

THE UNIVERSITY OF MANITOBA

**THE WATERHEN PROJECT:
THE INTRODUCTION OF THE ENDANGERED WOOD BISON TO THE
INTERLAKE REGION OF MANITOBA AND ITS ROLE IN THE ECONOMIC
DEVELOPMENT OF THE WATERHEN BAND OF SAULTEAUX INDIANS**

by

CHARLES HARVEY PAYNE

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY**

DEPARTMENT OF GEOGRAPHY

WINNIPEG, CANADA



July 1987

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A thesis submitted to the Faculty of Graduate Studies of
the University of Manitoba in partial fulfillment of the requirements
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ABSTRACT

THE WATERHEN PROJECT:

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The purpose of this dissertation is to give account from a geographer's perspective, of the introduction of wood bison, *Bison bison athabasca* to the Waterhen area of the Interlake Region of Manitoba. The project involves the interaction of cultural, social, economic and ecological processes. The management strategy advocated is a modest refinement of accepted wildlife management practice. This dissertation will explore the developing interdependency between the Waterhen Band and the wood bison, with the objective of resolving some of the social and economic problems of the former while ensuring the survival of the latter, which has been identified by the Convention on International Trade in Endangered Species (C.I.T.E.S.) as an endangered species. Critical to the potential future economic success of the Waterhen Project is the down-listing of the wood bison from endangered to

threatened status. The Waterhen Project has required and continues to require the involvement of several government and other agencies as it continues to move toward attaining its objectives.

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INTRODUCTION

The Waterhen Project, as the name implies, is located near Waterhen, Manitoba, approximately 320 km north-west of Winnipeg (Figure 1). It is a flat, low-lying, generally wet environment, an ecotone between the Aspen Parkland and the Boreal Forest. Manitoba's northern agricultural frontier reaches its limit in the Waterhen area. The area exhibits a ridge and swale topography, following a north-west to south-east parallel orientation. Conifers and/or poplar dominate the upland areas, which are interspersed with low-lying wet sedge-willow meadows, known as fens, where the dominant species is *Carex* (slough-grass). The fens are gradually filling and are periodically rejuvenated by fire which removes accumulated litter. Forest habitat type on the upland is also determined by wild-fire.

A northern continental climate prevails in the area. It is typically characterized by generally hot, dry summers and cold winters, during which a meter or more of snow may accumulate over a five- to six-month period.

Wood bison, *Bison bison athabasca* are adapted to this type of environment and secure sufficient nourishment from the low protein sedges and utilize the forest as

