. With few exceptions, the industry migrated in a logical pattern by starting in those areas nearest the product's destination and concluding in the places most remote from the consumer. Similarly, in nearly every case the pickers first gathered those relics nearest the transportation routes and then moved on to increasingly distant points as the buffalo bones disappeared.
3. Noting the extent of the trade in skeletons by defining its maximum extent. In determining the scope of this industry the boundaries of a uniform region were established and its internal characteristics described.

The fourth and final aim of this study was to determine what areal associations were created by the traffic in bison remains. This task was fulfilled by:

1. Explaining how a syndicate used spatial organization to control the trade in skeletons. Under this system a Minneapolis group assigned territories to bone dealers in Canada and the United States in

order to limit competition and monopolize the supply of raw materials to carbon and fertilizer works in the East.

2. Reconstructing commodity flows created by the enterprise. Because of the buffalo bone trade a strong interaction developed between two widely separated regions. This relationship was based upon the shipment of skeletons from the Northern Great Plains to Midwest firms, and a counter flow of payments for this product to compensate the pickers and local merchants.
3. Ascertaining the consumers of bison remains and the products they manufactured. Some major companies in the Middle West were dependent upon supplies of raw materials from the study area, so to complete the story of the buffalo bone trade these firms, and the ways they used skeletons, have been identified.

APPENDIX

APPENDIX

To research this dissertation the author traveled more than 20,000 miles and spent the equivalent of one full year seeking information about the commerce in bison remains. Well over a hundred facilities were visited during the course of this study for the purpose of gathering data, but at only about one half of these places could any useful facts be found. In those institutions where some details on the bone trade were obtained, such acquisitions were usually preceeded by many hours of fruitless exploration through manuscripts, newspapers, or books. Even when items were discovered pertaining to the gathering of skeletons, such references were usually no more than a sentence or two in length. Consequently, this dissertation is the product of small contributions from a large number of materials uncovered at various repositories across much of the United States.

The best sources of information on the commerce in bison remains were the early newspapers of communities in which the enterprise occurred. Where these records of the past had been lost or destroyed, accounts of the skeleton traffic could usually be gleaned from books and periodicals

dealing with local history. In those few instances when secondary materials failed to yield much on the provincial bone trade, manuscript collections were able to provide some valuable data and fill in much of the void. This was particularly true for the descriptions of the gathering activities around Carrington, Minnewauken, and along the Missouri River. Facts of a general nature on the subject of this study were primarily taken from the literature on the buffalo, especially the printed works by Major Israel McCreight. Additional material on the overall character of the business was extracted from a variety of U.S. and Canadian government publications.

The merits of a dissertation can in part be determined from the contents of its bibliography. An even better appraisal of the effort can be made if the places of research are also identified. To help the reader judge the thoroughness of this work, and to guide others wishing to continue my inquiry, the following is a list of institutions visited while investigating the buffalo bone trade.

ARCHIVES

Alberta, Provincial Archives of, Edmonton.

Bettman Archive, New York.

Canadian National Archives, Ottawa.

Manitoba Provincial Library and Archives, Winnipeg.

Saskatchewan Provincial Archives, Regina and Saskatoon.

United States National Archives, Washington, D.C. and Kansas City.

Wyoming, University of, Laramie.

BUSINESSES

American Agricultural Chemical Company, Detroit.

Armour & Company, Chicago.

Association of American Railroads, Washington, D.C.

Atchison, Topeka & Sante Fe Railway Company, Chicago.

Baugh & Sons Company, Philadelphia.

Burlington Northern Railroad, Saint Paul.

Canadian National Railways, Montreal.

Canadian Pacific Railroad, Montreal.

Chicago, Burlington & Quincy Railroad Company, Chicago.

Chicago, Milwaukee, St. Paul & Pacific Railroad Company, Chicago.

Coffrin's Old West Gallery, Miles City, Montana.

Great Northern Railway Company, Saint Paul.

Haynes Foundation, Bozeman, Montana.

Minnesota Transfer Railway Company, Minneapolis.

Missouri Pacific Lines, St. Louis.

Northern Pacific Railroad Company, Saint Paul.

Northwestern Fertilizer Company, Chicago.

Soo Line Railroad Company, Minneapolis.

Union Pacific Railroad Company, Omaha.

HISTORICAL SOCIETIES

Alberta, Historical Society of, Calgary.

Arkansas Historical Commission, Little Rock.

Chicago Historical Society.

