SACRED SYMBIOSIS

THE NATIVE AMERICAN EFFORT TO RESTORE THE BUFFALO NATION

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DISSERTATION

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ABSTRACT

Native Americans and bison maintain an ancient relationship characterized by spiritual affiliation and utilitarian use. Near the end of the destruction of the great herds in the late nineteenth century, Native Americans including Sabine and Samuel Walking Coyote of the Salish nation, Mary Good Elk Woman and Frederick Dupuis of the Lakota, and the Canadian Métis James McKay initiated efforts to bring back the buffalo in its habitat by establishing captive breeding programs. The progeny from these herds proliferated and remained under native aegis until 1926 when the loss of communal land and the changing political economy finally severed the physical bison-Indian relationship.

Emblematic of the rejuvenated cultural recognition for native people, bison returned to reservations including the Crow and Lakota Pine Ridge agencies from the public domain beginning in the 1930s and accelerating during the period from 1974 through 2000. In 1992, American Indians coalesced into the Intertribal Bison Cooperative (ITBC) and consolidated both herd increases and bison range acquisition with an excess of 10,000 bison running on more than 100,000 acres by 2003. The ITBC, fifty tribes strong, also worked to improve the plight of the Yellowstone bison for greater free range and use of population excess for tribal herd seed stock. Meanwhile, although with less coordination, Canadian First Nations continued to bring back the bison on reserves. Native Canadians also began co-managing free-ranging bison in northern Alberta and the Northwest Territories. Cultural affinity and respect for the indigenous landscape epitomized the Native American bison restoration effort across North America.

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For Native America

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CHAPTER 1
A Relationship From Time Immemorial

"In my body, in my blood runs the spirit of the buffalo."
– Arvol Looking Horse (2000)[1]

Bison[2] and Native Americans[3], in the historical context the two entities seem inseparable. Yet, the two also merge in contemporary analysis. Native Americans maintain a continuous relationship with the "buffalo nation" that dates back to time immemorial.[4] These indigenous people inculcate the historic relations with ongoing efforts to restore their animal brethren to its position as a landmark species occupying various ecological niches across the North American continent. This restoration, marked by a sense of vision for a healthy landscape, empathy between the animal and human worlds, and cultural perseverance, warrants presentation. For more than a century and a quarter, Native Americans have labored to bring back a healthy, viable bison population imbued with the dignity owed to the creature by its cultural dependents and stewards.[5] Today, American Indians from more than sixty tribes in the United States and Canada work with more than 20,000 buffalo. Although the numbers of people and animals acting in concert toward restoration pale in comparison to those interacting in prehistory and history, increase defines the effort. The bison are making a comeback led by Native Americans in the United States and First Nation peoples of Canada. Native spiritual elder Arvol Looking Horse makes it clear: "We are the buffalo people."[6]

The story of the restoration requires background information describing the prehistoric and historic relationship between natives and bison. The volume of literature on these subjects virtually renders any such literary endeavor an

exercise in bison historiography with hundreds of articles and books already in print.[7] Albeit, room exists for re-interpretation of the material combined with reconciliation with native perceptions. Ultimately, descriptions of the buffalo and its evolution along with the continent's indigens merge with the story of the Euro-American invasion of North America to produce a rather tragic tale begging for a happier sequel. "Brother Buffalo paid the price, and now we sustain him," states Native American Harry Charger.[8] This comment suggests that we first examine the buffalo, followed by its relationship to Native Americans and the price the species paid.

"If the buffalo were here today, I think they would be different from the buffalo of the old days because all the natural conditions have changed," observed Okute, a Lakota man, in 1911.[9] His intuitive observation possesses a certain timelessness in that change over time defines much of nature, most certainly to include the bison and its habitat.[10] The bison observed by Okute in his lifetime differed considerably, but recognizably, from their distant ancestors.

Modern day scientists tell us that prototypes of the bison first appear in the paleontological record perhaps two million years ago. The archeological record, although diffuse owing to an imbroglio of taxonomic jargon, goes back tens of thousands of years.[11] The ubiquitous bison cave art of Paleolithic Europe reveals ancient human portrayals of a recognizable but different-looking bison, the steppe bison (*Bison priscus*). This massive bovid with an impressive sweep of horns possessed nearly twice the mass of today's bison. The creature lived across Eurasia and into North America thriving into the Pleistocene epoch ending approximately ten thousand years ago. The species probably became the parent

species for subsequent species of bison in North America to include another large-horned, large-bodied species known as *Bison latifrons*. As the continent emerged from the Pleistocene with its intermittent recurring glaciation, a gradual diminution of the bison occurred. Foremost bison scientists, Dale Guthrie and Mary Meagher, speculate that during the course of the glacial periods, *priscus* and *latifrons* lost contact due to intervening ice sheets. The two massive species evolved into somewhat smaller species. North of the ice sheets on the northern plains, a smaller *priscus* form, *Bison occidentalis*, appeared and prospered on the plains. South of the glacial sheets, the *latifrons* line diminished into *Bison antiquus* which occupied niches from coast to coast and as far south as present central Mexico. About ten to twelve thousand years ago with the retreat of the glaciers, *occidentalis* and *antiquus* continued their diminution over the course of the next few millennia and eventually merged into the present species, *Bison bison*.[12]

The archeological record indicates that the bison would become increasingly recognizable to the contemporary observer with the passage of time from the Pleistocene epoch into the Holocene. Both *Bison antiquus* and *Bison occidentalis* appeared much like today's bison, albeit considerably larger. Evidence of the gradual diminution of the bison as the Ice Age relinquished its grip led Canadian archeologist Michael Wilson to assess that "bison standard time," meaning that the bison assumed a morphotype quite close to that observed today, occurred approximately ten thousand years ago. He states: "The complications of multiple migrating waves, interbreeding and extinctions concluded about 10,000 years ago." Moreover, the archeological record

elucidates itself around that time as well with discoveries readily verifying that Native Americans interacted with bison in a comprehensive bison culture.[13]

Nonetheless, for native people, the history of human-bison interaction extends back to time immemorial, to creation itself.[14] In other words, the collective memory of many natives recalls an existence always with bison. Traditions of tribes historically identified with buffalo and descended from pre-historic bison hunters speak of the presence of the bison, or the buffalo nation, when humans first set foot on earth. For example, the Crow, Cree and Arapaho nations possess creation stories explaining that the bison's existence pre-dates human life. Humans came to exist based on the premise that animals, specifically the bison, would sustain them.[15] The Lakota and Ute people share a story of humans arising from the blood clot of a buffalo. The Ute tradition explains that an old man and his wife, the predecessors of humanity, received a son born of bison blood in a kettle.[16] The Lakota tradition explains that "Buffalo" adopted "blood clot" as his younger brother and oversaw the sibling's coming to life and rise to prosperity in symbiosis with *Pte Oyate*, the buffalo nation.[17] Contemporary Lakota bison expert C. Wolf Smoke explains, "We evolved from the bison, we used to be bison." He further comments on the reconciliation of formal science and indigenous philosophy: "If you accept Darwin, then you should accept this."[18]

Worthy of note, a significant body of the oral tradition also accommodates the evolution of the bison from the larger types, such as *latifrons*, *antiquus*, and *occidentalis* into *Bison bison*. In many ways linking the paleontological and archeological records with present theories of bison evolution, the legends tell of

giant bison that tended to fight with their hunters.[19] Correspondingly, zoologists hypothesize that the early bison, much less of a herd animal than *Bison bison* and often found in environments richer in shrub and wood, probably tended to stand their ground to confront their attackers as opposed to the flight behavior seen in recent bison.[20] This does not preclude that *Bison bison* proves a formidable and dangerous prey species; rather, that the more heavily-bodied, larger-horned creatures favored fight over flight, especially when cornered which more easily could occur in a wooded environment. This same behavior has been observed with contemporary bison in forested areas as opposed to those in rangeland.[21] Traditions of the Arikara, Blackfeet, and Cheyenne all share in describing the hunting of the massive bison. Their stories, viewed as metaphor by proponents of reconciling native historical beliefs and science, describe ancient bison as carnivores who either preyed upon their native pursuers or competed with them to gain dominance in the relationship.[22] To some modern researchers, this presents an image of aggressive ancient bison willing to stand their ground against hunters far more so than the bison of recent memory.

Several of the traditions link the bow and arrow, archery, to the changed relationship with the bison nation in that the humans gained both permission and ability to harvest when deemed necessary. According to Blackfeet, Cheyenne, and Lakota tradition, the bison either agreed to or recognized human prowess once the tribes acquired archery.[23] The bow and arrow established a more even playing field betwixt the bison and the humans. Again, this makes sense in reconciling oral traditions with the archeological record in that the bow and arrow would minimize the risk for natives while hunting a large defensive prey species.

Native people more easily could harvest the bison, a seeming benevolent twist of fate in their relationship with the species which often proved vital their very survival and welfare. The archeological record suggests some anachronism in this case; however, in that the implementation of archery, approximately 1,500 to 2,000 years B.P. (Before Present), probably post-dated the majority of the diminution of the larger forms of bison, *Bison antiquus* and *Bison occidentalis*, to *Bison bison*.[24] Still worthy to note though lasts the presumption that the use of the bow enabled native people to more successfully harvest any bison that took to the defensive whether on the grasslands or in the woodlands where bison tend to develop a larger frame and behavior reminiscent of the great megafauna herbivores. The scientific records and native traditions merge into a sensible testimony of the evolution of a relationship between the Indian and buffalo nations.

For many scientists, the application of technology, such as archery, in exploiting a resource by America's indigenous people poses the question: did prehistoric native people over-exploit their resources, specifically, the large mammals to include *Bison bison* prototypes such as *latifrons* and its megafauna neighbors in late Pleistocene and early Holocene North America? The question at hand here pre-dates archery on the continent and examines more the use of spears, atlatls, fire, communal hunting and sheer cunning. The large prehistoric bison often, if not intermittently, lived in a mosaic landscape similar to the savannah of Africa with a fair mix of grasses, forbs, shrubs, and trees. University of Alaska professor Dale Guthrie likens the landscape to a plaid pattern of biodiverse micro-environs with rich nutritious flora in a comparatively warm, moist

climate, i.e., the arid West was not so arid then and much less inclined toward temperature extremes, especially on the cold side.[25] The early bison moved across this landscape sharing the same rhythms as other megafauna to include the mammoth, mastodon, camel, giant ground sloth, and their predators such as the American lion, short-faced bear, dire wolf, and more familiar animals such as the gray wolf, grizzly bear, pronghorn antelope, and moose.[26] Inhabiting this landscape, the Paleo-Americans found their niches, often becoming the hunters of the great mammals.[27] The archeological record, again, makes it clear that such a relationship existed. The most famous landmark finds come from locations near Clovis and Folsom, New Mexico early in the 1900s. These discoveries, followed by numerous others, led archeologists to label a Paleo-American "Clovis Culture" largely associated with mammoth hunting some 10,000 years or more before present and a "Folsom Culture" largely associated with bison dated to a slightly more recent time.[28]

Combining the preponderance of archeological evidence that Paleo-Americans hunted the megafauna, such as the mammoth and large bison, with the observation that none of these animals existed when Europeans arrived on the North American continent in the wake of Columbus begs for an answer to the question as to what happened to the "charismatic megafauna," the large mammals that evoke a sense of near sacred nostalgia in humans.[29] Theorists have lined up in a continuum between two sides known as the "overkill" and "overchill" advocates.

The overkill theorists, led by Paul S. Martin, generally speculate that the beginning of the end for most of the megafauna occurred with the arrival of

humans on the continent. This means that when the Paleo-Americans showed up, they began over-exploiting the large mammal species. The humans' ability to organize and utilize lithic technology along with intimate knowledge of animal behavior enabled them to harvest almost at will. The inability to control harvesting when practicing communal hunting, for example, drives, often resulted in the killing of more animals than the natives could utilize at the time. Moreover, such hunting techniques did not save the young and the females from death which resulted in decreasing fertility rates. As well, the overkill theorists maintain that the native people most likely did not possess a sense of conservation. Rather, their relationship to the animals proved less as stewards and more as hunters who believed that correct behavior and ritual would replenish the herds as opposed to limited and selective take.[30] Environmental historian Dan Flores explains that "in local isolation the Paleolithic shamans either misunderstood or could not grasp the implications; that their way of life, their way of using the plains was over" when they exterminated the animals in their region.[31]

Specific to bison, Jerry McDonald, emerges as the leading proponent of the overkill theory. McDonald hypothesizes that native hunters influenced the selective regime of nature. Bison that stood their ground and fought with their pursuers, although viable against other animals, did not stand a chance against organized, cunning, well-armed humans. Zoologists refer to such "stand and fight" mammals as "k-type" in the selective regime. Bison that fled their pursuers could easily outdistance humans unless tremendous snowfall prohibited such movement. Zoologists refer to the "flight" selective regime as "r-type." Thus, McDonald believes that r-type bison survived the onslaught of human hunters

owing to their propensity to flee. *Bison bison* fits this description. Meanwhile, the k-type bison, such as *latifrons*, perished due to an inability to overcome human harvesting. Thus, *latifrons* became a terminal line and the comparatively large-formed *Bison occidentalis* and *Bison antiquus* became doomed unless they evolved into smaller forms less vulnerable to the deleterious effects of human hunting. More aptly put, Indians killed off a species and doomed others, an argument extended to the mammoth as well.[32]

The native tradition rejects this paradigm. As stated above, the Native American tradition explains the change in the bison as re-negotiation of the relationship between nations resulting in a changed morphology of bison. Other critics of the overkill theory, advocates of the overchill theory led by Dale Guthrie, argue that although humans probably impacted megafauna populations, they did not kill off the large mammals. Rather, a combination of climatic and flora changes drastically altered the habitat rendering it unfit for the great beasts and their dependent predator species. More specifically, with the close of the Pleistocene and merging into the Holocene with its cooling and drying characteristic, the landscape became less hospitable for the megafauna. The rich mosaic of vegetation gave way to much more definitive biomes characterized by less diversity. For example, savannah and shrub land yielded to shortgrass prairie and evergreen forest. Guthrie describes this as a plaid landscape changing to a striped landscape. Much less diversity and less nutritious forage defined a given area. This decline in forage quality becomes important when considering that the majority of the megafauna possessed a monogastric, one stomach, digestive system as opposed to a ruminant digestive system.

Monogastric animals require comparatively higher quality forage as their systems possess less capability to garner nutrients out of forage than ruminants. For example, the monogastric horse gets less nutrition from the same low quality feed than a ruminant cow and therefore needs larger quantities to sustain itself which often earns the modern day horse the epithet "hayburner." Thus, the less nutritious forage became problematic for the majority of the megafauna. In addition to the problem with decrease in total digestible nutrients, the increasing severity of winters and droughts put further stress on the animals. Especially important to consider, the long gestation periods of the large mammals in excess of nine months and approaching a full year meant that fertility rates experienced decline as mothers and offspring increasingly faced seasons of hardship. A decrease in habitat quality then combined with the comparatively high maintenance demands of the monogastric megafauna to cause a slide into extinction perhaps fueled by, but not caused by humans.[33]

Bison survived extinction owing to their ability to digest and utilize large quantities of low quality forage, comparatively high reproductive rates, and tendency to flee from pursuers. Although they can sustain themselves with browse, they much prefer to graze and the "striped landscape" did not hinder them.[34] They inhabited the grasslands, referred to by Guthrie as the "Great Bison Belt."[35] When able, the bison occupied niches anywhere from coast to coast that offered suitable grazing. Invariably, such colonizations ebbed and flowed with climate and habitat quality.[36] Nonetheless, bison survived the extinction of the great North American megafauna. The comparatively diminutive stature of *Bison bison* and its survivability provides impetus for environmental

historian Dan Flores to label it a "dwarf weed species." His comment underscores the perseverance of the animal at thriving in a changed environment, better seen as occupying a vacant niche under ideal conditions, yet the "weed" designator somewhat implies something not useful to humans.[37] Far from the case, natives utilized bison as fully as possible whenever interacting with their fellow survivor of the Ice Age.[38]

The continuing arguments over the harvesting ethic of Native Americans acknowledges the very thorough interaction between bison and indigenous people.[39] Canadian social scientist and pioneer in the field of indigenous science Russel Barsh addresses Paleo-American communal hunting with the segue: "What's important in all this discussion is not whether Indians killed more than they could use or how much they killed; rather, what's important here is how they managed to harvest the bison." Utilizing extensive research on the northern plains with a focus in the area surrounding Parks Canada's Head-Smashed-In Buffalo Jump in southwest Alberta, Barsh theorizes that native people deeply immersed themselves into their environment in order to commune with their food source.[40] This "becoming of" the bison and their environs "dissolved the borders of the inner and outer worlds" between humans and their surroundings.[41]

In an attempt to answer the research question as to how humans could move bison herds predictably for more than fifty miles to a community kill site such as a buffalo jump, Barsh hypothesizes that human hunters inextricably intertwined themselves with wolves, the attendants of any bison herd.[42] Essentially, people "shadowed wolves shadowing bison."[43] Domestication of wolves possibly even occurred under these auspices as theorists and

archeologists believe that wolves sought the "leftovers" of human kills.[44] The relationship of humans, bison, and wolves "verged on pastoralism" with an archeologically documented history spanning 11,000 years in southern Alberta.[45] One Blackfeet legend attributing the feeding of a human family by wolves perhaps offers a metaphor of the dependency fostered by early bison hunters and the wolf.[46] The bison drives, involving hundreds of square miles of landscape with entire communities participating, unfolded like an orchestrated dance across a terrestrial map with rock cairns signifying the gathering basin and drive lanes. Estimates at Head-Smashed-In alone, just one of dozens of such sites, indicate that some 123,000 bison passed over the cliffs during a span of nearly 6,000 years.[47] In addition to emulating the wolf, the Paleo-Americans and their progeny utilized fire to enhance forage and sculpt the landscape. This made bison movements more predictable as they self-rotated onto richer forage.[48]

In the plains environment, in particular, with a boom and bust cycle of productivity, the dependency of a bison food source to convert unusable forage, to humans that is, into digestible nutrients in the form of bison beef proved a virtual godsend which lends credence to the term "charismatic megafauna." The intensive interaction between Native Americans, wolves, fire, and, of course, buffalo, inspired Dale Guthrie to label Paleo-American communal drive hunting as a semblance of "risky free-range husbandry."[49] Moreover, archeological records indicate that bison-eaters became larger than their neighbors suggesting the physical windfall offered by any bounty of bison.[50] The Blackfeet acknowledged this nutritious benefit by calling bison meat *natapi waksin* which

means "real food" and all other food by the name *kistapi waksin* meaning "nothing food."[51] Such epithets provide little wonder that wherever bison existed from the east coast to the west coast, native people utilized them as fully as possible either from hunting or trade with hunters.[52]

The phenomenal usefulness of bison to humans remains fairly well-known in that most novice students of American Indian life can explain that Indians fed themselves with buffalo meat and provided clothing and shelter with skins of the shaggy beasts. In fact, native people utilized more than one hundred parts of the bison to include the guts as containers, the dung for fuel, the bones for tools, and the sinews for adhesive and cordage to name just a few of the parts and some of their uses.[53] However, the fact that may make bison unique among mainstays of various foodways and base economies of Native Americans is the complete dependence fostered by bison in a grassland environment. The Great Plains, for example, without the presence of bison posed a nearly inhospitable environment to human groups of any size beyond that of an extended family.[54] Bison made the plains hospitable. No other animal in North America, perhaps even in the world, proved so critical to its dependents.

Worthy of note, when we think of recent pre-Columbian non-agricultural North American aboriginal peoples with primary prey bases besides bison hunters, then images of salmon fishers and caribou hunters come to mind. Both these groups certainly maintained integral relations with their food sources. However, both of them typically possessed supplemental food sources upon which to rely. For example, salmon fishers of the Northwest could fall back on marine resources or significant root and berry crops with some ungulate

presence as well. The caribou hunters, in recent memory probably the closest to the bison hunters in dependency on an ungulate species, tended to access marine or riverine resources as well.[55] These aquatic-based nourishment options existed largely outside the realm of plains dwellers. The plains dwellers needed the bison and other peoples who lived around bison enjoyed the boon offered by the remnant of the megafauna.

The bounty of the bison, aside from its ecological niche, mainly comes from its carcass with the meat transforming the energy of forage into energy for humans. *Bison bison* carcasses yield on average approximately 550 pounds for a bull, 400 pounds for a cow, 110-165 pounds for sub-adults, and 50 pounds for calves. *Bison occidentalis* totaled an additional twenty-five percent for each category.[56] Considering the caloric content of bison beef, about 635 calories per pound, and the requirements of humans for calories, an average of 2,400 calories considering varied sizes and ages, then approximately 3.8 pounds of bison beef per person each day would suffice for healthful living.[57] Humans can eat between five and six pounds of fresh meat per day and up to ten pounds during feasts. Drying significantly reduces the mass of the meat down to between ten and twenty percent of the original mass. Thus, less than one half pound of dried bison beef could sustain a human each day. Native Americans also pounded the meat adding fat and fruit such as chokecherries to make a high-calorie fuel known as pemmican. The pemmican powered both the humans and their canine companions so critical to their existence for both hunting and transportation prior to the arrival of the horse in a period of time referred to by the late renowned plains anthropologist John Ewers as the "dog days."[58] This means

that bison offered a conversion of seemingly unusable steppe areas into usable nourishment. However, Native Americans needed to process their harvested bison in order to extend the benefits of any successful hunt.

Plains archeologist George Frison estimates that small group and individual hunting probably resulted in more harvesting of bison than the more spectacular communal kills even though the latter receive more attention owing to their greater archeological imprint.[59] Small group and individual hunting techniques varied from stalking, with hunters often disguised in wolf-skins appearing as the herd's attendant wolves, to pursuits in deep snow, mud, water, or ice.[60] Hunting implements included spears, atlatls, and arrows once archery arrived on the scene.[61] Theorists believe that these hunters became quite proficient.[62] Communal hunters, also efficient once the herds approached the kill zone, used the terrain to perform mass harvests. Bison jumps where runners chased and enticed bison over cliffs, surrounds by groups of armed hunters, and impoundments into land forms such as arroyos, sand dunes, or wetlands in addition to human-made barricades of wood, rock, snow, and/or soil all combined into the communal hunting arsenal.[63] The efficiency emerged as an issue with Native Americans as they sought to kill the entire herd of a given event in order to prevent the bison from becoming savvy about the communal hunt techniques.[64] Owing to the sacred nature of such complete interaction with the environment, shamans typically served as the "poundmasters," or hunt leaders, the custodians of bison knowledge originating from divine sources.[65] Quality of life, or even death, depended on the success of the hunt to take advantage of the

bison's ability to convert browse into digestible nutrients offered by the buffalo's flesh.

However, the physical impact of the bison on its human hunters ranged far beyond simple nutrition. Rather, the bison hunting Paleo-Americans and their pre-Columbian descendants organized themselves in accordance with the availability of buffalo.[66] Typically at the family level, everybody participated in communal drives and equal distribution of the harvest occurred.[67] At the band and tribal level, greater accessibility and predictability of bison translated into a higher degree of organization and aggregation of their hunters. With respect to the plains, this meant that the areas with the greatest forage offered the most potential for human organization. Typically, the farther north and east the traveler goes on the plains, then the greater moisture and subsequent forage found.[68] Therefore, the northeastern plains theoretically spawned larger, more organized tribes.[69] The Algonkian and Siouian speakers who eventually made their way onto the plains in the proto-historic period offer evidence of such.[70] However, even in areas of lesser predictability to the south and west, people cooperated to high degrees when possible to harvest larger groups of bison which tended to congregate in response to varying conditions such as the rut or the weather.[71] The rut of late summer and early fall, seeking of shelter in river bottoms in the winter, or even calving in the late spring all provided enhanced opportunities for communal harvesting.[72] Thus, people organized themselves along the same lines as another social species, the buffalo. When the buffalo coalesced into large groups, then, so too did the Native Americans. These assemblies inevitably proved critical to the health and welfare of the people not to

mention their socio-political associations. Nonetheless, the large groups invariably dispersed into smaller groups, both human and bison, more capable of living within the parameters offered by the environment of the plains. Indeed, this fluctuating characteristic of bison presence and absence across a vast landscape prevented the development of a large human population on the plains.[73] Yet, as the generations passed, peoples on the eastern and southwestern margins of the plains came to practice and spread agriculture onto the plains; thus, the buffalo became an integral part of increasingly complex societies with access to a variety of foodstuffs. In fact, bison drives became more sophisticated with the passage of time and as George Frison explains, "Communal bison procurement reached its peak in the late prehistoric period" just prior to the arrival of Europeans and their influences.[74]

Indeed, the arrival of these Europeans and their influences spawned what scholars widely acknowledge as the "Columbian Exchange"[75] which drastically altered the plight of Native Americans and bison after several millennia of relative stability in the "discordant harmony" of ebb and flow in range and population.[76] This massive invasion of Old World biota both augmented and transformed the interdependency of native people and bison.[77] A snapshot of the "day before America,"[78] North America just prior to 1500a.d., reveals an increasing bison range beyond its Great Plains hearth. While probably maintaining themselves in the boreal forest/parkland areas of the northern plains, bison spread into the mountains and valleys west of the Rocky Mountains, deeper into the coastal prairie area of present day Texas, and into the prairies of the Midwest ranging from present Wisconsin across Indiana and into Ohio.[79] However, the "widowed

landscape" resulting from the Old World invasion accelerated the bison's expansion.[80] This proved especially true in the East where the destruction of the indigenous human population by European diseases such as smallpox and measles and an increasing forage area provided by slash and burn agriculture facilitated the bison's movement in the 1600s all the way to the Atlantic and Gulf Coasts of the present southeastern United States and west of the Appalachian Mountains all the way north to Lake Ontario.[81] Although numerically inferior to the herds west of the Mississippi River, the eastern herds became significant. Historian Ted Franklin Belue explains:

> By the dawn of the historic era, the buffalo were a welcome novelty for Indians in the lower Mississippi drainage. In the South, the Cumberland Valley, the Bluegrass region, and the Upper Mississippi basin, wild beef supplemented the Indians' fluctuating food supply. Upon entering this new ecological niche, the buffalo thrived. Herds increased. Range expanded.[82]

The chronicles of the Euro-American visitors to the region reflect the buffalo material culture shared by many of the tribes experiencing the boon of the expanded bison range. As early as 1541, Hernan de Soto's men found the Tula Indians of present Arkansas with piles of hides and stores of bison beef.[83] Later in the sixteenth century, an English scout of Sir Walter Raleigh's found evidence of buffalo material culture in present North Carolina.[84] Nearly a century later, Spanish chroniclers in the present Southeast continued finding natives harvesting bison to the point that they described the Appalachee Indians hunting "abundant" buffalo.[85]

The French made similar observations in their empire of the Mississippi River drainage during the seventeenth century. French explorers dubbed the Siouian speakers they found in present Minnesota in 1662 the *Nation du Bouef*

because of the tribe's reliance on buffalo (*bouef*) hunting. Jesuit missionaries and French explorers found ample evidence in present Illinois and surrounding areas of bison-rich culture to include documentation of the Illinois, Iowa, Miami, Ottawa, Kickapoo, and Potawatomi people practicing communal hunt techniques and distribution not unlike that of ancestral Paleo-Americans.[86] During the period 1718 to 1734, Frenchmen observed heavy reliance on the bison by the Sauk and Fox tribes in and around present Illinois and Iowa. They witnessed buffalo rituals and clan names in neighboring tribes to include the Caddo, Shawnee, and Winnebago. Meanwhile, they also documented buffalo hunting by the southeastern Choctaw, Chickasaw, and Creek tribes. One Frenchman even identified buffalo as the primary staple of the Natchez people dwelling deep in the south during this time period.[87]

Englishmen, or American colonists, made similar observations particularly during the latter half of the 1700s as the French and Spanish influence diminished in the Trans-Appalachian region. The Anglophone adventurers found buffalo material culture pervading the inland tribes from the Chippewa, Wabash, Ottawa, Potawatomi, Winnebago, Illinois, Sauk, Fox, Mascouten, Kaskaskia, Miami, Kickapoo, Delaware, and Shawnee in the north down to the Creek, Chickasaw, Choctaw, Cherokee, and Natchez in the south.[88] Kanta-ke, "land of the great meadows," known presently as Kentucky provided a bison rich environment jealously guarded by the Shawnee and perhaps became what historians later referred to as a "buffer zone" or animal refuge located on the boundary between peoples hostile to one another.[89] In this case, the Americans, Shawnee, and Delaware people all competed for the hunting dominance of

Kentucky in the 1770s.[90] In any event, the pressure brought to bear on the buffalo herds east of the Mississippi River overcame their ability to propagate into that landscape and by the 1830s, no record exists of bison running wild east of the great river.[91] Yet, for several generations, the historic record makes it clear that native people and buffalo co-existed in an existence bereft of domestication and intentional annihilation. Moreover, tribes, such as the Shawnee, fought invaders to preserve their bison landscapes. As well, some historians argue that the forefathers of the Lakota, Nakota, and Dakota people developed their interdependence with the bison when the buffalo nation came to the Siouian speakers' homeland on the Atlantic seaboard in the wake of the widowed landscape. The human ancestors then followed the retracting animal population back to the plains hearth where together they made a nearly final stand only a little more than a century past.[92]

However, many more than the tribes nestled in the East developed bison-related culture during the first three centuries of the Columbian Exchange. Far to the west across the Rocky Mountains, greater numbers of Indian nations came to increasingly embrace a culture heavily influenced by bison. The archeological records make it clear that prehistorically any people of the intermountain West and Pacific Northwest harvested bison when available; but, the historical record more clearly quantifies and qualifies some of the details.[93] For example, we know that Apache peoples came out of their mountain strongholds in the Southwest to hunt and acquire bison products for trade with Puebloan nations. Tribes of the Uto-Aztecan language group moved out of the basins and ranges farther north to become intertwined with the bison culture. From that group, the

Comanches left the mountains forever while the Ute, Shoshone, and Bannock foraged in and out of the mountains. Meanwhile, the plateaus and river valleys even farther north and west harbored the bison hunters emerging from the Salishan and Sahaptian speakers such as the Salish, Spokan, Coeur d'Alene, Nez Perce, Walla Walla and Yakama nations. Other plateau tribes of differing linguistic stocks including the Cayuse and Kutenai became bison hunters as well.[94]

Yet, a significant difference exists between the bison cultures of the West and those of the East in the wake of the Columbian Exchange. Those of the West responded far more to the acquisition of the horse from Euro-American sources, e.g., the Spanish of the upper Rio Grande drainage, than to the expansion of the buffalo's range.[95] Still, as time passed, the horse also brought other heretofore unmentioned tribes to the east from the forested fringes out onto the plains to enmesh themselves in bison material culture. Algonquian speakers such as Arapaho, Blackfeet, Gros Ventres, Cheyenne, Plains Ojibwa, and Plains Cree joined Siouian-speaking Mandan, Hidatsa, Ponca, Kansa, and Osage along with Caddoan speakers such as the Pawnee, Arikara, and Wichita to populate the plains to unprecedented levels. Some of these tribes, notably the Mandan, Hidatsa, and Pawnee maintained horticultural connections while others such as the Blackfeet and Cheyenne eventually abandoned agriculture altogether.[96]

Ultimately, by the nineteenth century, some three dozen different ethnic groups would occupy the Great Plains which became the last refuge for the bison in numbers capable of sustaining entire culture groups.[97] Although some historians view this equestrian migration to the plains as a cultural "genesis,"[98]

others view it more as an intensifier of a "cultural whole previously formed" by preceding pedestrian bison hunters.[99] Certainly, native people throughout the course of prehistory and history demonstrated a desire to harvest bison and maintain a material culture pervaded by the animal. The advantage of the horse in facilitating the interaction of native people and bison came from an increase in the "effective density" of the bison resource owing to decreased search, pursuit, and travel time for equestrian bison hunters.[100] This allowed greater aggregation of bison hunters into bands which coalesced in direct proportion to bison predictability and availability.[101] The inhospitable plains became quite inviting once the horse arrived. The famous Plains Indian "high culture" peaked during the late eighteenth and first half of the nineteenth centuries[102] which led plains traveler John Fremont in 1842 to observe that "Indians and buffalo make the poetry and life of the prairie."[103] The popular image of Native America emerges from this time when Indians on horses pursued innumerable buffalo across the sweeping landscape of interior North America.

Like the images of prehistoric America and the Paleo-American role in it, the vision of the historic West and the role of its indigenous inhabitants in it also warrant presentation and analysis. This proves especially true in light of the present movement of native people to restore the buffalo nation. Interpretation of historical data from the eighteenth and nineteenth century bison landscape attracts controversy. This largely occurs because for many the popular image of Native America poses either a romantic standard, a faulty myth, or a threatening throwback to yesteryear. For native people, the image conjures collective memory of cultural autonomy, a time for them when "the buffalo was everything

to us," as stated by the eminent Crow statesman, Plenty Coups at the end of the buffalo days culminating in the late nineteenth century.[104] The salient arguments revolve around the numbers of bison and the respective historic roles of Native Americans and Euro-Americans in the demise of the great herd.

Upon seeing a great many buffalo, a group of Lakota informed the post clerk at Fort Pierre on the Missouri River in 1834 that it appeared that "the dead ones have all come to life again."[105] The metaphorical reference seems quite vague, yet it parallels the guesses made by Euro-American observers and later historians trying to put a number on the bison population upon contact with the waves of Euro-Americans who overran the buffalo range in the eighty years from the time that Lewis and Clark first crossed the region in 1804 through 1806 until the last crack of the buffalo rifle of commercial Euro-American hide hunters sounded in the mid 1880s. William Clark with a comparatively conservative estimate marveled in 1804 about "buffalo in such multitudes that we can not exaggerate in saying in a single glance we saw three thousand of them."[106] Twenty-eight years later, the renowned painter and early advocate of a grasslands national park protecting native people, flora, and fauna alike, George Catlin described that "the almost countless herds of these animals [bison] blacken the prairies for miles together."[107] Eminent newspaper editor Horace Greeley seemed similarly astounded in 1854 on his cross-country stagecoach trip when he wrote, "I know a million is a great many, but I am confident we saw that number yesterday."[108] Southern plainsman Charles Goodnight offered astronomical observations when he described his memory of the southern plains during the Civil War prior to the hide hunting boom:

> The whole country was covered with what appeared to be a monstrous moving brown blanket, the length and breadth of which could not be determined. The number of animals it contained was beyond the human mind to estimate.[109]

The guesses of historians ranging in the low millions to as high as 200 million reflect the same variation as this small sample of observations stated above.[110] For years, sixty million, a number generated by naturalist Ernest Thompson Seton in 1906, became the standard.[111] The scrutiny of environmental historians over the past thirty years has caused a diminution of the estimate. Largely utilizing grazing capacity estimates based on livestock, these historians such as Tom McHugh, Dan Flores, and Andrew Isenberg estimate that the West contained some twenty to thirty million bison early in the nineteenth century.[112] However, the scientific community remains skeptical of such estimates. Biologists such as James Shaw, Mary Meagher, and Valerius Geist, giants in the field of bison studies, point out flaws in comparing livestock grazing and range capacity with that of bison. As well, the tremendous habitat fluctuations make estimates vague, at best. These scientists offer that "tens of millions" of bison roamed the West early in the nineteenth century, but that could mean as few as ten million depending on numerous variables.[113] Still, these scientists echo the words of Plenty Coups on the significance of bison: "No other large mammal in North America can match the American bison in relation to presettlement numbers, effects on the landscape, and historical importance."[114]

The scientific and history communities reach greater consensus on the explanation of the probable exaggerations of primary chroniclers and subsequent over-estimation by secondary analysts. Bison tend to wander in extended family groups ranging from five to fifty animals. Depending on conditions, these groups

coalesce into far larger groups. Therefore, at times, large areas of the plains contained what appeared as huge herds while other areas contained no bison.[115] For example, Lewis and Clark saw bison just fifteen percent of the days they spent in buffalo country.[116] Moreover, refugia, areas of large concentration of animals, formed in the buffer zones between hostile tribes.[117] When observers traveled into these areas, they saw unrepresentative large numbers of game. Western historian Elliot West explains the result: "Comments from early observers are nearly worthless. Suddenly confronted by vast numbers of animals in the unfamiliar openness of the plains, white emigrants fall back on vague, if memorable metaphors."[118] The estimates of many bison historians revolve around the early observations to Euro-American travelers. The most recent scholarship suggests that millions of buffalo existed, but we really do not know just how many. Still, this does not at all affect the significance of the buffalo nation in the lives of the indigenous people. But how did they interact during this time of profound change caused by the intensification of the Columbian Exchange due to increasing Euro-American encroachment deep into buffalo country?

At the heart of the answer to the question lies the blame for the near demise of the bison from millions to hundreds in the nineteenth century West. The arguments go as far back as contemporary observations of Native American harvesting of bison and extend to the present where scholars debate the issue in professional journals and monographs. Some primary chroniclers carefully documented that Native Americans refused to waste and over-harvest buffalo.[119] Others claimed that Indians readily wasted. [120] Two 1874 editions of *Forest and*

Stream symbolize the sides of the argument. A January article stated: "There never was a greater mistake to suppose that the Indian places no restraint on his powers of securing game. He only kills to eat and not for the amusement of slaughter."[121] Three months later, another article argued: "The Indian kills many times the amount that he needs, but this he considers one of his inalienable rights, and I believe it impossible to prevent this useless slaughter so far as the Indian is concerned."[122] The conflicting arguments of the same periodical probably reflect more the individual perspectives of their authors rather than quantifiable evidence. Writing on the heels of contemporary observers, academicians spanning the turn of the nineteenth into the twentieth century often viewed the vast destruction merely as a part of a larger historical process resulting in the ascendancy of Euro-American hegemony on the North American continent.[123] Fur trade scholar Merrill Burlingame epitomized this view in 1929 when he wrote: "That the twentieth century America might exist the buffalo and the Indian had to go."[124] Such discussion of historical determinism heralded the arguments made by later generations of historians in the twentieth century. Roughly stated, these historians, including general theorists such as Immanuel Wallerstein and Fernand Braudel, proposed that regions and countries around the globe, including their indigenous biota, became sucked into a world system that exploited them.[125] The indigenous populations could not withstand this globalizing pressure and became part of a process typified by over-harvesting of resources. These type of assertions find direct application to Native American and bison interaction in that, to many analysts, the fur trade rendered the Native Americans cultural dependents. The Indians felt the need to acquire Euro-

American goods and utilized bison robes and beef in the form of pemmican to fulfill their desires.[126] For these dependency theorists, North America's indigenous people simply failed to overcome outside pressures exerted upon them by Euro-American technology, materialism, biotic invasion, and coercion.[127]

Historians, though generally in consensus about the heavy role of Euro-American harvesting in the obliteration of the bison herds, continue to draw sides in the debate over the roles of natives in the demise of the bison.[128] This produces a second academic trial of Native Americans as environmental stewards.[129] The first trial, discussed above, examines the role of the Paleo-Americans in the destruction of the megafauna at the end of the Pleistocene and beginning of the Holocene epochs. The second trial, discussed here, presents arguments about possible Native American over-harvesting associated with the fur trade and potential explanations for Native American involvement.[130]

The popular romantic notion that the buffalo-hunting tribes curtailed harvests to preserve the bison, supported at times by bison historians such as Frank Gilbert Roe in *The North American Buffalo* (1951),[131] has come under increasing scrutiny from revisionist environmental historians.[132] Western historian Richard White's landmark study, *The Roots of Dependency* (1983), links the romantic notion with more recent academic work by describing Native American efforts, e.g., Lakota and Pawnee, to engage in selective take of the bison which became moot due to increasing Euro-American encroachment on the plains.[133] The most recent revisions come out of the field of environmental history and include the work of Dan Flores, Andrew Isenberg and William Dobak who focus respectively on the plains in three zones of the southern plains, the

central and northern plains of the continental United States, and the Canadian plains.

Asking the question as to whether or not Plains Indians over-harvested bison in the nineteenth century and therefore hastened their own cultural destruction, all three authors answer in the affirmative with qualification that changes brought on by the advance of Euro-American influences impacted the Native Americans into unsustainable hunting.[134] Flores asserts that wolf predation, climatic variation, increased grazing competition with horses, greater numbers of native hunters, and introduced diseases made southern bison populations vulnerable. When Native Americans began selectively harvesting young cows for pliable robes sought after in the fur trade, then they began to decimate the southern herds.[135] Flores expresses that "Native Americans did not grasp the implications of the market"[136] and that even without the presence of the Euro-American hide hunters culminating in the 1870s "the buffalo would probably have lasted another thirty years."[137]

Isenberg echoes the reasoning of Flores with respect to factors making the overall bison population vulnerable and the fact that native hunting broke the proverbial back of the buffalo nation.[138] He writes, "In the mid-nineteenth century, the combination of Indian predation and environmental change decimated the bison."[139] According to Isenberg, prior to the 1840s, Plains Indians killed bison at the sustainable rate of approximately 500,000 each year. After the 1840s, in order to maximize the robe trade, the native hunters began killing at the unsustainable rate of more than 600,000 each year with increasing selection of

young cows.[140] His analysis contends that the loose social bonds of the equestrian nomads prohibited the enforcement of mandates against waste.[141]

Discussing the Canadian grasslands, Dobak minimizes the impact of disease and environmental conditions such as drought. Rather, he maintains that sheer hunting pressure destroyed the great herds of Canada.[142] The region's population increased by two-thirds from 1820 to 1880. Mixed-blood "Métis" hunters joined First Nations people in seasonal rounds hinged on the presence of bison.[143] These hunters supplied not only buffalo robes like their southern neighbors but also vast quantities of pemmican to fuel the legions of trappers and traders plying the waters and lands of British North America. Dobak asserts that the robe trade alone encouraged these "Native" people to take thirty percent more animals than necessary.[144] Insisting that First Nation groups such as the Cree and Assiniboine believed bison populations infinitely renewable, Dobak claims that mere exclusion of competition served as a perceived suitable conservation tool.[145] In essence, he agrees with Flores that the indigenous people did not understand the impact of the market economy on their lifeways.

The notion that Native Americans failed to grasp the passing of the buffalo receives historiographic debate as well. Revisionists such as Dobak or Jeffrey Ostler scour the historical records to produce theses that native people either could not see or could not understand the diminution of the great buffalo nation.[146] Others, led by Richard White and Dan Flores look to the substantive view that Indian people perceived bison availability linked more to kinship relations between human and buffalo nations than to harvest numbers or conservation[147] Often, historians point to a native belief that buffalo came from

the ground which preserved an infinite supply.[148] When the end of the bison era grew near, tribes perceived that the buffalo returned to their underground hearth.[149]

Yet, the historical records also clarify that Native Americans fully did understand events as they unfolded toward the near extermination of the bison. As early as 1763, a Creek chief, The Mortar, complained to the governor of Georgia that white settlers and livestock persisted in driving the buffalo off the land.[150] A century later, Satanta of the Kiowa lamented at the Medicine Lodge Treaty Council (1867) that white soldiers constantly cut down wood and killed off bison.[151] At about the same time, the Hunkpapa Lakota Black Moon stated that the Euro-Americans "ruin our country with impunity."[152] Red Cloud echoed his compatriot's sentiments on two occasions just over a decade later even before the demise of the northern herd. He explained that whites killed the buffalo, divided the land and brought starvation, and that "where the Indian killed one buffalo, the hide and tongue hunters killed fifty."[153] In 1878, a Blackfeet man told Commissioner John Young, "The time is close when the tail of the last buffalo will be seen disappearing from the prairie."[154] Reflecting on his life during the diminution of the buffalo days, Chief Plenty Coups of the Crow nation enhanced the Blackfeet man's statement: "Anybody could now see that soon there would be no buffalo on the plains, and everybody was wondering how we could live after they were gone."[155]

Moreover, Native Americans did perceive their role in the reduction of bison numbers. In 1868, Thunder Bull, a Cuthead Yanktonai, took credit for Native American use of the guns as a factor in driving game away. Long

Mandan of the Two Kettle Lakota complained of Métis pressure on the northern herd.[156] Nez Perce hunter Yellow Wolf recalled worry over the plight of his grandchildren without the buffalo hunt to sustain them and admitted: "I killed yearlings mostly. It was robes we were after more than meat."[157] Such comments indicate that at least some Native Americans remained cognizant of the end of the buffalo and observed causes to include native absorption into the Euro-American process of hegemony.

Nonetheless, contemporary Native American scholars offer criticism of the revisionist positions in the "trial" of Native Americans as conservationists during the demise of the bison. Popular writer and political scientist, Vine Deloria, Jr., vehemently disagrees with the revisionist position in a recent statement: "It's nonsense. The Indians did not make any appreciable dent in buffalo numbers in the Northern Plains. It's anti-Indian stuff."[158] Fellow Lakota scholar Jim Garrett focuses on the obvious variable of increased Euro-American human presence on the plains in the nineteenth century as the key in any study of bison destruction. He especially concentrates on the use of alcohol as an inducement in the robe and hide trades. The use of such a drug to extend hegemony by the Euro-Americans warrants responsibility regardless of whether the shooter of the bison was Euro-American or Native American.[159] Garrett's argument hearkens back to the words of Plenty Coups: "They told us not to drink whisky, yet they made it themselves and traded it to us for furs and robes until both were nearly gone."[160] In the words of yet another Lakota scholar, Edward Valandra, Euro-American abdication for responsibility in the destruction of the bison proves vexing for Native Americans: "For the western world, the killing of millions upon millions of

buffalo registers nothing more than a blip on an accountability seismograph."[161] The Native American response to revisionist assessments of their relationship with bison proves poignant especially given the fact that the native reaction receives support from the scientific community. For example, environmental science professor Valerius Geist believes that the revisions of the dominant environmental historians on the subject prove faulty. He voices concern that their studies reflect "historian playing ecologist."[162] Thus, the sides remain drawn in the debate over the motives and actions of the native people during the time of the near loss of the great buffalo nation.

Richard White makes a compelling argument with his statement:

> The ubiquity of the Indian as environmentalist unfortunately tends to reduce most research about Indian people and the land to briefs for and against the recent canonization of Indians into environmental sainthood. Such arguments have outlived their usefulness.[163]

Still, given the emotive response witnessed in the public by issues such as free-ranging bison, native hunting rights and environmental protection versus development, one more argument regarding the native role in the destruction of the bison warrants consideration. To date, most of the analyses revolve around motives in harvesting, e.g., formalist economic or substantive cultural, and numbers of bison harvested. Yet, even in the field of contemporary wildlife conservation, the paradigm has shifted from more simplistic game animal management to ecosystem stewardship. This understanding provokes a re-interpretation of some reasonably well known Western historical events to uncover Native American motives and intentions at the twilight of the buffalo days. In keeping with the notion of ecosystem stewardship as a key to wildlife

conservation, then an appropriate lens for viewing the past comes through perceptions of the landscape.

Given a piece of countryside, respective cultures mentally will shape their own landscapes. Geographer Yi-Fu Tuan tells us that "landscape is a sector of reality, a construct of the mind and feeling."[164] Historian Simon Schama adds that human perception forms the difference between simple elements and landscape. He explains: "Landscapes are culture before they are nature; constructs of the imagination projected onto wood and water and rock."[165] Kiowa author and humanist N. Scott Momaday offers a similar native assessment, "Man invests himself in the landscape, and at the same time incorporates the landscape into his own most fundamental experience."[166] Undoubtedly, the Native American ancestors of Momaday and their brethren from other tribes sought to maintain their landscape and lifeways throughout the nineteenth century. They proved less managers of game and more stewards of habitat and environment which heralded recent trends in wildlife conservation.

The Plains Indian wars and treaties receive much attention in the annals of history.[167] The presentations of the material vary, but reading through it from the perspective of landscape history shows that Plains Indians fought and negotiated in a "natural" effort to preserve their landscape and hence provide a suitable habitat for their cultural mainstay, the buffalo nation.[168] For example, Native Americans successfully negotiated to maintain the chase of the buffalo as part of their treaty rights in the two biggest treaty events of the plains, Medicine Lodge Creek (1867) for the southern plains and Fort Laramie (1868) for the northern plains. At the same time, they sought exclusion of Euro-Americans to

the greatest extent possible.[169] The Red River War of 1874-1875 on the southern plains and the Lakota resistance of 1876-1877 on the northern plains occurred when these treaty rights broke down as hide hunters and soldiers invaded the southern hunting grounds preserved by treaty followed by another Euro-American invasion of the northern hunting grounds. Native Americans responded by sacrificing their lives to preserve their landscape. Famed Lakota spokesmen Black Elk and Luther Standing Bear recollected this time of landscape change. Black Elk explained the detriment of the reservation process, "The Wasichus (whites) came, and they made little islands for us and other little islands for the four-leggeds and always these islands are becoming smaller."[170] Standing Bear clarified a native view of Euro-American failure to understand their adopted landscape: "The white man is still troubled with primitive fears; he still has in his consciousness the perils of this frontier continent. But in the Indian the spirit of the land is still vested."[171]

Comments such as those of Black Elk and Standing Bear note the mentality of fear and conquer held by Euro-Americans as they spread onto the plains. Confinement of the natives followed by transformation of the landscape gave the death knell to the buffalo culture pursued by the Plains peoples. The Indians had possessed a desire to maintain a landscape capable of sustaining the great buffalo herds, in essence, the stewardship of an intact ecosystem. Given the latitude to police their own Native American ranks with respect to harvesting, the great buffalo nation potentially could have persisted. If the intertribal warfare had persisted, then buffer zones would have remained as refugia for bison.[172] If intertribal peace had been permitted to prevail, then self-

regulation may have occurred as Native Americans began to realize that the buffalo nation was in dire circumstances. Either way, the native people of the Great Plains did not receive an opportunity to prove their stewardship of their environment, the last bastion of the immense bison herds. The Army confined the Indians to reservations and applauded the demise of the bison; Euro-American hide hunters blasted the herds into oblivion; the American government failed to lift a finger to prevent the service of such injustice; and Euro-American agriculturalists carved-up the land while changing the biota which ultimately prohibited any possible resurgence of free-ranging bison herds reminiscent of the previous thousands of years.