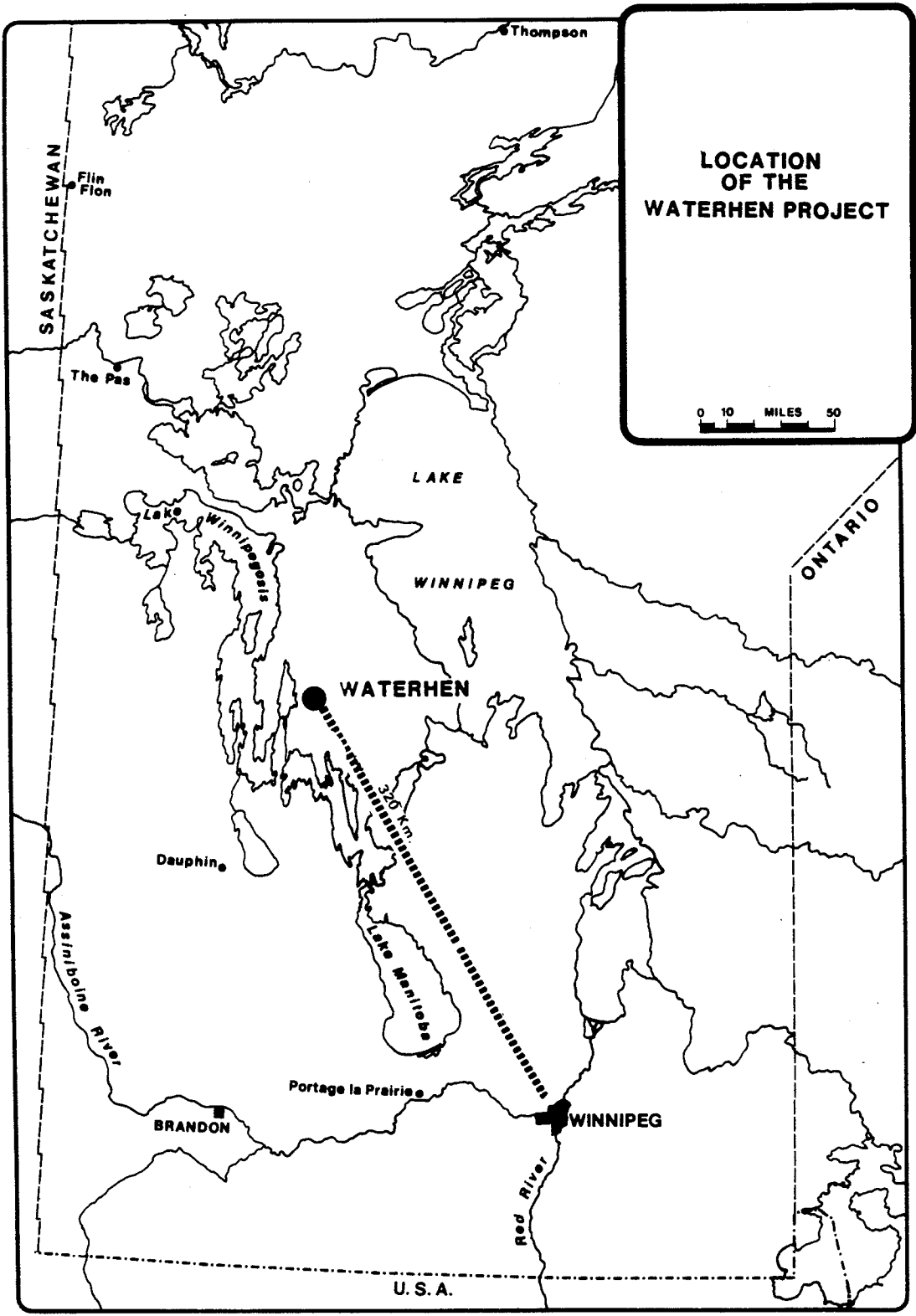


Figure 1 Location of the Waterhen Project

shelter throughout the year. Wood bison are a subspecies variant of the familiar plains bison, *Bison bison bison*. Generally speaking, the wood bison is larger and darker and is less migratory by nature than is the plains bison. There are only about 2000 extant wood bison and they are classified as endangered.

The Waterhen economy is depressed and is generally based on cattle ranching, commercial fishing, government and Indian Band administration and tourism. Sport fishing, primarily for pickerel (walleye) is the main attraction for tourists. The Waterhen Indian Band, located at Skownan, has a small population (approximately 300) relative to other Indian Bands in Manitoba and consequently the Reserve land-base is proportionately small. Cattle ranching, commercial fishing, trapping, operation of a fishing lodge and social assistance are the primary sources of income on the Reserve. The Band administration is the major employer and the unemployment rate exceeds 80%. There are two other small communities in the area: Mallard, a Métis community and Waterhen, a community of largely French, Ukrainian and native Indian ethnicity.

The Waterhen area, and in particular the Waterhen Band of Saulteaux Indians, is economically depressed, a condition which this game ranching venture, based on the wood bison, *Bison bison athabascae*, presumes to potentially alleviate.

The wood bison is an endangered subspecies of the genus *Bison*.

"Wood bison are listed on Appendix 1 of the Convention on Trade in Endangered Species of Wild Fauna and Flora and as such, trade in these animals is restricted. This subspecies is also listed in the Red Data Book by the International Union for the Conservation of Nature (IUCN) and thus is recognized as an endangered species." (Novakowski, 1978:11).

Once virtually extinct and presumed extinct for over twenty-five years, prior to their rediscovery in 1959, the wood bison is now (late 1980's) well on the road to recovery.

In order to relieve the endangered status of the wood bison, the Canadian Wildlife Service, in 1973, met with Provincial and Territorial Government Wildlife Agencies in an effort to jointly develop criteria for the management of wood bison. It was proposed to establish three free-ranging herds of wood bison, within the animals' former range (Reynolds et al., 1982:999).