Colorado, State Historical Society of, Denver.

Fort Totten Historical Society, North Dakota.

Glenbow-Alberta Institute, Calgary.

Illinois State Historical Society, Springfield.

Kansas State Historical Society, Topeka.

Maryland Historical Society, Baltimore.

Medicine Hat Historical and Museum Foundation, Alberta.

Michigan History Division, Lansing.

Minnesota Historical Society, Saint Paul.

Missouri Historical Society, Saint Louis.

Missouri, State Historical Society of, Columbia.

Montana Historical Society, Helena.

Nebraska State Historical Society, Lincoln.

New York Historical Society, New York.

North Dakota Historical Society, Coleharbor.

North Dakota Institute for Regional Studies, Fargo.

North Dakota, State Historical Society of, Bismarck.

Pennsylvania Historical Commission, Harrisburg.

Rock County Historical Society, Janesville, Wisconsin.

South Dakota State Historical Society, Pierre.

Valley County Historical Society, Glasgow, Montana.

Wisconsin, State Historical Society of, Madison.

Wyoming State Archives and History Department, Cheyenne.

LIBRARIES

Alfred Dickey Free Library, Jamestown, North Dakota.

Calgary Public Library, Alberta.

Carnegie Public Library, Devils Lake, North Dakota.

Carrington City Library, North Dakota.

Chester Fritz Library, University of North Dakota, Grand Forks.

Chicago Public Library.

Chinook Regional Library, Swift Current, Saskatchewan.

Colorado, University of, Colorado Springs.

Congress, Library of, Washington, D.C.

Crerar Library, Chicago.

Dauphin County Library System, Harrisburg, Pennsylvania.

Dearborn Public Library, Michigan.

Denver Public Library.

Detroit Public Library.

Dickinson Public Library, North Dakota.

DuBois Public Library, Pennsylvania.

East Saint Louis Public Library, Illinois.

Easton Area Public Library, Pennsylvania.

Eleutherian Mills Historical Library, Greenville, Delaware.

Enoch Pratt Free Library, Baltimore.

Fargo Public Library, North Dakota.

Free Library of Philadelphia.

Glasgow City-County Library, Montana.

Glendive Public Library, Montana.

Grand Forks Public Library, North Dakota.

Great Falls Public Library, Montana.

Griggs County Library, Cooperstown, North Dakota.

Havre Public Library, Montana.

Heart of America Library, Rugby, North Dakota.

Indiana University Library, Bloomington.

James Memorial Library, Williston, North Dakota.

Janesville Public Library, Wisconsin.

Johnson County Library, Buffalo, Wyoming.

Mandan Public Library, North Dakota.

Michigan State Library, Lansing.

Michigan State University Library, East Lansing.

Miles City Public Library, Montana.

Milwaukee Public Library.

Minneapolis Public Library.

Minot Public Library, North Dakota.

Minot State College Memorial Library, North Dakota.

Montana State University Library, Bozeman.

Moose Jaw Public Library, Saskatchewan.

National Agricultural Library, Beltsville, Maryland.

New Rockford Public Library, North Dakota.

New York Public Library.

Newberry Library, Chicago.

North Dakota State University Library, Fargo.

Parmly-Billings Library, Montana.

Pittsburgh, Carnegie Library of, Pennsylvania.

Regina Public Library, Saskatchewan.

Saint Louis Public Library, Missouri.

Saint Paul Public Library.

Saskatoon Public Library, Saskatchewan.

Smithsonian Institution, Washington, D.C.

Valley City Public Library, North Dakota.

Veterans Memorial Public Library, Bismarck, North Dakota.

Washington County Free Public Library, Hagerstown, Maryland.

NEWSPAPERS

Benson County Farmers Press, Minnewaukan, North Dakota.

Bismarck Tribune, North Dakota.

Bottineau Courant, North Dakota.

Chicago Tribune.

Detroit News.

Devils Lake Journal, North Dakota.

Devils Lake World, North Dakota.

Dickey County Leader, Ellendale, North Dakota.

Fort Benton River Press, Montana.

Foster County Independent, Carrington, North Dakota.

Glasgow Courier, Montana.

Griggs County Sentinel, Cooperstown, North Dakota.

Havre News, Montana.

Ipswich Tribune, South Dakota.

LaMoure Chronicle, North Dakota.

Medicine Hat News, Alberta.

Milnor Teller, North Dakota.

Minot Daily News, North Dakota.

New Rockford Transcript, North Dakota.