For its part, the American government proved all too glad to see the passage of the bison. On the front-lines, Army commanders indiscriminately slaughtered buffalo, supplied ammunition to and protected the Euro-American hide hunters to include scofflaws inconsiderate of native hunting rights, and lobbied for prohibiting protection of the herd.[173] Exemplary of this, George Armstrong Custer represented the most ardent and wasteful buffalo hunter in the Seventh Cavalry.[174] Meanwhile, Custer's colleague, Colonel Richard Irving Dodge, applauded Euro-American hunters with the directive: "Kill every buffalo you can. Every buffalo dead is an Indian gone."[175] Meanwhile, Custer's boss, General Philip Sheridan made several comments around the country lauding the destruction of the bison.[176] Back in Washington, D.C., attempts by Congress in 1874 to pass a bill protecting bison received a pocket veto from President Ulysses S. Grant.[177] One Congressman epitomized a prevailing attitude of policymakers bent on forever transforming the Western landscape: "The best

thing which could happen for the betterment of our Indian question would be that the last remaining buffalo should perish."[178]

For their part, the hide hunters, Euro-Americans who shot bison merely for their unprocessed hides destined for tanneries to the east and occasionally some of the meat such as the humps and tongues, readily complied with the wishes of the Army and Eastern politicians.[179] These market hunters hit the plains en masse following the invention of processes to convert bison hides into leather in Germany and in the United States in 1871.[180] Bison hides became industrially-processed robes, blankets, overshoes, machine belts, cushions, furniture, wall coverings, and military uniform accouterments.[181] The "buffalo runners," hide hunters, used large caliber guns to shoot as many bison as possible. They killed millions and their efforts resulted in the reduction of the last of the herds to remnants of small groups or individuals. They hastened the end of the buffalo nation on the southern plains by 1877 and on the northern plains by 1885.[182]

Meanwhile, cattle supplanted bison on the plains during the 1870s and 1880s. Some historians believe that diseases, including anthrax, brucellosis and tuberculosis, brought by cattle provided yet another death sentence for the once prolific bison herds.[183] In the 1880s, farmers began to dominate the region and the open range essentially ended. The agriculturalists busted the sod and planted Eurasian crops such as wheat in a quest for a dominant monoculture. These agriculturalists also partitioned the land with fences and fields. Their concept of a habitable landscape did not include the restoration of the buffalo nation. Worthy of note, the decision to exclude the bison clearly comes from a Euro-American cultural construct. After all, farming Indian tribes of the plains,

including the Mandans, Hidatsas, and Pawnees among others, never sought to drive the bison out of their foodways. Rather, they sought a comprehensive food culture mixing agricultural produce and bison beef. Nonetheless, while the hide hunters completed the destruction of the bison, the Euro-American farmers transformed the landscape and completely ended the potential for any quick return to the buffalo days.[184]

Regardless of the causes of the destruction of the bison, the effect on the Native Americans nearly proved cataclysmic. Bison historian Martin Garretson summarizes the impact, "It was a decimation of race as well as species."[185] Examining just one tribe reveals the consequences of the loss of the bison. In 1877, the Blackfoot of Canada enjoyed more than adequate nourishment largely derived from bison beef.[186] When between six and ten thousand Indian refugees from the United States invaded the Blackfoot hunting territory in 1877 and 1878, the death knell sounded and the Blackfoot were starving in Canada by the winter of 1879.[187] South of the forty-ninth parallel, the Blackfeet tenuously clung to their bison culture until 1883 when the hide hunters wiped out the herds depended upon by the tribe. In 1884, more than one-fourth of the 2,300 Blackfeet in the United States starved to death.[188] During the 1940s, John Ewers, resident anthropologist of the Blackfeet nation, observed lingering effects of this end of an era well into the twentieth century. He writes:

> Poverty that still exists on many reservations of the northern plains is stark proof of the persistence of Indian inability to adjust the changed conditions which followed the sudden death of the fur trade [buffalo days] in this region . . . and the horrible example of the effect on human lives of the extermination of the buffalo must continue to haunt those who are concerned about the future of man's relationship to his environment in North America.[189]

Native American statesmen of other tribes, Plenty Coups and Sitting Bull, eloquently articulated similar effects on their respective nations. Plenty Coups stated, "When the buffalo went away we became a changed people. Idleness that was never with us in buffalo days has stolen much from both our minds and bodies."[190] He added, "When the buffalo went away the hearts of my people fell to the ground, and they could not lift them up again."[191] Sitting Bull made a similar statement, "A cold wind blew across the prairie when the last buffalo fell - a death wind for my people."[192]

As the virtual apocalypse caused by the demise of the buffalo nation neared, spiritual ceremonies multiplied across Indian country in an effort to restore a landscape again home to the bison.[193] This movement culminated with the ceremony known as the Ghost Dance.[194] For Plains tribes, e.g., the Lakota, the ceremony possessed four key elements reflective of the native desire for land stewardship. First, the earth would regenerate. Second, the buffalo would return. Third, the Euro-Americans would go away. Fourth, the Indian population would multiply. The movement ended tragically and symbolically at Wounded Knee Creek in South Dakota on December 29, 1890 when Seventh Cavalry soldiers massacred 350 men, women, and children of the Lakota tribe led by Chief Big Foot of the Minniconjou band.[195] In many ways, this tragedy marked the nadir of Native American existence. Their near demographic collapse would hit bottom within a dozen years and they lost nearly all autonomy.

The buffalo also hit its nadir at this time. In 1886, William Templeton Hornaday left his Eastern headquarters as chief taxidermist for the Smithsonian to go to Montana to get some specimens for the museum before no more buffalo

existed. With some irony, he managed to track down and shoot nearly thirty animals for his collection.[196] This event spawned Hornaday's contemporary study of the extermination of the bison in the late 1880s. He estimated that across the West outside of Yellowstone National Park approximately eighty-five bison still ran wild. Another 200 roamed in Yellowstone. Perhaps as many as 550 scattered about in the parklands and forested areas of present northern Alberta and the Northwest Territories. He guessed that another 256 existed in captivity for a total of 1,091 in 1887.[197] Euro-American hunters and poachers continued destroying the remnants of the wild population so that by turn of the century only a couple dozen bison survived in Yellowstone and other wild bison south of the Canadian border failed to exist with the exception of one small herd in the Texas panhandle. The herd in Canada continued to diminish as well.[198] The buffalo nation had been brought to its knees.

Poachers in the snows of Yellowstone slaying some of the last of the buffalo; soldiers in the snows of South Dakota slaying some of the last of the Indians; the parallel proves simply ominous. A relationship generated by collective ancestors over thousands of years teetered on the edge of extinction. Ultimately, Native Americans perished as they struggled to preserve their way of life based on the buffalo nation and its unfettered landscape which both partners deemed home. However, Chief Big Foot and his followers probably did not realize at the time as they lay dying on the frozen ground that in some small way their prayers were beginning to get a positive answer. They would not live to see the fulfillment of their desires and the intentions of the Ghost Dance ceremony, but native people, honoring an ancient implied covenant, were working to save

brother buffalo and hence the land and its indigenous people. By 1890, Native Americans had caught bison calves and successfully established protected bison herds which would guarantee survival of the species and spread its progeny across North America for generations to come.

Endnotes

[1]Arvol Looking Horse, Lakota chief and keeper of the Sacred White Buffalo Calf Pipe, made this comment during his guest address at the Bison Conference 2000 hosted by the University of Nebraska, Lincoln, 7 April 2000.

[2]Bison and buffalo will be used interchangeably in this manuscript. Bison is the correct taxonomic term for *Bison bison*, but buffalo serves as a vernacular term. The etymology of the term buffalo remains somewhat obscured through history. It probably originated with the French term for bison, "les bouefs," which English settlers adopted. By the mid-nineteenth century Americans referred to buffalo as the accepted term derived from variants such as "boffle," "buffler," and "buffilo." See Harold Danz, *Of Bison and Man* (Boulder: University Press of Colorado, 1997), 6, and Michael Sample, *Bison: Symbol of the American West* (Billings: Falcon Press Publishing, 1987), 10.

Two extant bison species survive today, the American bison, *Bison bison*, and the European bison, *Bison bonasus*, known as the *wisent*. No indigenous "true buffalo" exist in North America as their home ranges include parts of Asia and Africa. Both true buffalo and bison belong to the bovid family and the ox-like tribe of the bovinae subfamily along with their relative, wild cattle. See Danz, *Of Bison and Man* (1997), 6-7; Jim Garrett, *The Cheyenne River Tribal College Tatanka (Bison bison) Management Program* (unpublished thesis, Humboldt State University, 2001), 4-5, 19; Linda Hasselstrom, *Bison: Monarch of the Plains* (Portland: Graphic Arts Center Publishing, 1998), 81; and Frank Gilbert Roe, *The North American Buffalo: A Critical Study of the Species in Its Wild State* (Toronto: University of Toronto Press, 1951, second edition, 1970, reprint, 1972), 3-5.

[3]Although the term "Indian" in reference to the native people of the Americas stands as a classic historic error dating back to Christopher Columbus, this paper interchangeably will use the terms Native American, American Indian, and Indian. The justification for this stems from the common vernacular usage and understanding of these terms combined with the comfort by which Native Americans refer to themselves as "Indian" both in academic and non-academic settings. When referring to the native people of Canada, the term "First Nation" also will receive frequent use in compliance with the vocabulary utilized in Canada.

[4]Often, the native belief structure assigns equal status among humans and animals. For example, the Lakota refer to the bison as *Pte Oyate,* the buffalo nation. The concept of "bison brother" remains quite familiar to many Native Americans. See Valerius Geist, *The Buffalo Nation: History and Legend of the North American Bison* (Stillwater, Minnesota: Voyageur Press, 1996), 18, 28-29; Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 4-5; and Bryan Hodgson, "Buffalo: Back Home on the Range," *National Geographic* 185:5 (November, 1994), 69, 89.

[5]The concept of maintaining the "dignity" of the bison, meaning a non-domesticated status, resides as a priority for Native Americans in bison restoration. Much of the rhetoric at the Intertribal Bison Cooperative's annual conference in September, 1999 at Polson, Montana with the theme of the future of the Yellowstone herd aimed at describing the need for bison to remain wild and to experience maximum space and range conditions when in captivity.

[6]Looking Horse, guest address, Bison Conference 2000 hosted by the University of Nebraska, Lincoln, 7 April 2000.

[7]Undeniably, bison command a large presence in literature. George Arthur's bibliography, *A Buffalo Round-Up: A Selected Bibliography* (Regina: University of Regina Canadian Plains Research Center, 1985), lists more than 2,500 titles. The number continues to grow with the publication of several important monographs and numerous articles over the past fifteen or so years. As noted in a more recent bibliography and short historiographic essay by Andrew Isenberg in his recent work, *The Destruction of the Bison: An Environmental History, 1750-1920* (Cambridge: Cambridge University Press, 2000), 3-5, the antecedents of these monographs extend all the way back to Joel Allen's 1876 book, *The American Bisons, Living and Extinct* (Cambridge: University Press, 1876). Allen, a zoologist, concerned himself largely with bison natural history and range. His contemporary observations revealed his attempt to reconcile science with history. William Templeton Hornaday used a similar approach in his classic 1886 portrayal known as *The Extermination of the Bison* in which he documented the nadir of bison existence [Hornaday, "Discovery, Life, History, and Extermination of the American Bison," *Report of the National Museum, 1887* (Washington, Government Printing Office, 1889), 367-548].

For several generations, influential writers after Allen and Hornaday mainly emerged from the ranks of naturalists. Examples of this genre of buffalo literature include Ernest Thompson Seton, "The American Bison or Buffalo *Bison Americanus* (Gamelin, 1788)," *Scribner's Magazine* 40:4 (October 1906), 384-405, Martin S. Garretson, *The American Bison: The Story of Its Extermination as a Wild Species and Its Restoration Under Federal Protection* (New York: New York Zoological Society, 1938), and Dewey J. Soper, "History, Range, and Home Life of the Northern Bison," *Ecological Monographs* 11:4 (October 1941), 349-412. Seton, a naturalist writer and illustrator, offered a sympathetic post-contemporary account of the wild bison herds. Garretson, the secretary of the American Bison Society and a curator at the New York Zoological Park, wrote a standard history of the bison which means that he began with a natural history portrayal and then progressed through bison and Native American interaction to bison and Euro-American interaction to near extinction and then recovery. His primary account of the recovery efforts set his book apart from later monographs with a similar approach. Soper, a Canadian government biologist, shed light on the bison of the northern plains and woodlands. These works typified the period prior to 1950 when academicians and journalists began a domination of the bison monograph market.

Frank Gilbert Roe offered an unprecedented compendium on the bison in *The North American Buffalo: A Critical Study of the Species in Its Wild State*

(Toronto: University of Toronto Press, 1951, second edition, 1970, reprint, 1972). Originally a transportation historian studying the origins of British roads in animal trails, Roe devoted fifteen years of research to bison resulting in a near one thousand page tome on the history of the bison complete with thirty-nine appendices on topics ranging from "multiplicity of Indian languages" to "Musk-Ox as buffalo." The book possesses extraordinary detail and notation. Virtually all subsequent academic studies cite Roe in their lists of references. Indeed, his work poses as the most significant bridge from the first half of the twentieth century until the early 1970s when not less than five important works appeared including the labors of Francis Haines, Tom McHugh, Mary Meagher, Cy Martin, and David Dary.

Historian Francis Haines authored *The Buffalo: The Story of American Bison and Their Hunters from Prehistoric Times to the Present* (Norman: University of Oklahoma Press, 1970, reprint, 1995) which explained the story of the bison as indistinguishable from that of the Native Americans. The book, published for a lay audience, offers a perspective that describes the Plains Indian wars as a struggle for hunting grounds and the protection of the bison hunting way of life. Haines focused on the classic association of the equestrian Indian and the omnipresent buffalo.

By contrast, McHugh's, *The Time of the Buffalo* (Lincoln: University of Nebraska Press, 1972, reprint, 1979) began as a dissertation in zoology, and Meagher, whose monograph *The Bison of Yellowstone National Park* (Washington: Government Printing Office, 1973) resulted from more than a decade in the field with her subjects, delivered works with a more scientific bent. *The Time of the Buffalo* described behavior and ecology based on McHugh's considerable range study with bison. McHugh also provided a documented history which capitalized on his scientific background with soundly justified speculation on migrations and populations . Meagher's book, although focused on the Yellowstone bison, provides enough overview to receive consideration here with other general monographs and articles. She combined intimate biological knowledge with readable prose to deliver a landmark work. *The Bison of Yellowstone National Park* stands as an oft-cited classic, the scientific version of Roe's history book in its ubiquitous appearance.

Publishers put out more journalistic approaches at about the same time with Cy Martin's *The Saga of the Buffalo* (New York: Hart Publishing, 1973) in 1973 and David Dary's *The Buffalo Book: The Full Saga of the American Animal* (Chicago: Swallow Press/Ohio University Press, 1974, reprint, 1989) in 1974. Both books offer a reasonable standard portrayal in the spirit of Martin Garretson with less detail than Roe and less scientific analysis than McHugh or Meagher. *The Buffalo Book* became the far more popular of the two works with a second printing in 1989. Dary, a journalism professor, gave not only a balanced historical account but also brought the bison's story right up to his time of writing with respect to population and herd location. As well, he wrote chapters dealing with bison kitsch.

Perhaps the best comparison to Dary's work comes from Larry Barsness' *Heads, Hides & Horns: The Compleat* [sic] *Buffalo Book* (Fort Worth: TCU Press, 1985). This well-illustrated volume, like that of Dary, boasts both a comprehensive bibliography and numerous anecdotes from primary accounts.

Barsness' general readability with a plethora of accompanying images foreshadowed the trend of bison general monographs for the next decade and a half.

Specifically, three books and one magazine article came out in the late 1980s and 1990s that define the available literature on bison. Michael Sample's *Bison: Symbol of the American West* (1987); Douglas Gruenau's *Bison: Distant Thunder* (New York: Takarajima Books, 1995); and Linda Hasselstrom's *Bison: Monarch of the Plains* (1998) all offer text portraying bison natural history, pre-history, and history. Photographs fill the pages with current images of bison located on public ranges around the country. A 1994 *National Geographic* article entitled "Buffalo: Back Home on the Range" by Bryan Hodgson also epitomizes the popularity of the topic and its presentation as "trade" material lending itself well to photographic enhancement. These works offer less for the academic community than other above-mentioned monographs, but they offer very easy reading, high interest literature for the lay public.

Nonetheless, more academic literature, often re-hashing the same general histories, emerged during the same time period. Canadians John Foster, Dick Harrison, and I. S. MacLaren edited *Buffalo* (Edmonton: University of Alberta Press, 1992). Part of the Alberta Nature and Culture Series and like the work of Dewey J. Soper (1941), *Buffalo* addressed the plight of the bison on the northern plains and in the northern woodlands. The work documented the bison-human relationship of Native Americans, Métis, and Euro-Americans from the days of the bison jump to the establishment of policy advocated by Parks Canada. Another Canadian, Valerius Geist, an eminent zoologist and university professor, wrote *Buffalo Nation* (1996). Geist departed from his monograph predecessors with his very conscientious effort to reconcile First Nation perspectives with those of science. This resulted in a work similar to that of McHugh, Dary, and Barsness, but unique in its interpretation of natural and indigenous history. American Harold Danz's 1997 book entitled *Of Bison and Man* became the last major monograph of the 1990s focusing on bison history. That yet another work on general bison history could broach the market demonstrates the on-going popularity of general bison history not to mention the numerous more specific books and articles. Bison maintain a strong presence in North American history.

Worthy of note, several recent authors worked to fill the niche for bison and bison-Indian study for young readers. Macmillan Publishing Company published master illustrator and author William D. Berry's *Buffalo Land* in 1961 as part of the Frontier West book series. A second printing in 1988 gave testimony to the book's timelessness. The editors of *Cobblestone: The History Magazine for Young People* devoted its August, 1981 issue, "The Story of America's Buffalo" to the introduction of bison to its readership. Russell Freedman's *Buffalo Hunt* (n. p.: Holiday House, 1988), a celebration of Native American and buffalo interaction for young readers, also received a second printing (1995) like Berry's *Buffalo Land*. Journalist Todd Wilkinson's *Bison for Kids* (Minnetonka, Minnesota: NorthWord Press, 1994) became part of the National Wildlife Federation's "Wildlife for Kids" series (1998). At the same time, the Intertribal Bison Cooperative offered *Gifts of the Buffalo Nation* (Rapid City: ITBC, 1998), another work focusing on the bison-Indian relationships. The effort continues in twenty-first century publication with Ken Robbins' *Thunder of the Plains: The*

Story of the American Buffalo (n. p.: Atheneum Press, 2001), a standard history of the bison aimed at a young audience. More specific to this manuscript, Neil Waldman's *They Came from the Bronx: How the Buffalo Were Saved from Extinction* (Honesdale, Pennsylvania: Boyds Mills Press, Inc./Wildlife Conservation Society, 2001) describes the early efforts to restore bison to the plains with the stocking of the Wichita Mountains Wildlife Refuge. Thus, the vast spectrum of bison literature reaches youth which certainly perpetuates interest in the topic and more future literature on this animal icon.

[8]Hodgson, "Buffalo: Back Home on the Range," 89.

[9]Hasselstrom, *Bison: Monarch of the Plains*, 25.

[10]For a discourse on change in nature, see Daniel Botkin, *Discordant Harmonies: A New Ecology for the Twenty-First Century* (Oxford: Oxford University Press, 1992).

[11]Michael Wilson sheds light on the over-abundance of nomenclature associated with bison evolution as garnered from the archeological record in his article entitled "Problems in the Speciation of American Fossil Bison," 178-199, in R. G. Forbis, *et al*, eds., *Post-Pleistocene Man and His Environment* (Calgary: The Student's Press/University of Calgary, 1969). He writes: "Unfortunately, such studies are clouded by a superabundance of taxa that do not adequately reflect biological reality. Useful in their time, these taxa were founded upon inadequate data, and statistical methods were less refined than presently available" (p. 178).

Roberta Speer also comments on this plethora of taxonomic jargon in her article, "Bison Remains from the Rex Rodgers Site," *Plains Anthropologist* 23:82, 2 (November 1978), 113-127. She explains: "Misunderstanding and disagreement arise partly because of varying definitions and uses by paleontologists and biologists of terms such as species, subspecies, and lineage. For instance the term 'species' is used variously to denote biospecies, morphospecies, chronospecies, or some combination of the three without clarification as to which meaning is intended" (p. 126).

R. D. (Dale) Guthrie elucidates the historiography of such classification by noting that the late nineteenth and early twentieth century direction of science consisted of an era of typological systematics, whereas, zoologists today lean toward synonymy. See Guthrie, "Bison and Man in North America," *Canadian Journal of Anthropology* 1 (1980), 55.

[12]R.D. Guthrie, "Bison Evolution and Zoogeography in North America During the Pleistocene," *The Quarterly Review of Biology* 45 (March 1970), 1-15; Guthrie, "Bison and Man in North America;" Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 19-21; Jerry McDonald, *North American Bison: Their Classification and Evolution* (Berkeley: University of California Press, 1981), 236-258; Mary Meagher, "Evolutionary Pathways and Relationships," unpublished chapter draft prepared for publication, in author's possession (July 2001), 1-2. Morris F. Skinner and Ove C. Kaisen's "The Fossil

Bison of Alaska and Preliminary Revision of the Genus," *Bulletin of the American Museum of Natural History* 89 (1947), 131-242, provides an oft-cited landmark study. The bison monographs usually cover bison evolution: Barsness, *Heads, Hides & Horns*, 27-30; Danz, *Of Bison and Man*, 6-12; Dary, *Buffalo Book*, 5-6; Haines, *The Buffalo*, 7-18; McHugh, *Time of the Buffalo*, 27-38; and Sample, *Bison*, 22-24.

See also, E.C. Pielou, *After the Ice Age: The Return of Life to Glaciated North America* (Chicago: University of Chicago Press, 1991) for a general overview of flora and fauna colonization and re-colonization associated with glacial North America.

[13]Michael C. Wilson, "Bison in Alberta: Paleontology, Evolution, and Relationships with Humans," Foster, Harrison, and MacLaren, eds., *Buffalo*, 10. See also: R. D. Guthrie, "Bison and Man in North America," *Canadian Journal of Anthropology* 1:1 (June 1980), 70; Michael Voorhies, "Hooves and Horns: The Coming of the Bison," *Nebraska History* 75:1 (Spring, 1994), 75-79; Michael Wilson, "Archaeological Kill Site Populations and the Holocene Evolution of the Genus *Bison*," *Plains Anthropologist* 23:82,2 (November 1978), 9-22.

George Frison and Waldo Wedel pose as the "giants" in the field of bison and Paleo-American archeology, especially in the present day Great Plains. Consult their monographs: George Frison, *et al*, *Prehistoric Hunters of the High Plains*, second edition (San Diego: Academic Press, Inc., 1978, reprint, 1991); and Waldo Wedel, *Prehistoric Man on the Great Plains* (Norman: University of Oklahoma Press, 1961).

[14]Discussion of "creation" warrants consideration of religion and/or philosophy. For a broad commentary on Native Americans and religions, see Vine Deloria, *God Is Red* (New York: Grosset and Dunlap, 1973). In general, the presence of animals and animal spirits pervades Native American cosmology. In particular, see the works of religious studies professor Howard Harrod including: *Renewing the World: Plains Indian Religion and Morality* (Tucson: University of Arizona Press, 1987) which reveals the centrality of the bison to Plains Indian religion; *Becoming and Remaining a People: Native American Religions on the Northern Plains* (Tucson: University of Arizona Press, 1995) which further validates the conclusions of *Renewing the World*; and *The Animals Came Dancing: Native American Sacred Ecology and Animal Kinship* (Tucson: University of Arizona Press, 2000) which presents Harrod's arguments to a lay readership along with contemporary analysis indicating that many Native Americans continue to closely identify with the animal world in their cosmology. Edward O. Wilson's "Biophilia Hypothesis" offers further discussion of the ties between the animal and human worlds in cosmology for cultures in general [See, Stephen R. Kellert and Edward O. Wilson, *The Biophilia Hypothesis* (New York: Shearwater Books, 1993)]. For another work which generally portrays Native American spirituality with its emphasis on human-animal relations see Åke Hultkrantz, "Water Sprites: The Elders of Fish in Aboriginal North America," *American Indian Quarterly* 7:3 (summer 1983), 1-22. For a more specific work on a tribe imbued with bison culture in religion/philosophy, see Joseph Epes

Brown, *Animals of the Soul: Sacred Animals of the Oglala Sioux* (Rockport, Massachusetts: Element, Inc., 1992). Stephen C. Rockefeller and John C. Elder, eds., *Spirit and Nature: Why the Environment is a Religious Issue - An Interfaith Dialogue* (Boston: Beacon Press, 1992) provides a solid introduction to comparative religions on the human-nature relationship.

[15]Barsness, *Heads, Hides & Horns*, 78-80; and Harrod, *Renewing the World*, 51-52.

[16]Richard Erdoes and Alfonso Ortiz, eds., *American Indian Myths and Legends* (New York: Pantheon Books, 1984), 8-11. Erdoes and Ortiz caution their readers: "To those used to the patterns of European fairy tales and folk tales, Indian legends often seem chaotic, inconsistent, or incomplete. To try to apply conventional (Western) logic is not only impossible but unnecessary. Spinning out a single image or episode may be the salient feature of - indeed the whole reason for telling a tale" (xii).

[17]Sandy Johnson, *The Book of Elders: The Life Stories and Wisdom of Great American Indians as Told to Sandy Johnson* (San Bruno, California: Audio Literature, 1996); and Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 4-5.

[18]Wolf Smoke, "Bison Love Their Children Too," lecture presentation at the Bison Conference 2000 hosted by the University of Nebraska, Lincoln, 7 April 2000.

[19]For an essay by Pawnee tribal historian Roger Echo Hawk on collaboration between scientists and oral traditions, see "Working Together," *Nebraska History* 75:1 (Spring, 1994), 138, or "Working Together - Exploring Ancient Worlds," *Society for American Archeology Bulletin* 11:4. See also Larry Evers and Barre Toelken, eds., *Native American Oral Traditions: Collaboration and Interpretation* (Logan: Utah State University Press, 2001); and Angela Cavender Wilson, Power of the Spoken Word: Native Oral Traditions in American Indian History, 101-116, in Donald Fixico, ed., *Rethinking American Indian History* (Albuquerque: University of New Mexico Press, 1997) for arguments explaining the importance of considering Native American oral traditions.

[20]Valerius Geist, "The Relation of Social Evolution and Dispersal in Ungulates During the Pleistocene, with Emphasis on the Old World Deer and the Genus *Bison*," *Journal of Quaternary Research* 1 (1971), 283-315; Geist, *Buffalo Nation*, 22, 29-30, 40-41; and Jerry McDonald, *North American Bison: Their Classification and Evolution* (Berkeley: University of California Press, 1981), 265-266.

[21]Geist, *Buffalo Nation*, 40-41.

[22]For the Arikara story, see Harrod, *Animals Came Dancing*, 55-56. For the Blackfeet tradition, see George B. Grinnell, *Blackfeet Lodge Tales* (Lincoln: University of Nebraska Press),137-144; Wilson, "Bison in Alberta," 1; and Barsness, *Heads, Hides & Horns*, 75-85. Barsness also describes the Cheyenne belief on the aggressive bison of antiquity. For further rendition of the Cheyenne stories, see also George B. Grinnell, *The Cheyenne Indians,* 2 vols., (Lincoln: University of Nebraska Press, 1972), vol. I, 244-252; and "The Great Race," in Richard Erdoes and Alfonso Ortiz, eds., *American Indian Myths and Legends* (New York: Pantheon Books, 1984), 390-392.

[23]For the Blackfeet explanation, see McHugh, *Time of the Buffalo*, 130-131. Andrew Isenberg relates the Cheyenne story in *Destruction of the Bison*, 75. Valerius Geist garnered the Lakota story in *Buffalo Nation*, 34, from Katherine Berry Judson, *Myths and Legends of the Great Plains* (n. p.: A.C. McClurg Co., 1913).

[24]David Hurst Thomas, *Exploring Ancient America: An Archaeological Guide*, 58-59.

[25]R.D. Guthrie, "Mosaics, Allelochemics and Nutrients: An Ecological Theory of Late Pleistocene Megafaunal Extinctions," in Paul S. Martin and Richard G. Klein, eds., *Quaternary Extinctions: A Prehistoric Revolution* (Tucson: University of Arizona Press, 1984), 267.

[26]Mark N. Cohen, *The Food Crisis in Prehistory: Overpopulation and the Origins of Agriculture* (New Haven: Yale University Press, 1977), 181; Geist, *Buffalo Nation*, 18-19; A-6, 47. See also Dale (R. D.) Guthrie, *Frozen Fauna of the Mammoth Steppe* (Chicago: University of Chicago Press, 1989) for a thorough analysis of Pleistocene and early Holocene fauna which also conveys information derived from the analysis of "Blue Babe," a steppe bison dated to 36,000 B.P.

[27]See Carl O. Sauer, "A Geographic Sketch of Early Man in America," *Geographic Review* 34:4 (1944), 529-573; R. D. Guthrie, "Bison and Man in North America," *Canadian Journal of Anthropology* 1:1 (June 1980), 55-73; W. D. Strong, "The Plains Culture in Light of Archaeology," *American Anthropologist* 35:2 (April-June, 1933), 283; and Joe Ben Wheat, "A Paleo-Indian Bison Kill," *Scientific American* 216:1 (January 1967), 44.

[28]The Clovis and Folsom labels refer to lithic technology. See Brian Reeves, "The Southern Alberta Paleo-Cultural – Paleo-Environmental Sequence," in R. G. Forbis, *et al, Post-Pleistocene Man and His Environment on the Northern Plains* (Calgary: The Student's Press/University of Calgary, 1969), 21-25; Pielou, *After the Ice Age*, 289; Cohen, *Food Crisis in Prehistory*, 170-171; Thomas, *Exploring Ancient America*, 10-2; Wheat, "A Paleo-Indian Bison Kill," 47; Robert Claiborne, ed., *The Emergence of Man: The First Americans* (New York: Time-Life Books, 1973), 48-49; and Bob Pickering, "Natural History and Human Interaction," *Bison World* 25:1 (January-March, 2000), 14-15.

[29]Dan Flores, "Bison Past, Bison Present," keynote address at the Bison Conference 2000 hosted by the University of Nebraska, Lincoln (6 April 2000).

[30]Paul S. Martin and Richard G. Klein gathered several provocative essays addressing the "overchill vs. overkill" debate in *Quaternary Extinctions*. The book served as a follow-up to an earlier work also edited by Paul Martin, *Pleistocene Extinctions: The Search for a Cause* (New Haven: Yale University Press, 1967). Further assessments of the debate on the extinctions of the megafauna exist in Cohen, *Food Crisis in Prehistory*, 184-187; and Pielou, *After the Ice Age*, 251-266.

For an orientation to scientists who emphasize the role of disease in the extinctions of the late Pleistocene and early Holocene epochs, see Susan Okie (*Washington Post*), "Rethinking Extinction: Clovis, Climate or Germ?" *Wenatchee World* (November 16, 2001), C5.

[31]Dan Flores, *Caprock Canyonlands: Journeys into the Heart of the Southern Plains* (Austin: University of Texas Press, 1990), 17.

[32]Jerry McDonald, "The Reordered North American Selection Regime and Late Quaternary Megafaunal Extinctions," in Martin and Klein eds., *Quaternary Extinctions,* 404-439. For "k" and "r" type discussion, see McDonald, *North American Bison*, 245-249, 265-266 and; C. Thomas Shay, "Late Prehistoric Bison and Deer Use in the Eastern Prairie-Forest Border," *Plains Anthropologist* 23:82,2 (November 1978), 194.

[33]Guthrie, "Mosaics, Allelochemics and Nutrients: An Ecological Theory of Late Pleistocene Megafaunal Extinctions," in Martin and Klein, eds., *Quaternary Extinctions*, 259-298.

[34]For a study describing the grazing versus browsing capabilities of bison, see Van Waggoner and Mike Hinkes, "Summer and Fall Browse Utilization by an Alaskan Bison Herd," *Journal of Wildlife Management* 50:2 (1986), 322-324.

[35]Guthrie, "Bison and Man in North America," 68.

[36]For the ebb and flow of prehistoric bison populations, see Tom Dillehay, "Late Quaternary Bison Population Changes on the Southern Plains," *Plains Anthropologist* 19:65 (August 1974), 180-196; Dan Flores, "Bison Ecology and Bison Diplomacy: The Southern Plains from 1800 to 1850," *Journal of American History* 78:2 (September 1991), 469; McDonald, *North American Bison,* 250; Elliott West, *The Way to the West: Essays on the Central Plains* (Albuquerque: University of New Mexico Press, 1995), 80; and Waldo Wedel, *Central Plains Prehistory: Holocene Environments and Culture Change in the Republican River Basin* (Lincoln: University of Nebraska Press, 1986), 72-80.

[37]Flores, "Bison Ecology and Bison Diplomacy," 469; Flores, *Caprock Canyonlands*, 16. For the ability of bison to disperse into various ecological niches, see Henry T. Epp, "Way of the Migrant Herds: Dual Dispersion Strategy Among Bison," *Plains Anthropologist* 33:121 (August 1988), 309-320.

[38]For the dynamic nature of the effects of prehistoric bison populations on human organization, see Brian Reeves, "Communal Bison Hunters of the Northern Plains," in Leslie Davis and Brian Reeves, eds., *Hunters of the Recent Past* (London: Unwin Hyman, 1990), 173-191 and Douglas Bamforth, *Ecology and Human Organization on the Great Plains* (New York and London: Plenum Press, 1988), *passim*. See also Charles A. Reher, "Buffalo Population and Other Deterministic Factors in a Model of Adaptive Process on the Shortgrass Plains," *Plains Anthropologist* 23:82,2 (November 1978), 23-39.

[39]This overkill versus overchill debate poses the first of two reflective trials of the Native Americans as conservationists. Although Western historian Richard White dismisses such arguments as "outlasting their usefulness," he and others continue to re-hash the arguments about the ability of the North American aboriginal people's ability to live sustainably in their environs both pre-contact and post-contact with Euro-Americans [Richard White, *The Roots of Dependency: Subsistence, Environment, and Social Change Among the Choctaws, Pawnees, and Navajos* (Lincoln: University of Nebraska Press, 1983), xiii]. The crux of the matter comes down to laws and policies for Native Americans based on historic and prehistoric precedent combined with the adoption of a model and symbol derived from Native Americana by the conservation and environmental movements. The second trial concerns the post-contact period and largely becomes a story of the influence of Euro-American culture on the lifeways of native folk. While neither of these arguments occupies the primary focus in this manuscript, their existence rather well juxtaposes the premise that the remarkable characteristic of the bison restoration remains the perseverance of the native people in the wake of near cataclysmic forces both for them and the bison. Toward this supposition, White stands correct that arguments offer little use when acknowledging that for the past approximately century and a quarter, Native Americans have provided a model of conservation and environmentalism with respect to bison and bison habitat restoration.

[40]Russel Barsh, "Forecasting Bison Migration: An Illustration of Indigenous Science," presentation at the Bison Conference 2000 hosted by the University of Nebraska, Lincoln, 7 April 2000.

[41]Roger Dunsmore, *Earth's Mind: Essays in Native Literature* (Albuquerque: University of New Mexico Press, 1997, 107. Dunsmore examines relations between human hunters and animal prey in general.

[42]Geist, *Buffalo Nation*, 63-67.

[43]Barsh, "Forecasting Bison Migration."

[44]Barsh, "Forecasting Bison Migration;" Geist, *Buffalo Nation*, 63-67. See James D. Keyser and George C. Knight, "The Rock Art of Western Montana," *Plains Anthropologist* 21:171 (February 1976), 6, for Native American rock art depicting the use of canines in hunting on the northwestern plains and evidence of the paramount role of bison to natives who did not dwell on the plains. For a monograph on human-wolf relations, see Barry Lopez, *Of Wolves and Men* (New York: Charles Scribner's Sons, 1978). See also M. W. Fox, *Concepts in Ethology: Animal and Human Behavior* (Minneapolis: University of Minnesota Press, 1974), 45-49 for comparison between human and animal hunting societies.

[45]Wilson, "Bison in Alberta," 13.

[46]Frances Fraser, *The Bear Who Stole the Chinook: Tales from the Blackfoot* (Vancouver: Douglas & MacIntyre, 1990), 109-111, 125-129 in Isenberg, *Destruction of the Bison*, 80.

Typically, Americans use the term Blackfeet while Canadians use the term Blackfoot. Both refer to the Algonquian speakers of the northern plains and Rocky Mountains.

[47]Heather Pringle, *In Search of Ancient North America: An Archaeological Journey to Forgotten Cultures* (New York: John Wiley & Sons, Inc., 1996), 150-155; Frison, *et al*, *Prehistoric Hunters of the High Plains*, 217-220. For a "must read" for anyone interested in prehistoric humans and bison on the plains of North America, see *Plains Anthropologist* 23:82,2 (November 1978). Editors Leslie Davis and Michael Wilson devoted the entire issue to a symposium on bison procurement and utilization. For a monograph specific to the Canadian plains discussed in part here, see Liz Bryan, *The Buffalo People: Prehistoric Archaeology on the Canadian Plains* (Edmonton: University of Alberta Press, 1991).

[48]George W. Arthur, *An Introduction to the Ecology of Early Historic Communal Bison Hunting Among Northern Plains Indians* (Ottawa: National Museum of Canada, 1975), 20-30; John A. Harrington, Jr., and Jay R. Harman, "Climate and Vegetation in Central North America: Natural Patterns and Human Alterations," *Great Plains Quarterly* 11 (Spring 1991), 110-111; Frison, *et al*, *Prehistoric Hunters of the High Plains*, 140-141; and Joseph D. Mitchell, "The American Indian: A Fire Ecologist," *American Indian Culture and Research Journal* 2:2 (1978), 26-31. See also William R. Dickinson, "Changing Times: The Holocene Legacy," *Environmental History* 5:4 (October 2000), 483-502, which describes the co-evolution of Holocene cultures and landscapes.

[49]Guthrie, "Bison and Man in North America," 71.

[50]George W. Gill, "Human Skeletal Remains on the Northwestern Plains," 431-447 in Frison, *et al*, *Prehistoric Hunters of the High Plains*.

[51]A. Johnston, "Man's Utilization of the Flora of the Northwest Plains," in R.G. Forbis, *et al*, eds., *Post-Pleistocene Man and His Environment on the Northern Plains*, 110. See also Hasselstrom, *Bison*, 42, where "real food" receives translation as *nitaniwaksim*.

[52]For the ubiquity of bison in varied Native American cultures, see McDonald, *North American Bison*; Wilson, "Bison in Alberta," 13; Dirk Van Vuren, "Bison West of the Rocky Mountains: An Alternative Explanation," *Northwest Science* 61:12 (1987), 65-69; Katherine A. Spielmann, "Late Prehistoric Exchange Between the Southwest and Southern Plains," *Plains Anthropologist* 28:102,1 (November 1983), 257-272; and Scott F. Anfinson, "Prehistoric Subsistence-Settlement Patterns in the Prairie Lake Region," 8-15, in Gary K. Clambey and Richard H. Pemble, eds., *The Prairie: Past, Present, and Future, Proceedings of the Ninth North American Prairie Conference* (Fargo, North Dakota : Tri-College University Center for Environmental Studies, 1984). See Keyser and Knight, "The Rock Art of Western Montana" for evidence of the paramount role of bison to natives who did not dwell on the plains.

[53]Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 10-11; McHugh, *Time of the Buffalo*, 83-109; Barsness, *Heads, Hides & Horns*, 65-74; J. A. Allen, *American Bisons*, 191-201; Garretson, *American Bison*, 156-169; and Hasselstrom, *Bison*, 44-49.

[54]Frison, *et al*, *Prehistoric Hunters of the High Plains*, 10, describes the plains as a pre-industrial living environment. See also John Ewers, *The Blackfeet: Raiders of the Northwestern Plains*, 9.

[55]Walter Hough, "The Bison as a Factor in Ancient American Culture History," *The Scientific Monthly* 30 (January-June 1930), 315.

[56]Wheat, "A Paleo-Indian Bison Kill," 52.

[57]John Lundwickson, "Historic Indian Tribes: Ethnohistory and Archeology," *Nebraska History* 75:1 (spring 1994), 140-141.

[58]E. Walker, "The Seasonal Nature of Post-Altithermal Communal Bison Procurement on the Northwestern Plains," *Na'pao: A Saskatchewan Anthropology Journal* 4:2 (April 1974), 3; Wheat, "A Paleo-Indian Bison Kill," 52; Frison, *et al*, *Prehistoric Hunters of the High Plains*, 329; Reeves, "Communal Bison Hunters of the Northern Plains," 169-171; and John Ewers, *Indian Life on the Upper Missouri* (Norman: University of Oklahoma Press), 8-9.

[59]Frison, *et al*, *Prehistoric Hunters of the High Plains*, 155.

[60]Geist, *Buffalo Nation*, 39, 41; and McHugh, *Time of the Buffalo*, 60-82.

[61]Frison, *et al*, *Prehistoric Hunters of the High Plains*, 170.

[62]Charles Kay, "Aboriginal Overkill and Native Burning: Implications for Modern Ecosystem Management," *Western Journal of Applied Forestry* 10:4 (October 1995), 121-126; and Charles Kay, "Aboriginal Overkill: The Role of Native Americans in Structuring Western Ecosystems," *Human Nature* 5:4, 359-398.

[63] Frison, *et al*, *Prehistoric Hunters of the High Plains*, 155-156; Geist, *Buffalo Nation*, 38-48; Walker, "The Seasonal Nature of Post-Altithermal Communal Bison Procurement on the Northwestern Plains," 23; and Reeves, "Communal Bison Hunters of the Northern Plains," 174-175. Reeves offers an excellent overview of the evolution of communal bison hunting.

[64]Archeological evidence shows that most communally harvested herds consisted of females and young. See Frison, *et al*, *Prehistoric Hunters of the High Plains*, 170 and Dennis Stanford, "Bison Kill by Ice Age Hunters," *National Geographic* 155:1 (January, 1979), 114-122. This occurred owing to the fact that bulls tended to run with the main groups only during the aggregation associated with the rut. Otherwise, the bulls tended to stay in smaller bachelor groups.

Critics of Native Americans point to this "over-harvesting" which occurred during the slaughter of entire herds as evidence of a lack of conservation ethic among North America's aboriginal people. Defenders explain that hunters can not "shut off" a bison stampede at a fixed number. Thus, native people took what they needed as best they possibly could. Certainly, evidence does not point to Pre-Columbian pleasure hunting. See Geist, *Buffalo Nation*, 42-48, for explanation of the harvest at communal hunting sites.

[65]Frison, *et al*, *Prehistoric Hunters of the High Plains*, 171-2; Wedel, *Central Plains Prehistory*, 87-94; William A. Dobak, "Killing the Canadian Buffalo, 1821-1881," *Western Historical Quarterly* 27:1 (Spring 1996), 50; and Joe Medicine Crow, "Notes on Crow Indian Buffalo Jump Traditions," *Plains Anthropologist* 23:82,2 (November 1978), 249. For an excellent lay reader's essay and illustrations highlighting the study of one communal hunting site, see Stanford, "Bison Kill by Ice Age Hunters."

[66]For a landmark work addressing human organization and the buffalo from prehistory into the historic period, see Bamforth, *Ecology and Human Organization on the Great Plains*. For models and graphics depicting the interaction of environmental productivity and cultural complexity over time, see Reeves, "Communal Bison Hunters of the Northern Plains," 187-191. See also John Bozell, "Culture, Environment, and Bison Populations on the Late

Prehistoric and Early Historic Central Plains," *Plains Anthropologist* 40:152 (1995), 145-163.

[67]Ewers, *Indian Life on the Upper Missouri*, 8-9.

[68]Ibid. See also Douglas Bamforth, "Historical Documents and Bison Ecology on the Great Plains," *Plains Anthropologist* 32:115 (February 1987), 1-16.

[69]Jeffery R. Hanson, "Bison Ecology in the Northern Plains and a Reconstruction of Bison Patterns for the North Dakota Region," *Plains Anthropologist* 29:104 (May 1984), 93-113. Hanson agrees with conclusions made by Bamforth [see the previous endnote], but emphasizes unpredictability as a defining characteristic of human organization based on bison.

[70]See Thomas F. Schilz and Jodye L. D. Schilz, "Beads, Bangles, and Buffalo Robes: The Rise and Fall of the Indian Fur Trade Along the Missouri and Des Moines Rivers, 1700-1820," *The Annals of Iowa* 49:1,2 (summer/fall 1987), 5-25.

[71]See Jeffrey Huebner, "Late Prehistoric Bison Populations in Central and Southern Texas," *Plains Anthropologist* 36:137 (1991), 343-357, and John D. Speth, *Bison Kills and Bone Counts: Decision Making by Ancient Hunters* (Chicago: University of Chicago Press, 1983).

[72]Archeologists do not always agree on the exact season when prehistoric Native Americans most likely congregated in response to aggregate bison herds. Reeves, "Communal Bison Hunters of the Northern Plains," 170-171, explains that fall, winter, or spring could produce optimal conditions for large assemblies. E. Walker, "Seasonal Nature of Post-Altithermal Communal Bison Procurement on the Northwestern Plains," concurs that fall and winter provided such opportunities. However, George Frison ["Paleo-Indian Winter Subsistence Strategies on the High Plains," in Douglas Ubelaker and Herman J. Viola, eds., *Plains Indian Studies: A Collection of Essays in Honor of John C. Ewers and Waldo R. Wedel* (Washington: Smithsonian Institution Press, 1982), 193-219 and "Animal Population Studies," *Plains Anthropologist* 23:82,2 (November 1978), 44-52], argues that winter was the dominant season for communal harvesting. Meanwhile, J. Michael Quigg, "Winter Bison Procurement in Southwestern Alberta," *Plains Anthropologist* 23:82,2 (November 1978),53-58, and George Arthur, *An Introduction to the Ecology of Early Historic Communal Bison Hunting Among the Northern Plains Indians*, claim the fall as the best time while Speth, *Bison Kills and Bone Counts*, documents the spring as optimal. In any event, it seems sensible to conclude that Native Americans harvested communally whenever possible and that the possibilities proved somewhat unpredictable and varied with location.

[73]Bamforth, *Ecology and Human Organization on the Great Plains*, 160-161 and Frison, *et al*, *Prehistoric Hunters of the High Plains*, 12.

[74]Guthrie, "Bison and Man in North America, " 70; Frison, *et al*, *Prehistoric Hunters of the High Plains*, 211. For works reflecting the continuity between prehistoric and historic bison culture, see Pringle, *In Search of Ancient North America*, 157; John Ewers, "The Last Bison Drives of the Blackfoot Indians," *Journal of the Washington Academy of Sciences* 39:11 (15 November 1949), 358-361; and Donald Lehmer, "The Plains Bison Hunt – Prehistoric and Historic," *Plains Anthropologist* 8:22 (November 1963), 211-217.

[75]See Alfred W. Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport, Connecticut: Greenwood Press, 1972).

[76]Borrowed from title of Daniel Botkin's book, *Discordant Harmonies* [see endnote 10 above], the term "discordant harmony" describes the complex dynamism of nature well beyond simplistic models suggesting predictable equilibria. The term aptly describes the presence/absence of bison throughout prehistory in various locales. Botkin's insights to the natural history of the present western United States emerge in another timely work entitled *Our Natural History: The Lessons of Lewis and Clark* (New York: The Berkeley Publishing Group, 1995). For a more specific discussion to the grasslands, see Kathleen Keeler, "Grasslands: An Introduction," *Great Plains Quarterly* 15:3 (summer 1995), 163-168 and Isenberg, *Destruction of the Bison*, 11. Regarding the application of similar theories to historic bison studies, see James Malin, *The Grassland of North America: Prolegomena to Its History with Addenda* (Lawrence, Kansas: James Malin, 1947), 436-440.

[77]For general world-wide discussion, see Alfred W. Crosby, *Germs, Seeds, and Animals: Studies in Ecological History* (Armonic, New York: M. E. Sharpe, 1994) and Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York: W. W. Norton & Company, 1997). For focus on the Americas, see Alfred W. Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport, Connecticut: Greenwood Press, 1972). More specific to the present United States, see Wilbur Jacobs, *The Fatal Confrontation: Historical Studies of American Indians, Environment and Historians* (Albuquerque: University of New Mexico Press, 1996).

[78]See William H. MacLeish, *The Day Before America* (Boston: Houghton Mifflin Company, 1994.

[79]James H. Shaw and Mary Meagher, "Bison," in S. Damarais and P. R. Krausman, eds., *Ecology and Management of Large Mammals in North America* (Newark: Prentice-Hall, 1999), 450; Roe, *North American Buffalo*, 257-333; Haines, *The Buffalo*, 8-9; Edward R. Warren, "Altitudinal Limits of Bison," *Journal of Mammalogy* 8:1, 60-61; F. M. Fryxell, "The Former Range of the

Bison in the Rocky Mountains," *Journal of Mammalogy* 9 (1928), 129-139; C. S. Kingston, "Buffalo in the Pacific Northwest," *Washington Historical Quarterly* 23:3 (July 1932), 163-172; Dirk Van Vuren, "Bison West of the Rocky Mountains," 65-69; B. Robert Butler, "Bison Hunting in the Desert West Before 1800: The Paleo-Ecological Potential and the Archeological Reality," *Plains Anthropologist* 23:82, 2 (November 1978), 106-112; Larry D. Agenbroad, "Buffalo Jump Complexes in Owyhee County, Idaho," *Plains Anthropologist* 23:82,2 (November 1978), 213-221; Robert A. Ricklis, "The Spread of a Late Prehistoric Bison Hunting Complex: Evidence from the South-Central Coastal Prairie of Texas," *Plains Anthropologist* 37:140, (1992), 261-274; and C. Thomas Shay, "Late Prehistoric Bison and Deer Use in the Eastern Prairie-Forest Border," *Plains Anthropologist* 23:82,2 (November 1978), 194-212.

[80]William Cronon and Richard White, "Ecological Change and Indian-White Relations," in Wilcomb E. Washburn, ed., *History of Indian-White Relations,* vol. 4 in William C. Sturdevant, general ed., *Handbook of North American Indians*, 20 vols., (Washington: Smithsonian Institution, 1988), 422.

Worthy of note, bison eventually would also suffer from the deleterious effects of Old World disease, namely anthrax and brucellosis, but these diseases apparently did not check the bison expansion witnessed after 1500. See Kenneth Owens and Sally Owens, "Montana Commentary - Buffalo and Bacteria," *Montana: The Magazine of Western History* 37:2 (Spring 1987), 65-67; and Flores, "Bison Ecology and Bison Diplomacy," 481.

[81]Ted Franklin Belue, *The Long Hunt: Death of the Buffalo East of the Mississippi* (Mechanicsburg, Pennsylvania: Stackpole Books, 1996), 7-8. Belue's work provides the best glimpse of bison east of the Mississippi River in the historic period. See also, Haines, *The Buffalo*, 73-39 and Roe, *North American Buffalo*, 228-256.

[82]Belue, *Long Hunt*, 10.

[83]Ibid., 27.

[84]Ibid., 55.

[85]Ibid., 25, 29, 30.

[86]Ibid., 37-41. See also John Henderson, "The Former Range of the Buffalo," *The American Naturalist* 6 (1872), 79-98; and Lehmer, "The Plains Bison Hunt – Prehistoric and Historic," 211-217.

[87]Belue, *Long Hunt*, 18-21, 44.

[88]Ibid., 46. See also John H. Goff, "The Buffalo in Georgia," *The Georgia Review* 11:1 (spring 1957), 19-28.

[93]Van Vuren, "Bison West of the Rocky Mountains," 65; and Butler, "Bison Hunting in the Desert West Before 1800," 106-112.

[94]Haines, *The Buffalo*, 4-5, 48-57, 61; Karen D. Lupo, "The Historical Occurrence and Demise of Bison in Northern Utah," *Utah Historical Quarterly* 64:2 (spring 1996), 168-181; Kingston, "Buffalo in the Pacific Northwest," 164-171; and Isenberg, *Destruction of the Bison*, 34.

[95]Clark Wissler, Francis Haines, John Ewers, and Frank Gilbert Roe pose as the giants in the historiography of the horse's arrival into western North America. Their seminal works include Wissler, "The Influence of the Horse in the Development of Plains Culture," *American Anthropologist* 16:1 (January-March 1914), 1-25; Haines, "The Northward Spread of Horses Among the Plains Indians," *American Anthropologist* 40:3 (July-September 1938), 429-437; Haines, "Where Did the Plains Indians Get Their Horses?" *American Anthropologist* 40:1 (January-March 1938), 112-117; Haines, *Horses in America* (New York: Thomas Y. Crowell Company, 1971); Haines, *The Plains Indians: Their Origins, Migrations and Cultural Development* (New York: Thomas Y. Crowell Company, 1976); Ewers, *The Horse in Blackfoot Indian Culture with Comparative Material from Other Western Tribes*, Bulletin 159, Bureau of American Ethnology (Washington: Smithsonian Institution, 1955); Ewers, "Were the Blackfeet Rich in Horses?" *American Anthropologist* 45:4 (October-December 1943), 602-610; and Roe, *The Indian and the Horse* (Norman: University of Oklahoma Press, 1955).