We have no clear evidence that the wood bison ever inhabited the Interlake region of Manitoba. In passing, the Waterhen Project proposes to demonstrate that, whether they did or not, they are well adapted to that environment. The area exhibits a ridge and swale topography, typical of wood bison habitat in other

regions.

The Waterhen Project involves raising wood bison in captivity with the objective of releasing some of the progeny to the wild, of establishing a wild herd and developing a commercial captive herd of wood bison. The project also presumes to alleviate some of the social and economic problems of the Waterhen Indian Band, while at the same time achieving progress toward down-listing the wood bison status from "endangered" to "threatened".

The bison has played a significant role in the European settlement and development of North America. The early trails west and later inter-state highways followed the trails of the buffalo. Roe (1951:3) considered the bison, "one of those important creatures like the horse, the dog and the deer, which have exercised a great and far-reaching influence upon portions of the human race". It may also be true that the bison exercised more influence on the North American landscape than did the native human inhabitants. Estimates indicate that there were more bison than people. Due to their great size (close to 1000 kg) and large numbers, they carved trails throughout the the central and western portions of the continent, which lasted long after the bison were gone.

The role of the author was to identify a suitable location and methodology for establishing a herd of wood bison in Manitoba in collaboration with the Indian people of the Province. The author played an active role in the

subsequent development and management of the project.

The Geographical Context of the Waterhen Project

Geography follows many traditions, of which the multiple discipline generalist tradition is one. Alexander von Humboldt (1769-1859) and Carl Ritter (1779-1859) were the last scholars to embrace universal knowledge (James and Martin, 1972:113). They brought the classical period of geography to an end in the process of founding modern geography. Nonetheless the generalist tradition has continued and it was within this context that the Waterhen Project was fashioned.

Part of the Waterhen Project is biogeographical in nature although it is more wholly embodied in contemporary applied development geography. Harder (1981:257) concluded that northern Manitoba fits the Third World paradigm. He further concluded that "underdevelopment and modernization processes generate spatial, economic, social and political structures which mitigate against good nutrition and good health" (1981:257) and result in social and political pathologies. It is these pathologies which the Waterhen Project seeks to reform through applied development geography.

The Indian Dilemma

Indian people are often criticized for their modern hunting practices and perceived lack of conservation principles. This is often because the perpetrators of the criticism fail to recognize or are unaware of Indian hunting and fishing rights, especially as they exist in the prairie provinces of western Canada.

The Indians follow a hunting tradition. Such a culture is based on sharing and the success of a man is rated on the amount of game he retrieves and subsequently shares.

"When you kill a deer, it is not just food for your own family. There are other people to whom you will give each section of the animal. You know who these people are before you go on the hunt. Some may be immediately related to you, some only very distantly related. All are close to you by the bonds of human necessity." (Manuel and Posluns, 1974:42).

The bison played a dominant role in the lives of the Indian people of North America both before and in the early years of European settlement. The value of the bison, (commonly known only as the buffalo, at that time) to the Indians was well recognized during the Indian wars. According to Dary (1974:129), General Philip Sheridan

apparently requested the Texas Senate and House, in 1875, to appropriate funds to strike a medal for each buffalo hunter: "a medal with a dead buffalo on one side and a discouraged Indian on the other." Such a medal was never struck, but some years later the Government of the United States of America minted a five-cent coin depicting a buffalo on one side and an Indian head on the other. Relative to the Indian, the head of the buffalo is upside-down. Sheridan is also reported to have said in testimony before a joint meeting of the Texas Senate and House:

The buffalo hunters "have done in the last two years and will do more in the next year (1876) to settle the vexed Indian question, than the entire regular army has done in the last thirty years. They are destroying the Indians' commissary, and it is a well known fact that an army losing its base of supplies is placed at great disadvantage. Send them powder and lead if you will;..for the sake of a lasting peace, let them kill, skin and sell until the buffaloes are exterminated." (Cook, 1907, in Dary 1974:129).

Culleton (1985), also discussed the demise of the buffalo and its significance in determining the outcome of the Indian wars. In the introduction to "The Spirit of the Bison" (1985:3) she wrote:

"It was not a quiet, accidental extermination. The horror was that the killings were deliberate, planned, military actions. Destroy the livelihood of the Indians and win a war. 'Buffalo hunters' were heroes of that era, and lived on as legendary heroes of the American West. Was the war really won?"