Regina Leader-Post, Saskatchewan.

Saskatoon Star-Phoenix, Saskatchewan.

Swift Current Sun, Saskatchewan.

Williston Herald, North Dakota.

Wolf Point Herald-News, Montana.

REFERENCES

REFERENCES

Aberle, George. From the Steppes to the Prairies. Bismarck: 1963, p. 163.

Alberta Historical Review, vol. 5, no. 4 (Autumn 1957), verso of front cover.
vol. 10, no. 2 (Spring 1962), p. 6.

Allen, Joel. The American Bison, Living and Extinct. Cambridge: University Press, 1876, pp. 190, 200.

The American Fertilizer, vol. 4, no. 2 (February 1896), pp. 98-101.

Ames, Manning & Ames. The Celebrated Buffalo Bone Meal. Hagerstown: Mail Job Print, 1880, p. 5.

Aubrey, Charles. "Letterbook." Property of Mrs. Herbert Swett, Dickinson. Correspondence dated 6 May 1885, p. 60; 1 June 1885, p. 75; 22 June 1885, p. 91; 23 June 1885, p. 98; 1 September 1885, pp. 146-147; 28 February 1886, p. 250.

Bailey, Vernon. "A Biological Survey of North Dakota." North American Fauna. U.S. Department of Agriculture, Bulletin 49. Washington, D.C.: Government Printing Office, 1926, p. 24.

Baker (I.P.) Papers. State Historical Society of North Dakota, Bismarck.
"Benton Transportation Company Journal." January 1, 1885 to February 16, 1886, Book 2, August 13, 1885, p. 51.
"Letterbook 7." April 28, 1884 to August 25, 1884, pp. 96, 276-277.
"Letterbook 12." July 28, 1886 to March 18, 1887, p. 24.
"Steam Batchelor Freight List, 1885." September 23 to November 20, 1885, trip 5.
"Steamer Benton Freight List, 1883-1884." trip 9, 1884.

"Steamer Benton Freight List, 1885." June 19, 1885.
"Steamer Helena Freight Book." October 1, 1884.
"Steamer Rosebud Freight List." July 1888 to November 1890, trip of June 9 to July 13, 1889.

Baugh & Sons Company. "The Delaware River Chemical Works of Baugh & Sons Company." Circular in Accession 663, invoices folder, p. 14. Elutherian Mills Historical Library, Wilmington.

Bismarck Weekly Tribune. 16 May 1884, p. 4.
13 June 1884, pp. 3, 8.
20 June 1884, p. 8.
27 June 1884, p. 8.
4 July 1884, p. 8.
25 July 1884, p. 3.
1 August 1884, p. 8.
15 August 1884, p. 8.
14 November 1884, p. 5.
12 December 1884, p. 8.
2 July 1885, p. 3.

Blegen, Theodore. "A Missionary Journey on the Dakota Prairies in 1886." North Dakota Historical Quarterly 1 (April 1927):28-29.

Bottineau Pioneer, 9 June 1887, p. 1.

Bozeman Times, 2 February 1875, p. 4.

Branch, Douglas. The Hunting of the Buffalo. Lincoln: University of Nebraska Press, 1962, pp. 221-224.

A Brief History of the County of Bottineau, North Dakota. [Bottineau] 1959, p. [3].

Briggs, Harold. Frontiers of the Northwest. New York: Appleton-Century Company, 1940, p. 178.

Burdick, Usher. Tales From Buffalo Land. Baltimore: Wirth Brothers, 1940, p. 211. The Old Time Cow-men of the Great West. Baltimore: Wirth Brothers, 1957, p. 166.

Calgary Herald, 17 October 1893, p. 8.
15 May 1894, p. 8.
10 July 1894, p. 8.
23 March 1935, p. 32.

Canada. Sessional Papers of Parliament. Ottawa, Canada: 1886, vol. 19, no. 1; 1887, vol. 20, no. 1; 1888, vol. 21, no. 3; 1889, vol. 22, no. 1; 1890, vol. 23, no. 2; 1891, vol. 24, no. 3; 1892, vol. 25, no. 4; 1894, vol. 27, no. 5; 1895, vol. 28, no. 4; 1896, vol. 29, no. 4; 1897, vol. 31, no. 4; 1898, vol. 32, no. 5; 1899, vol. 33, no. 5; 1900, vol. 34, no. 5.

Canadian Board on Geographic Names. Gazetteer of Canada. Ottawa: Department of Energy, Mines and Resources, Alberta, 1960; Manitoba, 1955; Saskatchewan, 1957.