See also Preston Holder, *The Hoe and the Horse on the Plains* (Lincoln: University of Nebraska Press, 1970); Paul H. Carlson, *The Plains Indians* (College Station: Texas A&M Press, 1998); and Alan J. Osborn, "Ecological Aspect of Equestrian Adaptations in Aboriginal North America," *American Anthropologist* 85 (1983), 563-591.

[96]Haines, *The Plains Indians*, 20, 25, 40, 41; Dobak, "Killing the Canadian Buffalo," 39-40; and Isenberg, *Destruction of the Bison*, 7, 34. See also Roe, *North American Buffalo*, 742-803, for in-depth presentation of Native American populations with respect to buffalo hunters.

[97]Flores, "Bison Ecology and Bison Diplomacy," 466; and Shaw and Meagher, "Bison," 448.

[98]Isenberg, *Destruction of the Bison*, 33.

[99]Wissler, "The Influence of the Horse in the Development of Plains Culture," 25.

See also Reeves, "Communal Bison Hunters of the Northern Plains," 168, and Guthrie, "Bison and Man in North America," 72.

[100]Osborn, "Ecological Aspect of Equestrian Adaptations in Aboriginal North America," 584-5.

North American Buffalo, 742-803, for in-depth presentation of Native American populations with respect to buffalo hunters.

[97]Flores, "Bison Ecology and Bison Diplomacy," 466; and Shaw and Meagher, "Bison," 448.

[98]Isenberg, *Destruction of the Bison*, 33.

[99]Wissler, "The Influence of the Horse in the Development of Plains Culture," 25.
See also Reeves, "Communal Bison Hunters of the Northern Plains," 168, and
Guthrie, "Bison and Man in North America," 72.

[100]Osborn, "Ecological Aspect of Equestrian Adaptations in Aboriginal North America," 584-5.

[101]Bamforth, *Ecology and Human Organization on the Great Plains*, 97-128, and Isenberg, *Destruction of the Bison*, 43, 69.

[102]Wissler, "The Influence of the Horse in the Development of Plains Culture," 15.

[103]Donald Jackson and Mary Lee Spence, eds., *The Expeditions of John Charles Fremont, Vol. 1: Travels from 1838 to 1844* (Urbana: University of Illinois Press, 1970), 185.

[104]Frank B. Linderman, *American: The Life Story of a Great Indian, Plenty Coups Chief of the Crows* (Yonkers on Hudson, New York: World Book Company, 1930), 252.

[105]Jacob Halsey to Pratte and H. Chardon, 6 October 1834, *Ft. Pierre Letter Book, 20 December 1832 - 25 August 1835, Part I*, The Chouteau Collection in Richmond Clow, "Bison Ecology, Brulé and Yankton Winter Hunting and the Starving Winter of 1832-1833," *Great Plains Quarterly* 15 (Fall 1995), 267.

[106]Reuben Gold Thwaites, ed., *The Original Journal of the Lewis and Clark Expedition*, 8 vols., (New York: Dodd and Mead Co., 1904), 1:153.

[107]George Catlin, *Letters and Notes on the Manners, Customs, and Condition of the North American Indians*, 2 vols., (Minneapolis: Ross & Haines, Inc., 1965, reprint from 1841), 1:249.

[108]Horace Greeley, *An Overland Journey from New York to San Francisco in the Summer of 1859*, Charles Duncan, ed., (New York: Alfred A. Knopf, 1964), 72-73.

[109]Charles Goodnight, Emanuel Dubbs, John Hart, *et al*, *Pioneer Days in the Southwest from 1850-1879* (Guthrie, Oklahoma: The State Capital Co., 1909), 236.

[110]For example, see Barsness, *Heads, Hides, & Horns,* 1-36; Danz, *Of Buffalo and Man*, 15-41; Dary, *Buffalo Book*, 28-29; and Haines, *The Buffalo*, 32-33.

[111]Seton, "American Bison or Buffalo," 386, 402.

[112]McHugh, *Time of the Buffalo*, 13-17; Robbins, "Historians Revisit Slaughter on the Plains," *The New York Times*, 16 November 1999, F3; Flores, "Bison Ecology and Bison Diplomacy," 470-471; and Isenberg, *Destruction of the Bison*, 24-25.

[113]Shaw and Meagher, "Buffalo," 447-448; and James H. Shaw, "How Many Bison Originally Populated Western Rangelands?" *Rangelands* 17:5 (October 1995), 148-150; Robbins, "Historians Revisit Slaughter on the Plains," F3; Mary Meagher, interview with the author, 26 June 1999, Mammoth Hot Springs, Yellowstone National Park.

[114] Shaw and Meagher, "Buffalo," 447.

[115]Botkin, *Our Natural History*, 115, and McDonald, *North American Bison*, 262.

[116]Botkin, *Our Natural History*, 116.

[117]Martin and Szuter, "War Zones and Game Sinks in Lewis and Clark's West," 36; Flores, *Bison Ecology and Bison Diplomacy*, 475-476; and West, *Way to the West*, 61-65.

[118]West, *Way to the West*, 52. See also Roe, *North American Buffalo*, 345.

[119]John D. Hunter, *Manners and Customs of Indian Tribes* (Philadelphia, 1832), 237 in Dary, *Buffalo Book*, 68, and Elijah Nicholas Wilson, *The White Indian Boy; The Story of Uncle Nick Among the Shoshones,* revised and edited by Howard R. Driggs (Yonkers-on-Hudson, New York: World Book Co., 1919), 35, 74.

[120]R. M. Rylatt, *Surveying the Canadian Pacific: Memoir of a Railroad Pioneer* (Salt Lake City: University of Utah Press), 165, and Gustavus A. Doane and F. D. Pease, *Report to the Commission of Indian Affairs, 19 February 1873*, M234, Roll 498, National Archives.

[121]Charles Hallock, managing ed., "The Buffalo: The Waste of Animal Life on the Plains and How to Correct It," *Forest and Stream*, 22 January 1874, 376.

[122]Charles Hallock, managing ed., "Destruction of Buffalo," *Forest and Stream*, 30 April 1874, 189.

[123]Henderson, "The Former Range of the Buffalo," 97; and Seton, " "American Bison or Buffalo," 404.

[124]Merrill G. Burlingame, "The Buffalo in Trade and Commerce," *North Dakota Historical Quarterly* 3:4 (July 1929), 290.

[125]See Immanuel Wallerstein, *The Modern World System*, 3 vols., (New York: Academic Press, 1974-1989); and Fernand Braudel, *Civilization and Capitalism: The Fifteenth through Eighteenth Centuries*, 3 vols., (New York: Harper & Row, 1982-1984).

[126]Significant works on the bison robe trade include Burlingame, "The Buffalo in Trade and Commerce," 262-291; and Dobak, "Killing the Canadian Buffalo", 41-47.

[127]See Richard White, *Roots of Dependency*, xv-xix, for a description of the "culture of dependency;" Andrew Isenberg, *Destruction of the Bison*, 44-61, 92-123, for a portrayal of the "ascendancy of the market" which Native Americans could not resist; John C. Ewers, "The Influence of the Fur Trade Upon the Indians of the Northern Plains," *Plains Indian History and Culture: Essays on Continuity and Change* (Norman: University of Oklahoma Press, 1997), 38-60, for the effects of the end of the fur trade in causing poverty; P. Nick Kardulias, "Fur Production as a Specialized Activity in a World System: Indians in the North American Fur Trade," *American Indian Culture and Research Journal* 14:1 (1990), 25-60, for further arguments on the empirical evidence of dependency; and Frank Tough, "Indian Economic Behavior Exchange and Profits in Northern Manitoba During the Decline of the Monopoly, 1870-1930," *Journal of Historical Geography* 16:4 (1990), 385-401, for comparative analysis of Native American and Euro-Canadian primary sector producers and resulting dependency.

For works which address the effects of the biotic invasion and climatic variation on the demise of the bison, see Dobak, "Killing the Canadian Buffalo", 37-39; Flores, "Bison Ecology and Bison Diplomacy," 478-484; Isenberg, *Destruction of the Bison*, 32-33, 83-84; Rudolph W. Koucky, "The Buffalo Disaster of 1882," *North Dakota History* 50 (winter 1983), 23-30; and Meagher, interview, 26 June 1999.

[128]Works describing the Euro-American harvesting of bison include: Barsness, *Heads, Hides & Horns*, 86-132; Dary, *Buffalo Book*, 69-120; Flores, *Bison Ecology and Bison Diplomacy*, 467; Garretson, *American Bison*, 79-155; Haines, *The Buffalo*, 89-199; McHugh, *Time of the Buffalo*, 39-49, 247-290; and Roe, *North American Buffalo*, 367-488.

[129]For a good overview of issues concerning the evaluation of Native American interaction with the environment, see Shepard Krech III, *The Ecological Indian: Myth and History* (New York: W. W. Norton, 1999). See also, James Axtell, "The Ethnohistory of Native America," in Donald Fixico, ed., *Rethinking American Indian History* (Albuquerque: University of New Mexico Press, 1997), 11-29; Karl W. Butzer, "The Americas Before and After 1492: An Introduction to Current Geographical Research," *Annals of the Association of American Geographers* 82:3 (September 1992), 345-368; Cronon and White, "Ecological Change and Indian-White Relations," 417-429; William M. Denevan, "The Pristine Myth: The Landscape of the Americas in 1492," *Annals of the Association of American Geographers* 82:3 (September 1992), 369-387; Gary G. Gray, *Wildlife and People: The Human Dimensions of Wildlife Ecology* (Urbana: University of Illinois Press, 1993); Donald J. Hughes, *American Indian Ecology* (El Paso: Texas Western Press, 1983); Christopher Vecsey and Robert W. Venables, eds., *American Indian Environments: Ecological Issues in Native American History* (Syracuse: Syracuse University Press, 1980); Richard White, "American Indians and the Environment," *Environmental Review* 9:2 (summer 1985), 101-103; and Richard White, "Indian Peoples and the Natural World: Asking the Right Questions," in Donald Fixico, ed., *Rethinking American Indian History* (Albuquerque: University of New Mexico Press, 1997), 87-100.

For works focusing on environmental consciousness as a function of religion, see Catherine Albanese, *Nature Religion in America from the Algonkian Indians to the New Age* (Chicago: University of Chicago Press, 1990); John Bierhorst, *The Way of the Earth: Native America and the Environment* (New York: William Morrow and Company, Inc., 1994); Annie L. Booth and Harvey M. Jacobs, "Ties that Bind: Native American Beliefs as a Foundation for Environmental Consciousness," *Environmental Ethics* 12 (spring 1990), 27-43; Sam Gill, *Mother Earth: An American Story* (Chicago: University of Chicago Press, 1987); and Åke Hultkrantz, *Belief and Worship in Native North America* (Syracuse: Syracuse University Press, 1981).

[130]Richard White offers a solid historiography addressing arguments over Native Americans as environmentalists and involvement in the fur trade, see White, "Native Americans and the Environment," in W. R. Swagerty, ed., *Scholars and the Indian Experience: Critical Reviews of Recent Writing in the Social Sciences* (Bloomington: University of Indiana Press, 1984), 179-204. See also J. Baird Callicott, "American Indian Land Wisdom? Sorting Out the Issues," *Journal of Forest History* 33:1 (January 1989), 35-42. Historiographers tend to separate historians into two camps with respect to analysis of aboriginal motives in the fur trade, the formalists who view decision-making as a product of

empirical analysis associated with western political economy and the substantivists who view decision-making more as a product of unique cultural constructs. For a basic explanation of this division, see Mary K. Whelan, "Dakota Indian Economics and the Nineteenth Century Fur Trade," *Ethnohistory* 40:2, (spring 1993), 247; and Jacqueline Peterson and John Anfinson, "The Indian and the Fur Trade," in W. R. Swagerty, ed., *Scholars and the Indian Experience: Critical Reviews of Recent Writing in the Social Sciences* (Bloomington: University of Indiana Press, 1984), 223-258. For a more detailed discussion, see Stephen F. Gudeman, *Economic Anthropology: Models and Metaphors of Livelihood* (London: Routledge and Kegan Paul, 1986).

The division becomes somewhat clear for readers of ethnohistorical literature regarding the fur trade. The formalists often espouse the dependency theory. They tend to reconcile a native sense of conservation with the notion that Native Americans only harvested "what they needed." However, the material culture offered by the fur trade changed native perceptions of necessity. Thus, harvesting animals to acquire Euro-American cultural goods, e.g., metal items, fell within the bounds of necessary harvest even if populations became depleted. In particular, see Jeanne Kay, "Native Americans in the Fur Trade and Wildlife Depletion," *Environmental Review* 9:2 (summer 1985), 123-124.

See also the following works for formalist analysis of native behavior in the fur trade: Arthur Ray, "Competition and Conservation in the Early Subarctic Fur Trade," 25:4 (fall 1978), 347-357; Arthur Ray and Donald Freeman, *"'Give Us Good Measure:'" An Economic Analysis of Relations Between the Indians and Hudson's Bay Company Before 1763* (Toronto: University of Toronto Press, 1978); Bruce G. Trigger, "Early Native North American Responses to European Contact: Romantic versus Rationalistic Interpretations," *Journal of American History* (March 1991), 1195-1215; David V. Burley, "Proto-Historic Ecological Effects of the Fur Trade on Micmac Culture in Northeastern New Brunswick," *Ethnohistory* 28:3 (summer 1981), 203-216; Paul C. Thistle, *Indian-European Trade Relations in the Lower Saskatchewan River Region to 1840* (Winnipeg: University of Manitoba Press, 1986); and James Van Stone, "The Yukon River Ingalik: Subsistence, the Fur Trade, and a Changing Resource Base," *Ethnohistory* 23:3 (summer 1976), 198-212.

Substantive theorists utilize a more relativist approach by examining native behavior in the fur trade through frames of reference involving religion, cosmology, and language. The leading, though oft-criticized, proponent of the substantive, or non-western, analysis is Calvin Martin. See Calvin Martin's following works: *Keepers of the Game: Indian-Animal Relationships and the Fur Trade* (Berkeley: University of California Press, 1978); *In the Spirit of the Earth: Rethinking History and Time* (Baltimore: The Johns Hopkins University Press, 1992); and *The Way of the Human Being* (New Haven: Yale University Press, 1999). For other theses of such non-western behavior in the fur trade, see also Callicott, "American Indian Land Wisdom;" Adrian Tanner, *Bringing Home Animals: Religious Ideology and Mode of Production of the Mistassini Cree Hunters* (New York: St. Martin's Press, 1979); Whelan, "Dakota Indian Economics and the Nineteenth Century Fur Trade;" and Robert A. Brightman,

Grateful Prey: Rock Cree Human-Animal Relationships (Berkeley: University of California Press, 1993).

Worthy of note, Callicott warns of generalizing based on case studies ["American Indian Land Wisdom," 41]. Environmental historian David Rich Lewis echoes Callicott's warning that the notion of a set pan-Indian land ethic would result in "oversimplified or romantic stereotypes [which] deny them complex human experience" [David Rich Lewis, "Native Americans and the Environment: A Survey of Twentieth Century Issues," *American Indian Quarterly* 19:3 (summer 1995), 439]. See also Daniel Francis and Toby Morantz, *Partners in Furs: A History of the Fur Trade in Eastern James Bay, 1600-1700* (Kingston and Montreal: McGill-Queen's University Press, 1983) and Toby Morantz, *An Ethnohistoric Study of Eastern James Bay Cree Social Organization, 1700-1859* (Ottawa: National Museums of Canada, 1983) for works acknowledging variation in native responses to the fur trade depending on time, location, and tribal socialization.

[131]Flores, "Bison Ecology and Bison Diplomacy," 467, fn. 6; and Dary, *Buffalo Book*, 68.

[132]Robbins, "Historians Revisit Slaughter on the Plains," F3.

[133]White, *Roots of Dependency*, 197-211.

[134]Flores, "Bison Ecology and Bison Diplomacy," 478-484; Isenberg, *Destruction of the Bison*, 193; and Dobak, "Killing the Canadian Buffalo," 52.

[135]Flores, "Bison Ecology and Bison Diplomacy," 478-484. For another work on the southern plains, see James E. Sherow, "Workings of the Geodialectic: High Plains Indians and their Horses in the Region of the Arkansas River Valley, 1800-1870," *Environmental History Review* 16:2 (summer 1992), 61-84.

[136]Flores, "Bison Past, Bison Present," keynote address, 6 April 2000.

[137]Robbins, "Historians Revisit Slaughter on the Plains," F3.

[138]Isenberg, *Destruction of the Bison*, 2-3, 83-84.

[139]Ibid., 3.

[140]Isenberg, *Destruction of the Bison*, 83-84, and Robbins, "Historians Revisit Slaughter on the Plains," F3. See also West, *Way to the West*, 66.

[141]Isenberg, *Destruction of the Bison*, 84-85.

[142]Dobak, "Killing the Canadian Buffalo," 35. For a succinct summary of a similar argument specific to the Canadian West, see John Foster, "The Metis and the End of the Plains Buffalo in Alberta," in Foster, Harrison, and MacLaren, eds., *Buffalo*, 66.

[143]"Métis" designates the ethnic group that largely grew out of the fur trade from the intermarriage of Euro-Americans and Native Americans. They emerged as a distinct commercial bison culture on the Plains. For explanation of the term Métis as opposed to *métis* which designates mixed-blood Euro-Americans and Native Americans in general and not specific to the Plains, see Jennifer S. H. Brown, "The Métis: Genesis and Rebirth," 105-117 in R. Douglas Francis and Howard Palmer, eds., *The Prairie West: Historical Readings*, 2nd ed., (Edmonton: Pica Pica Press, 1992). For a description of the Métis bison culture, see Foster, "The Metis and the End of the Plains Buffalo in Alberta," 61-78. See also Jacqueline Peterson and Jennifer S. H. Brown, eds., *The New Peoples: Being and Becoming Métis in North America* (Winnipeg: University of Manitoba Press, 1985) and Arthur J. Ray, "Reflections on Fur Trade Social History and Métis History in Canada," *American Indian Culture and Research Journal* 6, 91-107.

[144]Dobak, "Killing the Canadian Buffalo," 49, 52. See also Foster, "The Metis and the End of the Plains Buffalo in Alberta," 72-74, for the impact of Métis hunting. "Native" receives capitalization in this circumstance since it includes both Métis and First Nation peoples which makes "Native" an ethnic designation in Canada.

[145]Dobak, "Killing the Canadian Buffalo," 51.

[146]Dobak, "Killing the Canadian Buffalo," 33-52; and Jeffrey Ostler, "They Regard Their Passing as *Wakan*," *Western Historical Quarterly* 30:4 (winter 1999), 475-497.

[147]Cronon and White, "Ecological Change and Indian-White Relations," 417-429, and Flores, "Bison Past, Bison Present." See also Whelan, "Dakota Indian Economics and the Nineteenth Century Fur Trade," 247, 261.

[148]Alfred Bowers, "Crows Heart's Reminiscences and Personal Experiences," in Arnold Krupat, ed., *Native American Autobiography: An Anthology* (Madison: University of Wisconsin Press, 1994), 28; Dobak, "Killing the Canadian Buffalo," 49; George A. Dorsey, ed., *Traditions of the Skidi Pawnee* (New York: Kraus Reprint Co., 1969 reprint from Boston: Houghton, Mifflin and Company, 1904), 36-38; Geist, *Buffalo Nation*, 26; Harrod, *Renewing the World*, 47; Hasselstrom, *Bison*, 17; Isenberg, *Destruction of the Bison*, 76; Frank Linderman, "Plenty Coups: Chief of the Crows," in Krupat, ed., *Native American Autobiography*, 250; McHugh, *Time of the Buffalo*, 134-135; Roe,

North American Buffalo, 644-645; and Robert Pickering, *Seeing the White Buffalo* (Denver: Denver Museum of Natural History, 1997), 15-16.

[149]Flores, *Bison Ecology and Bison Diplomacy*, 485, and Erdoes and Ortiz, eds., *American Indian Myths and Legends*, 490-491.

[150]Goff, "Buffalo in Georgia," 278.

[151]David D. Smits, "The Frontier Army and the Destruction of the Buffalo: 1865-1883," *Western Historical Quarterly* (autumn 1994), 321.

[152]Ostler, "They Regard Their Passing as *Wakan*," 485.

[153]Ostler, "They Regard Their Passing as *Wakan*," 476, and Warren K. Morehead, "The Passing of Red Cloud," *Kansas Historical Collections* X (1907-1908), 298, in Dary, *Buffalo Book*, 68.

[154]*Reports of the Commissioner of Indian Affairs, 1879*, 90; Young to Commissioner of Indian Affairs, 1 March 1878, Indian Office Records in Ewers, *The Blackfeet*, 295.

[155]Linderman, *American*, 227.

[156]Ostler, "They Regard Their Passing as *Wakan*," 488.

[157]L. V. McWhorter, "Yellow Wolf: His Own Story," in Krupat, ed., *Native American Autobiography*, 191.

[158]Robbins, "Historians Revisit Slaughter on the Plains," F3.

[159]Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 27.

[160]Linderman, *American*, 227.

[161]Edward Valandra, "Lakota Buffalo Theology: Implications for Buffalo Reintroduction into the Great Plains," (unpublished thesis, University of Colorado, Boulder, 1993) in Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 28.

[162]Robbins, "Historians Revisit Slaughter on the Plains," F3. See also Shaw, "How Many Bison Originally Populated Western Rangelands?" 148-150, and Shaw and Meagher, "Bison," 447-466, in Damarais and Krausman, eds., *Ecology and Management of Large Mammals in North America*.

[163]White, *Roots of Dependency*, xiii. White, himself, maintains a prolific publication record on the subject of Native American interaction with the environment as made evident in the citations of this manuscript [see endnote 130 above]. For his part, Dan Flores lucidly argues about the usefulness of arguments concerning a native environmentalism: "How a society or group of people with a shared culture makes adjustments to live within the carrying capacity of its habitat is not only a valid historical question, it may be one of the most salient questions to ask about any culture" [Flores, "Bison Ecology and Bison Diplomacy," 467].

[164]Yi-Fu Tuan, "Thought and Landscape: The Eye and the Mind's Eye," in D. W. Meinig, ed., *The Interpretation of Ordinary Landscapes: Geographical Essays* (New York: Oxford University Press, 1979), 89.

[165]Simon Schama, *Landscape and Memory* (New York: Alfred A. Knopf, 1995), 61. Bison play a significant role in this work of Schama in the form of the wisent, European bison, which parallels the bison-Indian-land relationship with its role in the spirit of the Polish people. Reflecting on Polish history, Schama writes, "For as long as the beast [wisent] and its succoring forest habitat endured, it was implied, so would the nation's martial vigor" (p. 41). For changing perceptions based on the culture of the observer, see also D. W. Meinig, "The Beholding Eye: Ten Versions of the Same Scene," 33-50, in Meinig, ed., *The Interpretation of Ordinary Landscapes*.

[166]N. Scott Momaday, "Native American Attitudes Toward the Environment," in Walter H. Capps, ed., *Seeing With a Native Eye* (New York: Harper and Row, 1976), 80.

[167]See Robert M. Utley, *The Indian Frontier of the American West 1846-1890* (Albuquerque: University of New Mexico Press, 1993, reprint from 1984); William T. Hagan, "United States Indian Policies, 1860-1890," 51-65, in Wilcomb E. Washburn, ed., *History of Indian -White Relations*, vol. 4 in William C. Sturdevant, ed., *Handbook of North American Indians*, 20 vols., (Washington: Smithsonian Institution, 1988); Robert V. Kvasnicka, "United States Indian Treaties and Agreements," 195-201, in Washburn, ed., *History of Indian -White Relations*; Francis Paul Prucha, "United States Indian Policies, 1815-1860," 40-50, in Washburn, ed., *History of Indian -White Relations; and* Robert M. Utley, "Indian-United States Military Situation, 1848-1891," 163-182, Washburn, ed., *History of Indian -White Relations*.

[168]Yi-Fu Tuan explains the natural drive to preserve landscape: "Yearning for an ideal and humane habitat is perhaps universal. Such a habitat must be able to support a livelihood and yet cater to our moral and aesthetic nature" (Tuan, "Thought and Landscape," in Meinig, ed., *The Interpretation of Ordinary Landscapes*, 101).

[169]Isenberg, *Destruction of the Bison*, 124-128; Ostler, "They Regard Their Passing as *Wakan*," 484-489; and *Death Wind on the Plains*, video production directed by David Smits and Barbara Smits, Big Sky Western Heritage Productions, 1997.

[170]Black Elk (ca. 1875, no fn. given) in Joel Berger and Carol Cunningham, *Bison: Mating and Conservation in Small Populations* (New York: Columbia University Press, 1994), 23.

[171]Luther Standing Bear, *Land of the Spotted Eagle* (Lincoln: University of Nebraska Press, 1933), 248. For a work examining the central plains and Rockies from the perspective of historical landscape, see Elliott West, *The Contested Plains: Indians, Goldseekers, and the Rush to Colorado* (Lawrence: University Press of Kansas, 1998).

[172]For discussion of buffer zone refugia, see Martin and Szuter, "War Zones and Game Sinks in Lewis and Clark's West."

[173]*Death Wind on the Plains*, David Smits and Barbara Smits, directors, and Smits, "Frontier Army and the Destruction of the Buffalo," 312-338; Barsness, *Heads, Hides, & Horns*, 126-132; and Dary, *Buffalo Book*, 127-128.

[174]Smits, "Frontier Army and the Destruction of the Buffalo," 319.

[175]Barsness, *Heads, Hides & Horns*, 126.

[176]*Death Wind on the Plains*, David Smits and Barbara Smits, directors, and Smits, "Frontier Army and the Destruction of the Buffalo," 314-317.

[177]Dary, *Buffalo Book*, 126-128.

[178]"History of Buffalo Legislation," *Forest and Stream* 18 (6 April 1882), 1,890.

[179]For general works on the hide hunters, see Douglas E. Branch, *The Hunting of the Buffalo* (Lincoln: University of Nebraska Press, 1997, reprint from 1962); Wayne Gard, *The Great Buffalo Hunt* (New York: Alfred A. Knopf, 1959); Miles Gilbert, *Getting a Stand* (Union City, Tennessee: Pioneer Press, 1986); Charles M. Robinson III, *The Buffalo Hunters* (Austin: State House Press, 1995); and Mari Sandoz, *The Buffalo Hunters: The Story of the Hide Men* (New York: Hastings House Publishers, 1954).

[180]Isenberg, *Destruction of the Bison*, 130-143; Hasslestrom, *Bison*, 64; Larry Barsness, "The Bison in Art and History," *The American West: The Magazine of Western History* 14:2 (March/April 1977), 20; and Smits, "Frontier Army and the Destruction of the Buffalo," 326.

[181]Hasselstrom, *Bison*, 64.

[182]Dary, *Buffalo Book*, 114-120.

[183]Owens and Owens, "Montana Commentary - Buffalo and Bacteria," 65-67; and Koucky, "Buffalo Disaster of 1842," 23-30.

[184]For the agricultural transformation of the American West, see Frieda Knoblock, *The Culture of Wilderness: Agriculture as Colonization in the American West* (Chapel Hill: University of North Carolina Press, 1996). For an analysis of Native Americans and the impact on them of agriculture, see David Rich Lewis, *Neither Wolf Nor Dog: American Indians, Environment, and Agrarian Change* (New York: Oxford University Press, 1994).

[185]Garretson, *American Bison*, 184.

[186]Typically, the native people of the Siksika nation refer to themselves as Blackfoot in Canada and Blackfeet in the United States. See endnote 46 above.

[187]Roe, *North American Buffalo*, 478, and Ewers, *The Blackfeet*, 295.

[188]Ewers, *Indian Life on the Upper Missouri*, 173, and McHugh, *Time of the Buffalo*, 284-286.

[189]John C. Ewers, "Influence of the Fur Trade Upon the Indians of the Northern Plains," in Ewers, *Plains Indian History and Culture*, 58-60.

[190]Linderman, *American*, 252.

[191]Ibid., 311.

[192]*Death Wind on the Plains*, David Smits and Barbara Smits, directors.

[193]Archeologist Michael Wilson further articulates the impact of the near extermination of the buffalo nation as being a virtual end of the world from a philosophical perspective : "[It] removed far more than a food source: it knocked out the underpinnings of an entire cultural pattern, from subsistence to ceremonialism. Their prime link with the Creator disappeared as much a memory as the unfenced open plains" (Wilson, "Bison in Alberta," in Foster, Harrison, and MacLaren, eds., *Buffalo*, 14).

[194]Ostler, "They Regard Their Passing as *Wakan*," 489-495, and McHugh, *Time of the Buffalo*, 287-290.

[195]Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 12-13. For comprehensive works on the Ghost Dance and Lakota religion, see James Mooney, *The Ghost Dance Religion and the Sioux Outbreak of 1890* [Chicago: University of Chicago Press, 1965, originally published as part 2 of the *Fourteenth Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1892-1893* (Washington: Government Printing Office, 1896)]; Raymond J. DeMallie, "The Lakota Ghost Dance: An Ethnohistorical Account," *Pacific Historical Review* 51 (November, 1982), 385-405; and Raymond J. DeMallie and Douglas R. Parks, eds., *Sioux Indian Religion: Tradition and Innovation* (Norman: University of Oklahoma Press, 1987).

[196]Dary, *Buffalo Book*, 198-199.

[197]Hornaday, "Discovery, Life, History, and Extermination of the American Bison," 525.

[198]Hasselstrom, *Bison*, 91, 98, and J. Albert Rorabacher, *The American Buffalo in Transition: A Historical and Economic Survey of the Bison in America* (St. Cloud, Minnesota: North Star Press, 1970), 49-54.

CHAPTER 2
Saving the Buffalo Nation

"Through some ministration of the Great Spirit a few buffalo were given to an Indian warrior. These buffalo have multiplied and they are now the most valuable herd in the world."
-- Duncan McDonald, Salish Elder (1904)[1]

Despite the tragedy defining the end of the buffalo days, some remarkable uplifting parallel developments took place. During the decade and a half from 1875 to 1890 when the wild bison population teetered on the brink of extinction, particularly south of the parklands and boreal forest of present northern Alberta and the Northwest Territories, five groups established captive breeding programs that guaranteed survival of the species. During the 1870s, James McKay and Charles Alloway of Manitoba, the Goodnights of Texas, and Samuel Walking Coyote and Sabine of Montana established and increased captive herds. In the 1880s, they were joined by the Dupuis' of the Dakota Territory and Charles Jesse (Buffalo) Jones of Kansas. In three of these households, those of McKay, Walking Coyote and Dupuis, ran the blood of Native Americans who primarily sought the preservation of the buffalo nation for cultural purposes. Jones and Goodnight sought restoration for nostalgic purposes as well but spent considerable effort at attempting to turn a profit by developing a cattle-bison hybrid. Regardless of motives, the efforts of these households buffered the beleaguered bison while the legal slaughter of the 1870s and 1880s continued and subsequent poaching into the 1890s persisted.[2] The hindsight of history reveals that these households did not stand alone in the capture and raising of bison; also, that the bison might have survived without their efforts. However, although they were not the first to capture and raise buffalo calves, they were the

only groups who maintained a captive bison operation from start to finish whereby the calves grew to adulthood and successfully procreated with the progeny remaining in the protected herd. As well, historical documentation tells us that disease and poaching loomed as huge threats to wiping out the buffalo. The fact that these saviors of the bison augmented not only numbers but genetic diversity owing to the disparate geographic origins of their herds can not receive sufficient emphasis. In fact, experts agree that the genes of these five seed herds exist in most of the bison living today.[3]

Before describing and analyzing the stories of the bison saviors with emphasis on the Native Americans, we need to set them in context. Today, most students of the American West can give a rough synopsis of the bison's plight. The Indians and the buffalo coexisted in relative harmony. Then, Euro-Americans arrived on the Plains and brought firearms, livestock that spread disease and competed for resources, horses that enhanced Native American hunting, and trade goods including alcohol that encouraged Indians and buffalo hunters to harvest unnecessary numbers of buffalo. These factors combined nearly to wipe out the buffalo.[4] At the end of the slaughter, conservationists saved some bison by setting aside habitat on federal land with the protection of government forces, namely Yellowstone National Park under the protection of the U.S. Army in the United States and crown lands over-watched by the Royal North-West Mounted Police in northern Canada. Bison eventually prospered and their progeny exist across the United States and Canada in parks, zoos, refuges, and on private ranches.[5]

This brief version of the buffalo's predicament satisfies general knowledge, but it fails to detail the precise nadir of bison population. Also, it does not mention the numerous attempts at raising bison prior to near extinction, nor does it give credit to those front-line conservationists who were successful. Filling in these gaps begins with some details about the wild bison's demise.

During his 1886 expedition to Montana, William T. Hornaday, the renowned hunter-naturalist, found it difficult to locate any buffalo for his Smithsonian Collection.[6] Subsequently, he engaged in arduous study of the demise of the bison and created a map showing the numbers and locations of wild bison. As noted above, Hornaday believed that 835 bison still ran wild in North America. The largest herd numbered 550 and roamed the Peace River country of Canada. The second largest herd, of 200, foraged in Yellowstone National Park. Smaller herds included twenty-five in the panhandles of Texas and Oklahoma, twenty-six in south-central Wyoming, twenty in eastern Colorado, ten in east-central Montana, and four in the western Dakotas.[7] Hornaday's figures potentially possessed some minor inaccuracy, slightly underestimating bison numbers and locations, as revealed by some of the documented killing noted below. Nonetheless, he did illustrate the extraordinarily tenuous position of the once prolific bison reduced to a few wandering bands with possible extinction looming large.

Threats to the very survival of the species, particularly from hunters but also from disease, lurked. People continued to kill bison even after the end of the great herds. For example, when hunters found a "hidden" herd of 165 animals near Jackson Hole, Wyoming, during the winter of 1884-85, they annihilated the

entire herd.[8] Two years later, Texas cowboys killed fifty-two bison they discovered and sold the heads and hides for taxidermy.[9] In 1897 hunters found and eliminated four isolated bison in Lost Park, Colorado. Worse yet, poaching plagued the herd in Yellowstone National Park through the 1890s and into the first decade of the twentieth century. In a 1902 survey Yellowstone Park officials located fewer than thirty animals and the park game warden, Buffalo Jones, deemed it necessary to supplement the herd with captive bison.[10] Following the herd's plight for a couple more decades reveals that even as the herd increased it remained in danger, losing forty members in 1925 when they wandered out of the park and into Montana's Gallatin Valley where hunters quickly slaughtered them.[11] Reminiscent of events south of the forty-ninth parallel, the apparently isolated bison ranging Canada's Peace River country dwindled to fewer than 300 near the turn of the century.[12] Given such low numbers of animals, disease posed a threat to extinction, e.g., twenty-two Yellowstone bison perished in 1912 because of *hemorrhagic septicemia*.[13] With the limited population of bison, hunters unconcerned with preservation of the species and disease undoubtedly threatened the very existence of the bison when it lingered at its nadir. The captive breeding programs provided a major bulwark to extinction due to the protection afforded the animals within the herds.

Although such successful programs failed to materialize until the near complete demise of the bison, the history of attempted captive breeding of bison, particularly by Euro-Americans, extends back all the way to the initial occupation of buffalo country by Europeans. In the late sixteenth century, the first Spanish governor of New Mexico, Don Juan de Oñate, ordered a capture of bison for

domestication. This unsuccessful effort spanned thirty-one years. In 1701, Huguenot settlers in Virginia tried to raise buffalo. Later in the same century, Virginians in western counties attempted to raise bison. Alexander Henry caught bison calves in the Red River Valley in 1800 by leading them behind his horse once their mothers no longer could be found. Robert Wickliffe raised buffalo for thirty years in Kentucky beginning in 1815. He attempted cross-breeding with cattle to produce an enhanced hybrid. The bison captives' ferocity ended his experiment. Artist George Catlin raised several calves during his time on the northern plains. Fur trapper and trader Dick Wootton took care of buffalo calves from 1840 to 1843 in southeastern Colorado. Eventually, he tired of the enterprise and drove the buffalo with milk cows across the plains to market in Independence, Missouri. Famed newspaper editor Horace Greeley while "going west" saw captured calves in Kansas in 1859.[14] In fact, calf-napping proved nearly ubiquitous as stage station managers, soldiers, fur traders, and even buffalo hunters kept bison calves as pets.[15] A particularly compelling story emerges from Montana plainsman Vic Smith's recollection of catching fifty calves in 1879 and penning them on the breaks of the Yellowstone River forty miles north of the stream. Gros Ventres tribal members set the calves free by breaking down the fence.[16]

Ultimately, none of these ventures led to bison increases and dissemination through captive breeding. The reasons for this lack of success come clear in the testimony of British sportsman John Mortimer Murphy written in the same year as Smith caught his calves. Murphy elucidated:

> Lassoing calves is most interesting sport, as the creatures run well. Hunters who wish to obtain calves for menageries or private

> persons often resort to the method of capture [leading bewildered calves behind horses], as the animals are more likely to live than if they were driven hard for several miles before being lassoed. Thousands of them are captured alive annually by being run down with horses, but the greater number die, owing to the severe manner in which they were chased, or else to their grief at being separated from their kindred and the nutritious grasses and freedom of the plains. I have seen a troop of cavalry lasso one hundred of them in two days, and bring them to the barracks, and although they had plenty of room in a corral to run about, and an abundance of hay and grass, few of them lived more than a week. The same mortality was noticeable among those captured by expert lassoers and regular hunters, so it is evident that they cannot stand much hardship.[17]

Indeed, to keep bison alive, protect them, and meet their needs required an inordinate amount of perseverance. Buffalo Jones, an eventual savior of the bison who captured more calves than any other of the original founders of successful programs, even stated about the nearly 60 bison, which he caught and used to start his herd, that "this number does not include the scores I captured when shooting buffalo on the plains for 50 cents a piece; the calves that I captured I generally sold for $5 each, and were probably used for beef purposes."[18] Even as the saving efforts for the sake of posterity got underway, few individuals saw through with their bison captives to ensure success. One such reasonably well documented case typifies that lack of follow-through and comes from the McKoy brothers who caught two calves, a male and female, near Beaver, Oklahoma in 1883. They sent the two to Rand Park in Keokuk, Iowa in 1885. The park then sold two offspring to Page Woven Wire Fence Company of Michigan. The company continued raising the bison with some finding themselves at the New York Zoological Park in 1904. From that herd, in 1907, fifteen buffalo went to one of the first restored public herds in the Wichita

Mountains of Oklahoma in 1907.[19] This example combined with the numerous examples of calf-napping underscores the historical importance of the successful captive breeding programs done by people who hunted, caught, raised, and increased bison to guarantee survival of the species.

The two most famous bison-savers, Charles Goodnight and C.J. "Buffalo" Jones, pop out of the Old West with legendary biographies.[20] From their stories, some of the themes threaded through the successful bison-saving efforts appear. First, front-line conservationists emerged from the ranks of Western bison hunters, Native American and Euro-American, to ensure the survival of the species with whom they possessed extraordinary familiarity. Second, women played a key role. Third, the respective efforts of the Euro-Americans and Native Americans reflected important cultural differences even though both groups possessed a keen sense of nostalgia for the animal. Individualist capitalism characterized the enterprises of Goodnight and Jones. Communalism better describes the work of the Dupuis and Walking Coyote families along with the purchasers of their herds. James McKay, a Métis, falls somewhere in between these characteristics.

By the time his biographers caught up with him, Charles Goodnight was a Texas frontier legend. He had served as a scout for the Texas Rangers and was renowned for pushing cattle across and establishing ranches on the South Plains. He was also quite cantankerous. His biographer, J. Evetts Haley, recollected, "I hesitatingly crossed his ranch-house yard to face the flow of tobacco juice and profanity."[21] Laura Hamner, another biographer, chose to soften Goodnight by accompanying him on rides and visiting with him in his

den.[22] In the end, both Haley and Hamner broke the tough veneer and conveyed the story of Charles Goodnight.

On the plains of Texas in 1866, Goodnight decided to capture some bison calves. He used an old stockman's trick of chasing a herd until the calves tired and could be separated from their mothers and led along. When one unwilling mother charged Goodnight, he defended himself and his horse by shooting her. Sixty-two years later, he explained, "The older I get the worse I feel about having to kill that cow."[23] Goodnight's first capture of bison calves ended like those of so many others. He agreed to let a friend raise them on half shares, but the friend tired of the enterprise and sold the captives. At that point, they vanished from record.[24]

It took the intervention of Mary, "Mollie," Goodnight to guarantee the successful establishment of a Goodnight captive breeding program for the besieged bison. In 1878, during the horrendous slaughter by the hide hunters, Mrs. Goodnight took charge. At this critical point, she explained to her husband "the advisability of preserving to Texas and the nation a few of the buffalo."[25] She abhorred the suffering and hated to think of the "certain extermination of this race of animals."[26] Acting on her suggestion, Charles and Mary's brother roped four calves. The calves were each given a milk cow to suck. They adopted their new mothers and new range and went on to become the beginning of the Goodnights' permanent herd. Their progeny spread all over the country, including Yellowstone, to enhance the existence of their once near-extinct species.[27] Mary Goodnight insured that the calf captures of 1878 did not end like those of 1866. The Goodnight story blends front-line conservation and women's

involvement. The Goodnights portray the consummate Western ranchers, living and working on the southern Plains. Their conservation effort took place at their home. Mary inspired the enterprise and persevered until it succeeded. Perhaps her goodwill made the Goodnight story synonymous with the theme of hunter-conservation or developer-conservation.

Charles Goodnight, like other plainsmen, was a product of his time and environment. He hunted and killed buffalo. When he established his ranch in the Palo Duro region of the Texas panhandle, he stationed camps of cowboys to drive the bison away from available grass and water so that his cattle could feed at will.[28] Goodnight claimed that civilization necessitated the buffalo slaughter and that the buffalo hunters were a "fearless body of men . . . who by killing out the buffalo stopped forever the terror of the settlers, the depredatory tribes of the plains Indians."[29] Clearly, he did not exhibit the characteristics of an environmentalist concerned that nature reign supreme and unchecked.

Still, Charles Goodnight studied nature. According to J. Evetts Haley, Goodnight always laced their conversations with "observations upon the growth of the land with particular attention to varying forms for latitude and altitude, humidity and aridity."[30] Haley said that Goodnight believed: "Everything in nature is useful."[31] According to Laura Hamner, Goodnight's "books were woods and streams . . . by day and stars by night."[32] Goodnight told Hamner that as a ten-year-old boy new to Texas he saw his first buffalo. He "felt a pull that something in the beasts had for a responsive element in him . . . his spirit was roaming the prairie with that animal, powerful, alone, free."[33] Maybe Goodnight's spiritual empathy with the nomads prompted his efforts. Although he helped

destroy the buffalo, his wife's influence and his love for nature combined to mitigate the destruction.

The Goodnights reaped both intangible and tangible rewards of conservation. Visitors frequented their ranch to see the living symbol of the Western frontier. They invited a band of Kiowa to stage a buffalo hunt.[34] Eating buffalo meat held special significance for them. One of Charles' last meals was a Thanksgiving buffalo roast in 1929.[35] Bison played an elemental part in Goodnight's past. More tangibly, buffalo did bring considerable income and the Goodnights battled to earn a decent living. Perhaps they anticipated the future value of buffalo when they began their captive breeding program. Bison hide value increased from $2.50 in the 1870s to more than $100.00 a few years later. Mounted heads and horn products also commanded top dollar. Buffalo meat became a relatively high-priced luxury food.[36] Ever the capitalist, Charles also developed buffalo wool, tallow, and soap products for sale.[37] His rugged individualism showed when he established new ranches in west Texas, when he forged the Goodnight-Loving cattle trail, and when he developed catalo, a hybrid cross between cattle and buffalo, whose meat brought comparatively higher prices than regular beef.[38]

This concept of developing catalo did not originate with Goodnight any more than did the idea of calf-napping to start a captive breeding herd. In fact, both Oñate and Wickliffe had envisioned such a hybrid. Apparently, others sought such an animal as well.[39] This proved true enough to spawn the following critical observation by a contemporary observer in 1872:

> The idea of their domestication at once entered their heads [Western developers], and, from that time to the present, many

> attempts have been made to domesticate them [bison], or, by crossing with domesticated cattle, to impart to the latter some additional valuable quality; but I believe that hitherto all such attempts have proven abortive. Now and then, upon the western frontier, you may see the dun color, high shoulders, and somewhat restless disposition, that indicate a cross between the domestic cow and buffalo bull, but, like the red-blood of the Indian, the mighty throng that is pressing on, soon absorbs it, and obliterates effectually its marks, if not wholly its effects.[40]

Still, Goodnight spent considerable effort to establish a mixed-blood animal and received some notoriety as one of the few successful breeders of the catalo.[41]

Goodnight pursued this manipulation of the bison for decades and foresaw "great possibilities in this cross-breeding."[42] He even became quite defensive about his operation when questioned about whether it was he or Buffalo Jones who first developed a successful hybrid breeding program. Lively correspondence about this debate reflects that both men sought credit for such an enterprise.[43] Ultimately, the hybrid program failed due to infertility problems, but the failure does not indicate a lack of concerted effort on behalf of Goodnight who experimented with a variety of crosses and cattle breeds to pull off the enterprise.[44] In the end, the Western plainsman and his wife helped resurrect the bison from the brink of disaster, but Charles' effort at hybridization went beyond simple saving of the species on its own terms and indicated that precepts of Euro-American development played a heavy role in his work with the bison.

Such development also characterizes the other famous bison-saver, Charles Jesse Jones, colorfully known by his more common name of Buffalo Jones. A resident of the southern Great Plains like the Goodnights, his adventures took him from his home in Kansas to the frozen Canadian North and

the steaming jungles of Africa. His exploits varied from farming, buffalo hunting, and serving as game warden of Yellowstone National Park to lecturing on his experiences in Africa. Actually, these listed enterprises comprise only a small portion of his accomplishments. However, preserving the buffalo offered his greatest contribution to posterity.

Jones claimed that he conceived his rescue idea in 1872. He still hunted buffalo for a living, but he sought to atone for his slaughter.[45] To this end between 1886 and 1889, he and his staff embarked on four rescue missions ranging from Garden City, Kansas down into the Texas panhandle and catching an estimated fifty-six buffalo calves.[46] These provided the start for a domestic herd that served as the foundation of other private and public herds throughout the United States, including one herd used by journalist Ernest Harold Baynes to promote the American Bison Society.[47]

Jones' entertaining tales of his expeditions detail roping calves, grabbing their tails, and hand-throwing them. He explained to his biographer, Henry Inman, that on his first calf-catching expedition he protected his charges from wolves that closed in on the thrown and tied calves. Jones could not stop while he labored to catch as many calves as possible, so he left an article of clothing with each calf to deter the hungry wolves. Half-naked and burdened by a calf under each arm, Jones rode back to aid his captives. Finally, his support wagon, furnished with pails of milk, arrived and saved the day.[48]

Correspondent Emerson Hough, accompanying Jones' second expedition, provided a near magical description of one Jones capture: "Up came his hand, circling the wide coil of the rope. We could almost hear it whistle through the air .

. . in a flash the dust was gone, and there was Colonel Jones kneeling on top of a struggling tawny object." [49] Later on the expedition, Jones, like Goodnight, was "compelled to kill [an attacking mother buffalo] with his revolver." Hough related that this as "an unwished result, and was much deplored, for we came, not to slay, but to rescue."[50] Nonetheless, Jones successfully captured his calves and fostered them on milk cows, usually involving an initial brawl until the calf and cow became accustomed to each other on the long drive from Texas back to Kansas. [51]

Buffalo Jones' last two calf-napping expeditions in 1888 and 1889 proved noteworthy for a couple reasons. First, Jones tried but failed to catch and drive adult bison. Jones explained that the adults "took fits, stiffened themselves, then dropped dead, apparently preferring death to captivity." [52] Second, it was on this expedition that the last wild buffalo calf of the southern range was caught. Jones described the moment: "I whirled the lasso in the air. I laid the golden wreath around the neck of the last buffalo calf ever captured." [53]

Like other savers of the bison, Jones, a Westerner, saved buffalo where he worked and lived. Guilt motivated his hunter-conservationism. In the 1870s he had been one of the foremost buffalo hunters; he, himself, claimed killing "thousands" of the large creatures, even though many times he sought to break his rifle over a wagon-wheel and quit the slaying business. Then hearing the boom of other hunters' rifles, he rationalized that with or without his presence, the bison were doomed. He would shoulder his rifle and head off for another day's shooting. Later he said, "I am positive it was the wickedness committed in killing

so many that impelled me to take measures for perpetuating the race which I had helped almost destroy."[54]

Similar to Goodnight, love for nature and a drive to control it motivated Jones. He often longed to "be by himself in the timber or fields where he could indulge in his love of nature untrammeled by any uncongenial companions." [55] Jones saw nature as something beautiful, but something created to serve humankind. As a child he would catch little animals and "tame them in his own peculiar way."[56] In fact, he made his first money by capturing and selling a squirrel. A "transaction," Jones said, that "fixed upon me the ruling passion that has adhered so closely through life."[57] He compared the nearly-extinct buffalo to the biblical reference of the "stone which the builders rejected" insisting that the domesticated buffalo would become the chief of all ruminants, as the rejected stone became the cornerstone. Jones claimed he would "chain" and "dominate" the buffalo.[58] He spoke of "dominion" over the creature. [59]

Jones' comments suggest that he hoped for economic benefit while he exercised his dominion over the bison. Like other buffalo savers, Jones battled most of his life to make a respectable living. He prospered and suffered as a farmer, buffalo hunter, town developer, and rancher. Jones believed that one day buffalo would supplant cattle as the lords of the domestic range.[60] He spent a great deal of money on his expeditions and undoubtedly hoped for a return on his investment. His capitalist motivation appeared in his bid to develop the catalo as he vied with Charles Goodnight to earn recognition as the champion breeder of the cattle-bison cross.[61] He bought and sold buffalo for several years dealing in tens of thousands of dollars.[62] During the 1890s, he lobbied the federal

government both for a bison preserve and assistance for his hybridization program.[63] Jones' conservation, motivated by guilt, Euro-American ideals for dominance of nature, and capitalist fervor, combined with the efforts of the Goodnights to help save the bison of the southern Plains.