The efficiency of the buffalo hunters is undisputed but their reputation as "professionals" is questionable. Martin (1973:99) described the "still hunt", developed by the hide hunters.

"A buffalo hunter went out before dawn. When he decided that there was enough light to do his job, he would spot his first victim - always a cow. He would lung-shoot her; she would not drop. As he expected, she just staggered around while the other buffalo frantically smelled her and milled about. Firing as quickly as he could, [with a Sharps repeating rifle] the hunter would down the whole bunch."

The demise of the buffalo meant the end of the traditional way of life for the Indians of the plains of North America, who were forced to live on reservations too small to provide adequate range for the buffalo. A similar scenario was enacted in southern Canada, only in a non-warring fashion. However, the situation with the wood bison in the northern forests was quite different. Wood

bison, although numerous, were not a primary resource for the Dene Indian people of northern Canada and were not to any significant degree hunted by the colonists. The cause of their sudden collapse in the late nineteenth century remains a mystery.

The Waterhen project has many facets. Like his counterpart in the United States the Canadian Indian became largely restricted to life on a reserve, with little room to support wildlife and little opportunity to pursue his traditional lifestyle. Although the Indian had in treaty retained the right to hunt, unfettered by law, on unoccupied Crown land, the land soon became settled and largely destitute of game. Moreover, legislation steadily infringed on the Indians' right to hunt. The lack of wildlife, the limited resource base on reserves and the provision of welfare transfer payments resulted in an impoverished lifestyle relative to that of other Canadians.

The fate of the Métis, who received no land settlement, was no better. Their dependence on the buffalo was equal to that of the Indian. Sealey (1975: 61) described the relationship in "Stories of the Métis". He tells the story of a buffalo hunt by the Métis of the settlement of Red River in 1842. He describes the excitement and happiness in the hearts of the hunters as they prepared for "their annual, fabulous breath-taking experience, the buffalo hunt." It is a picture of a long

train of six hundred carts, bulging with women, children, food and the supplies. There were winter hunts as well as fall hunts because, although the harvest of the fall hunt was bountiful enough, it was rarely sufficient to supply the settlement for the entire winter. The winter hunt was quite different from the fall hunt. Banks of drifted snow made the use of horses and carts impossible and the hunters resorted to using dogs and sledges for travel.

The market system of the mainstream of Canadian economic development was never well understood or adapted to by either the Indians or the Métis. In essence, they lacked marketable skills and demonstrated little will or desire to change the situation. The Waterhen Project embodies not only the restoration of an endangered species of wildlife but also an opportunity for the Waterhen Band to become more active in the market economy. The program has implicitly strong links to past cultural tradition, it embodies wildlife management teachings and practice and is compatible with the lifestyle of Indian people.

Samuel Walking Coyote

How the North American buffalo, *Bison bison bison* was saved from extinction is not only interesting but has implications for game ranching and the later near extinction of the Canadian wood bison, *Bison bison*

athabascae.

One of the stories of how the buffalo was rescued from the brink of extinction is a romantic one and myth has probably replaced fact in many aspects and details of it. The actors in this story were all unusual people. They were very much individualistic thinkers and by no means conformed to the society in which they lived. They were prophets, but unversed in philosophy. How they saved the buffalo was a remarkable conservation achievement. However, there was little or no conservation thinking behind their actions: their interests were in personal gain through opportunism. The following account (from Dary, 1974:222) is one version of the story of those who saved the buffalo.

Samuel Walking Coyote was a Pend d'Oreille Indian who lived with the Flathead Indians on their reservation in what is today western Montana. In 1872, Walking Coyote left his wife and adopted home with the Flathead and moved east across the Rockies to a Blackfoot reservation, where he joined the winter buffalo hunt of 1872-1873. Walking Coyote did more than hunt buffalo that winter, however. He fell in love with a beautiful Blackfoot woman and married. If the story is true, and many dispute it, it was that marriage that saved the buffalo and later contributed to the near extinction of the Canadian wood bison through genetic dilution.

When spring came, Walking Coyote became homesick and

decided to return to the Flathead reservation, and take his new wife with him. However, there were problems with the plan. Flathead law prohibited taking a wife from off the reservation and the Jesuit Fathers of the Flathead Mission would not approve of any man taking more than one wife.