Cheney, Roberta. Names on the Face of Montana. Missoula: University of Montana, 1971.

Chinook Opinion, 29 May 1890, p. 4.
21 August 1890, p. 4.

Christy, Miller. "The Last of the Buffaloes." The Field 72 (10 November 1888):697.

Churchs Ferry Sun, 21 May 1887, p. 4.
18 June 1887, p. 4.
16 July 1887, p. 4.
16 June 1888, p. 4.

Cooperstown Courier, 30 May 1884, p. 1.
19 September 1884, p. 1.
22 May 1885, pp. 1, 8.
29 May 1885, p. 1.
12 June 1885, p. 1.
7 May 1886, p. 1.

Crawford, Lewis. History of North Dakota. vol. 1. Chicago: American Historical Society, 1931, p. 198.

Crockett, Jean. "The Memoirs of William T. Cowan, Pioneer Merchant of Northern Montana." M.A. Montana State University, 1957, pp. 40-45.

Cummins, Scott. Musings of the Pilgrim Bard: A Book of Poems. Winchester, OK: 1903, pp. 230-231.

Dalchite, Bob. Letter to Le Roy Barnett. 8 January 1970.

Dary, David. The Buffalo Book. Chicago: Swallow Press, 1974, pp. 134-141.

Dearborn Independent, 16 June 1923, p. 12.

Detroit Evening News, 19 April 1881, p. 1.
27 March 1885, p. 4.

Detroit Free Press, 27 March 1885, p. 4.

Detroit of Today, the City of the Straits. Detroit: Phoenix Publishing Company, 1893, p. 132.

Devils Lake Daily Journal, 17 June 1933, p. 4.
28 June 1957, p. 4.

Devils Lake Inter-Ocean, 16 May 1885, p. 1.
30 May 1885, p. 1.
6 June 1885, p. 1.
20 June 1885, p. 1.
27 June 1885, p. 1.
25 July 1885, p. 2.
8 August 1885, p. 1.
15 August 1885, p. 1.
29 May 1886, p. 1.
30 April 1887, p. 4.
11 June 1887, p. 4.

Devils Lake World, 11 July 1928, p. 2.

Dickinson Press, 24 May 1884, p. 1.
7 June 1884, p. 1.
14 June 1884, p. 1.
28 June 1884, p. 1.
5 July 1884, p. 1.
6 June 1885, p. 1.
20 June 1885, p. 2.
26 September 1885, p. 1.
8 May 1886, p. 3.
20 February 1915, p. 4.
7 August 1915, p. 4.

Dixon Brothers Papers. "Buffalo Bone Ledger." Glenbow-Alberta Institute, Calgary. Letter North-western Fertilizing Company, Chicago, 24 September 1888.

Dixon Brothers Papers. "Letterbook." November 28, 1891 to October 2, 1893, pp. 207-208. Canadian Plains Research Center, University of Regina.

Downham, L. P. Letters and manuscript to Le Roy Barnett, 1971.

Drache, Hiram. The Challenge of the Prairie. Fargo: North Dakota Institute for Regional Studies, 1970, p. 59.

East St. Louis Gazette, 19 December 1885, p. 3.

East St. Louis Press, 10 July 1875, p. 2.

Edgeley Mail, 17 June 1937, p. 5.

The Emigrant (Winnipeg). 1 (June 1886):37; 2 (February 1888):146.

Ernest Brown Catalog, Record Book 3, p. 9a. Provincial Archives of Alberta, Edmonton.

Fargo Daily Argus, 12 June 1884, p. 2.
10 December 1884, p. 7.
14 May 1885, p. 7.
17 August 1885, p. 7.
30 November 1890, p. 5.

Fargo Forum, 3 February 1950, p. 6.
4 November 1962, section C, p. 1.

The Field (London) 69 (1 January 1887) 22: 65 (10 January 1885):57.

Fort Benton River Press, 9 June 1886, p. 5.
26 October 1887, p. 5.
19 June 1889, p. 5.
17 July 1889, p. 5.
5 November 1884, p. 1.
17 June 1885, p. 5.
8 July 1885, p. 5.

Fristad, Palma. Historic Mandan and Morton County. Mandan: 1970, pp. 30-31.

Gard, Wayne. The Great Buffalo Hunt. Lincoln: University of Nebraska Press, 1968, pp. 300-302.