Meanwhile, the northern plains bison possessed their protagonists as well, with native people dominating the efforts. James McKay, a mixed-blood giant of a man with a Scot father and Métis mother, conceived of preserving the bison as early as 1872. An annual participant in the Red River hunts where Métis families went out on the prairie *en masse* for coordinated harvesting by their hunting brigades, McKay became alarmed at the lack of bison after their hunt took them much farther west than usual.[64] His business partner and assistant in the bison-saving effort, Charles Alloway, described their thoughts on saving the bison: "We talked it over, and through that winter concluded that the buffalo could not last much longer."[65] Thus, in the spring, 1873, with the assistance of French Métis hunters, McKay managed to acquire two heifer calves and one bull calf from the Battleford area on the Battle River. Alloway recollected that they lassoed the calves or ran them down after hunting as the pitiful calves approached the hunting camp. Like others before and after them who successfully maintained healthy calves, McKay put the new young charges with milk cows and kept them at his ranch at Deer Lodge near Headingly on the Assiniboine River located twenty-eight miles west of Fort Garry, present Winnipeg, Manitoba.[66] Alloway explained, "We fed them hay and tended them in shelters much the same as domestic cattle."[67] In April 1874, McKay again went out with the Métis hunting

brigades totaling between eighty and one hundred hunters supported by women and children numbering nearly 2,000 clambering along in the distinctive Red River carts or on horseback. Alloway described the hunting party as "migratory tribes of Indians or half-breeds." In May, the group encountered bison to the west along the Milk River breaks near the forty-ninth parallel southward between present Moose Jaw, Alberta and Regina, Saskatchewan. They caught three more calves to include one bull and two heifers. The young male subsequently died, and McKay's small captive herd back at Deer Lodge contained five members after the 1874 hunting expedition.[68]

The small protected herd grew and in 1877 Samuel Bedson, the warden of the penitentiary at Stony Mountain, Manitoba, bought four young bulls and one heifer from McKay. McKay lived just two more years, but his herd increased to thirteen pure-bred bison and three cross-bred catalo. The subsequent developments with respect to his herd eventually tied back into the bison restoration efforts south of the forty-ninth parallel. At McKay's estate sale in 1880, Bedson purchased another eight bison and acquired another three from other sources. The warden grew his herd to 83 bison in 1888, but he left the bison business, marked both by increase and attempted cross-breeding, when he sold his herd totaling 58 pure bison and 28 cross-breeds to Buffalo Jones. At the same time, McKay's neighbor Lord Strathcona, Sir Donald Smith, on behalf of the Canadian government began a herd presumably from McKay's bison. He kept his herd until 1898 when he donated his thirteen animals to Rocky Mountain Park at Banff where it became the last Canadian breeding population outside of those animals left in the parklands and woods to the north.[69]

The motives for McKay do not appear in the historical record as readily as those of Goodnight and Jones. Still, the evidence from his partner Alloway's recollections indicates a simple desire to preserve an animal very important to the northern plains and prairies. McKay, a speaker of Cree and several other First Nation dialects along with both English and French, eventually became the provincial secretary of Manitoba.[70] Both a businessman and politician, he appears not to have used the bison to advance either business goals in his freighting enterprise moving goods between St. Paul, Minnesota and Edmonton or political ambitions as a dominator of nature. As well, he did not engage in widespread breeding programs aimed at developing the catalo. Like others who maintained bison with cattle for a calming effect, he did get mixed-breed animals in his herd, although the numbers do not indicate an extraordinary attempt to create a "super cow" like that desired by Buffalo Jones. Nonetheless, McKay lasted in the business just a few years, long enough to preserve the bison, but not long enough to develop a full-blown program from which observers could determine his full intentions beyond simply saving the species. The Red River hunting brigades retain some measure of fame for their intensive bison harvesting that combined both sustenance and commercial robe and pemmican industries. Indeed, these hunts provided a blend of both communalism and individualistic capitalism. McKay's effort to save the bison reflects influences of both his First Nation and Euro-Canadian heritages.

While McKay's bison work represents a cultural middle ground, the efforts of the two Native American households, Salish and Lakota, which saved bison on

American soil more firmly symbolize Native American communalism driven by something other than capitalist economic thought. The first of these two stories emerges from northwestern Montana where a Salish family engaged in a near epic effort to bring bison back to the Flathead Valley from the northern plains across the Rocky Mountains.[71] The somewhat controversial[72] story first appeared in the public record in 1902 when George Bird Grinnell published it in a July issue of *Forest and Stream*.[73] Interested in the origins of domestic bison herds, Grinnell asked a hunting guide friend, Jack Monroe, to investigate the origins of the Flathead Valley herd. Monroe met with the owners at the time, mixed-bloods Michel Pablo and Charles Allard, and acquired a testimonial correspondence from Montana entrepreneur Charles Aubrey.[74] A former fur trader, buffalo hunter, and rancher, Aubrey, who like others had tried and failed to establish a captive bison program, articulated the details of the herd prior to its purchase by Pablo and Allard.[75] His story, rich in detail, illustrates an effort far different in its inception than that of Goodnight, Jones, or McKay.

Aubrey explained that in the winter of 1877-1878, he occupied his trading post on the Marias River just south of present Shelby, Montana.[76] The popular native wintering ground, though firmly within the home territory of the Blackfeet, bore residents from many other Indian nations as well to include Sarcee and Stony from the north; Klamath, Kootenai, Nez Perce, and Salish from the west; Assiniboine and Gros Ventres from the east; and even a family of Crow from the south. Aubrey maintained that the wake of the Nez Perce conflict left a feeling of sympathy among the tribes so that traditional animosities abated. Meanwhile, a drama unfolded within the trading encampment when a Pend d'Oreille man

named Samuel Walking Coyote, married to a Salish woman named Sabine, became involved with a Blackfeet woman. The affair caused a domestic dispute that Aubrey attempted to mediate by asking the Blackfeet to restrain their young lady while he attempted to settle matters between Walking Coyote and Sabine. Tempers flared through the winter, but the Blackfeet woman left in the spring following a quarrel in which Walking Coyote injured Sabine. Aubrey explained to the Salish man that the circumstances became grave and that neither the Salish community back home in the Flathead Valley nor the Jesuit priests there would treat Walking Coyote kindly in light of the matter. Aubrey stated that the fearful Walking Coyote and he then devised a plan to make amends for the transgression. Because bison did not range in the Flathead Valley, then Walking Coyote could capture and take bison calves back to the community and the priests. The gentlemen agreed.

The next day, Walking Coyote and Sabine prepared to leave with plans to rope calves and then bring them back to Aubrey's post to habituate them with milk cows. The plan worked and within a couple days, the husband and wife team returned with a heifer and bull to pen with the cows. Walking Coyote told Aubrey that the Salish family, which probably included their teen-age son Joseph Attahe,[77] would return to the hunting grounds to catch more calves and that the herd already was moving north toward its summer range near the Saskatchewan River. Thus, he feared running into enemy hunters and that the family would not return for more than a week either way. Eight days after departing, they successfully returned with three more heifers and two bulls. Walking Coyote told Aubrey some of the details including the loss of one heifer whose neck broke

during a roping accident. Sabine took this as an omen to end the effort and they then hobbled the calves and led them back to Aubrey's post. The fur trader remembered that they left within a few days as a pack train with Sabine leading the family with pack horses followed by the calves and Walking Coyote trailing.

Aubrey did not see them again, although he did ascertain knowledge of their return trip. They crossed the Teton and Sun Rivers, went up the Dearborn River to cross the continental divide at Cadotte Pass, and descended along the Blackfoot River. Then, they passed through Hell Gate, skirted alongside the Bitterroot Valley and climbed through the Koragen defile where U.S. Highway 93 now runs to drop into the Flathead Valley. They lost one bull after a debilitating injury. Whether or not Walking Coyote received vindication for his actions remains unclear. Either way, they made it back home and began raising their small herd.[78]

During Monroe's interview of Michel Pablo and his wife, the couple verified much of the story and remembered the arrival of bison calves back into the valley.[79] Similarly, Charles Allard explained in an 1889 letter to George Bird Grinnell that his and Pablo's bison came from calves "bought from the Indians."[80] Others remembered the early story of the calves as well. Long-time Flathead Valley mixed-blood resident Duncan McDonald recalled in an interview late in life "that *Whista Sinchilape* or Walking Coyote found three little heifer and three little bull calves wandering" and that "Mary Sabine" and "Joe Attahe" helped drive the calves back to the St. Ignatius area of the Flathead Valley.[81] Duncan's brother, Joseph McDonald, also remembered "Samuel" and the calves. Noting that the community became excited each year during the calving season for the bison, he

added that the Salish family confined them to a small pasture but eventually they freely wandered often in the vicinity of Fort Connah, a former Hudson's Bay Company post located just a few miles across the valley from St. Ignatius.[82] Another Salish man named Que-que-sah also recalled the calves, commenting: "I remember Samuel Welles whom the white people called Indian Sam and Indian Samuel." He continued, "I was in the village of St. Ignatius that day in 1873, when Welles rode in with his pack string." Que-que-sah remembered the initial pasturing and later free ranging of the small herd. Community members often gathered after church on Sundays to watch the bison for a time of reflection. He also acknowledged that Pablo and Allard bought these bison to start their herd. He went on to indicate that he believed that they acquired a few calves later from Blackfeet to augment their captive breeding herd.[83] Father Lawrence Palladino, a priest at St. Ignatius during this time wrote in retrospect about the Pablo-Allard herd claiming that it "all sprung from two calves captured and brought to St. Ignatius in our first days on the place by Indian Samuel."[84] Indeed, Pablo and Allard bought the bison from Walking Coyote's family in 1883 or 1884. Sources usually fix the number purchased at between eight and fourteen.[85] By the time Allard wrote to Grinnell in 1889, the partners owned 34 head with a vibrant herd that would eventually increase into the hundreds.[86]

Comparing the efforts of Walking Coyote and Sabine's effort to deliver bison to their homeland and thereby perpetuate the species with those of other saviors brings up some important similarities and differences. First, these people lived and worked in the West on the front-lines of both harvesting and conservation. Their culture depended on the bison. Second, as native people,

they did not concern themselves with cross-breeding experiments or genetic manipulation. Rather, they raised bison as bison and not farm cows even to the point that they allowed their buffalo open range. Of paramount consideration here remains the fact that the Salish nation of the Flathead Valley clearly offered tacit approval to bring back the bison since they allowed the herd free run of the reservation. Third, Sabine played a key role in perpetuating the species right down to hunting and herding the calves. The generations of native women intimately involved in the bison-human relationship continued through her involvement. Moreover, this primary involvement of native women characterized the effort of the fifth and final household to save bison, the Dupuis of the Lakota nation.

The Dupuis,' also known as the Dupres, Duprees, or Dupris, received far less notoriety than the Goodnights or Buffalo Jones. Nonetheless, their life stories prove comparable. Frederick Dupuis, a French-Canadian, arrived at Fort Pierre in present South Dakota in 1838.[87] A fur trader, he first worked for Pierre Chouteau's American Fur Company then traded independently. Documentation from his trading days in 1860 and 1861 reveals that he largely concerned himself with Indian activity, trade goods, and the whereabouts of the buffalo.[88] Eventually, Dupuis left the fur trade and became a rancher until his death in 1898.[89]

Dupuis lived in South Dakota for sixty years, witnessing the Plains Indian horse culture at its prime, the steady resource exploitation by fur trappers and traders, the Black Hills gold rush, the domination by the blue-coated federal

soldiers, the destruction of the buffalo, the establishment of towns, farms, and ranches, and the massacre of his Lakota neighbors at Wounded Knee. Dupuis married a Minniconjou Lakota named Good Elk Woman who took the name Mary Ann Dupuis. They had nine children. The Dupuis' established a large ranch on the Cheyenne River that served as a camp and hub for Indian activity with at least fifty people being served supper daily.[90] Serving as a bridge between two cultures, the Dupuis household also linked the old wild herds of bison and the captive herds that insured survival after the slaughter.

A Dupuis expedition to save the buffalo occurred sometime between 1881 and 1882 somewhere on the hunting grounds along either the Grand, Moreau, or Yellowstone Rivers in the present western Dakotas or eastern Montana, different reports giving different dates and locations.[91] An account of a Dupuis hunting expedition at this time lends insight into the family's life in buffalo country. At the invitation of a Dupuis son-in-law, Clarence Ward, the Reverend Thomas Lawrence Riggs accompanied the Dupuis family on what he labeled the last winter buffalo hunt of the Dakotas. After seeking permission from the family for Riggs to accompany the hunt, Ward announced to the clergyman that the Dupuis boys and Mary were excited about his presence and wished him to share their tent. Frederick did not go along on the hunt. Riggs described a communal Indian hunt with horses, travois, and dogs. The Dupuis family took a buckboard and tents. About half of the hunting party consisted of women. The hunters proved successful, and the Dupuis family took care of Riggs during the hardships of the hunt. He concluded that the industrious, good-natured Native Americans possessed great expertise at buffalo hunting.[92] Riggs never mentioned that the

Dupuis boys captured live calves on this hunt although it seems certain his detailed account would have recorded such an event.

Curiously, George Philip, a close relative of Scotty Philip who eventually purchased the Dupuis bison herd, insisted that it was during an 1880-81 hunt that Pete Dupuis, Frederick and Mary's son, caught the live calves. Apparently, the hunt referred to by Philip was not the same as that described by Riggs. Philip specified that Dupuis caught the calves after an exhaustive chase in the breaks of the Grand River, then loaded the youngsters onto a wagon for a ride back to the Dupuis ranch on the Cheyenne River. He put the calves in with the Dupuis cattle where they ranged on the Cheyenne River Reservation without incident.[93]

Another account, possibly primary, exists concerning the capture of the calves. Basil Clement, a companion of Frederick Dupuis, related his version of the story to Circuit Judge John F. Hughes of Fort Pierre who years later told Clement's story. Clement maintained that he, Frederick Dupuis, and one Dupuis son headed west toward Montana to capture buffalo calves. When they found a herd, they stayed downwind and watched the animals graze until the calves bedded down and the mothers wandered off feeding. Then the hunters stole the little creatures that instinctively remained motionless. The hunters loaded the orphans on the buckboard and took them back to the Dupuis ranch. Charles Deland, the recorder of Hughes' story, noted that contemporary eyewitnesses confirmed that four young bison lived on Dupuis land in the fall of 1883. Apparently, the Dupuis' acquired these animals during the previous spring or summer.[94]

Regardless of the exact details surrounding the capture of the bison calves, the Dupuis family helped save buffalo. By 1888, the successfully growing herd numbered at five cows, four bulls, and seven mixed-blood catalo.[95] The hybrids resulted from ranging with domestic cattle to keep the bison from wandering away, rather than an attempt by the Dupuis' to create a mixed-blood breed.[96] The Dupuis story shares the common themes found in the other endeavors. Front-line conservationists, these people lived and worked on the northern Plains. Their sense of communalism becomes evident when examining their hospitality and hunting. Mary, a full-blood Minniconjou experienced in the buffalo culture, proved instrumental in the effort. Riggs' account of the 1880-81 buffalo hunt suggests that she administered the Dupuis hunting party, and she clearly helped guide the family. Frederick Dupuis told the *Pierre Free Press* in 1890, "Many years ago, I married a good Indian woman." When asked about taking land in severalty, he deferred, "My old woman can take land if she wants to."[97] Frederick honored his wife's wishes. One observer of the French-Canadian fur trappers and traders noted that the "only authority [they] acknowledged was that of [their] Indian spouses."[98] Indeed, Mary, Good Elk Woman, influenced Frederick and her sons to save a few of the remaining buffalo. The oral tradition among descendants of Frederick Dupuis and Good Elk Woman fully celebrates the leading role played by her in bringing back the bison.[99] Given the tribe's traditional explanation of White Buffalo Calf Woman as the architect for a covenant between human and buffalo nations, this role of a Lakota woman reconciling the two entities proves quite familiar.[100]

Thus, as disaster struck in Indian Country in 1890 symbolized by Wounded Knee, a small promise of hope existed with the consolidation of protected bison herds. Walking Coyote and Sabine's herd descendants numbered into the thirties and represented the largest herd under the aegis of native people, namely Michel Pablo of the Salish-Kootenai Reservation. The Dupuis herd possessed at least nine full-blood bison grazing on the Cheyenne River Reservation. Meanwhile, McKay's Métis-gathered herd did not find its way to a First Nation reserve, but did become a small seed herd for Rocky Mountain Park along with a large addition to Buffalo Jones' herd on the southern Plains. The southern Plains did come to contain the most privately-protected bison at the dawn of the 1890s with Jones and Goodnight maintaining several dozen bison each.

Yet even as the bison in Indian Country maintained some degree of autonomy with open range, these days would conclude as increasing pressure toward a Euroamerican re-structured landscape dominated even the apparent safe havens of Native American reservations. Much like North America's indigenous people in many ways faced their greatest challenge in the face of demographic and cultural collapse after the conclusion of military hostilities, so, too did the bison which had come to range in protected Indian Country. Both the native people and the buffalo in the period around the turn of the century and for a few succeeding decades would come to suffer from the loss of their autonomy and the benefits of their covenant relationship. The bison and the American Indians would soon follow the way of their Canadian brethren who no longer maintained bison herds following the sale of the McKay herd.

Endnotes

[1]Duncan McDonald, compiled by Mabel Olson, "Legend of the Red Buffalo Leader," 28 August 1941 (Bozeman: Montana State University, W.P.A. Writer's Project File Number 300.051), 7. In this passage, McDonald refers to Samuel Walking Coyote and the descendants of his herd that became the nucleus of the Pablo-Allard herd. The regionally renowned McDonald, a mixed-blood Salish elder, first told the story for the Old Timer's Club in 1904 when the *Daily Missoulian* published it on August 28. Olson compiled the story and other material for the Writer's Project. McDonald often appears as MacDonald.

[2]See Barsness, *Heads, Hides and Horns*, 147-148; Danz, *Of Bison and Man*, 118-122; Geist, *Buffalo Nation*, 103-111; Isenberg, *Destruction of the Bison*, 176-182; Rorabacher, *American Buffalo in Transition*, 51-60; and Ken Zontek, "Hunt, Raise, Capture, and Increase: The People Who Saved the Bison," *Great Plains Quarterly* 15:2 (spring 1995), 133-149. Parts of this chapter first appeared in "Hunt, Raise, Capture, and Increase."

[3]Judith Hebbring Wood, "The Origin of Public Bison Herds in the United States," *Wicazo Sa Review* 15:1 (spring 2000), 157-182 and George D. Coder, *The National Movement to Preserve the American Buffalo in the United States and Canada Between 1880 and 1920* (Ph.D. dissertation, Ohio State University, 1975 [unpublished manuscript]), 40-42, 76-84. Coder's unpublished dissertation remains the single best work detailing the initial efforts to save bison. Also, in 1924 the eminent naturalist George Bird Grinnell wrote a survey and brief history of the bison entitled "The American Bison in 1924." As an editor of *Forest and Stream* and former frontiersman, Grinnell possessed a keen interest in conveying to the public accurate information about bison. His survey of the herds in 1924 revealed that virtually all the bison alive in the United States, with the exception of the few wild Yellowstone buffalo, descended from bison caught and saved in captive breeding programs by just the four American households [George Bird Grinnell, "The American Bison in 1924," in *Hunting and Conservation: The Book of the Boone and Crockett Club*, George Bird Grinnell and Charles Sheldon, eds., (New Haven: Yale University Press, 1925), 393-411].

[4]Richard White, *"It's Your Misfortune and None of My Own": A History of the American West* (Norman: University of Oklahoma Press, 1991), 216-9.

[5]Barsness, *Heads, Hides and Horns*, 152-157 and McHugh, *Time of the Buffalo*, 304-314.

[6]Hornaday, "Discovery, Life, History, and Extermination of the American Bison," 502.

[7]Ibid., 525 and Larry Barsness, The *Bison in Art: A Graphic Chronicle of the American Bison* (Flagstaff, Arizona: Northland Press, 1977), 121.

[8]E.J.Clifford, "Bison Hunting," *Oregon Historical Quarterly* 52 (December 1951), 261.

[9]Hornaday, "Discovery, Life, History, and Extermination of the American Bison," 502.

[10]Meagher, *Bison of Yellowstone National Park*, 21, 26; Coder, The *National Movement to Preserve the American Buffalo*, 98-106; Barsness, *Heads, Hides and Horns*, 154-56; and Geist, *Buffalo Nation*, 98.

[11]Martin Garretson to Dick Adams, 1 July 1925, American Bison Society Files, Conservation Center Library, Denver, Colorado, in Barsness, *Heads, Hides and Horns*, 157.

[12]Francis Harper, 'Letter to the Canadian Field Naturalist," *Canadian Field Naturalist* 39 (1925), 45 in McHugh, *Time of the Buffalo*, 305. See also Geist, *Buffalo Nation*, 98.

[13]George Bird Grinnell, "The American Bison in 1924," 399.

[14]See Dary, *Buffalo Book*, 241-244; Haines, *The Buffalo*, 213-219; and Roe, *American Buffalo*, 707.

[15]Barsness, *Heads, Hides & Horns*, 147,186-187.

[16]Vic Smith, "Roping Buffalo Calves," *Recreation* (May 1896), 365-366 in Barsness, *Heads, Hides & Horns*, 147.

[17]John Mortimer Murphy, *Sporting Adventures in the Far West* (London:
Sampson, Low, Marston, Searle and Rivington, 1879), 165-166.

[18]Charles Jesse Jones to Charles Goodnight, 18 April 1917; Charles Goodnight File, J. Evetts Haley Collection, Nita Stewart Haley Memorial Library, Midland, Texas. Jones claimed that he captured eighty-nine calves in this letter; however, other sources fixed his actual total to approximately fifty-six animals, e.g., See Coder, *National Movement to Preserve the American Buffalo*, 38 and Isenberg, *Destruction of the Bison*, 176.

[19]Dary, *Buffalo Book*, 233-234

[20]See J. Evetts Haley, *Charles Goodnight: Cowman and Plainsman* (Norman: University of Oklahoma Press, 1936); Laura Hamner, *The No-Gun Man of Texas: A Century of Achievement, 1835-1929* (Amarillo: Hamner, 1935); and Henry Inman, ed., *Buffalo Jones' Adventures on the Plains* (Lincoln: University of Nebraska Press, 1970).

[21]Haley, *Charles Goodnight*, ix.

[22]Hamner, *No-Gun Man of Texas,* 251.

[23]Haley, *Charles Goodnight*, 438.

[24]Dary, *Buffalo Book*, 229.

[25]Charles Goodnight, Emanuel Dubbs, John Hart, *et al, Pioneer Days in the Southwest from 1850-1879* (Guthrie, Oklahoma: The State Capital Company, 1909), 28.

[26]Ibid. See also Dary, *Buffalo Book*, 229.

[27]Dary, *Buffalo Book*, 227. See also Coder, *National Movement to Preserve the American Buffalo*, 7-15.

[28]Hamner, *No-Gun Man of Texas*, 133.

[29]Goodnight, Dubbs, Hart, *et al*, *Pioneer Days in the Southwest*, 21.

[30]Haley, *Charles Goodnight*, 422.

[31]Ibid., 80.

[32]Hamner, *No-Gun Man of Texas*, 11.

[33]Ibid., 4-5.

[34]Ibid., 240.

[35]Haley, *Charles Goodnight*, p. 464.

[36]Hamner, *No-Gun Man of Texas*, 226.

[37]Dary, *Buffalo Book*, 229-231.

[38]Hamner, *No-Gun Man of Texas*, 226.

[39]See Barsness, *Heads, Hides & Horns*, 173-179; Dary, *Buffalo Book*, 271-278; Haines, *The Buffalo*, 213-216; and Rorabacher, *American Buffalo in Transition*, 95-105.

[40]John Henderson, "The Former Range of the Buffalo," *The American Naturalist* 6 (1872), 80.

[41]Edmund Seymour to Charles Goodnight, 19 March 1917, Charles Goodnight File, J. Evetts Haley Collection. Worthy of note, in this letter Seymour makes it clear that Goodnight favored spelling catalo as "cattalo." Buffalo Jones

favored the more widely adopted "catalo." Seymour's interest in this business stemmed from his position as an official in the American Bison Society. He eventually became president.

[42]Goodnight to Seymour, 1 March 1917, Charles Goodnight File, J. Evetts Haley Collection. See also Jones to Goodnight, 18 April 1917, Charles Goodnight File, J. Evetts Haley Collection.

[43]See Goodnight to Seymour, 24 February 1917; Seymour to Goodnight, 19 March 1917; Jones to Goodnight, 3 April 1917; and Goodnight to Seymour, 28 August 1917, Charles Goodnight File, J. Evetts Haley Collection.

[44]Dary, *Buffalo Book*, 274-275 and Rorabacher, *American Buffalo in Transition*, 96.

[45]Inman, ed., *Buffalo Jones' Adventures*, 37.

[46]Barsness, *Heads, Hides & Horns*, 143.

[47]McHugh, *Time of the Buffalo*, 298-299.

[48]Inman, ed., *Buffalo Jones' Adventures*, 58-65, 76-82.

[49]Emerson Hough, "A Buffalo Hunt Indeed," in ibid., 133.

[50]Ibid., 135.

[51]Barsness, *Heads, Hides & Horns*, 145.

[52]Inman, ed., *Buffalo Jones' Adventures*, 222-223.

[53]Ibid., 219.

[54]Ibid., 235.

[55]Ibid., 24.

[56]Ibid.

[57]Ibid., 22.

[58]Ibid., 50.

[59]Ibid., 25.

[60]Ibid., p. 49.

[61]See above note 43.

[62]McHugh, *Time of the Buffalo*, 296.

[63]Coder, *National Movement to Preserve the American Buffalo,* 89-93.

[64]For the best synopsis and analysis of the McKay's bison-saving effort and subsequent dissemination of his small herd, see Coder, *National Movement to Preserve the American Buffalo,* 2-7. Judith Hebbring Wood also elucidates the record in "Origins of Public Bison Herds," 168. See also Bill Burns, "Bison: Back from the Brink," *The Beaver* 82:5 (October/November 2002), 19; Dary, *Buffalo Book*, 225-226; Garretson, *American Bison*, 216-217; Haines, *Buffalo*, 220; and Roe, *North American Buffalo*, 708.

For a biography of McKay, see Mary McCarthy Ferguson, *The Honorable James McKay of Deer Lodge* (Winnipeg: published by the author, 1972).

Three works on the Red River hunting brigades include Dobak, "Killing the Canadian Buffalo," 33-52; John Foster, "The Métis and the End of the Plains Buffalo in Alberta," in Foster, Harrison, and MacLaren, eds., *Buffalo*, 61-78; and Gerhard Ens, "Dispossession or Adaptation? Migration and Persistence of the Red River Métis, 1835-1890," in R. Douglas Francis and Howard Palmer, eds., *The Prairie West: Historical Readings* (Edmonton: Pica Pica Press, 1992), 136-162 first published in *CHA Historical Papers 1988 Communications Historiques* (Ottawa: Canadian Historical Association, 1988), 120-144.

[65]Charles V. Alloway, interview with T. W. Leslie, found in "Buffalo Preservation" file in the Hudson Bay Library, Winnipeg, Manitoba in Coder, *National Movement to Preserve the American Buffalo,* 4.

[66]Coder, *National Movement to Preserve the American Buffalo,* 2-5

[67]Ibid., 5. For Alloway's quotes, Coder utilized an untitled article that he referred to only as *Winnipeg Tribune*, June 24, 1925. See ibid., 48, notes 10-18.

[68]Ibid.

[69]Coder, *National Movement to Preserve the American Buffalo* , 5-7 and Hebbring Wood, "Origins of Public Bison Herds," 168.

[70]Coder, *National Movement to Preserve the American Buffalo,* 2.

[71]According to the originally published story, Samuel Walking Coyote and his wife hailed from the Upper Pend d'Oreille tribe (Charles Aubrey, "Natural History: Montana's Buffalo," *Forest and Stream,* 5 July 1902, 6). However, Duncan McDonald, a regionally renowned and long-time native resident of the Flathead Valley, made it clear in a 1908 interview that the area's Native Americans considered the Flathead and Upper Pend d'Oreille people culturally inseparable and therefore referred to themselves collectively as Salish ("Duncan McDonald," *Phillips County New and the Enterprise, Malta, Montana*, 23 August 1908, 1).

Also, Salish serves as the name of the language most common to tribes in the Columbia Basin. Many tribes, including the Salish, spoke respective dialects of the Salish language. See Stuart A. Chalfant, "Aboriginal Territories of the Flathead, Pend d'Oreille, and Kutenai Indians of Western Montana," in D.A. Horr, ed., *Interior Salish and Eastern Washington Indians II* (New York: Garland Publishing Inc., 1974), 5. The Lower Pend d'Oreille tribe living to the west receive the epithet of Kalispel.

The designation of "Flathead" for the Salish occurred because northern plains tribes east of the Rocky Mountains identified all the Salish-speaking tribes west of the mountains by "the generic name of the Flatheads" [Meriwether Lewis, *The Original Journals of the Lewis and Clark Expedition*, vol. 4, (New York: Dodd and Mead Co., 1904), 184]. The Salish of present western Montana did not alter the cranial structure of their infants, but the name of Flathead stuck because other Salish speakers to the west indulged in the practice. Fur trader Ross Cox elucidated the cultural geography of this habit when he wrote in the early nineteenth century about the tribes of the Columbia Basin: "Indeed, it is only below the falls and rapids that the real flat heads appear" [Ross Cox, *The Columbia River*, Edgar and Jane Stewart, eds., (Norman: University of Oklahoma Press, 1957, reprint)], 142.

[72] The controversy surrounding the story emerges from the claim by Indian agent Peter Ronan and his wife, Mary, that he started the Flathead Valley herd. Ronan made his claim in 1888 stating that he initiated the herd with three bison calves that he acquired from Native Americans in 1878 [Peter Ronan, "Annual Report to the Commissioner of Indian Affairs, 1888," *Annual Report of the Commissioner of Indian Affairs to the Secretary for the Year, 1888* (Washington: Government Printing Office, 1888)], 158. For Mary Ronan's claim, see H.G. Merriam, ed., *Frontier Woman: The Story of Mary Ronan as Told to Margaret Ronan* (Missoula: University of Montana Press, 1973), 119. Later, historians such as Larry Barsness and Helen Addison Howard used these claims combined with confusion over the names of the Salish family members who brought the bison back to the Flathead Valley to portray misconstructions of the story. See Larry Barsness, *Heads, Hides & Horns*, 182-183 and Helen Addison Howard, "The Men Who Saved the Buffalo," *Journal of the West*, July, 1975, 123.

For validation of the story as presented by Charles Aubrey, see Ken Zontek, *Saving the Bison: The Story of Samuel Walking Coyote*, unpublished master's thesis, New Mexico State University, 1993. For critical proof verifying the veracity of Aubrey's story in light of the confusion over names, see Andrew Stinger, interview with Bon I. Whealdon, "Indians Have Several Names," 14 October 1941 (Bozeman: Montana State University, W.P.A. Writer's Project File Number 910.039), 1-2. Referring specifically to the Walking Coyote story, Stinger stated:

> A deeper knowledge of the naming of an Indian, strengthens my contention. For example, we will take a Pend d'Oreille named "Mescal Michel." He marries a Flathead squaw, and mingles with her people, who call him "Many Bears." He joins a party of Nez Perce buffalo hunters, who dub him "Shot His Horse In The Head." He is baptized with the name "Joseph Peter Michel." The pioneer

settlers call him "Michel Joe." Here we have the same individual known to five different groups by five different names. "Mescal Michel, Many Bears, Shot His Horse In The Head, Joseph Peter Michel, Michel Joe" passes away. Years elapse, then the few remaining survivors from each tribe tell their story of the same man, each group calling him by the name he was known to that division.

See also Que-que-sah, interview with Bon I. Whealdon, "Samuel's Buffalo Calves," 7 January 1942 (Bozeman: Montana State University, W.P.A. Writer's Project File Number 910.040), 3. As well, the late Clarence Woodcock, a Salish tribal historian, acknowledged that tribal tradition celebrates the accomplishments of Sabine and Walking Coyote while affirming that they appear in the oral tradition at times by other names, most notably "Blanket Hawk" or "Hawk Blanket" (Clarence Woodcock, interview with the author, 4 August 1992, St. Ignatius, Montana).

[73]Aubrey, "Natural History: Montana's Buffalo," 6. Grinnell published the story on two more occasions. See Charles Aubrey, "The Edmonton Buffalo Herd," *Forest and Stream*, 6 July 1907, 11-13 and Grinnell, "The American Bison in 1924," 356-411.

Grinnell achieved notoriety as an adventurer in the American West, editor of *Forest and Stream*, and founding member of the Boone and Crockett Club. See Isenberg, *Destruction of the American Bison*, 166-167. For a work on hunter conservationists in general, see John F. Reiger, *American Sportsmen and the Origins of Conservation*, rev. ed., (Lincoln: University of Nebraska Press, 1986).

[74]Grinnell, "American Bison in 1924," 371. For biographical information on Monroe, see the Jack Burton Monroe File, Montana Historical Society Collections, Helena

[75]For biographical information on Aubrey, see "Charles Aubrey," *Forest and Stream*, 5 September 1908, 371; Charles Aubrey, "Memories of the Buffalo Range: The Last of the Plains Buffalo," *Forest and Stream*, 20 May 1905, 357, 371, 391-392; andCharles Aubrey, "Memories of an Old Buffalo Hunter," *Forest and Stream*, vol. 71, 133-134, 173-174, 216-217.

[76]To read the story in its entirety, see Aubrey, "Natural History: Montana's Buffalo," 6.

[77]Duncan McDonald, interview with Cora Van Deusen, "Duncan McDonald," undated interview, in the Duncan McDonald file in the Montana Historical Society Collections, Helena, 2-3.

[78]Aubrey, "Natural History: Montana's Buffalo," 6.

[79]Ibid.

[80]Charles Allard, reprint of a letter dated 23 February 1889 from Charles Allard to George Bird Grinnell in Grinnell, "The American Bison in 1924," 370.

[81]Duncan McDonald interview.

[82]Joseph McDonald, interview with Bon I. Whealdon, "Samuel's Buffalo Calves," 29 September 1941 (Bozeman: Montana State University, W.P.A. Writer's Project File Number 910.00), 3.

[83]Que-que-sah interview.

[84]Lawrence Palladino, S.J., *Indian and White in the Northwest: A History of Catholicity in Montana, 1831-1891*, 2nd ed., (Lancaster, Pennsylvania: Wickersham Publishing Company, 1922), 177-178.

[85]Aubrey, "Natural History: Montana's Buffalo," 6; Que-que-sah interview, 1-2; and Joe Green and June Allard, "The Life and Times of Joe Allard Described in His Own Words Recorded by Him in 1957 and 1958," *Joseph Allard: His Life and Times and Family History* (Allards, 1986), 181.

[86]Allard, reprint of a letter dated 23 February 1889 from Charles Allard to Grinnell.

Numbers and dates regarding the Salish bison vex the researcher bound by the desire for precision. As well, the allusions to bison brought by other Native Americans besides Walking Coyote and Sabine figure into the analysis, although none of the data disproves the couple's effort and establishment of a breeding program when weighed against the overwhelming support derived from existing documentation. Still, given the various testimonies that exist, the analyst may well conclude that by the mid 1880s if not earlier, small additions to the herd came from other Native American sources, most likely Salish or Blackfeet hunters during the late 1870s or early 1880s.

Still, another possible but improbable source emerges from an interview of a Salish woman during the W.P.A. Writer's Project. The woman delivered a detailed account of a concerted Salish effort during the late 1850s and early 1860s to bring bison west of the mountains so as to avoid the depredations of the Blackfeet on Salish hunting parties. They caught more than fifty calves during these expeditions. See Kootenay Ann, interview with Allis Stuart, "Kootenay Ann," 20 October 1941, 1941 (Bozeman: Montana State University, W.P.A. Writer's Project Archives). Close analysis of the interview reveals that Stuart probably interviewed Teresa, Kootenay Ann's daughter, rather than Kootenay Ann herself. Either way, the bison vanished from record unless they became some of the few found occasionally in the region's timber and valleys during the 1860s and 1870s. See Kingston, "Buffalo in the Pacific Northwest," 169. A slight chance exists that a rogue or two from this group eventually joined the Walking Coyote and Sabine or Pablo-Allard herd. This event probably did not occur but does offer some information worthy of consideration.

[87]Calvin Dupree, "The First Dupree into South Dakota," unpublished paper in the Dupree Family File, South Dakota State Archives, Pierre, 1.

[88]Frederick Dupuis, "The Dupuis Letters," Dupree Family File, South Dakota State Archives, Pierre.

[89]Dupree, "First Dupree," 8.

[90]Ibid., 2-3.

[91]See Dary, *Buffalo Book*, 231; Charles E. Deland, "Basil Clement (Claymore): The Mountain Trappers," *South Dakota Historical Collections*, vol. 2 (Pierre: Hipple Printing Company, 1922), 384-85; George Philip, "James (Scotty) Philip," *South Dakota Historical Collections*, vol. 20 (Pierre: Hipple Printing Company, 1940), 391, 393; and Hebbring Wood, "Origins of Public Bison Herds," 169.

[92]Reverend Thomas L. Riggs as told to Margaret Kellogg Howard, "Sunset to Sunset: A Lifetime With My Brothers, the Dakotas," *South Dakota Historical Collections*, vol. 29 (Stickney, South Dakota: Argus Printers, 1958), 228-230, 240-241.

[93]Philip, "James (Scotty) Philip," 391, 393. See also, James M. Robinson, *West from Fort Pierre: The Wild World of James (Scotty) Philip* (Los Angeles: Westernlore Press, 1974).

[94]Deland, "Basil Clement," 384-385.

[95]C. Stanley Stevenson, "Buffalo East of the Missouri in South Dakota," *South Dakota Historical Collections*, vol. 6 (Pierre: Hipple Printing Company, 1912), 392 in Coder, *National Movement to Preserve the American Buffalo*, 25.

[96]Robinson, *West from Fort Pierre*, 124-126.

[97]"Dupree Was No Dude," *Pierre Free Press*, 29 May 1890, 5c.

[98]Deland, "Basil Clement," 270.

[99]Jim Garrett, interview with the author, 20 September 1999. Joseph Dupuis, interview with the author, 6 April 2000. Both Garrett and Dupuis, cousins, are direct descendants of Frederick and Mary Dupuis.

[100]For renditions of the Lakota's White Buffalo Calf Woman story, see "White Buffalo Woman," as told by Lame Deer in Richard Erdoes and Alfonso Ortiz, eds., *American Indian Myths and Legends* (New York: Pantheon Books, 1984), 47-52; Lone Man, interviewed by Frances Densmore in *Teton Sioux Music* (Bureau of American Ethnology, 1918) in Geist, *Buffalo Nation*, 28-29; Jeffrey Ostler, "They Regard Their Passing as *Wakan*," *Western Historical Quarterly* 30:4 (winter 1999), 479-480; and Robert Pickering, *Seeing the White Buffalo* (Denver: Denver Museum of Natural History, 1997), 16-20.

Traditions of other tribes also explain key roles by women in establishing primary links with the bison. For the Blackfeet, see Ella E. Clark, *Indian Legends*

of the Northern Rockies (Norman: University of Oklahoma Press, 1966), 275-276. For the Cheyenne, see Grace Jackson Penney, *Tales of the Cheyennes* (Boston: Houghton Mifflin, 1953), 7-14. For the Hidatsa and Mandan, see Howard L. Harrod, *Becoming and Remaining a People: Native American Religions on the Northern Plains* (Tucson: University of Arizona Press, 1995), 70, 74-76.

CHAPTER 3
Indians and Buffalo, 1890-1990s

"It is a singular fact, and contrary to general belief, that we owe much to the Indians for saving the buffalo from extinction."
– Martin Garretson, Secretary, American Bison Society (1938)[1]

In 1997, as he watched several bison leave a corral and emerge onto the prairie much to the delight of several Native American onlookers including students from a local school, Lakota environmental scholar Jim Garrett explained: "The resurgence of the buffalo. That's happening. But it's happening a hundred years later."[2] His comment hearkened back to the Ghost Dance ceremony and the lamentations of Indian people across the West to restore the earth and bring back the buffalo during the late 1880s and early 1890s. However, Garrett's statement also came with the hindsight of history viewing the past one hundred years. Ethnohistorian David Rich Lewis summarizes the antecedents and marginalization of Native Americans in the twentieth century:

> The pace of change in Native American cultures and environments increased dramatically with Euroamerican contact. Old World pathogens and epidemic diseases, domesticated plants and livestock, the disappearance of native flora and fauna, and changing patterns of native resource use altered the physical and cultural landscape. Nineteenth-century removal and reservation policies reduced the continental scope of Indian lands to islands in the stream of American settlement. Reservation lands were largely unwanted or remote environments of little economic value. The Dawes General Allotment Act of 1887 provided for the division of some reservations into individual holdings as part of an effort to transform Indians into idealized agrarians - yeomen farmers and farm families. In subsequent acts Congress opened Indian Territory, withdrew forests, reservoir sites, mineral and grazing lands, regulated Indian access to those areas, and even circumvented the trust period to speed the transfer of lands into non-Indian hands. These policies contributed to the alienation of more than 85 percent of Indian reservation lands – a diminishment of land, resources, and biotic diversity that relegated Indians to the political and economic periphery of American society.[3]

Yet, all the while, Indians tenaciously kept the bison integral to their culture.

Even though Native Americans including Sabine, Walking Coyote, the Dupuis, Michel Pablo, and Charles Allard labored to save the bison and preserve its integrity on the range, the continuity of the Indian-buffalo physical relationship remained in question as Euro-American forces continued to re-shape the landscape and its native inhabitants. These bison-savers helped determine that biologically the bison could survive the past annihilation. They could not however make the political determination. Rather, the American government would do that. The century from the time of the establishment of safe captive breeding herds under Native American aegis in the late nineteenth century until the proliferation in bison numbers in Indian Country largely due to pan-Indian organization through the Intertribal Bison Cooperative in the late twentieth century marked a period where the whims of the American government bore heavily on the ability of Native American people to persevere as the "buffalo people."[4]

Students of Indian-white relations often can recite general salient points of the last century and a quarter to include the boarding school movement, Dawes Act (1887), Indian Reorganization Act (1934), Termination Policy of the 1950s and early 1960s, and Indian Self-Determination Act (1974).[5] The ability of Native Americans in the United States to maintain adequate influence on the plight of bison in their ongoing struggle for cultural autonomy often parallels these policies and legislation. During the detrimental impact of the "Americanization" programs featuring the concentration of native youth in boarding schools and the alienation of communal Indian lands, Indians and their allies lost a protracted battle to keep

bison ranging in Indian Country.[6] During the better treatment offered by the New Deal with its re-instatement of respect for Native American culture and communal landholding, bison began to return to Indian Country with the blessing of a sufficient number of federal policymakers and warm encouragement by willing Native Americans. The arrogance proffered by termination temporarily checked Native American autonomy just as augmented livestock policies impacted the range of the buffalo. Yet the efforts of the 1960s and 1970s with activism and advocacy often led by Native Americans resulted in a better position for native people before the law and also resulted in an intensification of bison stocking programs on reservations. Thus, by the 1990s, Indians and buffalo finally could become the subject of a modern success story after riding a virtual bucking bison bull of interference. The prayers of a century past were getting a favorable answer, but initial self-help by a few determined Indians proved instrumental in getting an affirmative response from beyond.

Far and above the most prolific of the two Native American bison programs entering the decade of the 1890s, lay in the Flathead Valley of northwest Montana where mixed-blood ranchers Michel Pablo and Charles Allard grew their herd from around a dozen head in the early 1880s to several hundred by the end of the 1890s. Their story perpetuates several of the themes associated with Native American efforts to save the bison including conservation by front-line Westerners often with women involved, a strong sense of communal responsibility to Native America, and the desire to maintain bison herds with as little human interference as possible in a virtually free range environment.

Indeed, both Pablo and Allard possessed Native American mothers. For his part, Pablo, also known by his Indian name of Chilth-mit-chin-noo, was born in 1844 or 1845 in Fort Benton, Montana in the home range of his Blackfeet or Piegan mother.[7] His father, a Mexican or New Mexican, worked there as a wrangler. Pablo's ties to the Flathead Valley came through his 1866 marriage to a mixed-blood Kootenai woman, Huist-tel-coi-co, who went by the name Agette Finley. Presumably, he met her through his work in the area as a wrangler and interpreter, and she reputedly held considerable influence in the household decision-making with respect to the bison.[8] The couple established a ranch on the south end of Flathead Lake in 1881, and it was in this area that the Pablos ran their bison with Michel's partner, Charles Allard, following the purchase from Samuel Walking Coyote.[9]

Allard was born in Salem, Oregon in 1853 to a Native American mother and Euroamerican father. He moved to Montana in 1865 where his father participated in western Montana's gold rush. Young Charles eventually grew to become a successful stockman. He also made the Flathead Valley his home and began a ranching partnership with fellow mixed-blood Michel Pablo. Like Pablo, the purchase of the Walking Coyote bison initiated Allard's effort to bring back the buffalo.[10]

Tony Barnaby, a son-in-law of Michel Pablo, elucidated the reasons for the purchase from Walking Coyote in an interview several years after the inconspicuous business deal that forever impacted the restoration of bison in the United States. Barnaby explained in 1941:

> Many people today, while appreciating the fact that Indian Samuel, Michel Pablo, Chas. Allard, Sr., and Andrew Stinger [bison wrangler

> associated with Pablo] were the ones who saved the buffalo from extermination, question their motive. Some say that the plan was to build up a vast herd, that later, could be sold at a great profit. Perhaps that is a very natural view; but we, who were associates of these four men, know it is erroneous. The acquisition of money meant little to men of their type. But the preservation of the bison, well, this latter reason was their duty, privilege and pleasure. Pablo, for instance, did not consider a buffalo as just a great shaggy beast of the plains; but rather symbolical [sic] of the real soul of the Indians' past --something grand, that with the culture of his own race, had somehow managed to survive the undesirable features in the white man's system.[11]

With this sense of purpose, Pablo and Allard sought to grow their small herd, which for the most part wandered freely in the Round Butte area of the Flathead Valley.[12] Through natural increase, assorted purchases, and the acquisition of a few calves from Piegan hunters, the herd contained twenty-seven head by 1888 and thirty-five head just one year later.[13] In 1893, the partners made a significant purchase of twenty-six pure-blood bison and eighteen hybrid catalo from Buffalo Jones. Displaying their keen abilities as bison stewards, Pablo drove a few of his herd to Butte, Montana where he met the new herd recently arrived by railroad and in the safekeeping of his partner. The two and some hired hands then drove the combined and more habituated herd back to the Flathead Valley. Never happy with the hybrid catalo, Pablo and Allard quarantined them on Wild Horse Island in Flathead Lake. The two ranchers did not want the cattle blood in the veins of their bison herd, which now possessed both southern herd blood and a bolster of northern herd blood because Jones had infused his herd with bison and their progeny initially acquired by James McKay and Charles Alloway on the prairie near the United States – Canadian border. Pablo and Allard did not keep the catalo for long and re-sold them to Buffalo Jones who possessed a keen interest in mixed-breeding unlike the less

manipulative bison philosophy espoused by Pablo and Allard. Nonetheless, by the time of Allard's untimely death from complications following an accident injury in 1896, the herd possessed a full 300 animals.[14]

Allard's death, though a heartfelt loss, did not disrupt the progress of building of the herd. Pablo split the herd of three hundred into two groups of 150. He kept one group and Allard's heirs split the remainder. Three individuals quickly acquired these animals and spread them across the West. They became important seed stock for later herds. Charles Conrad of the Kalispell area received several animals. He, too, passed away prematurely, but his widow Alicia Conrad provided the main body totaling thirty-four animals of the original herd established on the National Bison Range in 1908. Howard Eaton took several of his animals received from Allard's heirs and dealt them to the federal government with fifteen of them becoming part of the Yellowstone National Park herd. Meanwhile, the third recipient of the herd from Allard's heirs, Judge Woodrow of Missoula, sold his to the Miller Brothers' 101 Ranch in Oklahoma.[15]

Pablo used his 150 head to continue building the largest herd in private hands in the world. In 1900, his herd of 259 more than doubled the holdings of Charles Goodnight and Buffalo Jones.[16] After the turn of the century, as much as eighty percent of the nation's bison possessed some blood from the Pablo-Allard herd.[17] All the while, the beneficence of Pablo's bison effort did not go lost on his neighbors. For example, Salish spokesman Que-que-sah recalled that the owners would occasionally butcher an animal to share with neighbors. In particular, he said of Pablo: "[He] was very generous to his friends. Often he would tell our Indians to butcher a fat buffalo. We all liked and respected Mr.

Pablo and no Indian would steal any of his herd."[18] Pablo's son-in-law, Tony Barnaby, described him as "lavishly generous to friend and foe; lover of both races; fond of all animals." About Pablo's bison savvy, Barnaby added:

> With a keen eye to his animals' welfare, he knew at all times, just about where his buffaloes were grazing. He soon realized that they were increasing at a rapid rate: and after he returned from each daily ride on the range, he remarked: "it is well."[19]

However, shortly after the turn of the century, Pablo no longer could say, "It is well." Rather, far from it, forces beyond his control would end his endearing bison restoration effort and nearly complete the alienation of the physical relationship between Native Americans and bison.

In 1904, President Theodore Roosevelt signed a bill into law ordering the execution by 1909 of the 1887 General Allotment (Dawes) Act on the Flathead Reservation. This translated into the alienation of reservation lands from the tribes into individual landholdings and the opening-up of the reservation to settlers on lands not allotted.[20] Thus, the protected communal lands that served as the Pablos' bison range would no longer exist.[21] Realizing that time ran short in 1905 and 1906, Pablo reportedly petitioned for a grazing allotment for his herd, by then approaching 600 animals. The government denied his petition and he responded with an overture to Congress that the federal government buy his herd for $250 a head. The Congressmen rebuffed his offer.[22] Pablo then struck a deal with the Canadian government.[23] Tony Barnaby described Pablo's reaction to the rejection by the United States government and subsequent deal with Canada:

> Only upon one occasion, was Pablo really discouraged. When he was positively assured that the reservation was to be opened to white settlers, he knew that free, open range was ending and that

> his beloved herd must go. He vainly sought to sell them to our own Government in hopes they would find a haven in some refuge set aside for that purpose. We know that when Pablo heard that our Congress could not be induced to appropriate a purchasing fund, he was moved to manly tears. Only as a last resort, did he sell them to the Canadian officials.[24]

Canada's point man for the business negotiations, the Métis Canadian emigration agent named Alex Ayotte, hailed out of Great Falls, Montana. He knew of Pablo's dilemma and after some quick checks with his superiors in Canada, Ayotte brokered the deal with Pablo to continue to preserve his fellow mixed-blood's bison herd in Canada.[25] Pablo signed the final agreement with Howard Douglas, the commissioner of Dominion Parks, indicating that the Canadian acquisition relied on the Canadian national government's sponsorship of a bison recovery program in its parks.[26] They closed the deal in March, 1907 promising to pay $245 to include shipping per animal that reached its new home near Wainwright, Alberta. Pablo received a down payment of $10,000 and began planning the round-up and shipment of the herd to begin in the late spring of 1907 and scheduled to conclude in 1908.[27]

Although the sale proceeded smoothly, the round-up and shipment did not parallel such ease. The plan included a round-up along the Pend d' Oreille River, trailing the herd twenty-seven miles to the rail station at Ravalli, then a multiple stage railroad journey utilizing five separate railroad companies and culminating with arrival at Elk Island Park in Alberta where the bison would remain until crews finished the fence at Wainwright. Pablo supervised the construction of the loading facilities at Ravalli including the strengthening of rail cars, installation of troughs, and building of wings for the chutes. Pablo's cowboys, full-blooded and mixed-blood Native Americans led by Charles Allard's

son Joe, hoped to separate bulls and young animals from the main herd for the initial shipment.[28]

The cowboys met their match in trying to round-up and load the herd. Bison gored horses, men sustained injuries, and occasionally cowboys shot bison in self-defense.[29] In the first roundup spanning two weeks, they managed to commandeer less than 250 head.[30] Pablo accompanied this first group all the way to their destination to ensure their safe arrival.[31] In fact, this would provide the most success seen in the entire process. By spring, 1908 the stockmen managed to gather and ship only about 400 total of the more than 600 Pablo bison.[32] The planned two year round-up and shipment did not occur. Meanwhile, the remaining herd continued to reproduce. In all of 1909, Pablo's men shipped just over 200 animals.[33] In that year, they switched from trailing the herd to Ravalli to transporting them in crated wagons from the round-up site.[34] The round-ups continued but tapered off over the next three years with sixty-eight bison shipping in 1910 and seven in both 1911 and 1912.[35] Estimates vary, but approximately 700 bison eventually made the trip. Still, the cowboys never did succeed in rounding up the entire herd and stragglers remained.[36]

The event spanning a few weeks of each year from 1907 through 1912 became a bit of a media spectacle. Even today, customers can find post cards commemorating the event in curio shops in Montana.[37] Although photojournalists covered the event, some of the most colorful and insightful description came from the pen and paint of famed Montana artist and author Charles Marion Russell.[38] Russell participated in the round-ups in both spring,

1908 and fall, 1909. He reflected on his attendance in three letters from 1909 and 1910.[39]

His correspondence and supplementary sketches and watercolors yield a plethora of information about the landscape and the cowboys combined with the difficult details in executing the round-up. First, he commented on the open range preserved for the bison on the reservation: "It was shure good to bee in a country without fences [sic.]" About the buffalo wranglers, he added that "the riders were all breeds [mixed-blood] an[d] fool boods [full bloods] a wild looking bunch that looked good to me." He augmented these comments with a watercolor of nine riders galloping across the prairie. The riders sport long dark hair, many in braids, cowboy hats, feathers, vests, long sleeve shirts, bandanas, riding quirts, and Western rigs on an assortment of horses.[40] Another watercolor entitled "one of Pablo's riders" provides more detail of a single rider similar to the nine described above but with jacket instead of vest and an obvious colorful blanket under the saddle.[41]

Russell elucidated the arduous task posed by this monumental effort by Native Americans to save the bison. He sketched a diagram of the bison holding facility utilizing an oxbow and cliffs along the Pend d'Oreille River and painted a rendition of bison hurtling into the river. The cowboy artist explained:

> The first day they got 300 in the whings but they broke back an[d] all the riders on Earth couldn't hold them. They only got in with about 120. We all went to bed that night sadisfide with 120 in the trap but woke up with one cow the rest had climed the cliff an[d] got away. The next day they onely got 6 an[d] a snow storm struck us an[d] the roundup was called off till next summer [sic].[42]

He augmented this with further description of the same anecdote in another letter:

> These bluffs were nearly straight up an[d] made a natural fence that would have held any cow on Earth an[d] from looks I'd bet nothing with out wings could have made the git away but since I seen where they got out I wouldn't bet what buffalo cant do they had 300 in the wings the first run but when they sighted the fence they split running in all directions an[d] there aint no such thing as lieding a buffalo hel [he'll] go through under or over you an[d] a rider that runs in front of a buffalo is a green hand.[43]

Given such description, the determination of these people to get the buffalo off the increasingly unprotected reservation and into the aegis of the Canadian government proved remarkable. After all, the few bison that Pablo's wranglers did not catch quickly met the fate of millions of their predecessors at the hands of buffalo hunters.