Several days later he was still pondering the problem, when eight buffalo calves wandered into his camp; some had been orphaned during the hunt whereas others had become separated in the chase. Apparently the little buffalo soon attached themselves to the Indians' horses and Walking Coyote got the idea that a gift of eight buffalo calves to the Jesuit Fathers would appease their anger toward him for having taken two wives. Comfortable with this idea, he set out across the Rockies with the eight buffalo and his Blackfoot bride.

It was a rough journey across the Rockies. Two of the calves died. In the spring of 1873, the couple, with the six surviving buffalo calves, arrived at the Jesuit Mission. The Jesuit Fathers were not impressed with Walking Coyote's proffered gift and the couple were beaten by the Flathead police and thrown off the reservation. This so angered Walking Coyote that he decided to keep the buffalo rather than hand them over to the Jesuit Fathers who had brought this misfortune upon him. He did not go far from the Mission but settled in the lush Flathead Valley and raised his buffalo calves, which, according to

the story, did extremely well and became exceptionally tame. The heifers produced calves when they were four years old. By 1884, Walking Coyote's buffalo herd numbered thirteen and they were becoming a problem. They were taxing Walking Coyote's meager resources and annoying his neighbors.

Reluctantly, because he loved the buffalo, Walking Coyote put them up for sale. The herd was sold to Charles Allard and Michel Pablo. Walking Coyote insisted on cash and was paid \$2000 in gold. The buffalo was now well on the road away from potential extinction, largely due to the economic rather than conservation interests of Allard and Pablo.

The buffalo prospered under the care of Allard and Pablo. However, complications following a knee injury resulted in the death of Charles Allard in 1895. The buffalo, now numbering 300, were divided between Pablo and Allard's estate. The interests of the latter were either immediately or ultimately sold. Some of the animals later went to repopulate Yellowstone National Park, while others were sold to private interests in Oklahoma.

Michel Pablo retained his animals until 1906. At that time, the Flathead reservation on which the animals grazed was being opened up for settlement. He offered to sell his buffalo to President Theodore Roosevelt, following refusal of a request for grazing privilege on Federal lands. His suggestion was rejected by the Congress

of the United States. Perhaps feeling distraught, he sold the buffalo to the Government of Canada because it too, like that of the United States, refused to grant grazing rights to him. The Government of Canada purchased the buffalo for \$200 each.

The buffalo prospered at Wainwright, Alberta, a buffalo reserve that the Government of Canada had established to preserve the plains bison (*Bison bison bison*). However, the plains bison were to later develop into a threat to the wood bison in Wood Buffalo National Park, located in Alberta and the Northwest Territories, which was established in 1922 to preserve the wood bison.

There are conservationists in Canada today who share the interests of Allard and Pablo. These people would like to see more commercialization of wildlife through development of its economic potential.

History of the Wood Bison

When Canadians talk of conservation we tend to focus attention on the problems of southern Canada and often console ourselves in the mistaken belief that to the north there is an enormous unspoiled virgin land that abounds in wildlife. Such belief inhibits the expansion of conservation efforts. Virtually all northern wildlife populations have suffered decline in the last 100 years.

Hewitt (1921:56) wrote:

"Now that the buffalo has disappeared from our prairies the [barrenground] caribou constitutes, I believe, the most abundant of the larger land mammals in the world."

Barrenground caribou subsequently suffered drastic decline but have apparently made up some of their losses in recent years. The decline of the wood bison population is no better understood; neither is any resurgence of numbers indicated.

Samuel Hearne, one of the earliest explorers of Canada's northlands, was likely the first European to see a wood bison. On his journey from Fort Prince of Wales (Churchill, Manitoba) to the mouth of the Coppermine River and back, Hearne passed through what may have been the center of the wood bison population at that time. On his return trip from the north, he crossed Great Slave Lake. (Figure 2, after van Zyll de Jong, 1986:52). He recorded seeing wood bison on January 9, 1772. He wrote:

"The buffalo in these parts, I think are in general much larger than the English black cattle...the horns are short, black and almost straight, but very thick at the roots or base.... The head of an old bull is of a great size and weight indeed; some of which I have seen were so large, that I could not without difficulty lift them from the