Gard, Wayne. "Gathering Buffalo Bones." The Cattleman 45 (March 1959):53.

Gard, Wayne. "Bygone Midwest Business: Trade in Buffalo Bones." Chicago Tribune, 11 October 1959, section F, p. 2.

Garland, Aileen. Trails and Crossroads to Killarney. Killarney: Killarney and District Historical Committee, 1967, p. 155.

Garretson, Martin. The American Bison. New York: New York Zoological Society, 1938, pp. 160-165, opp. 172.

Gibbon, John. Steel of Empire. New York: Bobbs-Merrill Company, 1935, p. 236.

Gladstone, James. Interview, 8 September 1970, Calgary.

Glasgow Courier, 30 November 1937, p. 22.
4 August 1949, p. 9.

Glendive Times, 7 June 1884, p. 3.
23 August 1884, p. 3.
4 October 1884, p. 3.

Gordon, John. "True Tales of Days That Are Gone." The Brooks Bulletin, 5 February 1970.

Grafton News and Times, 23 July 1885, p. 1.

Great Northern Bulletin 8 (April 1897):9.

Haines, Francis. The Buffalo. New York: Thomas Crowell Company, 1970, pp. 130, 201-202.

Hammer, Kenneth. "Buffalo Bones." American West Review, 15 March 1967, p. 14.

Harper's Weekly 18 (4 April 1874): 307-308.
31 (15 January 1887):39.

Harrington, Mrs. Fred. Letter to Le Roy Barnett, 31 December 1969.

Hawkes, John. Saskatchewan and its People. vol. 2. Chicago: Clarke Publishing Company, 1924, p. 1087.

Hazard's United States Commercial and Statistical Register, vol. 4. Philadelphia: William Geddes, 1841, p. 205.

Heerman (Edward E.) Papers. Letter from Fred Stoltze to Captain Heerman, 17 April 1913. Minnesota Historical Society, St. Paul.

Heinemeyer, C. B., and Janssen, B. History of Mercer County, North Dakota. Hazen, ND: 1960, pp. 19, 27-28, 93, 96, 98, 110, 106.

Hewitt, Gordon. The Conservation of the Wildlife of Canada. New York: Charles Scribner's Sons, 1921. opposite p. 114.

Hicks, Borden. "Obituary of Captain Borden Mills Hicks." Typescript in possession of Mrs. Robert Schmitt, Minneapolis.

Hope Pioneer, 30 May 1884, p. 1.
29 May 1885, p. 1.
5 June 1885, p. 1.

Hornaday, William. "The Extermination of the American Bison." Smithsonian Report, 1887, part 2. Washington, D.C.: Government Printing Office, 1889, pp. 446, 509-510; "The Passing of the Buffalo." The Cosmopolitan 4 (October 1887):85-88.

Howard, Joseph. Montana: High, Wide and Handsome. New Haven: Yale University Press, 1943, p. 21.

Hunt's Merchants' Magazine, vol. 6 (January-June, 1842), p. 193.

Illustrated London News, 29 October 1887, p. 521.
11 June 1892, p. 731.

Industries of Michigan: City of Detroit. Chicago: Historical Publishing Company, 1880, p. 244.

Jamestown Alert, 14 October 1886, p. 8.
18 November 1886, p. 8.

Jamestown Morning Alert, 17 May 1884, p. 2.
12 June 1884, p. 3.
13 May 1885, p. 4.
19 May 1885, p. 4.

Jamestown Weekly Alert, 3 August 1883, p. 4.
10 August 1883, p. 4.
9 November 1883, p. 4.
16 November 1883, p. 4.
23 November 1883, p. 4.
28 April 1887, p. 1.
19 May 1887, p. 1.

Jones, Mat. Fiddlefooted. Denver: Sage Books, 1966, pp. 141-142.

Jordon, Robert. "Oklahoma." National Geographic 140 (August 1971):185.

Larimore Pioneer, 4 June 1885, p. 5.

Leonard, J. W. The Industries of St. Louis. St. Louis: J. M. Elstner & Company, 1887, p. 189.

Lethbridge News, 3 July 1886, p. 5.
18 June 1890, p. 3.
28 September 1893, p. 3.

Libby (Orin) Papers. "Notes taken by Miss Lizzie May Brown, 1915-16." Bismarck: State Historical Society of North Dakota.

Lindesmith (E. W. J.) Collection. "Miles City Parish Records, 1883-1885." Washington, D.C.: Archives of the Catholic University of America.