The remaining bison, a cagey group of survivors termed "outlaws" by *Forest and Stream*, eluded capture "without fear or respect for horse, man, rope or fence," and "if overtaken and roped, they threw the horse and his rider and went off with the rope."[44] Pablo hoped to conduct hunts for local residents to harvest this remainder of his once prolific herd. He began staging hunts, but Montana's attorney general declared that the allotment of the reservation placed the leftover bison under the jurisdiction of Montana law. Without the Native American community's protection, poachers quickly obliterated the last of Pablo's bison.[45]

A noteworthy side story to the end of the Native American bison herd of northwestern Montana emerges from the establishment of the National Bison Range on alienated lands once grazed by Pablo's buffalo on the Flathead Reservation. Largely in response to the failure of the United States government to protect the bison through the purchase of the Pablo herd, several Eastern conservationists gathered in New York in December, 1905 to form an

organization aimed at establishing a national bison range. The participants formed the American Bison Society headed by William Templeton Hornaday with President Theodore Roosevelt serving as the honorary president.[46] The organization and its supporters, to include a fundraising women's group, acted quickly to get bison into the public domain beside the Yellowstone herd.[47] The Roosevelt administration oversaw the 1907 stocking of the Wichita Mountains Wildlife Reserve in Oklahoma, formerly part of the Kiowa-Comanche Reservation prior to allotment, with fifteen bison from the New York Zoological Park.[48] The American Bison Society subsequently made a proposal to Congress in March, 1908. The society would provide a herd to run on a fenced range of approximately twenty square miles adjacent to the Flathead River near St. Ignatius. In return, the federal government would purchase and fence the land.[49] The government responded favorably and the American Bison Society purchased the Conrad herd of thirty-four buffalo to stock the new preserve. They hit the ground on October 17, 1909.[50]

Despite the fact that many of the American Bison Society members and supporting Congressmen advocated saving the bison on these ranges for reasons similar to those of Native Americans, nostalgic more so than economic, the circumstances reveal some important nuances.[51] First, the government deprived the Native Americans of their land, then took the land and re-established bison there much as Native Americans initially preferred anyway.[52] Moreover, unfulfilled American Bison Society plans developed to repeat this process on both alienated Lakota and Crow lands as well, but these tribes would eventually establish their own herds. Second, the Eastern conservationists did

not envision a bison open range landscape at the expense of Euramerican farmers and developers. Environmental historian Andrew Isenberg explains:

> The bison preservationists acceded to the economic exploitation of the grasslands by the ranchers and the farmers who had displaced the bison and the Indians in the nineteenth century. They sought only relatively small parcels of land for parks and game preserves, and were rather more concerned that the ranges be accessible to tourists.[53]

Third, Hornaday developed resentment for Pablo owing to the Canadian deal for his herd. In a letter to the American Bison Society's northwest Montana range consultant, Morton Elrod, Hornaday explained of himself that he refused "to ask favors of a half-breed Mexican-F'head" with respect to getting a few Pablo bison to stock the future National Bison Range.[54] Thus, while both Native Americans and Euro-Americans worked to preserve the bison of the United States at the turn of the century, the effort reflected federal government hegemony in executing policy and ethnocentrism on behalf of Eastern conservationists.

Meanwhile, Canada's bison program received a numerical boon with the arrival of the Pablo bison. The herd quickly outgrew its temporary pasture at Elk Island Park where a few remained after the transfer of the bulk of the herd to the larger facility at Wainwright. Still, by 1923, the herd posed a threat to overgrazing its range. The Canadian government responded with a culling program featuring the slaughter of surplus animals. By 1933, the Canadian government was slaughtering 1,500 to 2,000 bison annually to keep the herd in check with the park's grazing capacity.[55] As well, policymakers decided to make a controversial transfer of several hundred buffalo to Wood Buffalo National Park in northern Alberta and the Northwest Territories. The controversy arose over positive tuberculosis tests in the Wainwright herd and concern over the mixing of

the transferred bison with the bison already indigenous to Wood Buffalo National Park.[56] Certainly, "prolific" describes the Pablo bison and their progeny both while on American and Canadian soil.

Although less prolific, the Dupuis herd is also of paramount importance in the history of the Native American effort to retain a continuous physical relationship with the bison. Its story contains many of the same themes found in the story of the Sabine and Samuel Walking Coyote-cum-Pablo herd. These features include a transfer of ownership, a sense of community and loyalty to the bison-Indian relationship, the influence of Native American women, and the hope to raise the bison in as much an open range environment as possible.

During the 1890s, Pete Dupuis, Frederick and Mary's son, took control of the family's herd and increased its number. He passed away in 1898 and the executor of the family's estate decided to sell the herd to family friend Scotty Philip. Philip continued grazing the herd on the Cheyenne River Reservation for three more years.[57] In 1901, he and five other men moved the animals nearly 100 miles to his more than 10,000 acre "Buffalo Pasture" on his Fort Pierre ranch, near present Pierre, South Dakota.[58] The herd contained fifty-seven pure blood bison and approximately two dozen hybrid cattalo.[59] Not interested in establishing a catalo enterprise, Philip declared that the hybrids "weren't worth a damn" and promptly slaughtered them.[60] Thus, Philip quickly displayed his intentions to replicate bison herds as he had known them during his maturation on the northern plains.[61]

James "Scotty" Philip's Western experience began when he left Scotland in 1874 as a fifteen year old adventurer seeking gold in the Black Hills. By 1877, his past work experience consisted of jobs as a guide, scout, freighter, rancher and dispatch rider out of Fort Robinson, Nebraska. Two years later, he met and married his lifetime mate, Sarah Laribee (Larvie). Soon thereafter, the couple moved onto the Great Sioux Reservation in Dakota Territory and began ranching near Bad River by present Philip, South Dakota in the "west-river" country.[62] About that time, Philip met and became friends with the Dupuis family. Enjoying the communal landholding and subsequent open range opportunities like those of the Dupuis,' the Philips became very successful ranchers eventually running tens of thousands of cattle on the Dakota rangelands. In the early 1890s, they shifted their base of operations off the reservation to Fort Pierre. James rode his ranching success to become a real estate broker, banker, and even a state senator.[63] His ability to achieve success became a part of his bison-saving effort as well that lasted as long as he lived until 1911. Yet, as proved true with his friend Frederick Dupuis, Scotty's drive in raising bison linked with the influence of his wife.[64]

For her part, Sarah Laribee, often called "Selly" by the brogue of her husband, came from the parenting of Joseph Laribee, a French fur trader once employed with the Hudson's Bay Company and later a cattle rancher, and his Cheyenne wife.[65] In fact, Joseph served as Scotty's initial partner in ranching.[66] One of four daughters and a sister-in-law of Crazy Horse, the multi-lingual Sarah moved easily between the Native American and Euramerican worlds. Her Native American blood allowed the Philips to live on the reservation and placed them in

circles of friends filled with mixed-blood children and mixed-race relations. Her nephew, George Philip, described her as a "splendid woman" and "self-sacrificing helpmate . . . always willing to do her part."[67] Her influence on Scotty paralleled that of Mary Dupuis on her husband and relates to the comments of Dakota fur trader Basil Clement that the "only authority acknowledged was that of Indian spouses."[68] As well, she possessed a similarity to Mary Goodnight in that both their husbands failed to start bison herds prior to the involvement of their spouses. Prior to his marriage to Sarah, Scotty attempted to corral a large herd on the Grand River only to watch them escape his grasp.[69] Moreover, sources indicate that her advice to Scotty resulted in his purchase of the Dupuis herd in 1898.[70]

However, more than just Sarah's advice provided impetus for the Philips to help preserve the bison and prevent their extinction.[71] The Philips possessed a keen sense of responsibility for their Native American neighbors. One of the Philip's ranch hands and later biographer of Scotty Philip, James Robinson, explained: "Among his great ideas were the lessening of misery among his friends, the Indians; [by] saving the buffalo from extinction."[72] Nephew George Philip, who helped herd the bison from the Dupuis ranch to the Buffalo Pasture, added about his uncle: "He was one man who always believed that the Government policy of tutelage and dependence was against the best interests of the Indian." The nephew further assessed that Philip "always remained to the end a staunch and stern champion of their rights."[73] Such comments reveal that as an already successful cattle rancher, Philip entered the world of raising bison in order to help his adopted people, the Lakota and Cheyenne nations.

His actions as a bison steward indicate Philip's desire to restore bison on an open range rather than as shaggy cattle in pens undergoing constant genetic manipulation to create a hybrid super-cow. With natural increase and sundry acquisitions from neighbors, the Philip herd grew to eighty pure blood animals by 1904. Philip continued butchering or selling hybrid animals.[74] Within two years, Scotty managed to wrangle a 3,500 acre land grant along the Missouri River from Congress with the expressed purpose of enlarging his bison's range. The "Buffalo Pasture" then became 16,000 acres enclosed by fence on three sides and the Missouri River on the fourth side. The herd prospered on the expanded pasture and eventually grew to more than 900 animals thereby exceeding the grazing capacity. As well, the herd easily migrated out of its designated range when the Missouri River froze during the winter.[75] Like Pablo, the Philips envisioned that the federal government should purchase and take responsibility for the herd. Scotty Philip hoped that the government would create a great open range for bison in the unused portions of western South Dakota.[76] His dream never transpired. Scotty died in 1911.[77]

The closest development to Philip's vision of a "buffalo commons" came in the form of the establishment of South Dakota's Custer State Park in 1914.[78] Though much smaller than anything envisioned by Philip, Custer State Park quickly became a very prolific bison-producing area originally stocked with thirty-six animals sold to the park by Sarah Philip. Owing to an active culling program, the park since its inception has furnished thousands of buffalo to bison handlers across the country.[79]

After Scotty's death, the Philip family's bison effort began to diminish.[80] Sarah, affectionately called "Mother Philip" or "Grandma' Philip" by ranch staff continued to visit the bison as late as 1920.[81] That same year, her son-in-law, Andy Leonard, initiated the first of several sell-offs. Staged hunts and sales led to the diminution of the herd and by 1926 it no longer existed.[82] Thus, 1926 marked the date when the physical relationship between Indians and buffalo broke. True, the National Bison Range persisted as a federal enclave within the confines of the Flathead Reservation, but no longer did Native Americans or their advocates serve as primary stewards for the buffalo nation. North America's aboriginal people hit another level of dependency, but the disruption would prove temporary because buffalo would return to Indian Country in the next decade.

The period from the Ghost Dance until the New Deal in many ways represented the nadir for Native Americans. Their population dipped to an unprecedented low at the turn of the century approaching a scant 200,000 individuals from what once numbered in the millions, they lost the majority of their communal landholdings, and boarding schools stripped their youth of their indigenous culture.[83] Although mainstream American popular culture often focuses more on the detriment caused to Native Americans by disease and military conquest culminating in the late nineteenth century, Native Americans, themselves, often view the greatest injuries sustained by them as the result of the subjugation efforts stemming from the Dawes Act (1887) and boarding school movement.[84] It is little wonder then that the greatest blow to the Indian-bison relationship came at this same time.

Native Americans persevered through this period and forgot neither their culture nor its important aspect of maintaining a solid physical relationship with the buffalo. Of course, it becomes obvious to any observer that treatment of bison and Native Americans paralleled each other. Euro-Americans subjected both of them to slaughter, disease, a marginalized landscape, deprivation of community, and alienation to their ways of living through concentration away from preferred habitat. Indian spokesman John Lame Deer reflected on the parallel treatment:

> There are places set aside for a few surviving buffalo herds in the Dakotas, Wyoming and Montana. There they are watched over by Government rangers and stared at by tourists. If brother buffalo could talk he would say, "They put me on a reservation like the Indians." In life and death we and the buffalo have always shared the same fate.[85]

A further analogy from this reservation and boarding school period stems from the confinement of Native Americans in close quarters where disease spread much in the same way that captive bison suffered disease from exposure due to confinement or movement restriction. In some cases, the very same disease, tuberculosis, victimized the native people and animal.[86]

Yet although problems continue to exist, since the 1930s the situation steadily has improved in Indian Country for Native Americans and bison, albeit with some interruptions. Indeed, most buffalo on reservations today came from the public sector. The Meriam Report of 1928 admitted that government policy toward America's native people possessed great need for correction. Subsequently, the 1934 Indian Reorganization Act ended the allotment process, made provisions to restore unallotted lands back to the tribes, and established a precedent for honoring native culture and customs. Thus, the Indian desire to

get bison back into Indian Country received acknowledgement and some degree of redress by the federal government.[87] The Crow Reservation offers a good example of this process.

At the ongoing request of Robert Yellowtail, superintendent of the Crow Agency, Yellowstone National Park and the National Bison Range made several donations of live bison to the Crow Reservation in southeast Montana in the mid-1930s.[88] Some slight variations exist in the available statistics, but during the two winters of 1934-1935 and 1935-1936, Yellowstone National Park shipped approximately 177 bison to the Crow. The National Bison Range furnished an additional twenty-six animals.[89] Superintendent Yellowtail made additional overtures for more animals in 1937. His request received a relatively cool reception from Yellowstone superintendent Edmund B. Rogers due to concerns over the supervision of the bison on the reservation. With natural increase and some supplemental purchases from private bison ranchers, the Crow herd numbered more than 350 head in 1937. Roaming as they do, many of the bison made their way south into Wyoming. This infuriated stockmen and State officials in the Cowboy State who concerned themselves with possible disease and grazing damage.[90] Nonetheless, the National Park Service furnished the Crow Reservation with an additional twelve bulls in 1942.[91]

Although opinions vary over virtually any program tied to the government and in light of the fact that some Crow cattle ranchers expressed concern over the re-introduction of the bison, many Crow appreciated the return of bison to their stewardship.[92] Jeanne Eder, a Dakota Native Studies professor and author, recalled her adopted Crow mother's explanations of the restored pride

and feelings of goodwill brought by the re-introduction of the bison in the 1930s. The Crow woman, Georgianne Bad Bear, reminisced about the sense of security and stability provided by the presence of the herd as she grew up on the reservation.[93] Attempting to create as much grazing range as possible, by 1942 the Crow utilized 24,000 acres with the original pasture containing 14,000 acres on a high plateau in the Bighorn drainage. The topography minimized fencing requirements to cutting off access routes through draws and ravines, but still the bison managed to find their way to roam the landscape without regard for political boundaries. Part of the desire to migrate came from the population increase experienced by the herd. The number reached near 1,000 head in 1942 with a subsequent culling program accounting for 100 to 200 harvests each year. In the spirit of community, the harvested bison went to ceremonies, school lunch programs, and family consumption. The herd's population dropped to 746 in 1946 and decreased even further to just above 500 in the mid-1950s. Nonetheless, it burgeoned again to nearly 1,100 in the early 1960s.[94]

However, the 1950s marked a lurch toward federal and State government interference in dealing with Native Americans. First, during that decade the federal government pursued the termination policy which persisted into the 1960s.[95] This policy sought to solve the perceived "Indian problem" by encouraging Native Americans to leave their reservations and enter mainstream American society in its increasingly urban and suburban environments. Termination never affected a large number of tribes, but its imposition revealed that the government's manipulation of Native Americans did not vanish with the New Deal. The parallel for termination in the government's policy toward Indians

and buffalo came as the concern over diseased bison. This resulted in the complete eradication of the Crow herd.

In 1950, the director of the National Park Service declared that live bison shipments from National Park sites then came under the jurisdiction of the Fish and Wildlife Service.[96] About the same time, the acting director of the Fish and Wildlife Service, Hillory Tolson, announced the decision to end further shipments of live animals due to studies revealing the presence of brucellosis, a disease that causes abortions in pregnant cattle. Tolson explained:

> Because the park herds roam over extensive areas and cannot be handled and treated as can cattle, it is impossible to fulfill the sanitary requirements that have been set up by Federal and State agencies to govern the interstate shipments of livestock.[97]

These standards and different landscape visions for open range grazing definitively ended shipments from both Yellowstone and Wind Cave National Parks.

By this time, though, the Crow herd needed no more supplementation. However, the increasingly stringent regulations and enforcement brought federal pressure on the Crow Agency culminating with the initiation of an eradication program in 1962. Additionally, area ranchers wanted a slaughter owing to confirmed bison-cattle contact in the winter range off the flanks of the Bighorn Mountains. Worthy of note, the Crow bison stewards never observed the effects of brucellosis, e.g., early births, in their herd.[98] Either way, the shipments in the 1930s never received testing while the 1942 shipment of twelve bulls tested negative, meaning that the bulls did not carry brucellosis.[99] The eradication slaughter took two years with poachers finishing off stragglers in 1965.[100] Thus, termination was complete. The Crow lost their bison herd to outside interests.

However, the Crow survived this second break in their physical relationship with the bison. The early 1970s brought a restoration for their bison project much as the Indian Self-Determination Act (1974) achieved by Native American activism and advocacy in the late 1960s and early 1970s brought greater autonomy for Native Americans nation-wide. After the Crow began construction of enhanced fencing and handling facilities for vaccinations and brucellosis testing, the Secretary of Interior authorized the importation of disease-free bison from Theodore Roosevelt National Park. The second re-introduction commenced with fifty animals in the late summer of 1972. Requirements included the stipulation that the tribe round-up and test annually for brucellosis until the county acquired a "certified brucellosis free" status.[101]

From this point in the 1970s, the Crow's physical relationship with the bison and subsequent cultural strength solidified. The tribe increased its peninsula-like bison paddock to 30,000 acres on the Bighorn Plateau. Annual round-ups became more than just working events, but also an annual cultural tradition. By 1990, 900 bison moved across the reservation landscape and they increased to more than 1,200 by 1995. The tribe became a leader in the renascent Native American bison comeback as an original member of the Intertribal Bison Cooperative in 1992 and provider of seed stock to other tribes.[102] The bison return led one tribal member to state in 1995:

> The buffalo mean everything to the Crow. Not only do we now have meat for our celebrations, but we eat the meat and it makes us feel good. We tan the hides. We keep the skulls. It just makes us feel Indian again. We lost a part of our way of life, our culture. Now it makes even little kids happy to know we have buffalo running up there.[103]

Certainly, the Crow's relationship with the bison and government policy did not evolve in a vacuum. After all, by 1992 approximately twenty-six tribes ran nearly 3,600 bison in Indian Country.[104] Although the Crow possessed the largest herd, their twentieth century history with the bison most closely mirrored the Lakota of the Pine Ridge Reservation. Also recipients of federal bison from more than one site, in this case both Yellowstone and Wind Cave National Parks in the 1930s and 1940s, the Pine Ridge Lakota grew a rather large herd.[105] They also suffered herd eradication and reintroduced bison in the 1970s.[106]

Others joined the Crow and Lakota in getting seed stock and beginning modern herds in the late 1960s and 1970s. Moreover, the broad geographic range of the few tribes portrayed here reveals the widespread desire by Native Americans to enhance their association with the bison. For example, the Shoshone-Bannock of southeastern Idaho brought twenty-one bison from Theodore Roosevelt National Park in 1966 to begin their reservation's contemporary herd.[107] The Assiniboine and Gros Ventres nations of the Fort Belknap Reservation in northern Montana started their now very successful herd with just twenty-seven animals originating from both the National Bison Range and Theodore Roosevelt National Park in 1974. The tribes put their new charges next to the tribal headquarters for a short time before moving them to a 2,000 acre pasture at the visually striking Snake Butte area.[108] Also in 1974, twelve other bison from Theodore Roosevelt National Park went to the Kalispel Reservation in eastern Washington.[109] A donation from the National Bison Range in 1979 added ten more animals to the Kalispel herd.[110] Bison returned to

the Cheyenne River Reservation as well in the 1970s near where the Dupuis' once watched over their captive seed bison.[111]

In some ways, this marked the completion of a full circle in that the Dupuis, a Lakota family, saved bison off the range, lost the small herd in an estate sale with the passing of son Pete, but then descendants of the Dupuis' witnessed the return of bison to their homeland after an absence spanning some eighty years. This circle of association with the buffalo gives rise to family and tribal pride.[112] After all, Jim Garrett, descended from the Dupuis family, spoke the quote introducing this chapter that the reintroduction of bison answers prayers uttered a century ago. This source of pride and comfort also reveals the very personal nature of the presence of bison in Indian Country. Often suffering the whims of government policies and cultural breakdowns associated with subjugation and dependency, Native Americans persevered through the twentieth century in maintaining a relationship with the buffalo.[113] At times, the physical relationship broke, but the cultural affinity remained strong and set the stage for the burgeoning witnessed in the 1990s.

Endnotes

[1]Garretson, *American Bison*, 215.

[2]Jim Garrett, in *American Buffalo: Spirit of a Nation* [video], Judith Dawn Hallet, dir., National Wildlife Federation, Devillier Donegan Enterprises andThirteen/WNET, 1998.

[3]David Rich Lewis, "Native Americans and the Environment," 423.

[4]Looking Horse, guest address, Bison Conference 2000.

[5]For overviews of United States Indian Policy, see William T. Hagan, "United States Indian Policies, 1860-1900," 51-65; and Lawrence C. Kelly, "United States Indian Policies, 1900-1980," 66-80, in Washburn, ed., *History of Indian-White Relations*. See also Donald Fixico's bibliographic piece: "Twentieth Century Indian Policy," 123-161, in Swagerty, *Scholars and the Indians Experience*.

Dates often vary in literature for some of the legislation discussed here. For example, some authors date the Dawes Act at 1886 while others date it at 1887. As well, the epithets for the Dawes Act include the Dawes General Allotment Act, the General Allotment Act, and the Allotment Act. Similarly, 1974 and 1975 appear as dates for the Indian Self-Determination Act. Readers should realize that the legislation is the same regardless of the date given within one year. The confusion often occurs over when legislation is introduced as opposed to when it passes into law.

[6]For analysis of the reform movement pursued to "correct" the "Indian problem," see Frederick E. Hoxie, "The Curious Story of Reformers and the American Indians,," 205-230, in Frederick Hoxie, ed., *Indians in American History* (Arlington Heights, Illinois: Harlan Davidson, Inc., 1988).

[7]The Blackfeet Confederacy consists of the Blackfeet (proper), Piegan, and Blood tribes. Therefore, the reporting of someone as "Blackfeet" often can indicate ancestry from any of the three related tribes.

[8]Barsness, *Heads, Hides & Horns*, 161; Coder, *National Movement to Preserve the American Buffalo*, 20-21; and Jack Holterman, *Pablo of the Buffalo: Historical Monographs* (West Glacier: Glacier Natural History Association, 1991), 1-2, 6-7.

[9]Coder, *National Movement to Preserve the American Buffalo*, 20-21 and Holterman, *Pablo of the Buffalo*, 1-2, 6-7.

[10]Coder, *National Movement to Preserve the American Buffalo*, 21-22 and Howard, "Men Who Saved the Buffalo," 124.

[11]Tony Barnaby, interview with Bon I. Whealdon, "Pablo Loved His Herd,"

14 October 1941 (Bozeman: Montana State University, W.P.A. Writer's Project File Number 910.037), 1.

[12]Coder, *National Movement to Preserve the American Buffalo,* 22.

[13]Holterman, *Pablo of the Buffalo*, 8 and Hebbring Wood, "Origin of Public Bison Herds in the United States," 167-168.

[14]Barsness, *Heads, Hides & Horns*, 159; Coder, *National Movement to Preserve the American Buffalo*, 39-40; Dary, *Buffalo Book*, 224-225; Haines, *Buffalo*, 222-224; Hebbring Wood, "Origin of Public Bison Herds in the United States," 167-168; and Holterman, *Pablo of the Buffalo*, 8.

[15]Coder, *National Movement to Preserve the American Buffalo*, 171-172; Dary, *Buffalo Book*, 224-225; Haines, *Buffalo*, 222-224; Hebbring Wood, "Origin of Public Bison Herds in the United States," 167-168; and Holterman, *Pablo of the Buffalo*, 9.

[16]Coder, *National Movement to Preserve the American Buffalo,* 84-85.

[17]Howard, "Men Who Saved the Buffalo," 125.

[18]Que-que-sah, interview with Bon I. Whealdon, 7 January 1942, "Samuel's Buffalo Calves," (Bozeman: Montana State University, WPA Writer's Project, 910.040).

[19]Barnaby interview, 2.

[20]For a summary on United States land policies for Indians, see Arrell M. Gibson, "Indian Land Transfers," 211-229, in Washburn, *History of Indian-White Relations.* See also, Kelly, "United States Indian Policies, 1900-1980," 66-70.

[21]Joseph Dixon, "To Establish a Permanent National Bison Range," *Senate Executive Document, No. 467*, 60th Congress, 1st Session, II (Washington: Government Printing Office, 1908), 2.

[22]Dary, *Buffalo Book*, 224-225 and Hebbring Wood, "Origin of Public Bison Herds in the United States," 167-168.

[23]For the best account of the sale and transport of Pablo's herd, see Coder, *National Movement to Preserve the American Buffalo*,1 71-251.

[24]Barnaby interview, 2.

[25]Coder, *National Movement to Preserve the American Buffalo,* 180.

[26]Howard, "Men Who Saved the Buffalo," 125.

[27]Dary, *Buffalo Book*, 224-225; Hebbring Wood, "Origin of Public Bison Herds in the United States," 167-168; "Pablo Buffalo Sale," *Forest and Stream* 8 June 1907, 893; and Morton J. Elrod, "The Flathead Buffalo Range: A Report to the American Bison Society of an Inspection of the Flathead Indian Reservation, Montana for the Purpose of Selecting a Suitable Location for a National Buffalo Range," *Senate Executive Document, No. 467,* (1908), 16.

[28]Barsness, *Heads, Hides & Horns*, 164 and Coder, *National Movement to Preserve the American Buffalo,* 199-200, 205, 208. For works describing Native American cowboys and cattle culture, see Peter Iverson, *When Indians Became Cowboys: Native Peoples and Cattle Ranching in the American West* (Norman: University of Oklahoma Press, 1994); Peter Iverson, "When Indians Became Cowboys," *Montana: The Magazine of Western History* (winter 1995), 16-31, Ian Dyck, "Does Rodeo Have Roots in Ancient Indian Traditions?" *Plains Anthropologist* 41:157 (August 1996), 205-219; and Lewis, "Native Americans and the Environment," 425.

[29]Charles M. Russell to Fiddleback (Bertrand W. "Bill" Sinclair), 12 January 1910 in Brian Dippie, ed., *Charles M. Russell, Word Painter: Letters 1887-1926* (Fort Worth: Amon Carter Museum, 1993), 130-131. See also Barsness, *Heads, Hides & Horns*, 165, 168.

[30]Coder, *National Movement to Preserve the American Buffalo,* 206.

[31]Ibid., 222-224

[32] Elrod, "The Flathead Buffalo Range," *Senate Executive Document, No. 467*, 16.

[33]Barsness, *Heads, Hides & Horns*, 165.

[34]Coder, *National Movement to Preserve the American Buffalo,* 227-228.

[35]Barsness, *Heads, Hides & Horns*, 165, 168 and Dippie, *Charles M. Russell*, 109-110.

[36]Ibid.; Dary, *Buffalo Book*, 224-225; Hebbring Wood, "Origin of Public Bison Herds in the United States," 167-168; andHoward, "Men Who Saved the Buffalo," 126

[37]Perhaps most notably, Charles Marion Russell sent his wife two post cards "hot off the press" in 1908 to his wife Nancy. The first card shows cowboys chasing bison while the second portrays a pair of local Salish gentlemen in traditional dress (Dippie, *Charles M. Russell*, 109).

[38]For photography of the event, see Tom Jones, *The Last of the Buffalo* (Cincinnati: Scenic Souvenirs, 1909), passim; Barsness, *Heads, Hides & Horns*, 166-167; and Dary, *Buffalo Book*, 226-227.

[39]Charles M. Russell to Friend Goodwin (Philip R. Goodwin), January 1909, 112-113; Charles M. Russell to Fiddleback (Bertrand W. "Bill" Sinclair), January 1909, 114-115, Russell to Fiddleback (Bertrand W. "Bill" Sinclair), 12 January 1910, 130-131, in Dippie, *Charles M. Russell.*

[40] Russell to Fiddleback, January 1909, in Dippie, *Charles M. Russell*, 115.

[41]Russell to Goodwin, January 1909, in Dippie, *Charles M. Russell*, 112.

[42]Ibid., 112-113.

[43]Russell to Fiddleback , January 1909, in Dippie, *Charles M. Russell*, 115.

[44]"The Outlaw Buffalo," *Forest and Stream*, 12 November 1910, 778.

[45]Barsness, *Heads, Hides & Horns*, 168.

[46]For details on the formation of the American Bison Society, see Coder, *National Movement to Preserve the American Buffalo,* 118-170. See also Joseph Dixon, "To Establish a Permanent National Bison Range," *Senate Executive Document, No. 467* and James A. Dolph and Ivar C. Dolph, "The American Bison: His Annihilation and Preservation," *Montana: The Magazine of Western History* (summer, 1975), 14-25.

For an assessment of Eastern interests in saving the bison, see Isenberg, *Destruction of the Bison*, 177-178 and Coder, *National Movement to Preserve the American Buffalo,* 326.

[47]For the role of women in fundraising, see Dolph and Dolph, "The American Bison," 23 and Hebbring Wood, "Origin of Public Bison Herds in the United States," 157.

[48]Dary, *Buffalo Book*, 237-239; Dolph and Dolph, "The American Bison," 21; Garretson, 202-203; Isenberg, *Destruction of the Bison*, 182; and McHugh, *Time of the Buffalo*, 300.

[49]William T. Hornaday to Senator Moses E. Clapp, 30 March 1908, in "To Establish a Permanent National Bison Range," *Senate Executive Document, No. 467*. See also "Montana Buffalo Preserve," *Forest and Stream*, 70:17 (25 April 1908), 697.

[50]"The Montana Bison Range," *Forest and Stream*, 30 October 1909, 689. See also Dolph and Dolph, "The American Bison," 24.

[51]William T. Hornaday, *Thirty Years War for Wild Life* (New York: Arno/New York Times, 1930, reprint, 1970), 250.

[52]For general analysis of the establishment of federal parks at the expense of Native Americans, see Philip Burnham, *Indian Country, God's Country: Native Americans and the National Parks* (Washington: Island Press, 2000) and Mark David Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999).

[53]Isenberg, *Destruction of the Bison*, 189.

[54]William Hornaday to Morton Elrod, 1 July 1908, American Bison Society Letterbooks, 2 in Isenberg, *Destruction of the Bison*, 183.

[55]"Pablo's Montana Buffalo Formed Nucleus for Huge Canadian Herd of Bison," *Montana Standard*, 15 October 1933, 1.

[56]Coder, *National Movement to Preserve the American Buffalo*, 228-229, 311.

[57]Dary, *Buffalo Book*, 231-232.

[58]C. Wayne Lee, *Scotty Philip: The Man Who Saved the Buffalo* (Caldwell, Idaho: The Caxton Printers, Ltd., 1975), 231-234; George Philip, "James (Scotty) Philip," *South Dakota Historical Collections* XX (1940), 394; and Robinson, *West from Fort Pierre*, 126-127.

[59]Lee, *Scotty Philip*, 231-234 and Hebbring Wood, "Origin of Public Bison Herds in the United States," 173-174.

[60]Hebbring Wood, "Origin of Public Bison Herds in the United States," 173-174. See also Lee, *Scotty Philip*, 242-243 and Philip, "James (Scotty) Philip," 393-394 and Robinson, *West from Fort Pierre*, 194.

[61]Lee, *Scotty Philip*, 225-227.

[62]Robinson, *West from Fort Pierre*, 71.

[63]For salient biographical details of Scotty Philip with respect to saving the bison, see Coder, *National Movement to Preserve the American Buffalo*, 25-27; "Dakota Images," *South Dakota History*, 16:1 (spring 1986), 89; Robinson, *West from Fort Pierre*, 49-54, 71, 74, and Hebbring Wood, "Origin of Public Bison Herds in the United States," 173-174.

[64]Hebbring Wood, "Origin of Public Bison Herds in the United States," 173-174. Also worthy of note, Ila Wiedemer, a local historian of Pierre, interviewed a friend of the Philips, Flora Huston Ziemann years ago. Huston Ziemann knew daughter Olive and mother Sarah. They told her that Sarah did indeed influence her husband to help save the bison. Huston Ziemann told South Dakota State Archivist Ken Stewart of her information on the origins of Philip's herd. Stewart

relayed the information to the author of this manuscript in an e-mail dated 27 June 2002.

[65]Lee, *Scotty Philip*, 116 and Philip, "James (Scotty) Philip," 379.

[66]Robinson, *West from Fort Pierre*, 71.

[67]Ibid., 122.

[68]Deland, "Basil Clement," 270.

[69]Coder, *National Movement to Preserve the American Buffalo*, 26.

[70]Hebbring Wood, "Origin of Public Bison Herds in the United States," 173-174. See also above note 64.

[71]Philip, "James (Scotty) Philip," 393, 396.

[72]Robinson, *West from Fort Pierre*, 194.

[73]Philip, "James (Scotty) Philip," 372.

[74]Dary, *Buffalo Book*, 232

[75]Robinson, *West from Fort Pierre*, 127, 129 and Philip, "James (Scotty) Philip," 394-395.

[76]Robinson, *West from Fort Pierre,* 198. Philip's vision of the western Dakota "park" definitely begs comparison to artist George Catlin's similar dream approximately seventy years earlier. Catlin envisioned "a *magnificent park*, where the world could see for ages to come, the native Indian amid the fleeting herds of elks and buffaloes" [George Catlin, *Letters and Notes on the Manners, Customs, and Conditions of the North American Indians*, 2 vols., (Minneapolis: Ross & Haines, Inc., 1841, reprint, 1965), 1: 249, 251]. Catlin and Philip heralded the 1987 work of Frank and Deborah Popper, Rutgers University geographers, who suggested the development of a "Buffalo Commons" in the increasingly distressed counties of the western plains (Frank and Deborah Popper, "The Great Plains: From Dust to Dust," *Planning* (December 1987), 572-577. By 2000, Frank Popper felt comfortable announcing that the Buffalo Commons was becoming a reality due to the increasing size and number of bison operations across the western plains (Frank Popper, comments at the Bison Conference 2000, 7 April 2000, Lincoln, Nebraska). As well, Lakota scholar and Intertribal Bison Cooperative consultant Edward Valandra presented evidence of the possibilities for linked bison landscapes particularly in western South Dakota precisely where Philip sought the bison range (Edward Valandra, comments at the Bison Conference 2000, 7 April 2000, Lincoln, Nebraska).

[77]Dary, *Buffalo Book*, 232.

[78]Robinson, *West from Fort Pierre,* 198.
See above note 76 for discussion of a "buffalo commons."

[79]Hebbring Wood, "Origin of Public Bison Herds in the United States," 159-166, 175-177.

[80]Dary, *Buffalo Book*, 232.

[81]Robinson, *West from Fort Pierre,* 197.

[82]Ibid., 191-197.

[83]Population estimates for Native Americans prove nearly as elusive as those of the bison population. Scholars often indicate 200,000 to 250,000 as the nadir. See Arrell Morgan Gibson, *The American Indian: Prehistory to the Present* (Lexington, Massachusetts: D.C. Heath and Company, 1980), 515 and John Mack Faragher, et al, *Out of Many: A History of the American People*, 2 vols., (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1994), 564.
For a monograph on Native American population in the twentieth century, see Nancy Shoemaker, *American Indian Population Recovery in the Twentieth Century* (Albuquerque: University of New Mexico Press, 1999). For a comprehensive bibliographic essay, see Henry F. Dobyns, "Native American Population Collapse and Recovery," 17-35, in Swagerty, ed., *Scholars and the Indian Experience*.

[84]Joseph Dupuis, interview with the author, 6 April 2000, and Jim Garrett, interview with the author, 6 April 2000, Bison Conference 2000, Lincoln, Nebraska. Matthew Dick, interview with the author, 5 May 2000, Cashmere Museum, Cashmere, Washington; Lavina White, in Sandy Johnson, *Book of Elders*; Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 12. See also, Hagan, "United States Indian Policies, 1860-1900," 56-64; and Margaret Connell Szaz and Carmelita S. Ryan, "American Indian Education," 284-300, in Washburn, *History of Indian-White Relations*. Szaz and Ryan term the damage from allotment and Indian education as "immeasurable" (294). For an assessment of the blow to the environmental foundation of native economies caused by the Dawes Act, see Cronon and White, "Ecological Change and Indian-White Relations," 426-427, in Washburn, *History of Indian-White Relations.*

[85]John (Fire) Lame Deer, *Lame Deer: Seeker of Visions*, with Richard Erdoes (1972) in Geist, *Buffalo Nation*, 128.

[86]Two monographs address the boarding schools as disease zones, see Brenda J. Child, *Boarding School Seasons: American Indian Families, 1900-1940* (Lincoln: University of Nebraska Press, 1998) and Scott Riney, *The Rapid City Indian School, 1898-1933* (Norman: University of Oklahoma Press, 1999).

[87]For works explaining the benefits of the Meriam Report and subsequent Indian Reorganization Act, see Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 12; Gibson, "Indian Land Transfers, 227; Kelly, "United States Indian Policies, 1900-1980," 70-74; andSzaz and Ryan, "American Indian Education," 294.

[88]For the acknowledgment of Robert Yellowtail's requests, see Edmund B. Rogers, Superintendent of Yellowstone National Park, to National Park Service Director, 21 October 1937, Bison Shipments File, Yellowstone National Park Archives, Mammoth Hot Springs, Yellowstone National Park, Wyoming.

For biographical information on Robert Yellowtail, see R. David Edmunds, ed., *The New Warriors: Native American Leaders Since 1900*. (Lincoln: University of Nebraska Press, 2001).

[89] Bison Shipments File, Yellowstone National Park Archives.

[90] Rogers to National Park Service Director, 21 October 1937, Bison Shipments File, Yellowstone National Park Archives.

[91] Bison Shipments File, Yellowstone National Park Archives.

[92]For description over opinions among the Crow over re-introduction of the bison, see Mary Meagher to John W. Grandy IV (Wildlife Administrative Assistant, National Parks and Conservation Association), 5 January 1973, Mary Meagher's Personal Records, Gardiner, Montana. Meagher's personal records contain correspondence, park records, Bureau of Indian Affairs documents, and local newspaper articles along with her own notations on these documents.

The Crow concerns by various factions over the re-introduction of bison heralded friction on other reservations as well. See also, Mary Meagher, interview notes, 28 September 1972, from an interview with Glen Jackson, Bureau of Indian Affairs, Billings, Montana, 22 September 1972, Meagher's Personal Records.

[93]Jeanne Eder, moderator comments at the Coalition for Western Women's History Annual Conference (2000), 29 July 2000, Pullman, Washington and Jeanne Eder, telephone interview with the author, 23 April 2003.

[94]Meagher, interview notes from interview with Jackson, 28 September 1972; Mary Meagher, interview notes, 28 September 1972, from an interview with Helen Peterson (*Hardin Tribune Herald*), 7 September 1972 and 11 September 1972, Meagher's Personal Records; andMeagher to Grandy, 5 January 1973.

[95]For detailed analysis of this process, see Kenneth R. Philip, *Termination Revisited: American Indians on the Trail to Self-Determination* (Lincoln: University of Nebraska Press, 1999).

[96]Newton B. Drury (Director, National Park Service) to Regional Director (Region Two), 18 August 1950, in C. K. Skinner and W.B. Alcorn, History of the Bison in Yellowstone National Park (1942-1951) File, Yellowstone National Park Archives, Mammoth Hot Springs, Yellowstone National Park, Wyoming.

[97]Hillory A. Tolson (Acting Director, Fish and Wildlife Service) to Dr. Charles F. Webb, 21 August 1950, Skinner and Alcorn, History of the Bison in Yellowstone National Park (1942-1951) File.

[98]Meagher, interview notes, 28 September 1972, from an interview with Helen Peterson (*Hardin Tribune Herald*), 7 September 1972 and 11 September 1972, Meagher's Personal Records.

[99]Mary Meagher, Shipment of Live Bison For Restocking Purposes (Crow Indian Reservation), 8 September 1972, Mary Meagher's Personal Records, Gardiner, Montana.

[100]Meagher to Grandy, 5 January 1973.

[101]Ibid., and Meagher, Jackson interview.

[102]Diane Hoyt-Goldsmith, *Buffalo Days,* (New York: Holiday House [presented by the Intertribal Bison Cooperative], 1997), 12-18.

[103] Ibid., 32.

[104] Danz, 134-135

[105]Bison Shipment File, Yellowstone National Park Archive;, Callenbach, *Bring Back the Buffalo! A Sustainable Future for America's Great Plains*, (Washington, D.C.: Island Press, 1996), 69; Hebbring Wood, "Origin of Public Bison Herds in the United States," 163; andIsenberg, *Destruction of the Bison*, 189-190

[106]Callenbach, *Bring Back the Buffalo*, 69.

[107]Danyelle Robinson, "Shoshone-Bannock Build Culture of the Buffalo," *Indian Country Today*, 3-10 March 1997, B1.

[108]Rudner, *Chorus of Buffalo* (Short Hills, New Jersey: Burford Books, Inc., 2000), 98 and Wayne Azure (Fort Belknap, Assiniboine/Gros Ventres), interview with the author, 19 August 1999.

[109]O.J. Cotes, ed., *The Kalispels: People of the Pend d'Oreille* (Usk, Washington: Kalispel Tribal Office, 1980, reprint, 1996), 29 and Ray Entz, interview with the author, 22 June 97, Kalispel Reservation, Usk, Washington.

[110]Jayne Yatchak, "A Population and Behavioral Study of the North American Buffalo (*Bison bison*)," unpublished paper in the National Bison Range files, National Bison Range, Moiese, Montana, 48.

[111]Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 30.

[112]Joseph Dupuis, interview with the author, 6 April 2000, and Jim Garrett, interview with the author, 6 April 2000.

[113]An anecdote by an Oglala Lakota holy man, Eke Catches, illustrates the arduous perseverance by Native Americans to maintain their relationship with the bison. His story conveys the importance of the bison in the culture, the difficulty posed by alienation from traditional culture, and bitterness toward the government for imposed cultural strain. Catches relates:

> There is a ranch nearby that raises buffalo. It is where we get our buffalo for the Sun Dance. I had been "Sun Dancing" for eight years. One year I told them that I wanted to go with them when they butchered a buffalo. My son, Peter, was with me. We went in two cars. One, a pickup was carrying canvases, towels, and knives. The group selected a two year old bull and then shot it. We drove up close and started skinning it, but first they bled it. When they cut the guts out, I took a cup and filled it with blood. They were all looking at me. I drank all of it. My son asked me for the empty cup and I handed it to him. He filled it with blood and drank it too. The others were gagging. One went around the pickup and threw up, and he is a full-blooded Indian. This is what the government has done to us (Eke Catches, in Johnson, *Book of Elders)*.

CHAPTER 4
The Intertribal Bison Cooperative

"You people are doing the most important thing of any group, Indian or non-Indian, that's going on today . . . by bringing this animal back, this animal that has tremendous power, you're going to change everything in the Great Plains."
--Vine Deloria, Jr. (1998)[1]

A pan-Indian buffalo restoration movement became a reality in 1992 when representatives of more than a dozen tribes gathered in Denver to create an umbrella organization aimed at bringing back the buffalo nation. The Intertribal Bison Cooperative, more often referred to as the ITBC, resulted.[2] Thus, bison and bison range proliferated in Indian Country in the 1990s. During the decade, herds under the care of Native Americans elevated from 1,500 animals to more than 9,000 head in 1999. At the same time, bison range increased by 100,000 acres.[3]

Although Native American bison restoration made headway in the two or three decades prior to the establishment of the ITBC, the effort lacked both synergy and a philosophical binding. For example, Yellowstone National Park biologist Mary Meagher concluded on the native effort to restore bison in 1973 that "there seems to be a confusion of opposing motives, opinions, self interest and fact."[4] Heavily involved in the ITBC and his own Lakota peopie's effort to restore the bison on the Cheyenne River Reservation, Jim Garrett explained the impact of the ITBC some two decades after Meagher's observation. His statement articulates reasons behind the apparent confusion: Garrett wrote:

> Until this cooperative movement was established, tribal efforts at restoring the buffalo to their lands was a singular experience for them. Many did not have sufficient experience in raising buffalo and needed guidance. Prior to ITBC, while restoring buffalo populations was making some inroads, there was little to no effort

> to re-introduce the cultural, economic, and ecological significance of the buffalo to the tribal community.[5]

Another source within the movement echoed this assessment of the importance of the ITBC's coordination. In 1995, ITBC member Mike Fox declared, "With ITBC, we've done more in the last three years than they did in the last fifteen." His statement made reference to the facts that between 1992 and 1995, the ITBC established seven new tribal herds, tripled the number of buffalo in Indian Country, and restored 25,000 acres to buffalo range.[6]

Indeed by the end of the decade, the list of accomplishments of the ITBC possessed remarkable length. Besides a growth in the number of bison and size of their range, highlights included: an increase in member tribes from nineteen to fifty, provision of technical expertise to initiate herd introductions for twenty-five tribes, the creation of more than 500 tribal jobs, development of two projects entitled the Native American Bison Refuge and the Yellowstone Rescue Facility Initiative, establishment of policies to ensure the acquisition of seed stock from national parks and wildlife refuges with an example of 160 bison going to member tribes in 1998, the Best Industrial Video Award from the American Indian Film Institute for its promotional video *Return of the Native*, a Renew America Award for environmental excellence, entrance into a memorandum of understanding with the National Wildlife Federation to prevent the Yellowstone bison slaughter, the acquisition of more than 15,000 signatures for the Yellowstone Bison Draft Environmental Impact Statement, and the acquisition of millions of dollars in grant money from government and private sources.[7]

In terms of an institutional precedent, the ITBC developed out of an interest group within the Native American Fish and Wildlife Society.[8] Nurtured in

this structured environment, the founders of the ITBC quickly developed some organizational frameworks for its function and form. With an understanding that "reintroduction of the buffalo to tribal lands will help heal the spirit of both the Indian people and the buffalo," [9] the group generated the following mission statement:

> The Intertribal Bison Cooperative is a non-profit Native American organization dedicated to the mission of restoring buffalo to Indian lands in a manner which promotes cultural enhancement spiritual revitalization, ecological restoration and economic development compatible with tribal beliefs and practices. [10]

The Cooperative defined its purpose:

> The role of the ITBC, as established by its membership, is to act as a facilitator in coordinating education and training programs, developing marketing strategies, coordinating the transfer of surplus buffalo from national parks to tribal lands, and providing technical assistance to its membership in developing sound management plans that will help each tribal herd become a successful and self-sufficient operation. [11]

The aforementioned membership has consisted of a board of directors comprised of each member tribe's chosen representative. The representative may or may not have been the tribe's bison wrangler. The head of the organization consisted of an executive council with a president, vice-president, executive director, secretary, and treasurer. The ITBC also maintained a donating member list, but these individuals do not participate in the decision-making. [12]

In order to implement its purpose during its first decade of existence, the ITBC typically operated with four departments utilizing money received from government and private grants and private donations. The four departments included Development, Tribal Business Management, Publications/Cultural

Education, and Technical Services. The Development Department fundraised. Employees lobbied the government, foundations, and corporations. Publicity campaigns supplemented direct mail-outs, recruitment of individual donors, the creation of planned gift options, and the formation of partnerships with businesses capitalizing on the bison products market.

The Tribal Business Management Department furnished business plans to member tribes. The department also offered business training with workshops addressing budgeting and cash management in a bison operation. At the same time, business consultants also conducted feasibility studies for land, herd, and capital expansion.

Meanwhile, the Publications/Cultural Education Department produced the quarterly newsletter and created a coloring book entitled *Gifts of the Nation*. The award-winning *Return of the Native* video production stands as one of the proud accomplishments for this department. As well, the development of an educational CD-ROM, traveling buffalo box for school use, and the performance of presentations marked the educational efforts of the ITBC.