Lounsberry, Clement. North Dakota History and its People. Chicago: Clarke Publishing Company, 1917, p. 34.

Lux, Mabel. "Honyockers of Harlem." Montana: The Magazine of Western History 13 (Autumn 1963):9.

MacBeth, R. G. Canadian Pacific Railway. Toronto: Ryerson Press, 1924, pp. 168-169.

McCreight, Major. Buffalo Bone Days. Sykesville, PA: Nupp Printing Company, 1939, pp. 5, 25-28, 39-40.

_____. Buffalo Bone Days. DuBois, PA: 1950, pp. 32, 65, 71, 76-79, 82-83.

MacEwan, Grant. Between the Red and the Rockies. Toronto: University of Toronto Press, 1952, pp. 81-83.

_____. Entrusted to my Care. Saskatoon: Modern Press, 1966, pp. 48-51.

McGowan, Don. Grassland Settlers. Regina: Canadian Plains Research Center, 1975, pp. 11-12, 23.

McGuire, Hugo. "Reminiscences of incidents in the Maple Creek, Gull Lake, and Shaunavon, Saskatchewan, areas. Stories of the West. Manuscript, Glenbow-Alberta Institute, Calgary.

McHolmgren, Eric and Patricia. Over 2,000 Place Names of Alberta. Saskatoon: Western Producer Prairie Books, 1976.

McHugh, Tom. The Time of the Buffalo. New York: Alfred Knopf, 1972, pp. 277-280.

McLean County Mail, 25 May 1889, p. 3.
1 June 1889, p. 3.
15 June 1889, p. 3.
22 June 1889, p. 3.

Mandan Pioneer, 16 May 1884, p. 4.
30 May 1884, pp. 1, 4.
5 June 1884, p. 4.
15 May 1886, p. 4.
4 June 1886, p. 3.
2 July 1886, p. 4.
9 July 1886, p. 4.

Manufactories and Manufacturers of Pennsylvania in the Nineteenth Century. Philadelphia: Galaxy Publishing Company, 1875, pp. 49-50.

Mark, Marion and Theodore. Early Hebron. Hebron: 1935, p. 11.

Martin, Cy. The Saga of the Buffalo. New York: Hart Publishing Company, 1973, pp. 145-157.

Medicine Hat Times, 22 July 1886, p. 1.
30 April 1887, p. 4.
18 June 1887, p. 4.
2 July 1887, p. 4.
3 November 1887, p. 4.
10 May 1888, p. 4.
10 August 1889, p. 4.
8 May 1890, p. 4.
18 June 1891, p. 4.
1 October 1891, p. 4.
31 August 1893, p. 4.

Medora Bad Lands Cowboy, 29 May 1884, p. 4.
5 June 1884, p. 3.
19 June 1884, p. 4.
10 July 1884, p. 4.

Michigan. State Board of Agriculture. Thirty-seventh Annual Report. Lansing: Robert Smith Printing Company, 1899, p. 120.

Miles City Weekly Yellowstone Journal, 23 August 1884, p. 3.
4 October 1884, p. 1.

Milwaukee Sentinal, 1 August 1909, pt. 4, p. 2.

Minot Daily News, 25 June 1935, p. 11.
25 July 1953, p. 5.
19 August 1961, pt. 2, sec. C, p. 5.

Moose Jaw News, 7 November 1884, p. 1.

Moose Jaw Times, 12 June 1891, p. 2.
26 June 1891, p. 3.
1 September 1893, p. 4.
6 July 1894, p. 4.
5 October 1894, p. 8.

Moosomin Courier, 23 October 1884, p. 3.

Muscalus, John. Dictionary of Paper Money with Historical Specimens Illustrated. Bridgeport, PA: [1965], p. [9c].

New Rockford Transcript, 9 November 1883, p. 3.
16 November 1883, p. 3.
25 April 1884, p. 3.
30 May 1884, p. 3.
27 June 1884, p. 3.
5 September 1884, p. 3.
20 May 1887, p. 1.
27 May 1887, p. 1.
17 June 1887, p. 1.
1 July 1887, p. 4.

New York Times, 26 December 1884, p. 3.

New York Times, March 23, 1889, p. 8.

New York Tribune, 27 November 1874, p. 3.

North Dakota. Collections of the State Historical Society of North Dakota. vol. 1. Bismarck: Bismarck Tribune, 1906, pp. 140-141.

North Dakota Historical Society. Trails and Smoke Signals. 3 (April 1969):7.

North Dakota Inter-Ocean, 22 September 1883, p. 1.

North Dakota Outdoors, 24 (July 1961):33.

Northern Pacific Railroad. Report of the President of the Stockholders at Their Annual Meeting, 1883. New York: Wells, Sackett & Rankin, 1883, p. 77.

Northwest Magazine, 2 (September 1884):20
3 (July 1885): 10.
3 (November 1885):30.
4 (August 1886):19.
18 (August-September 1900):27-29.

Ogle (George A.) & Company. Compendium of History and Biography of North Dakota. Chicago: 1900, p. 1,348.

Orr (Wesley) Papers. "Diary." January-July 1896, p. 50. Glenbow-Alberta Institute.
"Letterbook." December 1892 to October 1893, pp. 196, 204, 260, 431, 450.
"Letterbook." July 1894 to March 1896, pp. 287, 312, 555, 731.
"Letterbook." March 1896 to November 1897, pp. 19, 74, 91, 96-97, 99-100, 102, 104-105, 108, 112, 115, 122, 147, 148, 186, 195, 196, 206, 212, 218, 225, 246, 267, 353, 423.

Pen and Sunlight Sketches of St. Louis. Chicago: Phoenix Publishing Company, 1891, p. 168.

Pierce County Tribune, 4 June 1936, sec. 2, p. 9.

Pierre Free Press, 6 June 1884, p. 1.
27 June 1884, p. 2.

Pioneer Stories Written by People of Nelson County, North Dakota. Lakota: American Print, 1926, p. 9.

Piper, Edwin. Barbed Wire and Other Poems. Chicago: Midland Press, 1917, p. 3.

Port Emma Times, 11 June 1885, p. 2.

Porterville, Myrtle. "Griggs County Story." Manuscript Collection, North Dakota Institute for Regional Studies, Fargo.

Power (T.C.) Papers. Case 67, "Wolf Point & Poplar River." Letters dated 7 May 1884, 18 May 1884, 5 July 1884, 10 July 1884, 21 July 1884, 30 July 1884, 31 October 1885, 4 November 1884, 21 June 1885, 11 September 1885, 13 September 1885, 24 November 1885. Letterbooks. 1 December 1888 to 3 May 1889, 3 May 1889 to 16 August 1889, 17 August 1889 to 17 February 1890.

Prosser, Paul. Letter to Le Roy Barnett, 7 May 1971.

Qualey, J. S. "Prince of the Prairie Bone Pickers." Real West 7 (July 1964):62.

Qu'Appelle Progress, 4 July 1890, p. 4.

Qu'Appelle Vidette, 11 July 1889, p. 3.

Raby, S. "Prairie Fires in the North-west." Saskatchewan History 19 (Autumn 1966):82-83.

The Record 2 (November 1896):6.
8 (February 1902):40.

Regina Journal, 23 June 1887, p. 8.
18 July 1889, p. 1.

Regina Leader, 29 June 1886, p. 1.
12 October 1886, p. 4.
28 June 1887, p. 4.
6 September 1887, p. 4.
30 August 1888, p. 5.
5 August 1890, p. 4.
12 May 1891, p. 1.
16 June 1891, supplement.
1 September 1891, p. 1.
13 October 1891, p. 1.
8 December 1891, p. 1.
19 October 1893, p. 9.

Regina Standard, 26 June 1891, p. 1.
18 September 1891, p. 8.
17 June 1892, p. 7.
24 May 1894, p. 8.
4 July 1895, p. 8.

Rice, Robert. Letter to Le Roy Barnett, 29 December 1969.

The Rising Sun (Sun River, Montana), 26 August 1886, p. 3.

Robinson, Elwyn. History of North Dakota. Lincoln: University of Nebraska Press, 1966, p. 161.

Rocky Mountain News, 26 November 1884, p. 2.

Roe, Frank. The North American Buffalo. Toronto: University of Toronto Press, 1970, pp. 447-466, 515.

Roosevelt, Theodore. Hunting Adventures in the West. New York: Putnam's Sons, 1927, pp. 186-187.

Rural New-Yorker 44 (5 September 1885): 602.
45 (11 September 1886):595.

St. Paul Weekly Pioneer Press, 22 May 1884, p. 8.

Sanderson, Laura. In the Valley of the Jim. [Jamestown: 1933], p. 33.

Sandoz, Mari. The Buffalo Hunters. New York: Hastings House, 1954, pp. 163, 249, 358.