Finally, Technical Services performed the most direct work with the tribes. Members of this department gave technical assistance with features of bison restoration such as fencing, range restoration, transport, and medicine. The department also coordinated Congressional funding and the distribution of bison from the federal parks and wildlife refuges system along with other donors. In keeping with the concerns over the bison of Yellowstone National Park, the Technical Services Department continued researching disease and transportation issues surrounding the controversy over the herd.[13]

With respect to member tribes of the organization, the composite typical tribe, usually from the West, possessed a bison hunting tradition. The tribe probably joined the ITBC in the 1990s and established its herd in the same decade with surplus bison from a national park or wildlife refuge. Wind Cave National Park, for example, quite possibly provided the original animals, which the ITBC facilitated in moving to the receiving reservation. The foundation herd increased on its own and with the arrival of supplementary animals either from another tribe, private ranches, or more surplus from the government. The tribe's bison program, though possibly not self-sufficient financially, often enjoyed a very high level of ideological support from the tribal government and reasonably strong support from the tribal community. Community members regularly served as the tribal stewards of the bison emerging from the respective reservation's ranks of either ranchers or wildlife biologists. The typical herd quite possibly consisted of approximately seventy-five animals ranging over nearly 500 acres. [14]

These bison stewards, or caretakers, most often utilized a hands-off approach in developing their herds. In other words, they handled their bison as little as possible. Still, they needed to provide for their charges as challenges appeared such as maintaining genetic diversity, matching animal numbers to range capacity, public relations, and the general concerns faced by anyone working with wildlife or livestock to include potential negative consequences of human-animal interaction. As the Yakama herd program supervisor, Tracy Hames, stated it: "Buffalo are real good at being wherever they want to be, which may not be where some people want them." [15] The stewards usually augmented their herds to prevent inbreeding. Most tribes put their animals to

pasture and nature dictated that they provide limited feed supplementation during drought or winter. The harvest or culling of animals usually possessed an element of the sacred accompanied by a ceremony or personal prayer. Harvested bison, often at the request of tribal members or the tribal council, usually got distributed to the tribe for either ceremonial purposes, community service such as care for the elderly or less affluent, and/or a health program making bison meat available to help prevent diabetes or heart disease. Ultimately, the typical program succeeded in its short term goals and stewards remained optimistic that the restoration of the buffalo would continue with further acquisition of rangeland.[16]

The fact that so many member tribes complied with the mission statement and purpose of the ITBC validated the cooperative as an influential organization and indicated the existence of effective leadership.[17] This proved quite true at its inception as the ITBC in many ways realized the dreams of its leading founder, Fred DuBray. Years ago, DuBray, a Lakota rancher from the Cheyenne River Reservation, dedicated his life to restoring *Pte Oyate*, the buffalo nation. In 1995, he reflected on the impetus for his leadership:

> I've always felt there was something missing here. My ancestors are buried here. The buffalo's ancestors are buried here. All the grasses, everything's native here. That's the context that I always thought in. All these things need to be here. That comes from cultural understanding.[18]

As he formulated his plans to bring back the buffalo, a Lakota elder posed an important idea to DuBray that he should first ask the buffalo if it wanted to come back. Several Lakota held a ceremony for guidance and emerged with an answer in the affirmative. They would work to restore the bison, but with

"dignity." The proposition apparently influenced DuBray as he made it quite clear that "in a feedlot, it's not realistic to think that they would want to come back."[19]

Such rhetoric defined the articulate leader of the ITBC and over the course of the organization's life into the year 2003, he intermittently served as the cooperative's president. Whether DuBray led the organization in this time period or whether someone else served as the president or executive director, several lines of rationale emerged from the organization's leaders: the need for pan-Indian collaboration and commitment, the parallel fates of Native Americans and the bison, and the desire to "manage" bison as wildlife and not livestock in order to take care of the land.[20]

First, when the tribal representatives met in Albuquerque in 1992, delegates acknowledged the diverse situations of respective tribes. Ernie Robinson, Northern Cheyenne, elucidated, "Individually our goals may be different, but as a whole our goal is to get the buffalo back to the Indians again."[21] DuBray responded that "there are going to be obstacles on the way and we're going to need each other's strength to draw on." He gave a very real example of this collective capability when he further explained that if one tribe approached Congress about getting money for a bison program that "they'd probably just close the door in our face." The Lakota leader added, "But if we got thirty-four or thirty-eight tribes saying the same thing, they still may close the door in our face, but at least they're going to hear us."[22] Seven years later, then president Louis LaRose from the Winnebago tribe commented, "We are all growing in our understanding of the restoration of the bison."[23] Ben Yates, Nambe O-Ween-Ge of New Mexico's Pueblo tribes, fulfilled the initial commitment established by the

ITBC founders and continued through the 1990s when asked in 2003 of the future of his tribe's herd. He stated, "As long as my kids are around, then we'll have buffalo."[24]

Second, the leadership of the ITBC saw their fate inextricably intertwined with that of the bison. Comments by DuBray over the course of the 1990s exhibited this association. At the founding meeting, the organization's future president explained, "As we bring our buffalo herd back to health, we also bring our own people back to health, and that's what it's all about."[25] He whisked away any doubt about the meaning of his words when he noted that "buffalo are the very heart of our culture . . . if they can't be saved, then we can't either."[26] The next year, an Associated Press news release quoted ITBC President DuBray: "Before it was military strategy to eliminate the buffalo and eliminate our culture. Common sense would tell you that bringing buffalo back would bring people back into a healthy situation."[27] Four years later, a similar quote appeared in the *New York Times*: "When they destroyed the buffalo herds, they were destroying our culture. They severed the physical relationship, but the spiritual relationship remains."[28] Unsurprisingly, DuBray's commentary linking bison and Native Americans continued right into the next decade with his comments at the bison conference hosted by the University of Nebraska in 2000. Just days ahead of his scheduled appearance before the United Nations on behalf of indigenous people, he explained: "Buffalo are our relatives. We are obligated to take care of them."[29]

Third, the course of bison interaction and land management for member tribes emerged fairly concrete from the initial meeting to establish the ITBC.

Regarding the restoration of bison onto reservations, DuBray clarified: "The only way that we can justify doing this is to allow them to be what they are." The delegates came out with a stand against tinkering to develop "super buffalo" or bison with large meaty hindquarters.[30] The ITBC emphasized early on that it wanted to preserve the "wild integrity" of bison using a "traditional philosophy" and remained stalwart against practices of intensive management to include feed lots, dehorning, chronic medication, breakup of natural social units, premature slaughter, genetic engineering, and artificial insemination. In short, the ITBC came out in strong opposition to the treatment of bison as cattle.[31] DuBray stated, "We're trying to take a holistic approach."[32]

Thus, most tribes attempted to make their herds as free ranging as possible, and the ITBC leadership charged the board of directors to provide for their bison with as much a hands-off approach as possible. Vice President Carl Tsosie of Picuris Pueblo echoed the heralding comments of DuBray. Tsosie proclaimed at the 1999 ITBC Annual Conference: "We are stewards of nature." He told the buffalo handlers in the audience that "buffalo handling is like a marriage, it's not a hobby," adding: "You're the one, the base to all this, the answers to the prayers. You're the warriors. It may take years, it may take lifetimes, but we will never give up."[33] His strong rhetoric reflected the resolve of the ITBC's leadership.

However, the work of the ITBC went beyond organization, effective rhetoric, and the commitment of its bison stewards. For its first ten years, a myriad of concerns confronted both the cooperative's central administration, located in Rapid City, South Dakota, and its member tribes. Facilitation of

funding and the distribution of surplus bison from parks and refuges dominated the agenda of the ITBC. Other important matters included collaboration with tribal colleges for bison management education and validation of existing programs while creating a prospectus for new herds. Tribes and tribal programs, in cooperation with the parent organization, possessed agendas of day-to-day functions such as feeding, breeding, and troubleshooting any problems along with the omnipresent need to reconcile economics and holistic management, the development of health programs, and the implementation of new policies.

With an estimated potential twelve million acres capable of sustaining 120,000 bison on reservation lands, the ITBC largely concerned itself with the acquisition of funding in its first decade.[34] Since large chunks of land in Indian Country fell out of tribal hands following the passage of the Dawes Act (1887), tribes have struggled to get back their originally sanctioned domains. This requires money and the peak amount received in a given year during the period from 1993 through 1996 by the ITBC amounted to $660,000, equivalent to about ten percent of the financial requirement needed to implement full expansion into potential bison range.[35] Receiving its usual distribution from the Department of Interior, ITBC leaders lobbied Congress and Secretary of Interior Bruce Babbitt in 1999 for additional funding.[36] The following year, the cooperative did succeed in getting money from the Department of Labor for application toward the ITBC's education outreach.[37] By 2000, the technical services department fully implemented the funding system whereby tribes would write grants through the ITBC for Congressional money. Funding priorities went to tribes that demonstrated a program for fencing and range improvement.[38] All the while, the

solicitation of private donations and grants continued unabated. The quest for funding over the first decade resulted in the ITBC's disappointment in reaching its ultimate goals of financial comfort but feelings of success in maintaining an operating budget capable of providing for expanded services and departments.[39]

Hoping to increase bison along with bison range, the ITBC possessed a primary function as the conduit by which member tribes receive surplus bison from the federal government. Typically, the tribes submitted proposals to the ITBC which ranked the proposals. Technical services director Tony Willman reported in 2000 that the ITBC normally received requests for about 300 bison but usually could furnish just approximately 150.[40] The following year proved especially bountiful as tribes received 450 animals.[41] The parks donated the animals but the handling and transportation costs fell to either the ITBC or member tribes.[42] Some of the leading federal donors included Wind Cave National Park, Badlands National Park, Theodore Roosevelt National Park, the National Bison Range, and Wichita Mountains National Wildlife Refuge.[43] Custer State Park also donated considerable numbers of bison to neighboring Lakota reservations.[44] Nonetheless, these surplus bison, although a boon to the tribes, did necessitate some careful consideration since they were cull animals often selected by what the existing park or refuge herd did not need.[45] The enhancement of tribal herds with these surplus bison served as a major catalyst for the close association of the ITBC and the tribal colleges.

Judi Hebbring Wood, a private bison rancher, former secretary of the National Bison Association, the bison project coordinator for Lower Brule Community College, and administrator for the Northern Plains Bison Education

Project, explained in a 2000 professional journal article the culling process for public herds. The respective agencies kept the best animals, sold the next best through public auction, and then donated the leftovers. This, of course, worked contrary to the genetic strength benefit to tribes since they did not receive the fittest animals, the ones that historically would have survived. Wood cautioned tribes to watch the sources and backgrounds of their bison while looking for the expected qualities of healthy range bison.[46] She explained the simple process at the Bison Conference 2000 in Lincoln: "Beware the ugly and abnormal looking ones, if a buffalo looks good, then it's probably ok genetically speaking."[47]

Reminiscent of some of the key roles played by women in bringing back the buffalo, Hebbring Wood also contributed to the organization of the first three Tatanka Oyate Summer Institutes in 1999, 2000, and 2001. The ITBC combined with the Northern Plains Bison Education Network (NPBEN) to present this annual event in the summer. Each year participants received classes and hands-on instruction in all facets of bison restoration ranging from historical study to stress-free bison handling to native food preservation to range dynamics.[48] NPBEN consisted of ten tribal colleges funded in part by the W.K. Kellogg Foundation.[49] Some of these colleges initiated programs to offer Associate of Science degrees in Bison Production and Marketing. The colleges hoped to blend the science of western culture with indigenous philosophy, to promote study of "wildculture" alongside agriculture.[50] The summer institutes provided an opportunity for the ITBC and tribal colleges to link up and coordinate efforts to restore the bison.

The tie between the tribal colleges and the ITBC became obvious when the observer could hear a call like that made by ITBC President Louis LaRose in 2000 when he stated: "Land grant colleges are a key step to restoration. We need bison research for bison."[51] Worthy of note in 2002, LaRose, former ITBC president, served as the board chairman for Little Priest Tribal College in Nebraska, a member of NPBEN.[52] As well, the mission of the ITBC for a dignified return of the bison dovetailed rather nicely with the "science with soul, or spirit-based science" offered by the tribal colleges.[53] Much like the ITBC, the college programs looked to restore bison through an "intricate inter-weaving of culture, ecology, workforce development, and spiritual revitalization."[54]

While establishing liaisons with tribal colleges remained important to the ITBC through its first ten years with acceleration toward the end of that time period, site visits provided an opportunity to oversee tribal programs as well as offer the aegis of the cooperative. Although such visits continued regularly, one such trip received documentation in *Buffalo Tracks*, the ITBC's quarterly newsletter, in 2000. The article described a visit by a three person technical team to the Northern Ute Tribe at the Uintah and Ouray Agencies. The team presented the ITBC and its prevalent philosophies to the tribal council and the tribe's fish and wildlife department. Meanwhile, the team collaborated with tribal members to develop economic need, business, and herd management plans. Finally, the team toured the existing Ute herd and its range and evaluated the range and plans for herd expansion with the assistance of the ITBC. The visit concluded with a report by the team that good potential existed for range and

herd expansion if the tribe could acquire the appropriate grazing permits from cattlemen.[55]

Such visits assist tribal bison programs by validating them. At some point, most tribal bison programs required assistance from the tribal government. It took time and volume for most programs to become self-sufficient. Therefore, ITBC visits have demonstrated a pan-Indian support structure that tended to allay the fears of a losing proposition for tribal leaders hence the high level of support from tribal government experienced by most tribes even though tribal politics often prove divisive with the allocation of scarce resources. ITBC board member and Spokane tribal bison steward, Monty Ford, remarked after an ITBC visit to the Spokane Reservation: "Having ITBC here gave our community a good sense of why the bison are such an important commodity to the Indian people . . . that it's ok to be Indian, that it's ok to be cultural."[56]

Comments such as Ford's show that bison stewards must work within their own tribes and with the ITBC to navigate toward the future. As tribes established their programs through the course of the 1990s they received support, but many still found the obstacles to running a successful bison program beyond the acquisition of a few animals along with a land base and later supplementation with further additions of animals. For example, some tribes experienced enough success with natural increase of their herds that excess animals became a concern. For the Northwestern tribes of Washington with limited range, chase stories emerged quickly in any interview. Typically, bulls started to seek new range regardless of fences, roads, lawns, or gardens. Stewards found themselves either in round-ups or sometimes shooting the

wanderer.[57] Offering hunts for excess animals also posed a solution toward appeasing tribal councils or members concerned with the economic feasibility of their bison programs.[58] In 2000 and 2001, the Assiniboine and Gros Ventres of Fort Belknap responded to drought conditions with a culling that resulted in the establishment of the Fort Peck Reservation's herd with surplus bison from Fort Belknap.[59] Other tribes in the ITBC including the Eastern Shawnee, Miami, Nez Perce, Salish-Kootenai, Sault Ste. Marie Tribe of Chippewa, and the Tesuque, still without possession of herds, sought ways to acquire bison.[60] Meanwhile, the Comanche Tribe, like other tribes in Oklahoma without much of a land base left in tribal trust, sought to enhance its bison restoration effort by encouraging tribal ranchers to go into bison. Five of them did so by 2003.[61]

Clever solutions to difficult problems defined much of the work of the tribes during the first decade of the ITBC. Nowhere did this prove more true than in the synthesis of economics and the spirit of bison restoration. Unequivocally, virtually all ITBC tribes established their herds for spiritual and cultural revitalization. Nonetheless, a peripheral hope often presented itself in the form of economic vitality as well.[62] Lakota bison consultant Jim Garrett posed the question: "Where does one draw the line between spiritual use and utilitarian use of the buffalo? It is an ethical question that each tribe must ask itself and answer."[63]

Some tribes grew their herds to carrying capacity and could answer the question of utility in their programs by selling live animals for seed herds.[64] However, even this fairly anodyne solution ran into difficulty in first three years of the new millennium as drought gripped much of the West and live bison prices

plummeted. Tribes, although philosophically prepared to expand their bison restoration, found themselves needing to reduce herd sizes to maintain the principle of keeping bison on the range and not using heavy supplementation.[65] This explains why after the exponential increase in Native American bison holdings during the 1990s, the growth slowed after the turn of the century with the ITBC reporting no more than 10,000 animals held by its member tribes early in 2003.[66] During the same time, however, the meat market remained more consistent in pricing.[67]

Harvest and butcher of buffalo, certainly not novel concepts in Indian Country, always posed as a delicate issue for most ITBC tribes. Hence, most tribes performed these tasks with religious overtones.[68] To reconcile the utilization of meat in light of the organization's mission statement and rhetoric to bring back the buffalo with dignity, the ITBC lauded free range and grass fed bison beef as opposed to penned and grain fed bison beef.[69] Although a miniscule minority of tribes came to possess a penned herd with heavy feed supplementation, tribes definitively attempted to practice the range fed philosophy espoused by the ITBC.[70] The harvesting operations of the tribes did not resemble the slaughterhouse system pervasive in the cattle industry. In fact, the bison stewards typically shot their animals in the field accompanied by a religious ceremony.[71] As well, it was not uncommon at all for bison stewards to contend that a bison from the herd would actually present itself for the kill.[72]

The butchering process retained a great deal of significance as well. Traditional field butchering dominated with the harvest of small numbers of bison. However, some tribes possessed the desire to process a greater volume of meat

and bison products such as hides, skulls, and taxidermy heads.[73] They began working to develop a more efficient butchering system. Leading other tribes, the Lakota of the Cheyenne River Reservation looked to another indigenous people, the Sami reindeer herders of Scandinavia, for a processing model.[74]

The Cheyenne River Lakota researched the mobile slaughter unit of the Sami and deemed it culturally compatible. With such a unit the harvest occurs in the field with minimal stress to the animals compared to round up and shipment to a slaughterhouse. The tribe then commissioned the manufacturing firm in Sweden that built the Sami unit to construct a similar model upgraded for the larger-sized bison. The Lakota started using their customized mobile slaughterhouse in 1998. The resulting capabilities enabled the herd stewards to harvest as necessary with the ability to furnish at least one ceremonial bison each year to the reservation's seventeen communities along with the sale of stew meat and ground meat in the tribal-owned supermarket. This all proved additional to existing bison meat programs for the impoverished and elderly. Moreover, an additional benefit resulted in that the Cheyenne River Lakota more aptly could reach a niche market of more affluent consumers who prefer organically-grown and respectfully processed meat.[75]

In-depth analysis by the tribe's researchers also revealed that historically the Lakota found more than one hundred uses for the bison. Using modern butcher techniques, the tribe only found eleven different usages for the harvested bison. The mobile slaughter unit increased the uses to more than thirty. Jim Garrett explained an example of such an increase:

> Our people have always used the sinew along the backbone for sewing thread. In the modern butchering style, the backbone is cut

> across to make steaks and this eliminates the long sinew. Our more traditional style cuts the meat lengthwise so that the sinew can be separated from the meat, washed, dried and made into thread. The women can then use this thread in the making of authentic Lakota clothes and shoes that have a higher value on the market. Another example is that specific bones of the animal were used in the past and now we do not have to saw-cut the bones. We save these for our artists to use in their artistic expressions.[76]

In many ways, a standard bearing tribe for the ITBC, the Cheyenne River Lakota found a culturally sensitive way to blend spiritual respect for the bison with the desire to enhance production for the benefit of Indian people. Ultimately, tribal bison stewards hoped to increase their harvesting to continually grow their herd while providing for at least one meal with bison beef each day for each member of the tribe.[77]

The idea of health benefits for Native Americans derived from bison meat obviously did not occur solely to the Lakota. In fact, the ITBC selected "Sacred Buffalo: Restoring Healthy Native Nations" as its third annual conference theme. Although the concept of health at the conference embraced cultural, emotional, and environmental health, dietary healthy provided a main focus.[78] With diabetes afflicting as many as one out of three people on some reservations, the need to address dietary concerns became part of the agenda of the ITBC with Winnebago bison caretaker and ITBC official Louis LaRose often serving as point man with a model program on his reservation in Nebraska.[79] As LaRose articulated the matter at the University of Nebraska bison conference in 2000, "We're only two or three generations removed from picking berries, we were not designed to do all our hunting in aisles A, B, and C."[80]

LaRose and the model Winnebago Bison Project approached the bison meat augmentation effort with a three-pronged approach in the late 1990s. First,

the tribe initiated a Kids Café Diabetes Program as a type of dietary triage for the tribe's youth and to get bison into their diet. Second, LaRose and other representatives began lobbying the federal government to put bison into reservation food distribution programs. Third, bison project managers linked the health of their bison range to the health of the bison meat and hence the health of the consumers of that meat.[81] LaRose elucidated this position:

> In order for us to consider buffalo as a healthy food for us as human beings, we must also look at a healthy diet for the buffalo. The healthy diet for the buffalo was native grasses and native prairie. We have to provide a healthy ecosystem for the buffalo, but it also creates a healthy ecosystem for all the animals that are here.[82]

The twenty-first century will become the scene to assess the success of the Winnebago program and others like it by other ITBC tribes. Yet, the holistic viewpoint and sweeping vision pervade the bison restoration effort by many tribes.

Examples of such vision have included the plans Fred DuBray and the Cheyenne River Lakota, Pat Cornelius and the Oneida tribe of Wisconsin, Phil Follis of the Modoc tribe, and Richard Archuleta from Taos, New Mexico who has worked in tangent with other Pueblo bison stewards to enhance Southwest bison restoration. DuBray and many of the Lakota on the Cheyenne River Reservation announced their plans to eventually restore a natural parkland without fences for their herd. Through 2002, the tribe possessed a recent history of bison range acquisition and herd growth making it the largest operation in the ITBC with more than 2,000 animals on better than 30,000 acres.[83] Cornelius, the bison steward of the Oneida herd and herself a former private rancher, lobbied in 1998 to get fallow agricultural land in the Conservation Resource Program (CRP) available

for bison grazing. Laws prohibit agricultural use of the land, but since bison can classify as wildlife, Cornelius reasoned that they qualified for sustenance on the CRP lands. Government officials disagreed, but she did succeed in getting the seeding of native grasses and herbs on some of these lands in order to enhance prairie restoration.[84] Follis, a Modoc living in Oklahoma where the federal government concentrated members of his tribe following the Modoc War a century and a quarter ago, initiated a vision to bring bison to his people's northern California homeland. He hoped to piece together national forest, Bureau of Land Management (BLM) lands, and Modoc holdings to produce a 3,000,000 acre bison range. His efforts took him to Washington, D.C. to lobby beltway bureaucrats who started to mull his proposal early in 2003.[85]

Meanwhile, Richard Archuleta, who rotated in and out of ITBC officer status namely as the organization's treasurer in the late 1990s and into the new millennium, envisioned the expansion of his tribe's longstanding and quite successful bison program more fully into the Rio Grande Valley on the highlands above the Rio Grande Gorge near Taos. The Taoseños believe the area once flourished as a grassland and became the present sagebrush range only after overgrazing by sheep introduced by the Spanish. Archuleta expressed his desire to re-seed the area with native grasses and medicinal plants to support bison and pass on the health benefit to the people.[86]

Meanwhile, members of the Taos Pueblo including Archuleta combined with several other Pueblo representatives to directly avert a perceived bison disaster in late 1996 and early 1997. At an emotional time for the Pueblo people with respect to the bison owing to the reintroduction of bison and the sacrosanct

Buffalo Dance across the northern Pueblo tribes in the first half of the 1990s, an issue arose over a herd of bison managed by the State of New Mexico. Known as the Fort Wingate herd, a group of as many as 200 bison roamed western New Mexico near the Zuni Mountains overlapping the Fort Wingate Military Reservation.[87] With the expiration of the State's land lease, State officials decided to stage a hunt to eradicate the herd. The Native American outcry led by Taos, San Juan, Sandia, Pojoaque, Nambe, and Picuris Pueblos resulted in what equated to a "stay of execution" the day before the hunt's opening. By February, 1997, policymakers decided to donate a significant part of the herd to some of the Pueblos. For example, Sandia started its herd with this donation.[88] Meanwhile, Pueblos, even those not in the ITBC, followed-up on this momentous occasion by initiating their own herds. These tribes, maintaining small bands for spiritual revival, included the Cochiti, Isleta, Laguna, and Acoma.[89]

Despite the apparent cohesion of the pan-Indian bison restoration effort of the 1990s characterized by the leadership and strength of the ITBC, total consensus has not existed in Indian Country over the restoration of the bison. Of course, bison restoration ironically represented change and change always possesses its detractors very much in alignment with human nature. Inherent resistance to bison restoration always has existed to some degree, although the vast majority of bison stewards have detected a high level of support from their communities.[90] Nonetheless, one segment of Indian society, let alone that of Euro-American society, has possessed pockets of the greatest resistance, cattle ranching.[91]

Certainly not all cattle ranchers have resisted the homecoming of the bison. After all, a significant number of Native American bison stewards emerged from the ranks of cattle ranchers.[92] Cattle ranchers all too often feared the transmission of brucellosis which causes cattle to abort but possesses no record of occurring on the range. They sometimes became concerned about bison busting fences and harassing their cattle. At least one cattleman in Indian Country expressed dismay that the tribe's bison steward did not care for the bison anywhere near the standards associated with healthy livestock and that the caretaker expressed a certain arrogance about the entire undertaking. Yet, these issues usually could be allayed through range monitoring and personal diplomacy.[93] More often the crux of the issue lay in the allocation of resources often perceived as bison versus cattle.[94]

The important resources sought include land and capital. Some ranchers have insisted that tribal bison projects enjoy a "pet" status and suck away funds otherwise destined for agricultural subsidization. Spokane bison caretaker Monty Ford addressed this assessment in a 2000 interview when he explained that on the Spokane Reservation for the previous fiscal year, the range cattle budget received $80,000 from tribal, Bureau of Indian Affairs (BIA), and other federal budgetary sources. In the same time period, the buffalo program received a paltry $1,500.[95] Meanwhile, area ranchers struggled with the concept of communal ownership with a spiritual basis as opposed to individual capitalism with a material base and some feared the impact of bison beef on the market.[96]

For their part, members of the ITBC largely possessed three understandings with the cattle ranching versus bison restoration issue. First,

they viewed the bison as a superior animal for the range health of the American West. Second, they disapproved of the market-driven cattle industry's treatment of its subjects. Third, their vision of the landscape, much in keeping with that of their ancestors, sought a form of non-intensive pastoralism much unlike current modern monoculture. These understandings have not received widespread acceptance by the Western cowboy culture.

Former executive director of the ITBC, Mark Heckert, made his assessment of the superiority of bison clear:

> We've line-bred cattle for a thousand years, which are essentially a wetland, lowland species and we've tried to move them out here into an upland arid area. So they spend endless time in riparian areas, and you've got to keep unfrozen water open for them in the wintertime. You've got to pull the calves because they can't reproduce naturally.[97]

Lower Brule Lakota bison steward, Shaun Grassel explained that "cattle have a tendency to eat everything down and trample everything down" and added that "buffalo don't tend to overgraze as cattle do."[98] His colleague from Fort Belknap, Mike Fox, supported his contention: "Unlike cattle, they [buffalo] do not bunch around watering holes and destroy riparian areas and valuable prairie wetlands."[99] Fred DuBray acknowledged similar circumstances when he explained that bison face storms with their woolly forequarters, get water from snow in the winter, eat a plethora of grasses and forbs, and do not stand around selectively feeding.[100] In short, bison reign superior in Western range adaptation.

Because of this natural adaptation of the bison to the American landscape, the ITBC membership largely never has advocated any kind of manipulation to its mammalian charges. Heckert addressed this issue early in the ITBC's history when he stated in a 1996 interview: "The tribes are very concerned that the

buffalo will simply become a shaggy-cow money machine for people who don't care about native culture."[101] Technical services director Tony Willman clarified the ITBC's position with his article in the ITBC's quarterly newsletter in 1999. Willman acknowledged that the "bison industry continue[d] to explode" as ex-cattle ranchers entered the enterprise. Unfortunately, this propelled "the latest rage in physically altering bison directly linked to what certain 'ex-cattle ranchers/now bison experts' feel a bison should look like." He admonished that people should give their bison food, space, and water or not go into raising buffalo.[102] Judi Hebbring Wood described a similar anathema observation, "We are now beginning to see animals that hardly resemble real buffalo. They look more like furry cattle with their thick legs and blocky butts – the most prized on the show circuit."[103] She noted that with such trends in the buffalo industry that Native America remained the bison's best hope to maintain the wild character of the buffalo.

For members of the ITBC, certain resolutions emerged out the first ten years of existence. Bison should look like bison roaming as unfettered as possible on native landscape. Native Americans restoring their culture with the bison should be central to their rejuvenation. Enhanced health for generations to come in the plant and animal kingdoms ought to result. This would offer hope for the ITBC and fulfill much of what lay as the subject of the tribal sacrifices more than a century past.

Still, a more detailed examination of one ITBC tribe's experience sheds light on the bison restoration movement at the close of the previous century and

the dawning of the next. The Assiniboine and Gros Ventres example from Fort Belknap readily avails itself due to a concerted public outreach effort. As well, the reservation epitomizes much of the trials and tribulations experienced by ITBC member tribes.

When the tribal council originally decided to bring the buffalo back to the reservation lands in 1974, it met resistance. Predictably, some cattle ranchers frowned upon the venture. Other residents feared the loss of funding to other programs such as jobs, housing, or health care.[104] Reflecting on this friction, the head of the bison program through much of the 1990s, Mike Fox recalled: "Especially the ranching families. It seems like the ranching community are the ones that have the biggest mistrust of the buffalo; that they're going to take over."[105]

After an initial period of maintaining the bison penned near the tribal office, a management plan that heralded much of what the ITBC would implement came to guide the Fort Belknap bison program. The herd caretakers opened a large pasture and let the bison roam. They tested new arrivals to their herds and all slaughtered animals to see if brucellosis or other afflictions haunted their herd. Any type of round-ups took place only once per year. By 1990, approximately sixty animals enjoyed a 2,000 acre pasture. The following year the program started to pay for itself with the sale of live calves.[106] The "goal to bring the buffalo back into the daily lives of the tribal people" started emerging as a reality.[107] By 2000, four hundred bison grazed in a pasture of 22,000 acres with another 20,000 to 30,000 acres ready to come into the program with the transfer of grazing leases. The tribe traded bison and brought new blood in from various

locations to include Lakota reservations, the National Bison Range, and Wind Cave National Park. Supplemental feeding became infrequent and occurred only during urgent times of natural stress.[108] The Assiniboine and Gros Ventres herd became a seed herd for other tribes including the Blackfeet of Montana and members of the Blackfoot Confederacy in Canada as well who visited the reservation to observe the successful model bison operation.[109]

Like most other tribes, the Assiniboine and Gros Ventres harvested bison for ceremonies and impoverished families. They developed a somewhat innovative nuance as part of their game management plan where they might substitute bison meat for a reservation deer tag.[110] Harvests occurred in the pasture with field butchering sometimes including guided hunts for non-tribal members that earned the tribe as much as $2,000. The tribe also ran a pilot project on the impact of bison beef on diabetics.[111] However, the Fort Belknap bison program distinguished itself more by the happenings with its live bison rather than those that nourished the people through their harvesting.

The tribe offered its bison pasture as a recovery site for the nearly-extinct black-footed ferret.[112] This selection by a multi-agency team revealed the confidence placed in the holistic range management practiced by Fort Belknap as a model of grassland restoration. Although not an average tourist who visit the site in part due to an advertising campaign, former Secretary of the Interior Bruce Babbitt remarked on his 1999 tour of Fort Belknap, "American Indians are the only people who know how to live in harmony and to relate to the spiritual harmony of the land."[113]

When Babbitt made his complimentary statement, he perhaps did not know of an important piece joining the native spirit and the land. A program done at Fort Belknap directly linked the people and the bison. In the mid 1990s, the tribal council initiated a Buffalo Watch Program for alcoholics encountering difficulties in their families and social relations on the reservation. Although the tribe later dropped the program and its effects prove difficult to measure, at least one participant told a reporter that after initial resentment, she eventually learned quite a lot from the bison, particularly the mothers and their offspring, and believed it would help her become a better parent.[114] Wayne Azure, a former bison steward, intimated a similar success story during a 1999 interview. A woman who had a record for child abuse received a sentence to watch the bison during her lunch hour for several months or else the social services would not return her children to her. During the time, she eventually took on a different perspective, reunited with her children, and went on to become a "good mother" as Azure described her.[115]

Azure's story itself lends insight into the world of a modern bison steward in Indian Country. In his Nakota language, that of the Assiniboine, Azure's name is Tatanka Ska Wuhamní which translates as White Buffalo Dreamer. He worked in the late 1990s for the tribal fish and wildlife department as a field hand, tourist guide, and bison caretaker. He also served on the tribal health board. Emanating a sense of the sacred in his assessment of the bison program, Azure linked himself, the bison, and public health all in one brief description: "Most people don't realize the buffalo are here to heal the people. I see it coming I saw the white buffalo in a dream. This herd will have one."[116]

Making obvious reference to the aura associated with the white buffalo by native people, Azure personalized his role in the process. As one of the caretakers, he participated in slaughters. Each time, the shooters began with a pipe ceremony. Next they approached the herd and one of the bison would emerge from the herd. The hunters would shoot the loner. Then, each of the nearby bison would circle the downed beast and sniff it before they moved away and the butchering began. The herd would then sniff the stomach contents after the butchering. Azure explained that these behaviors struck a deep chord within him. He stated: "I cry when they do that. It's part of my healing process."[117] Obviously, bison stewardship takes on a dimension that not a majority of people perceive in their day to day work.

Thus, the acceleration of bison restoration in the 1990s and into the first three years of the new millennium touched an increasing number of people in Indian Country. The importance though clearly goes beyond objective numbers of bison and acres of land. The cultural connection and spiritual revival prevail with great importance to both the tribes and the individual Indians themselves.

However, Azure's story extended beyond Fort Belknap. Rather, he felt compelled when describing the healing process to offer his sentiments on the bison of Yellowstone National Park, an offering not without precedent with Native Americans concerned with the buffalo and their culture. Referring to the unprecedented modern slaughter of Yellowstone bison during the winter 1996–1997, Azure lamented:

> Why they would slaughter a whole herd when they didn't know how many carried brucellosis. It took me back to the time of my ancestors when they [Euro-Americans] slaughtered the buffalo. I was very, very angry for a long time about what was done. They

> asked us to go back in 1998 and 1999. I talked to my teacher [spiritual mentor] about it. I wanted to see it – feel it. But the senselessness angered me. I get bitter. Old Ones don't react so emotionally. They take time to find stories – parables.[118]

His concerns notwithstanding, the ITBC and bison supporters across Native America took to heart the issue of the Yellowstone bison. In many ways, they found the fate of these animals the ultimate parallel to that of themselves.

Endnotes

[1]*Intertribal Bison Cooperative 1998 Annual Report* (Rapid City: ITBC, 1998), 7. Deloria made these comments during his keynote address to the Intertribal Bison Cooperative's [ITBC] First Annual National Conference in Denver in 1998.

[2]Although sources vary on the exact number of tribes, ranging from sixteen to nineteen, that started the ITBC, the initial conference in Albuquerque definitely hosted delegates from several Lakota bands in the Dakotas, several Pueblo tribes, the Northern Cheyenne, Winnebago, Apache, Ute, and Crow nations as well. See *Return of the Native* [video], Sam Hurst, writer/producer, Intertribal Bison Cooperative, 1995.

[3]*ITBC 1998 Annual Report*, 4; Intertribal Bison Cooperative, *Intertribal Bison Cooperative* [pamphlet] (Rapid City: ITBC, 1999), 1; Garrett, *Cheyenne River College Tatanka Management Program*, 32.

[4]Meagher to Grandy, 5 January, 1973.

[5]Garrett, *Cheyenne River College Tatanka Management Program*, 32. Worthy of note, individual Native Americans in the United States continue raising bison though the numbers pale in comparison to aggregate tribal holdings. Members of the Comanche, Cheyenne River Lakota, Rosebud Lakota, Shoshone-Bannock, Southern Ute, Standing Rock Lakota, and Yakama tribes possess herds of bison. See Appendix A source list for these tribes.

[6]*Return of Native*.

[7]*ITBC 1998 Annual Report*, 4-5; *Intertribal Bison Cooperative* [pamphlet], 1. See also Colman McCarthy, "The Buffalo Is Back," *Washington Post*, 14 September 1996, A25. Sources often vary on the numbers of tribes and number of bison at any given point. Both numbers fluctuate as tribes join and sometimes leave the ITBC while bison stewards often regulate herd numbers for multiple reasons such as available range, market prices, weather, and politics. For checkpoints of the ITBC's growth through the 1990s, see the following. For 1993, see AP, "Indians Work to Restore Buffalo to Tribal Lands," *News-Review* (Roseburg, Oregon), 27 January 1993, 46; for 1994, see Deborah E. Popper and Frank J. Popper, "The Buffalo Commons: A Bioregional Vision of the Great Plains," *Landscape Architecture*, April 1994, 144; for 1995, see *Return of the Native*; for 1996, see Geist, *Buffalo Nation*, 124 and McCarthy, "The Buffalo Is Back," A25; for 1998, see *ITBC 1998 Annual Report*, 2; for 1999, see *Intertribal Bison Cooperative* [pamphlet], 1; for 2001, see Susan Ricci, *The Great Kinship Between Native Americans and the Buffalo Nation* (Rapid City: ITBC and NPS Historic Preservation Fund, 2001), 20.

[8]Garrett, *Cheyenne River College Tatanka Management Program*, 32.

[9]*Intertribal Bison Cooperative* [pamphlet], 1.

[10]Ricci, *Great Kinship Between Native Americans and the Buffalo Nation*, 20.

[11]*Intertribal Bison Cooperative* [pamphlet], 1.

[12]See the ITBC web-site, keyword: Intertribal Bison Cooperative, www.intertribalbison.org.

[13]Ibid.

[14]For a detailed study of the ITBC membership, see Appendix A. The Kalispel, Crow, Taos, and Assiniboine/Gros Ventres herds regularly contribute to the establishment or augmentation of other tribal bison herds (Appendix A). See also *American Bison: Spirit of a Nation*; Hoyt-Goldsmith, *Buffalo Days*, 18; Carl Tsosie, comments at the ITBC Second Annual Conference, 21 September 1999, Polson, Montana; Ervin Carlson, telephone interview with the author, 17 January 2003; and Susan Ricci, "Montana Tribes Demonstrate the Meaning of Cooperation," *Buffalo Tracks*, March 2001, 2.

[15]Tracy Hames (Yakama tribal biologist, non-native), interview with the author, 16 January 2003, Toppenish, Washington.

[16]See Appendix B.

[17]Appendix B reveals the answers to questions that verify the hands-off, holistic approach pursued by most member tribes. Virtually all member tribes treat bison as much as possible as autonomous creatures and not as manipulated livestock.

[18]Fred Dubray in *Return of the Native*.

[19]AP, "Indians Work to Restore Buffalo to Tribal Lands," 46. See also Jim Garrett, "A Case Study of an American Indian Economic Development Project: The Cheyenne River Reservation Bison (*Bison bison*) Program," unpublished paper in the author's possession, 23 April 2000, 6-7.

[20]The term "manage" poses problems when describing the oversight of wildlife. In this case, wildlife or bison management signifies more so the limiting of interaction between humans and buffalo, particularly when compared to intensive livestock management as found in many Euroamerican agricultural settings.

[21]Ernie Robinson in *Return of the Native*.

[22]DuBray, ibid.

[23]Louis LaRose, comments at the ITBC Second Annual Conference, 21 September 1999, Polson, Montana.

[24]Ben Yates, telephone interview with the author, 16 January 2003. "Nambe O-Ween-Ge" offers a the full name of the tribe, although "Nambe" usually suffices in references found in the Southwest.

[25]DuBray in *Return of the Native*.

[26]Ibid.

[27]AP, "Indians Work to Restore Buffalo to Tribal Lands," 46.

[28]Jim Robbins, "In the West, a Matter of the Spirit," *New York Times* (L), 21 January 1997, A21.

[29]Fred DuBray, comments at the screening of *American Buffalo: Spirit of a Nation* at the Bison Conference 2000, University of Nebraska.

[30]*Return of the Native*.

[31]Mountain Tree Community School (Potsdam, New York), *The Gift of the Great American Bison* [pamphlet] (Potsdam, New York: Mountain Tree Community School, 1998), 1.

[32]AP, "Indians Work to Restore Buffalo to Tribal Lands," 46.

[33]Carl Tsosie, comments at the Second Annual ITBC Conference, 21 September 1999.

[34]Callenbach, *Bring Back the Buffalo!*, 70.

[35]McCarthy, "The Buffalo Is Back," A25.

[36]Susan Ricci, "ITBC Takes Buffalo Restoration Movement to DC," *Buffalo Tracks* [ITBC's quarterly newsletter], winter/spring 1999, 1-2.

[37]Don Lake, "Department of Labor Funding for Education/Training," *Buffalo Tracks*, June 2000, 1,4.

[38]Tony Willman, "Funding Proposal Deadline Draws Near," *Buffalo Tracks*, June 2000, 11.

[39]Tony Willman [ITBC Technical Services Director], e-mail to the author, 31 January 2003.

[40]Tony Willman, "Surplus Bison Proposals for ITBC Member Tribes," *Buffalo Tracks*, June 2000, 11.

[41]Ricci, "Montana Tribes Demonstrate the Meaning of Cooperation," 2.

[42]Rudner, *Chorus of Buffalo*, 110.

[43]See Appendix B. See also Danz, *Of Bison and Man*, 185,199.

[44]Danz, *Of Bison and Man*, 185,199. See also Pickering, *Seeing the White Buffalo*, 119.

[45]Hebbring Wood, "Origin of Public Bison Herds in the United States," 158.

[46]Ibid.

[47]Judi Hebbring Wood, comments at the screening of *American Buffalo: Spirit of a Nation* at the Bison Conference 2000, 8 April 2000.

[48]"Tatanka Studies 2nd Annual Summer Institute," *Buffalo Tracks*, June 2000, 6 and Cheryl Hill, "An Indigenous Overview of the *Pte Oyate*," *Buffalo Tracks*, July 2001, 6-7.

[49]For information on the NPBEN, see www.unitedtribestech.com/orgs/npbec/npbison.asp. One of the tribal colleges that participated in NPBEN is United Tribes Technical which serves as the tribal college for five tribes to include Three Affiliated Tribes of Ft. Berthold, Spirit Lake Tribe, Standing Rock Sioux Tribe, Sisseton-Wahpeton Tribe, and Turtle Mountain Band of the Chippewa.

[50]Trudy Ecoffey and Jim Garrett, A Tribal College Perspective on Bison Education Presentation, University of Nebraska Bison Conference, 7 April 2000. See also Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 34. Garrett's thesis on the Cheyenne River Tribal College program is the most comprehensive source depicting the tribal college bison programs. He helped design the program at Cheyenne River and has been active in the Tatanka Institutes.

[51]Louis LaRose, luncheon address, Bison Conference 2000, University of Nebraska, 7 April 2000.

[52]Louis LaRose, e-mail to the author, 20 January 2003.

[53]Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 4.

[54]Ibid., 6.

[55]John Williams, "Field Visit to the Ute Indian Tribe," *Buffalo Tracks*, June 2000, 10.

[56]Susan Ricci, "Spokane Tribe of Indians Welcomes ITBC," *Buffalo Tracks*, June 2000, 9.

[57]Lloyd Finley (Kalispel), interview with the author, 21 June 2000, Usk, Washington; Monty Ford (Spokane), interview with the author, 20 June 2000, Wellpinit, Washington; and Hames interview, 16 January 2003.

[58]Mike Faith (Standing Rock Sioux), telephone interview with the author, 22 January 2003; Ford interview, 20 June 2000.

[59]Ricci, "Montana Tribes Demonstrate the Meaning of Cooperation," 2.

[60]Lamont Laird (Eastern Shawnee), survey correspondence to the author 20 July 2000; Dustin Olds (Miami), telephone interview with the author, 16 January 2003; James Holt (Nez Perce), telephone interview with the author, 21 January 2003; Mike Durglo (Salish-Kootenai), e-mail correspondence to the author, 19 June 2000; Mike Durglo (Salish-Kootenai), e-mail correspondence to the author, 17 January 2003; Robert Nygard, (Sault Ste. Marie Tribe of Chippewa), survey correspondence to the author, 12 July 2000; and Gary Moquino, (Tesuque), telephone interview with the author, 16 January 2003.

[61]Mike Mithlo (Comanche), telephone interview with the author, 21 January 2003.

[62]*American Buffao: Spirit of a Nation*. See also Appendix B.

[63]Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 34.

[64]See Appendix B.

[65]Phil Follis (Modoc), telephone interview with the author, 21 January 2003.

[66]Tony Willman, e-mail correspondence to the author, 31 January 2003.

[67]Follis interview, 21 January 2003.

[68]See Appendix B.

[69]*Bison: A Living Story* [Educational CD-ROM], ITBC production, 2000.

[70]See Appendix B; Kade Ferris (Turtle Mountain Band of Chippewa), telephone interview with the author, 10 January 2003; and Curley Youpee (Fort Peck, Assiniboine/Sioux), telephone interview with the author, 16 January 2003.

[71]See Appendix B.

[72]*American Buffalo: Spirit of a Nation* and Azure (Fort Belknap), interview, 19 August 1999.

[73]Kay Humphrey, "Buffalo Processing Industry Booming in Indian Country," *Indian Country Today*, 23-30 June 1997, A1-A2; Hoyt-Goldsmith, *Buffalo Days*, 18; and Finley interview, 21 June 2000.

[74]Jim Garrett, "A Case Study of an American Indian Economic Development Project," 8.

The use of a Eurasian model for an indigenous large mammal based industry preserving at least a semi-wild state in North America is not without precedent. For works describing the attempt to create a reindeer-raising society in Alaska, see Dean F. Olson, *Alaska Reindeer Herdsmen: A Study of Native Management in Transition* (Fairbanks, Alaska: Institute of Social, Economic and Government Research, University of Alaska, 1969). The program ultimately failed in its attempted transformation of indigenous lifestyle for Native Alaskans. Nonetheless, the program planners imported both Native Siberian Chukchi reindeer herders and Sami herders to teach their practices to Native Alaskans. See also James W. VanStone, "Hunters, Herders, Trappers, and Fishermen," 173-183 in William W. Fitzugh and Aron Crowell, eds., *Crossroads of Continents: Cultures of Siberia and Alaska* (Washington: Smithsonian Institution Press, 1988).

[75]Garrett, "A Case Study of an American Indian Economic Development Project," 8-9; Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 39; Tim Pickner (Cheyenne River Lakota), telephone interview with the author, 17 January 2003; Danz, *Of Bison and Man*, 200; Carol Goodstein, "Buffalo Comeback," *The Amicus Journal* 17:1 (spring 1995), 34-38 [reprint from Proquest], 4.

[76]Garrett, "A Case Study of an American Indian Economic Development Project," 8-10.

[77]Garrett, *Cheyenne River Tribal College Tatanka Management Program*, 39.

[78]Trudy Ecoffey, "Conference Puts Spotlight on Healthy Lifestyles," *Buffalo Tracks*, September 2000, 1,3.

[79]Ricci, *Great Kinship Between Native Americans and the Buffalo Nation*, 16, 20.

[80]LaRose, luncheon address, Bison Conference 2000, University of Nebraska, 7 April 2000.

[81]Ibid.; McCarthy, "The Buffalo Is Back," A25; andLouis LaRose to Jennifer Larson (Director, NHS Diabetes Center, University of Nebraska Medical Center), correspondence, 15 January 2003.

[82]*Return of the Native.*

[83]*Fate of the Plains* [video], Christine Lesick, producer, University of Nebraska, 1995 and DuBray, comments at the screening of *American Buffalo: Spirit of a Nation*, Bison Conference 2000, 8 April 2000.

[84]Pat Cornelius (Oneida), interview with the author, 22 September 1999, Polson, Montana.

[85]Phil Follis (Modoc), telephone interview with the author, 7 February 2003.

[86]*Return of the Native.*

[87]Ibid., and Tsosie, comments at the ITBC Second Annual Conference, 21 September 1999.

[88]Tsosie, comments at the ITBC Second Annual Conference, 21 September 1999.

[89]LeRoy Lovato (Sandia), telephone interview with the author, 10 January 2003.

[90]See Appendix B.

[91]For works on Native American cattle ranching, see Iverson, *When Indians Became Cowboys*; Iverson, "When Indians Became Cowboys," *Montana: The Magazine of Western History*, 16-31; Ian Dyck, "Does Rodeo Have Roots in Ancient Indian Traditions?" 205-219; and Lewis, "Native Americans and the Environment," 425.

[92]See interviews, Appendix B.

[93]Douglas Broyles (Caddo), telephone interview with the author, 16 January 2003; Finley interview, 21 June 2000; Ford interview, 20 June 2000; Hames interview, 16 January 2003; Meagher, interview notes, 28 September 1972; Meagher to Grandy, 5 January, 1973; Rudner, *Chorus of Buffalo*, 100-101; and Ted Wynecoop, interview with the author, 4 January 2003, Spokane, Washington.

[94]Mike Faith (Standing Rock Lakota), telephone interview with the author, 22 January 2003. For a journalistic description of the conflict between ranchers and bison stewards, see Rudner, *Chorus of Buffalo*, 35-50.

[95]Ford interview, 20 June 2000.

[96]Ibid.; Rudner, *Chorus of Buffalo*, 35-50; and *Bison: A Living Story* [CD-ROM]. For study emphasizing the communalism of reservations, see Klaus Frantz, *Indian Reservations in the United States: Territory, Sovereignty, and Socioeconomic Change* (Chicago: University of Chicago Press, 1999).

[97]Callenbach, *Bring Back the Buffalo*!, 73.

[98]Ricci, *Great Kinship Between Native Americans and the Buffalo Nation*, 16. Protagonists for ecological cattle ranching argue that stock owners can manage their livestock in a manner that prevents such range damage. The key lies in the intensive management to ensure less range degradation, which proves less of a consideration with bison. For such arguments, see Allan Savory, *Holistic Resource Management* (Washington: Island Press, 1988).

[99]Ricci, *Great Kinship Between Native Americans and the Buffalo Nation*, 16.

[100]AP, "Indians Work to Restore Buffalo to Tribal Lands," 46.

[101]McCarthy, "The Buffalo Is Back," A25.

[102]Tony Willman, "Keep the Beauty of Bison . . . No Genetic Tinkering," *Buffalo Tracks*, winter/spring 1999, 6.

[103]Hebbring Wood, "Origin of Public Bison Herds in the United States," 155.

[104]Minette Johnson, "Fort Belknap Looks to Tourists," *Defenders: The Conservation Magazine of Defenders of Wildlife* 73:1 (winter 1997-1998), 18.

[105]Rudner, *Chorus of Buffalo*, 99. Rudner's work offers a solid journalist's rendition of the bison program at Fort Belknap.

[106]Rudner, *Chorus of Buffalo*, 108-115.

[107]Ibid., 104.

[108]Ibid., 96, 100, 106 and Azure interview, 19 August 1999.

[109]Rudner, *Chorus of Buffalo*, 114 and Azure interview, 19 August 1999.

[110]Rudner, *Chorus of Buffalo*, 104-105.

[111]*Return of the Native* and Azure interview, 19 August 1999.

[112]Douglas Chadwick, "Fresh Try for Ferrets," *Defenders: The Conservation Magazine of Defenders of Wildlife* 73:1 (winter 1997-1998), 14-17, 19-20, 25-27; Johnson, "Fort Belknap Looks to Tourists," 18; and Azure interview, 19 August 1999.

[113]Susan Ricci, "Babbitt, Belknap, and Buffalo," *Buffalo Tracks* (winter/spring 1999), 4.

[114]Goodstein, "Buffalo Comeback," [Proquest reprint], 4.

[115]Azure interview, 19 August 1999.

[116]Ibid.

[117]Ibid.

[118]Ibid.

CHAPTER 5
The Yellowstone Crisis

"We will continue to pray for an end, and will fight the genocide of these sacred animals. We will continue with this struggle until this unethical slaughter ends."
– Carle Rae Brings Plenty (1999)[1]

Despite a century of steadily increasing bison population since the Yellowstone buffalo population's nadir in 1902, the winter crisis[2] of 1997 marked both the worst slaughter of "free-roaming" bison in the twentieth century and the worst slaughter of Yellowstone bison since the park's establishment in 1872.[3] By early February, 1997, over 800 of Yellowstone National Park's approximately 3,500 buffalo perished just outside the park's boundary at the hands of government officials representing the State of Montana and the National Park Service.[4] Yellowstone bison biologist Mary Meagher predicted that by the end of the winter "a major population crash" would befall the woolly beasts with at least 2,000 bison ultimately perishing.[5] Her prediction rang fairly true as government agents killed 1,084 and another 200 to 300 died from the exceptionally adverse winter conditions by the time the crisis ended. The herd emerged from the winter with fewer than two-thirds of its former members.[6] Environment-sensitive citizens bemoaned the "national tragedy."[7] The Greater Yellowstone Coalition of Bozeman, Montana led five other plaintiffs in a suit against the National Park Service (NPS) for violation of its own Organic Act and other laws. The coalition also charged that Montana ignored fifty-year-old laws requiring the State to establish bison habitat outside the park. Montana's Governor Mark Racicot, one of the most popular political figures in Montana history, shot back that the National Park Service proved "remiss" in its bison oversight.[8] Montana Senator Conrad Burns introduced legislation calling for tighter control and herd reductions

of Yellowstone bison. The Montana legislature moved bison from its Department of Fish, Wildlife and Parks to its Department of Livestock so that fewer obstacles arose in implementing the slaughter policy.[9] The fate of free-roaming bison on the American landscape appeared to hang in the balance across the boundary of Yellowstone National Park in the winter of 1997. Why?

Part of the answer comes from the National Park Service's controversial "natural regulation" policy for Yellowstone National Park.[10] Established in the 1960s, the policy departed from much of the existing heavy-handed management especially with respect to persistent human culling and the limiting of predation regarding ungulate populations.[11] For example, when the NPS implemented the policy of natural regulation in 1967, the frequently culled Yellowstone bison herd[12] numbered approximately 400 animals.[13] As the herd's population skyrocketed over the next three decades, various groups interested in the herd's plight envisioned differing futures for the buffalo of Yellowstone. Scientists and officials within the park service foresaw an "experiment" whereby they could examine "natural" processes.[14] Cattlemen saw a threat looming on the horizon articulated eventually by Montana's Senator Conrad Burns when he stated: "The problem with Yellowstone National Park has always been they had too many buffalo. What we're saying is get the numbers down where the range will support them. It's just good old common sense on how you run livestock."[15] Environmentalists saw nature running its course and hoped that with some subtle tweaking, e.g., the introduction of the wolf, the park's ungulates could reach some type of equilibrium.[16] For their part, Native Americans hoped to witness the return of an age-old icon to an existence not unlike it once enjoyed.[17]

Thus, as the herd increased, public officials, ranchers, environmental visionaries, and Native Americans possessed diverse ideas on the proper relationship of the buffalo to the American landscape. However, most specific to the Yellowstone controversy, the livestock lobby drew the line of no return for bison outside the park's boundaries. Montana possessed 2.75 million cattle in 1996 of which some 2,000 grazed near the park on six public allotments interspersed with private land.[18] The Montana herd enjoyed a "brucellosis-free" status which meant that Montana cattle did not require inspection when crossing state lines and their beef merited acceptance by European Union standards. Brucellosis, a disease for which about half the Yellowstone bison possess antibodies and only some twenty to twenty-five percent can transmit, causes abortion in cattle and undulant fever in humans.[19] Ironically, Yellowstone bison probably first acquired brucellosis from mingling with domestic cattle inside Yellowstone National Park sometime between 1915 and 1917.[20] Nonetheless, the native bovid species suffers little from brucellosis but spreads the ailment through reproductive fluids. Scientists believe that cattle can catch it only through ingestion of birthing fluids acquired through grazing in infected calving areas.[21] Heat, sun, and aridity readily kill the bacteria.[22] Proof of the rarity in spreading brucellosis emerged from the winter of 1989-1990 when 900 Yellowstone bison mingled on twenty separate cattle herd range areas and not a single cow tested positive for brucellosis.[23] These observations have led some scientists and onlookers to label brucellosis as a "political disease" because its control varies with the political strength of the infected animal's advocates.[24]

Additionally, elk carry brucellosis that cattle can acquire. In Jackson Hole, Wyoming forty percent of the elk possessed brucellosis in 1994. Hunters took 4,300 of these animals during that hunting season without one complaint of undulant fever.[25] Moreover, the valley possessed 300 bison. Yet, cattle grazed "nose-to-nose with brucellosis-infected bison and elk for more than 75 years" prior to and including 1994 without major brucellosis problems owing to timely cattle vaccinations, shooing-away of bison from domestic cattle, and keeping cattle off the range during wild ungulate calving and migration periods.[26] These facts led concerned onlookers of bison and cattle to observe that a powerful lobby of outdoorsmen and outdoorswomen, hunters, and outfitters protected elk from the strong livestock lobby while bison lacked protection. The 2,000 cattle grazing around Yellowstone National Park, a range often shared with elk, commanded an inordinate amount of protection considering that they comprised but .07 percent of Montana's cattle. Reacting to these observations, a Wyoming Fish and Game official who requested to remain anonymous stated:

> If the public gets used to the idea that bison, like elk and deer, should be fee to roam on federal lands managed by the Forest Service and Bureau of Land Management, then it may lead to a reduction in the amount of public lands forage allotted to livestock. That's what the ranchers really fear.[27]

Such a comment obviates the facts of free range and politics. Open range cattle have possessed a champion in the form of the enduring cowboy culture protected by conservative politicians. The maintenance of grazing permits amounting to subsidization offers proof of this protection. Elk and deer have received their champions from the ranks of the guide and outfitter industries combined with recreational hunters, both of which maintain powerful lobbies as

seen in the vigor of the hunting community in many Western States. But, the bison emerged from the winter of 1997 desperately needing a champion. With existing law, neither the National Park Service nor the State of Montana would and could protect the wild bison. A few mainstream environmentalists and their organizations sought to help; however, Native Americans drew on their age-old relationship with the buffalo nation to champion the cause of their animal brethren. Winnebago Bison Project director Louis LaRose epitomized this aegis when he declared on January 22, 1997: "The bison once took care of us. Now we're in the position where we must take care of the bison."[28]

For native people, even though they had sought for at least five years to get a different policy for the Yellowstone bison, the dire need for a change in the treatment of those buffalo came quickly in the winter of 1996-1997.[29] The typical stand on the issue for Native Americans with an historical relation to the park advocated no slaughter of bison. Carle Rae Brings Plenty, education and cultural coordinator for the ITBC, clarified this stance in 1998 when she stated, "We don't want to see any killed, but if they are, we would like to see them go to Indian people."[30] However, this proved unfeasible due to prevailing politics.

Capitalizing on a tradition tacitly agreed to by the governing entities of the National Park Service and the State of Montana, Native Americans from several tribes went to butcher bison killed near the park's boundary in accordance with existing policies.[31] However, the voluminous rain, snow, and subsequent ice along with cold temperatures combined to make it a year where bison would wander in nearly unprecedented numbers to find better grazing.[32] In fact, that

year, the bison began eating emergency food such as evergreen needles and bark as early as December.[33] Thus, when the Native Americans, already disgruntled from slaughters the previous year, arrived they found a vigorous slaughter in process. Since officials could not haze many bison back into the park, the Montana Department of Livestock hauled away numerous bison for death away from the killing fields.[34]

The effect of these circumstances bore two effects on the Native Americans. First, the killing and slaughter of the bison violated the traditions and respect proffered the animal by Native Americans who normally performed sacred rituals accompanying the butcher of the animals. Too fast and too institutionalized, the slaughter alienated the indigenous people. Second, the number of bison dying at the hands of Montana agents caused a shudder. Lakota Fred Dubray recalled of his tribe's butchers: "What they saw, what they felt, made them so sad they didn't want to go back. It was complete disrespect for the buffalo."[35] ITBC executive director Mark Heckert later remarked: "I don't know how else to say it. It's tremendously bad karma to kill these buffalo."[36]

In January, 1997, the Intertribal Bison Cooperative made a bold stroke to preserve the bison. Lakota leader of the ITBC Fred DuBray signed an agreement with National Wildlife Federation (NWF) President Mark Van Putten to work toward protecting emigrating Yellowstone bison from slaughter.[37] The ITBC committed itself to the agreement with the National Wildlife Federation to enlist the widespread support of the federation. DuBray made this clear in his official statement:

> To the tribes represented here today, buffalo represent the very essence of our culture and who we are. While the world around us has changed, our spiritual and cultural link to bison is eternal. By working together with National Wildlife Federation's millions of members, we will reestablish healthy bison populations on Indian lands, and reestablish hope for the Indian peoples.[38]

The agreement provided a memorandum of understanding aimed at immediately stopping the slaughter, offering an alternative to the NPS and Montana, and laying the groundwork for more comprehensive future activism and plans. The partnership offered a quarantine operation as the alternative. The Choctaw tribe of Oklahoma stepped forward to propose harboring a 3,000 acre refuge for animals certified healthy after inspections. The refuge would become a distribution point for healthy excess bison.[39] Worthy of note, Yellowstone bison retain special genetic value in that they are one of the few public herds whose genetic structure remains untainted with cattle genes, a tainting which happened fairly often with the initial captivities of the late 1800s.[40] Thus, they hold special attraction to those individuals concerned with the purity of their bison and the re-establishment of the buffalo nation.

Yellowstone National Park Superintendent Mike Finley offered the joint proposal to Montana Governor Racicot as a compromise to mitigate the slaughter.[41] Eventually, Secretary of the Interior Bruce Babbitt also asked the State to stop the killing.[42] Meanwhile, offers continued to arrive asking that the bison receive live shipment to the Choctaw reservation for future distribution.[43] Yet the State government of Montana did not budge. Racicot refused the overtures and the executive officer of the State Department of Livestock explained, "We don't want any diseased animals anywhere in the State."[44]

Still, on February 12, 1997 Tribal Chairman Caleb Shields hailing from the Assiniboine and Lakota tribes of the Fort Peck Reservation delivered a heartfelt oration to a joint session of the Montana legislature. He vocalized the significance of the slaughter to Native Americans. Shields opened his speech with:

> The Yellowstone Park bison herd has once again placed Montana in the national spotlight. Montana Indian Nations share a common bond with this herd. Like us, they are the last survivors. Those of our ancestors who survived the 19th century found sanctuary on reservations. In 1894, the last wild buffalo herd – about 20 head – found sanctuary in Yellowstone Park.
>
> I speak for all Montana Indian nations when I say that the slaughter of this herd must stop. The killing is out of hand. Hundreds of buffalo have been slaughtered without even attempting to test them for brucellosis.
>
> Our cultures are different on this issue. Under our religion, buffalo are respected. They are good medicine. Their skulls and hides still adorn our most sacred lodges. We will dance, sing and pray to them. What is occurring outside Yellowstone Park is disrespectful.
>
> Viable alternatives exist.[45]

Shields' address brought up key historical points and heralded others. First, Native Americans possess a long history of interaction with the bison of Yellowstone. Second, for many Indian people, the Yellowstone herd embodies Native America. Third, spirituality and feeling play a huge role in the native mindset in general and quite specific to the Yellowstone herd. Fourth, the Yellowstone herd merits treatment better than that received. These facets offer a window into the relationship of Native Americans and Yellowstone bison before, during, and after the 1996-1997 crisis.

The archeological record reveals Native American and bison interaction in and around the Yellowstone Plateau dating back to at least 10,000 years ago.[46] The mountain valleys served as a grazing resource regularly sought by bison.[47]

Their human harvesters followed the same ebb and flow through the present day park area as they hunted and foraged. Archeologists note that diffuse findings reflect a wide range of utilized flora and fauna including, of course, the buffalo. The obsidian deposits found within the park beckoned the native masters of lithic technology. Yellowstone obsidian emerges from archeological findings across the country in the form of both atlatl points and arrowheads. Some of those points still retain the blood of bison and unsurprisingly suggest the harvesting of the bison resource by Yellowstone Native Americans.[48] A buffalo jump at Emigrant, Montana just north of the park indicates that harvesting at times took on a reasonably voluminous dimension.[49]

As the prehistoric record yields to the historic record, analysts have been able to reconstruct some of the tribal affiliations with the park. The Kiowa maintained ties to the park area prior to their departure from the intermountain region and their Uto-Aztecan linguistic cousins, the Shoshone. The Shoshone and the Shoshone-Bannock combination of Shoshone and Paiute speakers probably most fully ranged the park in the time marking the arrival of Euro-Americans into the interior of the continent. Some of the Shoshone known as the Sheepeaters became virtually full-time residents subsisting quite often on bighorn sheep as implied by their name. Eventually, the equestrian Blackfeet and Crow ventured onto the plateau as part-time users. Tribes to the west and north such as the Salish and Nez Perce and their allies came to know the Yellowstone region during their horseback migrations through the area in pursuit of bison usually found but not restricted to the plains.[50] During its investigation of tribes receiving the designation of "Affiliated American Indian Tribes of Yellowstone National Park," the NPS added several Lakota and Dakota bands, the Kootenai,

Coeur d'Alene, Northern Arapaho, Gros Ventres, Assiniboine, Northern Cheyenne, Confederated Colville, and Confederated Umatilla tribes to its list of tribes known to possess a history intertwined with the Yellowstone Plateau.[51]

For many of the tribes, their use of the park proved quite temporal. Regardless, their presence as inhabitants became nil following an 1882 treaty negotiated by acting park superintendent Colonel Norris, United States Army. Remembering the unpleasant encounter of some tourists with Nez Perce combatants during the Nez Perce War of 1877, Norris believed that Indians detracted from the tourist experience. Therefore, he wanted them evicted.[52] With that, traditional existence in Yellowstone ended for Native Americans, but their association with the region did not terminate nor did their collective memory of it as a stronghold for the buffalo nation.

As the Yellowstone bison herd grew, park officials faced the prospects of disposing of excess animals. Live shipments such as those to private individuals or public institutions accounted for some of the disposal. As documented above, a few shipments of live bison also helped establish tribal herds for the Crow and Lakota nations. However, carcass shipments also helped alleviate perceived buffalo population pressures within the park.[53] Park records indicate that between 1925 and 1948, Yellowstone National Park shipped 2,263 bison carcasses and 1,910 bison hides out of the park. From those shipments, 1,880 carcasses and 1,457 hides went to Indian agencies. In 1949 and 1951, no shipments occurred, but in 1950 and 1952 the shipping to Indian agencies returned. Native Americans received 161 carcasses and 121 hides from the 162 animals slaughtered in 1950. In 1952, the agencies acquired 239 carcasses and 240 hides of the 242 slaughtered bovids.[54] Shipments became far more sporadic

in the period leading up to the implementation of the natural regulation policy in 1967 and often went first to slaughterhouses in Livingston before distribution to tribes. The majority of the slaughter and distribution activity in this time period probably occurred in the three to four years preceding 1967.[55] The carcasses typically went to either reservation headquarters or schools. For example, records from 1948 and 1950 show that the Fort Belknap, Flathead, Standing Rock, Fort Berthold, Crow Creek, Cheyenne River, Turtle Mountain, and Blackfeet agencies received shipments while school recipients included Pierre Indian School, Flandreau Indian School, Haskell Institute, and the Phoenix Indian School.[56]

Although getting carcasses of bison from Yellowstone National Park offered a far different connectivity with the bison than traditional hunting and butchering, it did provide a link for a significant number of Native Americans. The strength of the bond increased in the 1990s as park personnel allowed Native Americans to participate in the slaughter process with ceremonial field butchering. This meat went to reservations, educational organizations such as the Montana State University Indian Club, or intertribal organizations represented, for example, by the Helena Indian Alliance.[57] With bison restoration more of a concern than bison harvesting in Indian Country, the field butchering offered a method to continue to interact with the bison resource even though it proved less desirable than the taking of live bison for seed stock.[58] Nonetheless, the perceived sacrilege of the manner and volume of the 1996-1997 slaughter in many ways precipitated the Yellowstone bison crisis. After all, in terms of biological carrying capacity the park possessed too many bison to survive a difficult winter en masse.[59]

The biological carrying capacity of Yellowstone for bison did not concern Native Americans anywhere near as much as the treatment of those buffalo seeking to flee the park and its unavailable forage. This concern largely stemmed from the fact that many native people saw the buffalo and its plight as a mirror of their own. For them, killing the buffalo too much resembled the death of Native Americans. Fellowship as the "last survivors" between the Indian nation and buffalo nation of Yellowstone sparked strong rhetoric. [60]

"They're killing us again, there's no separation. That's how people feel, that's how I feel," stated Lakota activist Rosalie Little Thunder in reflection on the Yellowstone winter slaughters of the late 1990s.[61] Reminiscent of Lakota bison savior Mary Ann Dupuis, Little Thunder emerged as leader in the bison restoration movement surrounding the Yellowstone controversy. Active at the killing fields, in several environmental organizations, and as the defender of the Yellowstone bison, she demonstrated extraordinary skill as an orator and non-violent social protestor.[62] She helped forge the coalition between the Buffalo Nation bison activist group led by Michael Mease and Native American protestors into a new group known as the Buffalo Field Campaign.[63] Calling the slaughter an "act of genocide"[64] in a 2000 interview added to her contention that "the buffalo are victims of pathological politics"[65] and that shooting them equated to "outright racism."[66]

Little Thunder did not stand alone as made evident by her affiliation with several organizations including the ITBC. Cooperative President Louis LaRose echoed her comments about the killing when he stated that it "likened to the gatling guns at Wounded Knee." He added, "You're killing the answer to our elder's prayers that the buffalo would return."[67] A young Lakota man named

Nathan Chasing Horse at a pilgrimage ending in Yellowstone National Park's northern range in 1999 attacked the political economy surrounding the slaughter: "Brucellosis is a myth [as a valid reason for the slaughter]. They should kill the myth not the buffalo."[68] Little Thunder's colleague in Honor the Earth and eventual United States vice-presidential candidate for the Green Party in 2000, Winona LaDuke, Anishinabe, poignantly asked in a televised interview, "Is not America done killing buffalo? How could this happen again?"[69]

LaDuke posed the vexing questions. Little Thunder made an observation, "The one thing that really makes a difference is prayer."[70] Spoken two years after Caleb Shields' speech where he described the spiritual link with the bison, Little Thunder's words resonated like those of Shields. In fact, she became a symbol for the Native American effort to end the Yellowstone slaughter when she was arrested while offering prayers for a freshly shot buffalo less than a mile from a vigil held on the National Day of Prayer on March 6, 1997 near Gardiner, Montana at the entrance to the northern range of Yellowstone National Park.[71] On that day, across the nation, Indian people prayed for the Yellowstone bison. On Capitol Hill, ITBC spiritual advisor Rocke Afraid of Hawk, Lakota, led an assortment of tribal representatives.[72] More than 2,000 miles away, the Lakota chief and Keeper of the Sacred White Buffalo Calf Pipe, Arvol Looking Horse, conducted the ceremony at Gardiner within earshot of Montana Department of Livestock agents gunning down bison moving from the park onto private property. Little Thunder left the ceremony when she heard the shots so that she could pray over the fallen bison. Law enforcement officials reluctantly placed her under arrest.[73]

close proximity to our ceremony." She added: "I just wonder how they can kill the buffalo. I think when people look at a buffalo they automatically think of Indians. I wonder what they are thinking." She did go on to clarify that she did not hold the National Park Service at fault. The crux of the matter came from the responsibilities thrust on the park by the judicial system regarding the spread of brucellosis. "They [NPS personnel] participated in our prayers. They are so unhappy to see the killing of the buffalo too," she said.[74]

While the slaughter diminished over the next two comparatively mild winters to approximately 150 animals taken from spring, 1997 to spring, 1999, the commitment of a select group of Native Americans did not waver.[75] Forty Lakota men and women led by Rosalie Little Thunder walked and rode horseback 507 miles from South Dakota to Roosevelt Arch at the entrance to the northern range of Yellowstone Park. Sixty other Native Americans from tribes including the Apache, Nez Perce, Southern Ute, and Tuscarora joined as well. At times braving wind chill temperatures down to twenty-five degrees below zero, the pilgrims concluded their sacrificial and symbolic migration with a ceremony on February 28, 1999 with more than 300 Native American activists present along with officials from the National Park Service. The culminating event following the march to the arch led by Little Thunder carrying the Sacred White Buffalo Calf Pipe Bundle occurred when spiritual leader Gary Silk performed an age old buffalo skull ceremony. Assistants pierced the skin on the Lakota man's back and attached two bison skulls with cord.[76] Blowing a traditional whistle, Silk dragged the skulls through the brush and finally grasped a horse's tail. The combined force tore the flesh of Silk as onlookers cried and prayed. Little Thunder encapsulated the moment, "This is how much we care."[77]

As emotions and spirituality gripped Native Americans during the late 1990s in response to the continued slaughter of Yellowstone bison, Native Americans also persisted in attempting to find a way to develop alternative solutions to save the Yellowstone bison and even use them as seed stock for bison restoration. Gary Silk elucidated the native mindset on the issue, "If the government doesn't want them, we'll take them and bring them home." Using almost identical words, Rosalie Little Thunder stated: "They are not wanted here. We'll take them home."[78] For his part, Louis LaRose made it clear where native people could look for leadership in the process: "We're the herd bull, ITBC – the herd bull."[79]

When the ITBC and NWF signed their memorandum of understanding in 1997 they initiated the Buffalo Recovery Project. The agreement laid the groundwork for a more fully articulated plan largely governed by both sentiment and science. Tim Wapato of the Colville Confederated Tribes, the executive director of the ITBC, explained the cooperative's salient points in the ITBC's alternative plan to the organization's membership at the 1999 annual conference.[80] First and foremost, the ITBC sought the treatment of bison as wildlife with wildlife officials making the policy decisions affecting the park buffalo. Second, the existing slaughter needed to stop. Rather, hazing was to continue. Captured animals were to receive disease testing with seral positive animals requiring slaughter and seral negative animals entering the protection and transportation network of the ITBC to quarantine captured animals at either the Choctaw facility or Fort Belknap, which offered to harbor the refugee bison. Fourth, the tribes demanded a place in the environmental impact statement (EIS) process. Fifth, regarding brucellosis, the infirmity was to be handled as a park

disease issue and not just a bison issue. As well, tribal colleges and Native American scientists were to collaborate in the research on the disease. Sixth, concerning herd size, several facets required consideration to include the idea that park carrying capacity stood at 3,000 animals, the animals deserved the right to wander outside the limits of the park, the winter roads required closure, and that treaty rights allowing aboriginal bison hunting on adjacent lands should be restored. Seventh, with respect to bison-cattle interaction, adjustments such as the timing of placement on overlapping range and vaccination would be made by the livestock interests and not the bison. If bison wandered onto private property, then the ITBC would round up the animals for quarantine.[81] As the organization developed this plan it also lobbied on the political front including the delivery of a 10,000 signature petition supporting the Buffalo Recovery Project to Governor Racicot.[82]

Meanwhile, the ITBC's alternative plan to that of the NPS became part of the formal alternative known as the Citizen's Plan. Endorsed by the ITBC and NWF, the Citizen's Plan maintained the integrity of the Buffalo Recovery Project and ITBC plan with some additional points addressing compensation of private landowners for bison damage and cooperation with bison-friendly landowners in the bison range. Aside from the ITBC/NWF partnership, sponsors of the plan included the Greater Yellowstone Coalition, Gallatin Wildlife Association, Jackson Hole Conservation Alliance, Montana Audubon Society, Montana River Action Network, National Resource Defense Council, Defenders of Wildlife, National Parks Conservation Association, and the Wildlife Federations of Montana, Idaho, and Wyoming.[83] During the National Park Service's comment period on its EIS for the Yellowstone bison, twelve alternatives existed. When the park service

tallied the comments, 47,751 comments favored the Citizen's Plan, with the second most favored plan receiving 4,842 comments, the third received 1,653 favorable comments, and the fourth only 754, with the downward trend continuing through the rest of the proposals.[84]

Through the build-up into the comment period and subsequent interval prior to the imposition of a new bison policy for the park, Native Americans possessed reason for optimism toward the future of the Yellowstone bison and themselves by association. South of the park, federal and State departments devised plans for hunting of bison frequenting the National Elk Refuge.[85] Although the hunt failed to materialize due to a federal judge's decision that it violated the aesthetic rights of tourists, tribes had received a guarantee of thirty percent of the permits, which set an important precedent toward the restoration of aboriginal hunting of animals in public domain in accordance with treaty rights.[86] Game official and Blackfeet tribal spokesman Buzz Cobell voiced elation that this type of hunt on federal property "recognizes cultural heritage" and noted that it reigned superior over the Indian-bison interaction allowed at Yellowstone.[87] To the north in Yellowstone National Park, federal agencies acquired 8,000 acres of adjacent land on winter range for bison habitat.[88] National Park Service official Barbara Sutteer attended the 1999 annual conference of the ITBC and declared: "Stewards – you certainly are."[89] Showing the commitment of her statement, the NPS agreed to let Indian people into the decision-making process with tribal consultations.[90] Worthy of note, not all federal bureaucrats so readily endorsed native participation as Sutteer. This became evident by the "rump" tribal consultation convened in August, 1998 to which only a select few tribes received invitations. Six tribal councils passed

resolutions demanding their right to be consulted in accordance with federal policy. This political maneuver resulted in the scheduling of another consultation in the spring of 1999.[91]

The tribal consultation process of 1999 presented challenges and opportunities for Native Americans. Proceedings bogged down at the initial consultation in May, 1999 as a rather eclectic group of native people sought to implement their agendas. Blackfeet cultural consultant Curly Bear Wagner afterward expressed concern that "urban Indians" often not representing any tribe took up much of the agenda.[92] Both Tim Wapato and Louis LaRose expressed similar concerns. Wapato worried about the influence of "State House Indians."[93] LaRose remarked: "One of the difficulties with these issues is that it pits Indian against Indian."[94] Calling on legal tradition, the two ITBC officers responded by insisting on government-to-government or nation-to-nation negotiations between State and federal agencies and native people in order to focus the agenda.[95] Noting that "buffalo is the cement that can bypass our division," Rosalie Little Thunder also advocated "keeping the tribal voice legally strong."[96] In fact, even before the May meeting, on behalf of Honor the Earth, she sent out memoranda to a plethora of tribal councils imploring that they send official representatives to the meeting.[97] Reflecting on the May consultation and anticipating the October, 1999 consultation led ITBC President Louis LaRose to make his statement in September of that year that the ITBC must serve as the "herd bull" in the process in order to unify the native front on the issue.[98]

By the end of 1999 and into 2000, the Yellowstone bison had enjoyed comparatively mild winters the two previous years. Native hunting of bison in the federal domain of part of the greater Yellowstone ecosystem had received

consideration. The NPS was consulting native people about the Yellowstone herd. A bison-friendly alternative endorsed by Native Americans existed to guide future policies on the Yellowstone bison. A new federal EIS appeared "88-90 percent" like the Citizen's Plan.[99] Indeed, the people overwhelmingly had spoken up for the Citizen's Plan. The ITBC and NWF issued a joint statement: "The Citizen's Plan and its overwhelming support by the American public are all that stand between the Indian people and another, perhaps final, assault on their culture."[100] The people had spoken, but then again, in the year 2000 so did the court system.

A federal court decision in 2000 on brucellosis abrogated the EIS and alternatives process. The court simply ordered a "2000 Management Plan." Under the plan, the National Park Service would manage bison and the park to maintain a herd of 3,000 animals. Montana would allow up to 100 bison that tested negative for brucellosis to wander outside the park. The court mandated that hazing would be the first choice for excess bison moving out of the park. After that, capture, test, and slaughter would dominate the scene once again. The court also required the NPS to assist Montana in this process. Protections for bison outside the park would be removed if the number of animals rose above 3,000.[101]

A great irony exists in this application of the law. Canadian biologist Valerius Geist analyzes wildlife law in North America as a "powerful model based on local, populist wildlife harvest and management." He adds, "The policies governing the laws of North America's wildlife conservation are essentially 'tribal' in nature." He explains the tribal nature of the wildlife law as communal ownership, outside of market forces, allocated by elders, and under local

direction. Geist qualifies his assessment, "The quality of decisions in the North American system depends not only on science, but also on an enlightened public and the political power of special interest groups."[102] Thus, it would seem that tribes affiliated with the park backed by millions of people in special interest groups represented by officials relying on research and scientific data to develop wildlife policies ought to get their way. Yet, for all the cases where Geist's analysis applies in fish and game programs across the United States and Canada, it simply does not describe the Yellowstone situation.

Regardless of jurisdictions or political machinations, bison possess an instinct to move with the natural rhythms proffered by their environment. Between 1997 and 2003, the winter environment of Yellowstone never became severe like that of 1996-1997. For most of those years, fewer than 100 bison perished at the hands of agents slaughtering bison out of the park, although in the 2002-2003 cold season, agents killed 202 animals as of late January. Still, as the herd survived past the winter and toward spring, it again approached 4,000 members.[103] The groundwork for another crisis like 1996-1997 existed again. As Yellowstone bison expert Mary Meagher stated, "A lot of times, things look pretty good until all of a sudden they go to hell."[104] Native Americans would call it an "apocalypse" both for them and the buffalo.[105] Their vision of the landscape remained unfulfilled, but hope endured.

For many years through the 1990s and into 2003, Curly Bear Wagner of the Blackfeet tribe in Browning, Montana prayed. He offered his pipe in a sacred circle highlighted by the four compass points and the landmarks he knew. To the north, he acknowledged Chief Mountain in Waterton Park; to the east, the Sweetgrass Hills; to the west, the mountainous spine of the continental divide;

and to the south, Yellowstone. Wagner explained it the same both in 1999 and 2003: "When I pray, I offer my pipe to the south, to Yellowstone, because that is where the buffalo always have been, and that is from where again they will come."[106]

Endnotes

[1]Carla Rae Brings Plenty, "Struggle to Stop Indiscriminate Slaughter of the Yellowstone Buffalo Nation," *Buffalo Tracks* (winter/spring 1999), 5.

[2]"Crisis" here means a critical turning point. The events of 1997 set in motion various concerned factions that would ensure, one way or another, that such an episode exactly would not duplicate itself. With respect to the bison population, biologist Mary Meagher with forty years of experience working with the park's bison, noted in 1999 that 4,000 buffalo exceeded the park's biological carrying capacity. However, politics and emotions do not necessarily regard biological carrying capacity as the most salient point for policymaking. Meagher estimated in 1999 that the capacity of the park stood at 2,000-3,000 depending on the usage of western park areas by the bison (Mary Meagher, interview with the author, 26 June 1999, Mammoth Hot Springs, Yellowstone National Park). See also Meagher and Houston, *Yellowstone and the Biology of Time*, 239.

Meagher's *Bison of Yellowstone National Park* (1973) stands as the best monograph on Yellowstone's bison. For a more general overview by Meagher, see Meagher and Houston, *Yellowstone and the Biology of Time*, 242.

For a general history of the park, see Aubrey L. Haines, *The Yellowstone Story: A History of Our First National Park*, 2 vols., (Denver: Yellowstone Library and Museum Association/Colorado Associated University Press, 1977) and the folksy monograph by Merrill D. Beal, *The Story of Man in Yellowstone* (Caldwell, Idaho: The Caxton Printers, Ltd., 1949).

[3]For a contemporary journalist account of the winter's events, see Todd Wilkinson, "No Home on the Range," *High Country News*, 17 February 1997, 1, 8-10, 12 and Scott McMillion, "For Bison, It's *Déjà Vu* All Over Again," *High Country News*, 17 February 1997, 11.

The event certainly made the press, a Yellowstone National Park exhibit on the subject contained a collage with more than 200 articles from various newspapers and other news media ("Where the Buffalo Roam: The Exhibition," Collaborative Effort of Yellowstone National Park and the Buffalo Bill Historical Center, viewed by the author, 26 June 1999, Canyon Village, Yellowstone National Park).

For a detailed lay work, see Doug Peacock, "The Yellowstone Massacre," *Audubon: Magazine of the National Audubon Society* 99:3 (May-June 1997), 4-49, 102-103, 106-110. For an excellent academic view of the larger political and legal issues precipitating the crisis of 1996-1997 , see Robert Keiter and Peter Froehlicher, "Bison, Brucellosis, and the Law in the Greater Yellowstone Ecosystem," *Land and Water Law Review* 28:1 (1993), 1-75.

[4]Wilkinson, "No Home on the Range," 1 and Mary Meagher, e-mail correspondence to the author, 3 March 2003.

[5]AP, "Yellowstone's Buffalo Population May Be on the Verge of Collapse," *Lewiston Morning Tribune,* 20 January 1997, 6A.

[6]"Where the Buffalo Roam: The Exhibition." See also *American Bison: Spirit of a Nation* and Meagher, e-mail correspondence, 3 March 2003.

[7]Wilkinson, "No Home on the Range," 1.

[8]Ibid., 9-10.

[9]George Wuerthner, "The Battle Over Bison," *National Parks* (November/December 1995), 39.

For explanation of the role of the Department of Agriculture and the Animal and Plant Health Inspection Service (APHIS) in causing the basis for the slaughter policy, see Paul Pritchard, "Slaughter in the Sanctuary," *National Parks: The Magazine of the National Parks and Conservation Association* 71:3-4 (March/April 1997), 4 and "Yellowstone Buffalo Slaughtered in Record Numbers," *National Parks: The Magazine of the National Parks and Conservation Association* 71:3-4 (March/April 1997), 12, 14,16. See also *War on the Range* [video], Bill Curtis, producer, A & E Investigative Reports, 2000.

[10]Yellowstone National Park policy has remained a subject of much debate especially regarding natural regulation and even more specifically the park's northern range. For a monograph focused on the history of management in Yellowstone National Park, see James A. Pritchard, *Preserving Yellowstone's Natural Conditions: Science and the Perception of Nature* (Lincoln: University of Nebraska Press, 1999). For more journalistic pieces, see Jim Robbins, *Last Refuge: The Environmental Showdown in Yellowstone and the American West* (New York: William Morrow and Company, Inc., 1993) and Paul Schullery, *Searching for Yellowstone: The Ecology and Wonder of the Last Wilderness* (New York: Houghton Mifflin, 1997).

For monographs that criticize park management , see Alston Chase, *Playing God in Yellowstone: The Destruction of America's First National Park* (Boston: The Atlantic Monthly Press, 1986) and Richard A. Bartlett, *Yellowstone: A Wilderness Besieged* (Tucson: University of Arizona Press, 1985).

For an introduction to the controversy of management policy on the northern range and leading opponents on the issue, see Jim Robbins, "The Elk of Yellowstone," *Wildlife Conservation* (March/April 1998) and Stephen Budiansky, "Yellowstone's Unraveling," *U.S. News and World Report* (16 September 1996), 80-83.

Charles Kay and Fred Wagner have posed the loudest opposition to natural regulation and have been prolific in their publicity. Kay and Wagner's arguments find fault in the natural regulation management paradigm pursued as the official policy of the National Park Service in Yellowstone. Their data giving rise to their conclusion stems from their insistence that ungulate overgrazing is destroying the park's northern range. Kay uses exclosure studies, comparative historical photography, and primary journal records for the basis of his assessments. He claims that the Yellowstone range evolved with far fewer ungulates than presently on site, and therefore "natural regulation" is unnatural and ungulate populations on the northern range require mass culling to restore the range. A set condition did exist and park managers should seek to duplicate it.

See Charles E. Kay and Frederic H. Wagner, "Historical Condition of Woody Vegetation on Yellowstone's Northern Range: A Critical Evaluation of the 'Natural Regulation' Paradigm," 151-169, in Don Despain, ed., *Plants and their Environments: Proceedings of the First Biennial Scientific Conference on the Greater Yellowstone Ecosystem* (Denver: NPS Natural Resources Publication Office, 1994), Technical Report: NPS/NRYELL/NRTR-93/XX; Frederic H. Wagner and Charles E. Kay, "'Natural' or 'Healthy' Ecosystems: Are U.S. National Parks Providing Them?" 257-270, in Mark J. McDonnell and Steward Pickett, eds., *Humans as Components of Ecosystems: The Ecology of Subtle Human Effects and Populated Areas* (New York: Springer-Verlag, 1993); Charles E. Kay, "An Alternative Interpretation of the Historical Evidence Relating to the Abundance of Wolves in the Yellowstone Ecosystem, 77-84, in Ludwig Carbyn, Steven Fritts, and Dale Seip, eds., *Ecology and Conservation of Wolves in a Changing World* (Edmonton: Canadian Circumpolar Institute, University of Alberta, 1995); Charles E. Kay, "Bison Myths, 'Natural Regulation,' and Native Hunting: A Solution to the Yellowstone Bison Problem," Gallatin Writers web-site, http://www.webcom.com/gallatin /Buffalo Kay.html, 16 April 1998; Charles E. Kay, "Testimony Before the U.S. House of Representatives Subcommittee on National Parks and Public Lands Oversight Hearing on Science and Resource Management in the National Park System," reprint from *Oversight Hearing Before the Subcommittee on National Parks and Public Lands of the Committee on Resource, House of Representatives*, 105th Congress, 1st session, 27 February 1997 (Washington: Government Printing Office, 1997); Charles Kay, "Too Many Elk in Yellowstone?" *Western Wildlands* (Fall 1987), 39-44; S. Chadde and Charles Kay, "Tall-Willow Communities on Yellowstone's Northern Range," 231-262, in R. Keiter and M. Boyce, eds., *The Greater Yellowstone Ecosystem: Redefining America's Wilderness Heritage* (New Haven: Yale University Press, 1991); and Fred Wagner, et al., *Wildlife Policies in the U.S. National Parks* (Washington: Island Press, 1995).

See also J. Craighead, "Yellowstone in Transition," 27-40, in Keiter and Boyce, eds., *Greater Yellowstone Ecosystem*.

Critics of Kay and Wagner typically cite faulty scientific methods for the conclusions. For example, exclosures are not a natural setting and Kay's use of historic journals and photographs is limited to supporting evidence and does not consider a host of opposing documentation and photographs. See Robbins, "Elk of Yellowstone," 42, 45 and Lee H. Whittlesey, "Too Many Elk?" *Wildlife Conservation* (May/June 1998), 66.

Works that support natural regulation are bound by the theme that no set condition existed. Rather, a process of nature existed and managers should utilize a hands-off policy as much as possible to allow the process to take effect.

See M. Boyce, "Natural Regulation Or the Control of Nature?" 183-208, in Keiter and Boyce, eds., *Greater Yellowstone Ecosystem;* G. Davis and W. Halvorson, "Lessons Learned From a Century of Applying Research," 334-344, in W. Halvorson and G. Davis, eds., *Science and Ecosystem Management in the National Parks* (Tucson: University of Arizona Press, 1996); D. Despain, D. Houston, M. Meagher, and P. Schullery, *Wildlife in Transition: Man and Nature on Yellowstone's Northern Range* (Boulder: Roberts Rinehart, Inc., 1986); W. Halvorson and G. Davis, "Long-Term Research in National Parks From Beliefs to Knowledge," 3-10, in Halvorson and Davis, eds., *Science and Ecosystem*

Management in the National Parks; R. Keiter and M. Boyce, "Greater Yellowstone's Future: Ecosystem Management in a Wilderness Environment," 379-413, in Keiter and Boyce, eds., *Greater Yellowstone Ecosystem*; Sam McNaughton, book review of Wagner, et al., *Wildlife Policies in the U.S. National Parks*, *Journal of Wildlife Management* 60(3), 685-687; L. David Mech, "Returning the Wolf to Yellowstone," 309-322, in Keiter and Boyce, eds., *Greater Yellowstone Ecosystem*; Francis Singer, "The Ungulate Prey Base for Wolves in Yellowstone National Park," 323-348, in Keiter and Boyce, eds., *Greater Yellowstone Ecosystem*; C. Whitlock, S. Fritz, and D. Engstrom, "A Prehistoric Perspective on the Northern Range," 289-305, in Keiter and Boyce, eds., *Greater Yellowstone Ecosystem*; E. Zube, "Management in National Parks: From Scenery to Science," 11-22, in Halvorson and Davis, eds., *Science and Ecosystem Management in the National Parks.*

For other scientific studies arguing that Yellowstone's northern range is ecologically "healthy," see Douglas A. Frank and Samuel J. McNaughton, "Evidence for the Promotion of Aboveground Grassland Production by Native Large Herbivores in Yellowstone National Park," 57-62, in Francis J. Singer, ed., *Effects of Grazing by Wild Ungulates in Yellowstone National Park* (Denver: NPS Natural Resource Information Division, 1996) Technical Report: NPS/NRYELL/NRTR/96-01, reprinted from Douglas A. Frank and Samuel J. McNaughton, "Evidence for the Promotion of Aboveground Grassland Production by Native Large Herbivores in Yellowstone National Park," *Oecologia* 96 (1993), 157-161; Evelyn H. Merrill, Nancy L. Stanton, and John C. Hak, "Responses of Bluebunch Wheatgrass, Idaho Fescue, and Nematodes to Ungulate Grazing in Yellowstone National Park, 73-84, in Singer, ed., *Effects of Grazing by Wild Ungulates in Yellowstone National Park*, reprinted from Evelyn H. Merrill, Nancy L. Stanton, and John C. Hak, "Responses of Bluebunch Wheatgrass, Idaho Fescue, and Nematodes to Ungulate Grazing in Yellowstone National Park, *OIKOS*, 69 (1994), 231-140; James J. Reardon, "Changes in Grazed and Protected Plant Communities in Yellowstone National Park," 115-126, in Singer, ed., *Effects of Grazing by Wild Ungulates in Yellowstone National Park*; Francis J. Singer, "Effects of Grazing by Ungulates on Upland Bunchgrass Communities of the Northern Winter Range of Yellowstone National Park," 127-138, in Singer, ed., *Effects of Grazing by Wild Ungulates in Yellowstone National*; and Francis J. Singer and Jack E. Norland, "Niche Relationships Within a Guild of Ungulate Species in Yellowstone National Park, Wyoming, Following Release from Artificial Controls," 345-360 in Singer, ed., *Effects of Grazing by Wild Ungulates in Yellowstone National Park.*

This volume of supportive research led Superintendent Michael Finley to claim in an NPS May, 1997 letter that "virtually all science supports the idea that the northern range is not overgrazed and that natural regulation is working very well" ("Where the Buffalo Roam: The Exhibition").

[11]That the acceptance of predators proved crucial in developing the natural regulation paradigm remains evident in the 1963 Department of Interior's document entitled "Wildlife Management in the National Parks: The Leopold Report" by the Advisory Board on Wildlife Management led by Aldo Starker Leopold, the son of the venerable Aldo Leopold. The Leopold Report favored natural predation as the best way to establish "natural forage relationships" to

attain the goal of pre-Euro-American contact park conditions termed "primitive America" [Aldo Starker Leopold, S.A. Cain, C.M. Cottam, I.N. Gabrielson, and T.L. Kimball, *Wildlife Management in the National Parks. Report to the Secretary of Interior* (Washington: Government Printing Office, 1963) reprinted in Aldo Starker Leopold, S.A. Cain, C.M. Cottam, I.N. Gabrielson, and T.L. Kimball, "Wildlife Management in the National Parks," 28-45, in *Transcripts of the North American Wildlife Conference* 24 (1963), 5, 14, 9]. The report clarified that human intervention through culling, trapping/transplanting, and recreational hunting of migratory animals outside parks would be required until the high, natural predator-free populations were "reduced to a level that the range will carry in good health and without impairment to the soil, the vegetation, or to the habitat of other animals." Then, natural predation could receive a chance to maintain "primitive" conditions (Leopold Report, 14-16, 22).

Advocating these policies, the Leopold Report argued that the National Park Service should move from the "intensive husbandry" of ungulates "to a more open-ended approach" emphasizing faunal species diversity and healthy habitat (Leopold Report, 14, 22). It favored natural processes but admitted that with the history of human disturbance at most parks that a "reluctance to undertake biotic management can never lead to a realistic presentation of primitive America" (Leopold Report, 8). Such management necessitated "skill, judgment, and ecological sensitivity" in recognition of "the enormous complexity of ecological communities and the diversity of management procedures required to preserve them" (Leopold Report, 5, 8). To achieve effective management, Aldo Starker Leopold and his associates called for accelerated research and a four step management procedure involving historic research to ascertain primitive conditions, ecological research on plant-animal relationships for hypothesis development, small scale experimentation, and application of tested methods on critical areas (Leopold Report, 10, 12).

Yellowstone National Park's northern range provided the Advisory Board's most striking example of a critical area needing management. The Leopold Report justified the culling of 4,283 elk from the approximately 10,000 animal herd on the northern range during the winter of 1961-1962. The report called the culling a "desired reduction" and described the necessity of a "required yearly maintenance kill" (Leopold Report, 17-18). However, the public failed to embrace culling with the same level of acceptance as the scientific community. The northern range annual kill drew increased media attention in the years immediately following the Leopold Report. Thus, park officials faced a quandary: they still could artificially control the population which would heighten public outcry or they could develop a new policy that would attract less public attention. They decided on the new policy and this initiated the natural regulation policy of 1967, a policy of limited intervention and the abandonment of annual culling within the park. Since its implementation in the late 1960s and early 1970s, this policy has persisted as a subject of heated debate between policy advocates and their opponents.

For a general study of the evolution of wildlife management in the national parks, see R. Gerald Wright, *Wildlife Research and Management in the National Parks* (Urbana: University of Illinois Press, 1992).

[12]Manipulation of the park's bison herd began once Yellowstone Game Warden Buffalo Jones brought in captive bison in 1902 to augment the beleaguered existing wild population that had suffered from poaching. The captive herd increased rapidly and posed a surplus problem by the 1920s. Park officials responded with castration and slaughter for population control techniques. Culling within the park continued until the implementation of the natural regulation policy. Even then, some culling occurred until the crisis of 1996-1997, although more notably outside the park, e.g., the Montana bison hunts, 1985-1990.

For the history of the herd from the establishment of the park in 1872 through the mixing of the wild and domesticated herds around 1920, see Barsness, *Heads, Hides & Horns*, 152-157; Coder, *National Movement to Preserve the American Buffalo*, 63-81; Dary, *Buffalo Book*, 129-144; Geist, *Buffalo Nation*, 94, 111, 114; Haines, *Yellowstone Story*, 2: 54-77; Pritchard, *Preserving Yellowstone's Natural Conditions*, 11-12; Paul Schullery, "Buffalo Jones and the Bison Herd in Yellowstone: Another Look," *Montana: The Magazine of Western History* (summer 1979), 40-51; and Paul Schullery, "Yellowstone's Ecological Holocaust," *Montana: The Magazine of Western History* 47:3 (autumn 1997), 16-33.

For works addressing the Yellowstone herd later in the twentieth century, see Danz, *Of Bison and Man*, 178-180; Isenberg, *Destruction of the Bison*, 189-192; and Pritchard, *Preserving Yellowstone's Natural Conditions*, xiv-xviii.

[13]AP, "Latest Bison Count Lower than Fall Number," *Lewiston Morning Tribune*, 20 March 1997, 10A.

[14]See Despain, et al, *Wildlife in Transition*, 112, 115. Mary Meagher and Douglas Houston address the problems associated with the term "natural" in *Yellowstone and the Biology of Time*. They define natural as the full expression of a system's processes without major change or disruption by modern humans (251,272).

[15]*War on the Range*.

[16]The author lived in southwestern Montana in the last half of the 1980s and remembers the general feeling of local park aficionados that a "balance" of predator and prey would occur with the re-introduction of wolves.

Representing the scientific community, Valerius Geist makes a more important point that the value of the wolf is that it helps bison "reverse the effects of inadvertent domestication" since they possess few exposures to predation otherwise (Geist, *Buffalo Nation*, 124). In its first eight years of reintroduction, the wolf did not make an appreciable dent in the bison population making only fourteen kills in the first four years, and not increasing this rate much over the second four year period. Bison make for tough prey. Unless conditions weaken bison to the point of "walking carrion," then wolves with easier prey sources, e.g., elk, will focus their efforts elsewhere. [Douglas Smith, L. David Mech, Mary Meagher, and Wendy Clark, ""Wolf-Bison Interactions in Yellowstone National Park," *Journal of Mammalogy* 81:4 (November 2000), 1128-1135; and Mary Meagher, e-mail correspondence to the author, 18 November 2000; Mary

Meagher, e-mail correspondence to the author, 28 February 2003; Meagher, e-mail correspondence to the author, 3 March 2003].

Art Look, a Canadian trapper with seventy-five years experience in the Canadian bush and a consultant for the Mackenzie bison herd, explained to the author that wolf packs must learn to kill bison. Passing of the knowledge hinges on the longevity of pack leaders. Therefore, it proves difficult for packs to retain bison killing knowledge in a short-term setting. For example, when Look is tasked with reducing wolf predation on the Mackenzie herd, he accomplishes the goal with a select take of a few experienced adults. The pack then must re-learn the art of bison hunting (Art Look, interview with the author, 13 August 1999, Fort Providence, Northwest Territories, Canada).

[17]Winona LaDuke in *War on the Range*.

[18]Wilkinson, "No Home on the Range," 10.

[19]Wuerthner, "The Battle Over Bison," 39 and Meagher, e-mail correspondence, 3 March 2003.

[20]Mary Meagher and Margaret Meyer, "On the Origin of Brucellosis in Bison of Yellowstone National Park: A Review," *Conservation Biology* 8 (September 1994): 650. See also Lee H. Whittlesey, "Cows All Over the Place: The Historic Setting for the Transmission of Brucellosis to Yellowstone Bison by Domestic Cattle," *Wyoming Annals* 66:4 (winter 1994-1995), 42-57; E. Tom Thorne, Mary Meagher, and Robert Hillman, "Brucellosis in Free-Ranging Bison: Three Perspectives," 275-287, in Keiter and Boyce, eds., *Greater Yellowstone Ecosystem*; and Geist, *Buffalo Nation*, 130-131.

For other works about diseases introduced to bison, see Koucky, "Buffalo Disaster of 1882," 23-30; Owens and Owens, "Montana Commentary – Buffalo and Bacteria," 65-67; and Flores, "Bison Ecology and Bison Diplomacy," 481, 484.

[21]Wuerthner, "The Battle Over Bison," 38.

[22]Meagher and Meyer, "On the Origin of Brucellosis," 649.

[23]Wuerthner, "The Battle Over Bison," 38 and Todd Wilkinson, "To the South, Bison and Cattle Can Coexist," *High Country News*, 17 February 1997, 12.

[24]Archuleta interview, 18 January 1999 and Norman Cheville, "Brucellosis in Bison: Its Effects and Approaches for Disease Control," presentation at the ITBC Second Annual Conference, 21 September 1999, Polson, Montana.

[25] Wuerthner, "The Battle Over Bison," 40. See also *War on the Range*.

[26]Todd Wilkinson, "To the South, Bison and Cattle Coexist," *High Country News*, 17 February 1997, 12.

[27]Wuerthner, "The Battle Over Bison," 39.

[28]Judith Kohler (AP), "Pact Allows Bison to Be Relocated," *Lewiston Morning Tribune*, 23 January 1997, 5A.

[29]Ibid., 1A.

[30]K. Marie Porterfield, "Winter Bison Kill Begins," *Indian Country Today*, 16-23 February 1998, B1-B2.

[31]Jim Robbins, "In the West, A Matter of the Spirit," *New York Times* (L) 21 January 1997, A21. See also David Melmer, "Buffalo Slaughter Not Necessary," *Indian Country Today*, 3-10 February 1997, A2; David Melmer, "Bison Die in Sacrilegious Slaughter," *Indian Country Today*, 24 February – 3 March 1997, A1, A3; and Porterfield, "Winter Bison Kill Begins," B1-B2.

[32]For academic works on Yellowstone bison movements, see Mary Meager, "Evaluation of Boundary Control for Bison of Yellowstone National Park," *Wildlife Society Bulletin* 17 (1989), 15-19; Mary Meagher, Range Expansion by Bison of Yellowstone National Park," *Journal of Mammalogy* 70:3, 670-675; and Mary Meagher, M.L. Taper, and C.L. Jerde, "Recent Changes in Population Distribution: The Pelican Bison and the Domino Effect," presentation at the Yellowstone National Park Science Proceedings, October 2001, Yellowstone National Park. See also the interview of Dr. James Halfpenny in Ruth Yellowhawk, "Unusual Conditions Threaten the Buffalo In Yellowstone," *Indian Country Today*, 24 February – 3 March 1997, A3.