Saskatchewan Herald, 26 July 1886, p. 4.
15 May 1889, p. 1.
26 June 1889, p. 1.
23 July 1890, p. 1.
29 May 1891, p. 1.
7 August 1891, p. 1.
21 July 1893, p. 4.

Saskatchewan History 6 (Winter 1953):9.

Saskatoon Star-Phoenix, 7 April 1969, p. 4.

Schmirler, A. A. Our Page, 1882-1957. Fargo: North Dakota Institute for Regional Studies, 1958, p. 13.

Scientific American 34 (8 April 1876):225.

Seaton, Ernest. Life Histories of Northern Animals. New York: Charles Scribner's Sons, 1909, p. 258.

Sinnett, Charles. "Notes on the Early History of Carrington, North Dakota." Manuscript Collection, State Historical Society of North Dakota, Bismarck.

Spokesfield, Walter. The History of Wells County, North Dakota, and its People. Valley City: 1929, p. 82.

Steele, S. B. Forty Years in Canada. Toronto: McClelland, Goodchild & Stewart, 1915, p. 247.

Stiles, William and Stanley. The First Fifty Years: A History of the Community of Maddock, North Dakota. Maddock: Standard Publishing Company, 1951, pp. 8-16.

Stoltze, John. Letter to Le Roy Barnett, 17 October 1972.

Storer, F. H. Agriculture in Some of its Relations with Chemistry, vol. 1. New York: Charles Scribner's Sons, 1889, p. 218.

Stutsman County Record, 17 December 1931, p. 1.

Swift Current Sun, 23 April 1907, p. 2.

Tofsrud, O. T. A History of Pierce County. Rugby: 1936, p. 109. Fifty Years in Pierce County. [Rugby]: 1943, pp. 22-23.

Turner, A. R. "Wascana Creek and the 'Pile o' Bones.'" Saskatchewan History 19 (Autumn 1966):111-114.

Tyson, Robert. History of East St. Louis. East St. Louis: John Haps & Company, 1875, pp. 85-87.

U.S. Department of Commerce. "Report on Indians Taxed and Indians not Taxed in the United States." Eleventh Census of the United States, 1890. vol. 10. Washington, D.C.: Government Printing Office, 1894, p. 517.

U.S. Department of Interior. Annual Report of the Commissioner of Indian Affairs. Washington, D.C.: Government Printing Office, 1884, p. 116.

U.S. Department of State. "Despatches from United States Consuls in Winnipeg, 1869-1906." Consular Reports 490, 20 October 1887; 588, 5 August 1891; 598, 29 October 1891; 606, 6 February 1892. Washington, D.C.: National Archives.

U.S. Department of Treasury. Report on the Internal Commerce of the United States, Fiscal Year 1881-82. Washington, D.C.: Government Printing Office, 1884, pp. 123, 284.

Villard Leader, 8 May 1886, p. 4.
29 May 1886, p. 1.
12 June 1886, p. 1.
19 June 1886, p. 1.
21 August 1886, p. 2.
25 June 1887, p. 4.
1 June 1889, p. 1.

Waggaman, William. Phosphoric Acid, Phosphates, and Phosphate Fertilizers. New York: The Chemical Catalog Co., 1927, p. 42.

Waldo, Edna. Dakota. Caldwell, ID: 1936, p. 335.

Ward County Independent, 5 April 1928, p. 2.
21 March 1935, p. 4.
27 June 1935, p. 25.

Washburn Times, 16 May 1884, p. 1.
19 June 1885, p. 1.
17 July 1885, p. 1.
24 July 1885, p. 1.
7 August 1885, p. 1.
14 August 1885, p. 1.

The Western Producer, 16 July 1970, p. 28.

The Western World, 8 January 1892, p. 8.

Westerners Brand Book. Book 6 (Los Angeles Corral, 1956), pp. 91-93.

Whitney, F. I. Valley, Plain and Peak. Chicago: Rand, McNally & Company, 1894, pp. 32-33.

Williams, Mary. Origins of North Dakota Place Names. Bismarck: Bismarck Tribune, 1973; Pioneer Days of Washburn, North Dakota, and Vicinity. Washburn: Washburn Leader, 1936, p. 10.

Woodsworth, James. Thirty Years in the Canadian Northwest. Toronto: McClelland, Goodchild & Stewart, 1917, p. 151.

Zogbaum, Rufus. "Diary, 1884." Laramie: Western History Center, University of Wyoming, p. 26.