The issue of bison movement largely has concerned the winter access made available in the park by packed roads created by snow coaches and snowmobiles. Some bison traditionally wintered in the Pelican Valley near the center of the park due to its geothermal activity making successful grazing with less energy expenditure a possibility. The number of bison wintering in the Pelican Valley frequently hovered around 100-200 while in 2000-2001 only about two dozen remained in the highland refuge. Conceivably, none may winter there in the future given current movement trends (Mary Meagher, interview with the author, 26 June 1999, Yellowstone National Park; Meagher, e-mail correspondence to the author, 6 November 2001; and Meagher, e-mail correspondence to the author, 28 February 2003). Other bison attempted to winter on the park's northern range. However, the snow trails induced bison to utilize the western areas of the park and adjacent lands near West Yellowstone, Montana. It was in this area that many bison met their deaths in the winter 1996-1997.

Since that time, the National Park Service under the Clinton administration began a policy change toward banning much of the winter machine road use. The succeeding Bush administration predictably put these plans on the table for further review and appears to want to support snow coach and snowmobile use in the park. See AP, "Yellowstone Stampede," *News Review* (Roseburg, Oregon), 2 March 1997, D1; AP, "Winter Tourist Season Brings Battle Over Bison," *News Review* (Roseburg, Oregon), 2 March 1997, D1; Patrick O'Driscoll, "Yellowstone Likely to Ban Snowmobiles," *USA Today*, 15 March 2000, 3A; and

Tom Kenworthy, "Snowmobiles Rush for Last Ride," *USA Today*, 15 February 2001, 4A. See also *War on the Range* [video], Bill Curtis, producer, A & E Investigative Reports, 2000.

[33]AP, "Yellowstone's Bison Population May Be on the Verge of Collapse," 6A.

[34]The policy to catch and slaughter came in response to a lawsuit filed by the State of Montana, see "Yellowstone Bison to Be Slaughtered," *National Parks: The Magazine of the National Parks and Conservation Association* 70:11-12 (November/December 1996) 16, 18.

[35]Robbins, "In the West, A Matter of the Spirit," A21. For native concerns about slaughter methods, see also Melmer, "Bison Die in Sacrilegious Slaughter," A1 and Angus M. Thuermer, Jr., "Tribes Welcome Refuge Bison Hunt," *Jackson Hole News*, 15 April 1998, 8A.

[36]Doug Peacock, "The Yellowstone Massacre," *Audubon: Magazine of the National Audubon Society* 99:3 (May-June 1997), 108.

[37]Mark Van Putten. "Restoring an Important Part of America's Heritage," *National Wildlife* (April/May 1997): 19.

[38]Ibid.

[39]Kohler, "Pact Allows Bison to Be Relocated," 1A, 5A and Robbins, "In the West, A Matter of the Spirit," A21.

[40]Mary Meagher, "Evolutionary Pathways and Relationships," unpublished paper in the author's possession, 1 July 2001, 6 and Steve Torbit (NWF veterinarian), comments at the screening of *American Buffalo: Spirit of a Nation*, Bison Conference 2000, 8 April 2000.

[41]Kohler, "Pact Allows Bison to Be Relocated," 1A and Melmer, "Buffalo Slaughter Not Necessary," A1-A2.

[42]H. Josef Hebert, "Babbitt to Montana: Hold Your Fire on Wayward Buffalo," *Lewiston Morning Tribune*, 13 March 1997, 3C.

[43]Wilkinson, "No Home on the Range," 8.

[44]Robbins, "In the West, A Matter of Spirit," A21.

[45]"Shields addresses Montana Legislature," *Indian Country Today*, 24 February – 3 March 1997, A1-A2.

[46]Haines, *Yellowstone Story*, 1: 15-20; Joel Janetski, *The Indians of Yellowstone National Park* (Salt Lake City: Bonneville Books/University of Utah

Press, 1987), 14-15; and Meagher and Houston, *Yellowstone and the Biology of Time*, 248-249.

[47]Meagher, *Bison of Yellowstone National Park,* 13-14.

[48]K.P. Cannon, "Paleoindian Use of Obsidian in the Greater Yellowstone Area," *Yellowstone Science* 1:4, 6-9 and K.P. Cannon, "Blood Residue Analyses of Ancient Stone Tools Reveal Clues to Prehistoric Subsistence Patterns in Yellowstone," *Cultural Resource Management* 18:2, 14-16 in Meagher and Houston, *Yellowstone and the Biology of Time*, 248-249. See also, Janetski, *Indians of Yellowstone National Park*, 20-23.

[49]Barnum Brown, "The Buffalo Drive," *Natural History* 32:1, 75-82.

[50]Haines, *Yellowstone Story*, 1: 20-30; Janetski, *Indians of Yellowstone National Park*, 28-29; and Meagher and Houston, *Yellowstone and the Biology of Time*, 248-249.

[51]Affiliated American Indian Tribes of Yellowstone National Park [map], (Yellowstone National Park: Spatial Analysis Center, n.d.).

[52]Janetski, *Indians of Yellowstone National Park*, 54-55.
For a more detailed work examining this process in Yellowstone National Park and elsewhere, see Mark David Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999). For works devoting far less attention to Yellowstone but dealing with the marginalization of Native Americans from national parks, Philip Burnham, *Indian Country, God's Country: Native Americans and the National Parks* (Washington: Island Press, 2000) and Robert Keller and Michael F. Turek, *American Indians and National Parks* (Tucson: University of Arizona Press, 1998).

[53]Isenberg, *Destruction of the Bison*, 189.

[54]Bison Shipments File, Yellowstone National Park Archives, Mammoth Hot Springs, Yellowstone National Park.

[55]Mary Meagher, e-mail correspondence to the author, 12 August 2002.

[56]Memorandum, 7 April 1948, YNP Superintendent to Region 2 Director, 1948 Annual Bison Report. Annual Bison Reports File, 1931-1950, Yellowstone National Park Archives, Mammoth Hot Springs, Yellowstone National Park and Memorandum, 28 March 1950, YNP Superintendent to Region 2 Director, 1950 Annual Bison Report. Annual Bison Reports File, 1931-1950, Yellowstone National Park Archives.

[57]Melmer, "Buffalo Slaughter Not Necessary," A2; Melmer, "Bison Die in Sacrilegious Slaughter," A1; and Porterfield, "Winter Bison Kill Begins," B1-B2.

[58]Carla Rae Brings Plenty in Porterfield, "Winter Bison Kill Begins," B1-B2 and Winona LaDuke in *War on the Range*.

[59] Meagher interview, 26 June 1999.

[60]"Shields addresses Montana Legislature," A1.

[61]*War on the Range*.

[62]Ibid. Hope Sieck (Greater Yellowstone Coalition), interview with the author, 22 September 1999, Polson, Montana.
Little Thunder's activism includes founding member of the Buffalo Field Campaign, chairwoman of the Seventh Generation Fund, and member of Honor the Earth. See www.wildrockies.org/bison, www.7genfund.org, www.honortheearth.com.

[63]*War on the Range* and Sieck interview, 22 September 1999. See also Porterfield, "Winter Bison Kill Begins," B1.

[64]*War on the Range*.

[65]Porterfield, "Winter Bison Kill Begins," B1.

[66]Rosalie Little Thunder, comments at the ITBC Second Annual Conference, 21 September 1999.

[67]Louis LaRose and Steve Torbit, "Wildlife and Cultural Restoration: The Opportunity Provided by the Partnership Between the National Wildlife Federation and the Intertribal Bison Cooperative," presentation at the Bison Conference 2000, University of Nebraska, 8 April 2000.

[68]*War on the Range*.

[69]Ibid. See also LaDuke's chapter on bison, "Buffalo Nations, Buffalo Peoples," 139-166, in her book: Winona LaDuke, *All Our Relations: Native Struggles for Land and Life*, (Cambridge, Massachusetts: Southend Press and Minneapolis: Honor the Earth, 1999). LaDuke's tribal affiliation is Anishinabe.

[70]Little Thunder, comments at the ITBC Second Annual Conference, 21 September 1999.

[71]Carrie McCleary, "Advocate for Bison Arrested While at Prayer," *Indian Country Today*, 17-24 March 1997, A1-A2; David Melmer and Sharon Harjo, "A Prayer Day Held for Buffalo," *Indian Country Today*, 17-24 March 1997, A1-A2; and *War on the Range*.

[72]Melmer and Harjo, "Prayer Day Held for Buffalo," A1.

[73]McCleary, "Advocate for Bison Arrested," A1 and Peacock, "The Yellowstone Massacre," 109.

[74]McCleary, "Advocate for Bison Arrested," A1.

Another remarkable story of native activism from 1997 concerns the effort of Lakota Larry Hand Boy who made a 3,400 mile pilgrimage throughout Indian Country as part of a personal Yellowstone bison tribute and awareness campaign. See K. Marie Porterfield, "Runner Crier for the Spirit of the Buffalo," *Indian Country Today*, 23-30 June 1997, C1, C3.

[75]AP, "Court Refuses to Stop Buffalo Slaughter Outside of Yellowstone National Park," *News Review* (Roseburg, Oregon), 7 May 1999, 17.

[76]Jim Robbins, "An Old Rite Is Invoked to Protect the Park Bison," *New York Times* (L), 2 March 1999, 17 and *War on the Range*.

[77]*War on the Range*.

[78]Ibid.

[79]Louis LaRose, "Yellowstone Issue Overview," presentation at the ITBC Second Annual Conference, 21 September 1999.

[80]Tim Wapato, "Yellowstone: The ITBC Alternative," presentation at the ITBC Second Annual Conference, 22 September 1999.

[81]Ibid. See also Tim Wapato, "Executive Director's Corner," *Buffalo Tracks*, October 1999, 2-3; K. Marie Porterfield, "Bison Activists Get Prepared for Slaughter," *Indian Country Today*, 15-22 December 1998, B1-B2; and Fred DuBray and Louis LaRose, comments at the Bison Conference 2000, 8 April 2000.

[82]Porterfield, "Bison Activists Get Ready for Slaughter," B2.

[83]*Greater Yellowstone Coalition, The Citizen's Plan to Save Yellowstone Buffalo* [pamphlet], (Bozeman: Greater Yellowstone Coalition, 1999).

[84]*Yellowstone Buffalo Wild and Free* [pamphlet] (Boulder: NWF/Rapid City: ITBC, 1999), 1.

[85]Angus M. Thuermer, Jr., "Tribes Welcome Bison Refuge Hunt," *Jackson Hole News*, 15 April 1998, 8A.

[86]AP, "Wyoming Bison Hunt Is Called Off By Federal Judge," *Arizona Daily Star*, 1 November 1998, 10B.

[87]Thuermer, Jr., "Tribes Welcome Bison Refuge Hunt," 8A.

[88]*Yellowstone Buffalo Wild and Free*, 2.

[89]Barbara Sutteer, comments during "Yellowstone Issue Overview," ITBC Second Annual Conference, 21 September 1999.

[90]Wapato, "Executive Director's Corner," 2.

[91]Rosalie Little Thunder (Honor the Earth), memoranda to tribal councils, 7 May 1999, www.honortheearth.com/buffalo/consult, site visited 23 July 2000.

[92]Curly Bear Wagner, interview with the author, 9 August 1999, Browning, Montana.

[93]Tim Wapato, comments at the ITBC Second Annual Conference, 21 September 1999.

[94]Louis LaRose, comments at the ITBC Second Annual Conference, 21 September 1999.

[95]Ibid. and Wapato, comments at the ITBC Second Annual Conference, 21 September 1999.

[96]Rosalie Little Thunder, comments at the ITBC Second Annual Conference, 21 September 1999.

[97]Little Thunder, memoranda to tribal councils.

[98]LaRose, "Yellowstone Issue Overview."

[99]Steve Torbit and Louis LaRose, "Wildlife & Cultural Restoration: The Opportunity Provided by the Partnership Between the NWF and ITBC," presentation at the Bison Conference 2000, 8 April 2000.

[100]*Yellowstone Buffalo Wild and Free.*

[101]Mary Meagher, e-mail correspondence to the author, 28 February 2003; AP, "The Road Ahead for Yellowstone's Bison," *News Review* (Roseburg, Oregon), 3 March 2002, B10; AP "Montana Expands Killing of Bison that Leave Yellowstone," *Wenatchee World* (Wenatchee, Washington), 5 May 2002, 5A; and Katherine Q. Seelye (*New York Times*), "Bison Rebound in Yellowstone: New Risks Loom," *Seattle Times*, 26 January 2003, A6.

[102]Geist, *Buffalo Nation*, 123, 126.

[103]Seelye, "Bison Rebound in Yellowstone," A6.

[104]Scott McMillion, "Bison Abound," *Bozeman Daily Chronicle*, 27 February 2000, 1, 12.

[105]Arvol Looking Horse in Peacock, "Yellowstone Massacre," 109.

[106]Wagner interview, 9 August 1999 and Curly Bear Wagner, telephone interview with the author, 4 March 2003.

CHAPTER 6
A Comparative Perspective on Canada's Native Restoration of the Bison

"The bison look after me as I look after them. Something good will happen, and this will occur in the future. It's been tough but I know that down the road, this will help the people."
-- Harley Frank (1999)[1]

A comparison between the bison restoration effort of Canada with that of the United States produces both similarities and differences. On the surface, the overall plight and salvation of the bison looks the same. The European hegemony extended over the indigenous countryside resulting in a marginalized existence for the aboriginal people and a landscape largely devoid of bison. Subsequently, a few people saved bison and the observer can find them today in ever increasing numbers on ranches, reserves, and in parks.[2] However, focusing in on the Native[3] aspect in this bison recovery reveals some differentiating nuances that show the indigenous effort in Canada at once both more advanced and more fractured than that of the United States. Government cooperation with the Native bison stewards ascended to a high degree while the level of coordination among the First Nations in their effort lagged behind that established by the Intertribal Bison Cooperative in the United States.

Before launching into any discussion of Canadian bison restoration, an important clarification regarding bison speciation and subsequent policy requires consideration. Historically, bison of Canada consisted of two groups. The first group wandered across the plains and prairies and appeared quite similar in all aspects of existence to the bison of America's Great Plains. These bison numbered into the millions along with their counterparts farther to the south. The second group stuck to the boreal forest and meadows of the North country in present northern Alberta, southwestern Northwest Territories, northeastern

British Columbia, and northwestern Saskatchewan.[4] This woodland group probably numbered between 112,000 and 168,00.[5] For many years, leading scientists in Canada considered these northern bison to be a subspecies known as "Wood Bison" (*Bison bison athabascae*) as opposed to "Plains Bison" (*Bison bison bison*).[6] These northern bison tend to grow a bit larger, possess a darker pelage, and possess less of a distinction between forequarters pelage and the rest of the body than the southern bison.[7] Although current scientific leaders in the field of bison conservation believe that no subspecies exist because of genetic similarity and experiments showing that either type of bison develop similar characteristics in a given environment,[8] Canadian policies continue to treat the two variations different.[9] For our purposes here, "Wood Bison" will refer to the northern bison as distinguished by Canadian policy and "Plains Bison" will refer to the other bison more dominant to the south. For example, Plains Bison are considered as a domestic species in the prairie provinces while Wood Bison are considered wildlife in all provinces except Manitoba.[10] Thus, the two bison receive segregated treatment from government officials since they often fall under the jurisdiction of different agencies.

Either way, both populations of bison plummeted with the approach of the twentieth century. The last of Canada's plains bison succumbed to the killing field straddling the forty-ninth parallel in the 1880s. Meanwhile, the more secluded northern bison dipped to a low of 250 animals between 1896 and 1900. The Buffalo Protection Act (1877) had failed to protect either population. An act to preserve the wood buffalo in 1893 reversed the trend of annihilation, but not until the Mounties of the Royal Canadian Mounted Police began protecting bison in 1897 did the future of the animals seem secure. In 1911, the government

appointed six full-time buffalo rangers in the northern bison's home range. Under their vigilance, the northern herd increased to 500 in 1914 and between 1,500 and 2,000 in 1922 when Canada established Wood Buffalo National Park.[11]

As the Dominion of Canada saved its northern bison, it augmented its few exhibition plains bison at Banff with the mass purchase of the Pablo-Allard herd.[12] As noted above, this herd exploded in population quickly outgrowing its temporary pasture at Elk Island Park and even its more spacious park area in Wainwright. Culling became imperative and herd managers sought an outlet for their problem.[13] This resulted in the controversial transfer of these plains bison into Wood Buffalo National Park.[14] At this point, the histories of the two bison populations became one again and the parameters for future restoration efforts were established.

Between 1925 and 1928, Canadian officials transferred 6,673 bison from Wainwright to Wood Buffalo National Park (WBNP). As feared by many wildlife scientists, the plains bison quickly mingled with the northern bison resulting in disease transfer and the hybridization of what had been perceived as pure "Wood Buffalo."[15] The park's bison population shot up to 12,000 in 1934.[16] However, the population declined over the next sixty years down to 2,000 in 1994.[17] During the decline, scientists confirmed the presence of disease in the park herd to include anthrax, tuberculosis, and brucellosis. The weakened animals also more readily succumbed to predation, habitat loss, and severe environmental conditions such as floods and fire.[18] Disease eradication efforts failed miserably leading conservation biologist Valerius Geist to later identify the entire situation as an "adventuresome history of mismanagement."[19]

Still, the retention of a pure "Wood Bison" herd remained important to policymakers. Thus, excitement grew around the late 1950s discovery of a remote herd in the Nyarling River area of the northwest section of Wood Buffalo National Park. Tests confirmed the "purity" of the herd genetically and the absence of disease. Thus, officials instituted a capture program in the early 1960s. The program consisted of catching animals and moving them to Fort Smith. Program managers bottle-raised captive-born calves and slaughtered the parents in order to develop a disease-free herd.[20] A restoration program using these progeny took shape in 1963 when wildlife officials introduced eighteen of the animals to the region west of the Great Slave Lake in an area soon to become known as the Mackenzie Bison Sanctuary and twenty-three of the bison to Elk Island National Park separated from the plains bison already on site.[21] The Elk Island "Wood Bison" became the seed stock for later herds including the Nahanni-Liard herd of the southwestern Northwest Territories, the Nissling River herd in the Yukon, the Pink Mountain herd of British Columbia, and Waterhen Wood Bison Ranch in Manitoba to name a few.[22] By 1994, the Canadian government began to make Wood Bison available for public sale and the Mackenzie Bison Sanctuary totaled 2,000 animals.[23]

Indeed, it is in the establishment and management of herds such as some of those mentioned above that the heavy collaboration between Natives and government emerged. In comparison to the United States where the government excluded the aboriginal people from the national park lands and subsequently allowed them to assume only consultation roles, e.g., Yellowstone National Park, Canada often embraced Native co-management of parks, refuges, and bison restoration efforts in the government domain.[24] However, winning such rights

took patience and perseverance along with an adherence to traditional lifestyle keeping an eye toward sustainable economic development.

For their part, members of the First Nations in Canada, just like some of those in the present United States, always sought the preservation of the bison landscape to preserve their way of life. Evidence of such comes from treaty negotiations by Native leaders to retain their aboriginal hunting, fishing, and foraging rights as well as the participation by some Cree tribal members in the Northwest Rebellion of 1885.[25] As well, some record exists of direct action and rhetoric by First Nations to maintain their bison-based existence. For example, in 1857, the Plains Cree formed a grand council to attempt to impose a collective policy forbidding white men from killing bison on Cree hunting grounds. Approximately twenty years later, Sweetgrass, a Cree Chief, pleaded with the British North American government to protect the bison.[26] Both efforts failed. Like their brethren to the south, Canada's Native people became marginalized and impoverished while suffering the assimilationist whims of the dominating European-originating culture.

Although it proves difficult to tie the Canadian Native effort to restore the bison population to the cycle of federal legislation as witnessed in the United States, certainly policies on Canada's indigenous people drastically impacted the efforts of Natives to restore a landscape complete with bison. Worthy of note, the seeming liberalization of Native policy that allowed greater autonomy occurred in Canada in the 1980s fairly concurrent with the effects of American legislation in the 1970s such as the Indian Self-Determination Act (1975) and the American Indian Religious Freedom Act (1978).[27] Specific to bison restoration, the Canadian government made three separate exemplary agreements with

Native groups that stipulated joint aboriginal-government agency management of wildlife. The Native Canadians received the right to make decisions as opposed to simple consultation. In 1986, the Canada and Alberta, Fort Chippewyan Cree Band Settlement extended to the Cree of Fort Chippewyan located just east of Wood Buffalo National Park the right to participate in wildlife management that impacted the park's bison. Two years later, a separate agreement, known as the Comprehensive Land Claim Agreement in Principle between Canada and the Dene Nation and the Metis Association of the Northwest Territories, empowered Natives just north of Wood Buffalo National Park to become co-managers of area bison.[28] About the same time, in 1987 the Dene Band near Fort Providence in the form of the De Gah Goh Tie Betterment Corporation received back part of its age old hunting culture when management agreements allowed the band to resume subsistence hunting and some trophy hunt guiding of the bison living in the Mackenzie Bison Sanctuary.[29]

These settlements and restoration of aboriginal subsistence rights capitalized on an existing policy known as the National Recovery Plan for Wood Bison in Canada. The plan, entered into by federal, provincial, and territorial governments in 1975, possessed four objectives: first, to re-establish free-roaming Wood Bison; second, to maintain the genetic integrity of the Wood Bison; third, to restore herds so as to contribute to aesthetic, cultural, economic, and social well-being for rural communities through sustainable development; and fourth, to build long term cooperative management with local communities and aboriginal populations.[30] Specifically, the plan originally called for three free-roaming herds of at least 200 animals each In succeeding years, managers

upgraded their goals to four herds of 200 animals and eventually they agreed to a goal of four free-roaming herds of at least 400 animals each.[31]

As part of the plan, the Wood Bison Recovery Team sought the assistance of First Nations. Two First Nation bison projects opened in 1984.[32] The first project involved the Waterhen First Nation in the northern Interlake region north of Winnipeg, Manitoba. The Ojibway band took animals from various sites including Elk Island National Park in 1984. With a successful captive breeding program in place, the band released thirteen animals into a more remote location on Chitek Lake. The bison stewards released nine more animals in 1996 and by 1999, they declared their transfer successful with eighty bison occupying the area.[33]

The second project unfolded far to the north and west in northwestern Alberta near Habay. A 1982 range assessment by the Canadian Wildlife Service (CWS) and the Alberta Environmental Protection Natural Resources Service (AEP-NRS) near Hay and Zama Lakes found a suitable site for re-establishing bison in the area. The Alberta agency set up a liaison with the Dene Tha First Nation and established a Bison Management Agreement ratified by both groups in 1985.[34] Meanwhile, twenty-nine Wood Bison arrived from Elk Island National Park in February, 1984.[35] Upon arrival, one tribal elder remarked: "I am very happy that the buffalo are returned today. The wildlife is decreasing. Hopefully, the buffalo will breed and increase in numbers."[36] The project managers accommodated the bison in a temporary enclosure with the intent to release all the animals beginning in two years and finishing within five to six years.[37] However, after five years the herd still totaled only twenty-nine animals and just thirty-one animals the next year.[38]

Despite the fact that the Dene Tha won concessions from tribal members to protect the herd and not use it for subsistence, herd managers in 1990 still felt that the low level of reproduction combined with the threat of disease from free-ranging bison necessitated retaining the bison in their three square kilometer enclosure.[39] Nonetheless, in 1993, the enclosure partially collapsed and forty-eight bison wandered out and became Alberta's first successfully re-introduced, disease-free and free-ranging Wood Bison herd.[40] The provincial government declared a bison protection zone bound by the provincial borders to the north and west. Any bison except those of the Hay/Zama herd in the bison protection area were considered wildlife subject to hunting in accordance with provincial regulations to include aboriginal hunting rights. Moreover, the agreement between Alberta and the Dene Tha made it clear that when the Hay/Zama herd reached 250 members, then it would be subject to reductions by hunting with the Dene Tha receiving one-half of all quotas.[41] Presumably, the protection afforded by the tribal accords not to harvest offered good stewardship. By 1999, the herd increased to 100 and continued expanding its range, particularly toward the north and the political boundary of the Northwest Territories or the physical boundary of the Mackenzie River.[42] Thus, "success" described the joint management effort of provincial agencies and First Nations people in restoring a free ranging bison population to northern Alberta.[43]

A third project developed when the Northwest Territories government and Fort Smith Hunters and Trappers Association, an ethnically mixed community interest group, agreed in 1990 to create a bison facility on the Slave River lowlands. They created the Hanging Ice Bison Ranch, which by 1994 possessed 120 bison and became a source of meat and employment for local residents.[44]

With the increasing participation in wildlife management, First Nations assumed a greater sense of stewardship in their resources. For example, the Little Red River Cree maintain resource use areas as part of their indigenous rights on the western and southern boundaries of Wood Buffalo National Park. In the winter of 1998-1999, Cree tribesmen confronted Euro-Canadian hunters led by a guide. The hunters sought unprotected bison in the Caribou Mountains area. The Cree stopped the hunt.[45] Such cooperation between indigenous people surrounding the park in the management of the moving bison resource led park official Peter Lamb to state in 1999:

> I expect to see continued progress in working toward a cooperative management regime with our numerous aboriginal partners in and around Wood Buffalo National Park. Formal negotiations are underway with First Nations and Metis Associations with respect to Treaty Land Entitlements, land claim issues and park management activities.[46]

The restoration of free ranging bison in Canada was occurring and Native people fully participated in a remarkable success story.

Nonetheless, a hard fought battle that culminated in 1990 took place in which Natives persevered. Their victory in this struggle allowed some of the successes of the 1990s above-noted. The issue arose over Agriculture Canada's adopted proposal to create a disease-free Wood Bison herd in and around Wood Buffalo National Park. In the interest of disease eradication to promote the status of Canadian cattle and under the guise of helping the bison, this meant that Agriculture Canada proposed to slaughter all wild animals in the region and then subsequently re-introduce disease-free bison out of captive breeding programs. Natives responded vehemently to the proposal. Elder Fred Dawson of Fort

Resolution on the shores of the Great Slave Lake just north of the park, representing the Deninu Kué First Nation comprised of Chippewyan and Métis members, encapsulated his despondence toward Agriculture Canada's proposal. He stated, "It breaks my heart to hear you talk about the buffalo like this."[47] His words represented his people who defended their right to participate in the decision-making on the bison and also felt that the government infringed on the treaty rights for subsistence.[48]

During 1990, a Federal Environmental Assessment and Review Office (FEARO) panel presented the proposal in Canada's Indian Country.[49] The resulting discussions defined the positions of the adversarial parties and hearkened to the ongoing struggle of indigenous people worldwide to maintain a subsistence lifestyle without getting sucked into the modern world system of nonrenewable resource development. Proponents of the plan forwarded by Agriculture Canada defined the bison of Wood Buffalo National Park and surrounding areas as "transmitters of disease" tainted with "genetic impurity."[50] For their part, Natives opposed wholesale slaughter. After all, only about one-third the bison suffered from tuberculosis or brucellosis.[51] Much like their Native American brethren in the Yellowstone crisis, the Native Canadians emphasized that discrimination against bison resembled racism. They warily viewed the attempt to manipulate resources in the park as a step toward much further development in logging or agriculture. As well, they noted that agreements existed with the government regarding the Native influence in effectuating wildlife policy and that these proceedings would violate their rights to wildlife stewardship.[52] Ultimately, the confrontation

occurred over different visions of the landscape. First Nations sought an environment relatively free of manipulation with bison maintaining their own autonomy. Agriculture and development interests sought a heavily manipulated landscape.

Ultimately, the Minister of the Environment intervened and the decision-making process fell to a newly created Northern Buffalo Management Board. The board would consist of seventeen members including nine community representatives, five government agency representatives, and three representatives from non-governmental organizations. Two co-chairpersons would preside with one receiving an appointment from the government while the other hailed from the First Nations.[53] Upon taking office, Chairman George Kurszewski representing the Dene-Metis Nation stated: "This is a victory for us. We stopped the slaughter. We're a majority in this management board." About the management plan, Chairman Kurszewski described it as "one in which the rights of the aboriginal people are recognized."[54]

As a measure of the commitment of the Northern Buffalo Management Board to the input of the Native community, the Research Advisory Committee (RAC) also reflected a Native presence in its eight member constituency. Four community members such as trappers, elders, or chiefs, joined two government scientific advisers, one non-governmental environmentalist organization representative, and a member of the scientific community such as a veterinarian.[55] They plainly stated their goal of integrating traditional and scientific knowledge for a more "holistic approach" to bison management.[56] Avoiding wholesale slaughter

as an alternative and keeping alive the possibility for "free-ranging bison," the RAC supported the Northern Buffalo Management Board's policy advocating a compromise no buffalo zone south of the Mackenzie Bison Sanctuary, north of British Columbia and Alberta, and west of Wood Buffalo National Park. Officials intended for this zone to prevent contact between diseased animals, namely with tuberculosis and brucellosis, and disease-free animals.[57]

Further evidence of Native participation in restoration of Canadian bison came from the Hook Lake Recovery project originally proposed by the Denin Kué in 1991. The following year, the First Nation teamed with the Northwest Territories Department of Resources with funding from the federal coffer and the Canadian Wildlife Federation to begin an ambitious plan to reverse a disturbing trend affecting the wild Hook Lake northern bison herd ranging in the Slave River lowlands north of Wood Bison National Park. [58] The herd, once 1,700 members strong, dropped to less than 500 members due to brucellosis, tuberculosis, anthrax, and predation before the implementation of the Denin Kué plan.[59] The plan possessed five objectives: to get a healthy herd, preserve genetic diversity, salvage healthy bison, enhance the Hook Lake ecosystem, and develop economic opportunities for local people.[60] To implement the plan, the bison handlers caught calves and tested them. Those youngsters that tested positive for disease went back into their wild herd. Those that tested negative rode by helicopter back to the Denin Kué community at Fort Resolution.[61] There, the handlers used test and slaughter methods to ensure that the calves would become disease-free. The program utilized separation by cohort

peer groups to monitor the generations in anticipation of the disease-free generation that could re-populate the countryside as a disease-free bison herd destined to roam the backcountry.[62] By 1998, the captive herd contained more than forty females thereby producing a positive feeling about the future of the program.[63]

A more in-depth examination of a northern bison management program offers key insights into Native bison restoration in Canada by revealing policy, structure, implementation, and cultural effect. The Mackenzie Bison Sanctuary located north of the Mackenzie River and west of the Great Slave Lake allows one such opportunity to examine a First Nation program. The Dene Got ie First Nation with its band headquarters at Fort Providence, Northwest Territories manages one of the most significant bison herds in the world owing to its size with nearly 2,000 animals in 1999 and status as a pure bred northern bison herd that free ranges without brucellosis or tuberculosis.[64]

The Canadian government established the Mackenzie bison herd in 1963 with eighteen animals from Elk Island National Park with Nyarling River herd blood coursing through their veins as part of the government's plan to establish a free-roaming disease-free Wood Bison herd. While the herd built up in size, management passed to the local Hunters and Trappers Association, which consisted of local residents of varied ethnicity.[65] However, in 1993 the Fort Providence Resource Management Board formed and took over management of the herd. By design, the constituency of the board gave Natives a voting majority with three Dene seats, two Metis seats, and two at-large seats for community members.[66]

Development of a management plan, an organic document responding to fresh data accumulated constantly, became a top priority.[67]

Yet, the challenges arose immediately for the Native managers. Anthrax spores, believed to have come from birds, infected the herd and caused unforeseen mortality. As well, diseased animals tend to abort or become subject to predation more easily. Thus, the bison management team tasked its field hands and trappers to begin anthrax data collection and implementation of a vaccination program done both with salt blocks and helicopter darting and to curb the wolf population. The anthrax outbreak caused the managers to burn 173 bison carcasses and spend countless hours in the field monitoring the bison. Treatments helped alleviate the effects, but the issue stayed unresolved through the 1990s.

Greg Nyuli, chairman of Resource Management Board elucidated the wolfing program as "not wiping out wolves, just keeping a balance."[68] Art Look, a wildlife consultant for the board, explained in a 1999 interview that to curtail wolf predation on bison requires very little volume in terms of numbers of wolves taken. Namely, the trapper must get the adult leaders since they serve as the repository of knowledge for the pack to slay the bison. Eliminating the leaders forces the pack to re-learn the skill and temporarily takes the predatory pressure off the bison.[69] Chairman Nyuli noted that older community members would not trap wolves owing to a spiritual link while younger community members expressed far less hesitation.[70]

Treatment for anthrax, predator reductions, and range management through the use of enhanced grazing made by prescribed burning all

combined to safeguard the herd's population. Therefore, in the latter part of the 1990s, the management board implemented a hunt. With forty-seven tags allotted, twenty went to Dene and Metis community members, three went to members of the Dogrib band, nine went to guided hunts with private clientele, and sixteen went into a drawing for Northwest Territories residents.[71]

Chief Nyuli explained that these hunts gave enhanced prestige to the bison project for many community members. Prior to the hunts, some local hunters believed that the bison chased away the moose and the huntsmen remained bitter about it. The complexion of such disgruntlement changed when hunting seasons opened and the people became re-connected with the buffalo.[72] Nyuli explained some of the re-connection process, "We lost our history and we need to consult further with our elders." He added, "This used to be our resource and was wiped out and the government putting back bison is payback more than anything, for our resources."[73]

The connectivity for the people with the bison occurred with influence in the decision-making process for the Dene Got ie. In 1999, Chief Nyuli described future projects for his community and the bison. He believed the band could stage elite trophy hunts for Safari Club International. He also entertained the possibility of a separate bison ranch for meat production both for the people and for sale. Also, he hoped to capitalize on the innocuous eco-tourism industry by offering a safari experience with bison creeps to view and photograph the members of one of the largest wild bison herds in the world. Others in the community

apparently shared his vision since he maintained that the bison management scenario enjoyed 90 to 95 percent support from the community.[74] Thus, perhaps as much as any group of people in North America, the Dene Got ie have become re-associated with their age-old contemporary, the bison. Their experience reveals both the bonds of the past and the bridges to the future where the modern world meets a more nostalgic counterpart. In the end, though, they get to enjoy the benefits of seeing free-ranging bison largely unfettered by the confines of the Europeanized landscape imposed on North America beginning a half millennium ago.

The restoration of the northern bison under the aegis of First Nations and often in collaboration with various Canadian government entities produces both similarities and differences with the situation in the United States. At least three dominant similarities and three major differences characterize the comparison. The first similarity emerges from the psyche of the indigenous people that bison roaming as freely as possible serves as a cultural goal. The second similarity comes from the role of disease in prompting an often heavy-handed policy by government entities, a policy often rejected by the Indian people. This proved true both with Yellowstone and Wood Buffalo National Parks where agents of the government either destroyed or intended to destroy large numbers of bison while Native Americans and Native Canadians protested. The third similarity is the acquisition of surplus bison for seed stock from national parks, e.g., Wind Cave National Park or Theodore Roosevelt National Park in the United States and Elk Island National Park in Canada, which

signifies some degree of cooperation between government and the aboriginal people.

However, the differences begin with the level of support offered by the respective governments. The Canadian government ensured that Natives possessed management rights while the American government offered to hear consultation at most. Another difference surfaces with respect to free-roaming bison. Canadians indicated a readiness to allow open range for bison, at least in the northern range, qualified with bison protection areas, which do not serve as major avenues of movement anyway. By contrast, policies in the United States as made evident by Yellowstone reflect a hesitancy to allow free-ranging buffalo. Therefore, Natives of Canada can witness bison occupying a niche not unlike that of ages past. Finally, intertribal collaboration in Canada lags behind that in the United States. While coordination with the government and between local First Nations occurs, for many Natives their bison experience is quite singular since no indigenous umbrella organization coalesces the bison restoration effort.

While the discussion heretofore concerns efforts to restore the northern bison, a significant effort exists with the plains bison as well in Canada. This bison restoration warrants consideration and comparison also, but a lack of pan-Native coordination readily appears. Nothing like the ITBC exists in Canada and subsequently Canada's indigenous bison restoration effort remains quite fractured. Nonetheless, five case studies of Native bison programs offer fertile ground for portrayal and comparison with the United States. Ranging from north to south, the Kikino Métis

Settlement, Whitefish Lake First Nation, Okanese First Nation, Piikani (Northern Piegan) First Nation, and Blood First Nation offer insights into the plains bison recovery underway in Canada for the last quarter century.

Located in Alberta northeast of Edmonton, the Kikino Métis bison enterprise commenced in 1978 with the acquisition of twenty-four plains bison out of Elk Island National Park. The Kikino Council sought to establish a herd on its landholdings that would provide employment opportunities and utilize a land base that lent itself well to bush pasture.[75] Thus, the Kikino bison restoration effort began under circumstances different than most Native American attempts in the United States where traditional spiritual and cultural affinity provided the impetus for bringing back the buffalo far more than economics. However, in the case of the Métis, a people born out of the mixed-blood relations steeped in the fur trade, economic use of the bison resource to enter into the larger economy appears quite traditional.[76]

Regardless of motives, the Kikino Métis proved themselves able bison stewards as their herd grew to 167 breeding cows by 1999. They utilized three sections of grazing but the lower quality bush pasture necessitated supplemental feeding to include grain for younger animals. Meat production encouraged herd managers to use grains when supplementing. The settlement sells or donates all bulls except those maintained for breeding stock each year. For the most part, the bison managers utilized a hands-off approach and offered some guided hunts during the 1990s. Ceremony did not accompany harvests whether as part of hunts or butchering to provide senior citizens with meat.[77] Comparing

the Kikino Métis bison program with that of Native Americans stateside reflects that economics has played a greater role in the development of the herd. This spawns a question as to whether or not the intricate involvement with the fur trade created a more rationalist economic value of bison for the Métis than that associated with other indigenous people.

The Whitefish Lake First Nation provides a test of the question regarding fur trade legacies of Native people and bison restoration. Located quite close to Kikino, the Plains Cree also possess a fur trade history though not to the extent of the Métis. Similar to Kikino, Whitefish Lake used bush pasture for its herd started from fifty plains animals bought from the Alexander band in 1991 but originating in Elk Island National Park. By 1999, the herd totaled more than 300 bison ranging on four sections with plans for expansion by two hundred percent in grazing area. The operation easily paid for itself with the sale of excess stock and meat. Donations of excess animals occurred early in the herd's residency at Whitefish Lake, but the band council minimized donation to maximize profits. Herd managers supplemented feed about six months of the year and concerned themselves with meat production. A proposal to bring in northern bison met with enthusiasm by some elements of the population due to the slightly better meat production potential when compared to that of plains bison.[78] This quite possibly would balance out in a couple generations due to morphotype development in alignment with environmental constraints,[79] although one herd manager remarked that the northern bison looked like a "great feedlot animal."[80]

Yet, despite the fact that bison managers make it clear that "this ranch is a business," some Cree community members hold the bison range sacred. Herd steward Darryl Steinhauer remarked in 1999 that the "community people have a fascination with bison." He would observe one tribal elder performing rituals at the bison pasture many mornings with burnt sweetgrass braid offerings left as a reminder of the ceremony. Also, people gathered rocks from the bison pasture to use in their sweat lodges. Steinhauer explained, "This is a live relationship, as Natives we respect these sites."[81] These spiritual and nostalgic overtures toward the bison reflect the commitments witnessed in many American Indian bison restoration programs, but the overshadowing concerns with economics by comparison are the exception rather than the rule.

The Okanese First Nation located northeast of Regina, Saskatchewan marks a departure from the Whitefish Lake First Nation and Kikino Métis Settlement in that it more resembles an ITBC member tribe in its bison restoration effort. The Plains Cree community acquired a pair of bison in 1996 from a local rancher and the next year augmented the acquisition with additional animals from Elk Island, a Métis settlement, and later even from the Cheyenne River Lakota. The herd increased to thirty animals in 2003 and grazed on 500 acres. The bison stewards minimally managed the herd and some years the environment did not require feed supplementation. The tribe committed to bison restoration with a balance of cultural and economic motives, and many of the early advocates came from the cattle industry, which offered them a standard of comparison for getting into bison. Spiritual ceremonies accompanied all

harvests and the program contributed bison for cultural activities such as the Sun Dance. The First Nation also planned to initiate a bison based health and diet program.[82]

The features surrounding the Okanese bison restoration program in many ways equate with those of ITBC tribes. However, one other important consideration emerges from the Okanese story. In Canada, Native bison stewards have utilized the Canadian Bison Association or in Saskatchewan, the Saskatchewan Bison Association as their institutional affiliation. In Saskatchewan, at least fifteen First Nations or Native owners ran bison in early 2003.[83] Out of those ranks, a nascent movement started to take shape in 2002 and 2003 where First Nations, sometimes disenchanted with the commercial bison industry, started talking about forming a Native organization of bison producers sensitive to the cultural aspects of bison restoration.[84] Thus, the foundation for a northern version of the ITBC may have started to take form on the prairies of Saskatchewan even though at the time, little call for a grandiose bison landscape existed.[85]

Near Head-Smashed-In buffalo jump in southwestern Alberta, the Piikani (Northern Piegan) First Nation runs a herd of bison established in the early 1980s with about thirty head acquired from Parks Canada. The band went into bison for spiritual connection and the herd never grew large rising to just above fifty members in 2003. Ceremonies accompanied all harvests and the tribe sold excess animals. The herd grazed over 800 acres and required some supplementation during environmentally difficult times. However, the tribe practiced a hands-off

style of interaction with the herd. The bison steward, Edwin Small Legs, has managed the herd with a high level of support from both the tribal council and the community.[86] In short, the Piikani program mirrors those south of the forty-ninth parallel with the exception that it does not enjoy the networked support of an organization akin to the ITBC.

Sometimes, however, conditions simply necessitated that Natives go it alone. Such was the case for Harley Frank, the former chief of the Blood Nation, who tried to bring bison back to his people in 1992. Raised on the Blood Reserve in an agricultural family near the American border in southwest Alberta, the idea of re-introducing bison to his people became fixated in Frank's mind in 1987. During that year, he found an *iniskim*, a bison-shaped rock of great importance to members of the Blackfeet Confederation. Thinking much on the spiritual and material benefits of bison during the day, Frank had a vivid dream showing him a bison skull buried on his property. He went with his kids to the spot of the dream, and sure enough, his daughter found a horn that led them to uncovering the skull. The experience stuck with Frank and five years later he ran for tribal council on the platform that he would return the bison to the area.[87] However, in many ways, the romance of the story ends at that point.

After winning election, Frank traveled to South Dakota in 1993 and purchased eighty yearling bison from a large private ranch. Upon his return to Canada, protestors met his caravan. The protestors were Blood and tensions ran high as counter-protestors also met the caravan. At one point, protestors lay across the road to stop passage of the bison, but elder women from the Buffalo Women Society, hearkening to the great

contributions of women in saving bison, simply brushed the bodies aside as the Royal Canadian Mounted Police watched. Protestors threatened Frank, shoved him and even spat upon him. Frank asked for passage from the Mounties and his supporters secured his route. With that, the bison came back to the Blood Reserve. Yet, within a year, Frank lost election and bought out half the herd to go it alone in the bison restoration effort by keeping forty animals, which he raised much in alignment with hands-off principles.[88] After all, for Frank, "It's more about the spiritual sense."[89]

Frank's story proves quite exceptional in this narrative of bison restoration by North America's indigenous people. The reason for the tensions existed because of the fear of change and the allocation of resources from existing areas into the bison project. Some of the Blood Nation simply was not ready to bring back buffalo.[90] Frank's perseverance in bringing back the bison against unbelievable opposition mirrors that of Indian people in general to bring back the bison against difficult conditions brought by hundreds of years of Euro-American or Euro-Canadian hegemony. For Frank, though, a happy denouement exists to his story. In 1995, Frank put down one of his bison cows during birthing because she broke her hip. He delivered the calf that subsequently took him to be her mother. From then on, the two became virtually inseparable.[91] Harley Frank then communed with the buffalo virtually every day he remained at home.

Ultimately, the Canadian comparison to the United States in bison restoration by indigenous people produces a few salient points. First, the Native American effort to restore bison knows no geo-political boundaries, e.g., efforts exist on both sides of the forty-ninth parallel. Second, government collaboration

can result in a free-roaming bison herd, bearing in mind that northern Canada proves less problematic for a buffalo commons than would more populous areas to the south. Third, Native wildlife stewardship can offer effective ecosystem management. Fourth, the effects of the fur trade may still determine rational economic behavior as opposed to substantive, non-market related, behavior, which means that Natives more intertwined with the fur trade concern themselves more with the financial rewards of bison restoration than do tribes less intertwined. Worthy of note though, tribes less involved with the centuries old fur-bearing animal skin trade and involved in bison restoration today, probably more fully participated in lifeways based entirely on bison, e.g., the life of people on the plains as opposed to that in the woodlands. Fifth, the ITBC gives synergy to bison restoration in the United States. Canada's effort lags behind in a First Nation by First Nation sense because no umbrella organization coordinates or represents buffalo restoration. Indeed, the legitimacy offered by an intertribal group supporting a bison raising effort well could have helped the cause of Harley Frank as he sought to bring the bison back to his people.

Endnotes

[1]Harley Frank (Blood), interview with the author, 9 August 1999, Cardston, Alberta.

[2]For a concise general survey of the plight of Canadian bison from time immemorial to the present, see Bill Burns, "Bison: Back from the Brink," *The Beaver*, 82:5 (October/November 2002), 16-22.

For overviews of public bison herds in Canada, see Geist, *Buffalo Nation*, 121-122 and Harvey Payne and Karen Stock, "The Re-Establishment of Endangered Wood Bison in Manitoba, Canada," unpublished paper, presented at the Bison Conference 2000, 7 April 2000, University of Nebraska, 8-10. The paramount public herds roam Wood Buffalo National Park, the Mackenzie Bison Sanctuary, Elk Island National Park, and the Nissling River area of the Yukon. Other herds exist in parks and refuges from Manitoba to British Columbia and up into the Northwest Territories.

For works on bison ranching that suggest its increasing popularity in Canada, see Doug Dunn, "Bison Ranching in Canada," *Western Horseman*, November 1993, 154-158 and Burns, "Bison: Back from the Brink," 16-22. Burns noted:

> The Canadian Bison Association lists 1,250 bison ranches operating in Canada. In the late 1990s, commercial production was expected to grow 25 percent a year until 2005, one of the fastest growing areas in agriculture. If demand continues to increase as it did through the 1990s, experts predict as many as 700,000 animals will be processed ten years from now. Given these exponential figures, it is small wonder that some agribusiness analysts predict bison will displace cattle in North America (22).

For a work critical of North American agriculture's negative effect on bison through domestication, see Geist, *Buffalo Nation*, 123-131.

[3]"Native" receives capitalization in this chapter since it denotes a distinct ethnic classification in Canada consisting of First Nation (Native American/Canadian) and Métis people.

[4]Roe, *North American Buffalo*, 283-333 and Payne and Stock, "Re-Establishment of Endangered Wood Bison in Manitoba," 4.

[5]Soper, "History, Range, and Home Life of the Northern Bison," 362. This article by Soper set the baseline for studies of northern bison much like the work of Mary Meagher, *Bison of Yellowstone Park*, for bison in the United States.

[6]Soper considered northern bison as a subspecies, see Soper, "History, Range, and Home Life of the Northern Bison," 355-357. See also C.G. van Zyll de Jong, "A Systematic Study of Recent Bison, with Particular Consideration of the Wood Bison (*Bison bison athabascae Rhoads* 1898), *Publications in Natural Sciences, No. 6* (1986), National Museum of Natural Science/National Museums of Canada, 1-57.

[7]Geist, *Buffalo Nation*, 122. Geist refers to the "Wood Bison" as a "phantom subspecies."

[8]For a description of the evolution of the arguments over subspeciation, see ibid. Also, Mary Meagher, who like Geist, originally thought that a subspecies existed, now believes that subspeciation is not warranted (Meagher interview, 26 June 1999).

[9]Federal officials in Canada at various times have plotted to slaughter herds of Plains Bison or mixed Plains and Wood Bison viewing these animals as expendable to preserve either agricultural interests or animals perceived as genetically pure "Wood Bison." Such differential treatment hinges on distinguishing subspecies. Geist opposes such plans as based on "inadequate science." See Valerius Geist, "Agriculture versus Bison in Canada's Wood Buffalo National Park," *Conservation Biology* 4:4 (December 1990), 345-346.

See also Gary Wobeser, "Disease in Northern Bison: What to Do?: A Personal Perspective," 179-188, in Foster, Harrison, MacLaren, eds., *Buffalo*.

[10]Cormack Gates, Tom Chowns, and Hal Reynolds, "Wood Buffalo at the Crossroads," 139-166, in Foster, Harrison, MacLaren, eds., *Buffalo*.

[11]Ibid., 145-146. See also Barsness, *Heads, Hides & Horns*, 188-189; Dary, *Buffalo Book*, 50-51; and F. H. Kitto, "The Survival of the American Bison in Canada," *The Geographical Journal* 58 (January-June 1924), 431-437.

[12]Coder, *National Movement to Preserve the American Buffalo*, 5-7 and Hebbring Wood, "Origins of Public Bison Herds," 168.

[13]"Pablo's Montana Buffalo Formed Nucleus for Huge Canadian Herd of Bison," 1.

[14]Coder, *National Movement to Preserve the American Buffalo*, 228-229, 311.

[15]Coder, *National Movement to Preserve the American Buffalo*, 311; Gates, Chowns, and Reynolds, "Wood Buffalo at the Crossroads," 146-147; and McHugh, *Time of the Buffalo*, 304-306.

[16]Gates, Chowns, and Reynolds, "Wood Buffalo at the Crossroads," 146-147 and Geist, *Buffalo Nation*, 119-121.

[17]Geist, *Buffalo Nation*, 119-121.

[18]Coder, *National Movement to Preserve the American Buffalo*, 311; Gates, Chowns, and Reynolds, "Wood Buffalo at the Crossroads,"

147-148; Geist, *Buffalo Nation*, 119-121; and McHugh, *Time of the Buffalo*, 231.

For a work focusing on predation on bison by wolves in Canada, see L.N. Carbyn, "Wolves and Bison: Wood Buffalo National Park – Past, Present and Future," 167-178, in Foster, Harrison, MacLaren, eds., *Buffalo*. As opposed to the situation in Yellowstone National Park, Carbyn concludes about wolf predation in northern Canada: "All the studies have shown that wolves regularly and successfully prey on bison" (170).

[19]Geist, *Buffalo Nation*, 119. See also *The Great Buffalo Saga* [video], Mark Zannis and Barrie Howells, prod., National Film Board of Canada and Parks Canada, 1994 (recorded from 1985).

[20]Coder, *National Movement to Preserve the American Buffalo*, 312; *Great Buffalo Saga*; and Hebbring Wood, "Origin of Public Bison Herds in the United States," 181.

[21]Hebbring Wood, "Origin of Public Bison Herds in the United States," 181.

[22]Geist, *Buffalo Nation*, 119-123.

[23]Hebbring Wood, "Origin of Public Bison Herds in the United States," 181 and Geist, *Buffalo Nation*, 121.

[24]For a general work on Canadian conservation, see Janet Foster, *Working for Wildlife: The Beginning of Preservation in Canada* (Toronto: University of Toronto Press, 1978).

[25]See Robert J. Surtees, "Canadian Indian Policies," 81-95 and Robert J. Surtees, "Canadian Indian Treaties," 202-210, in Washburn, ed., *History of Indian-White Relations*. See also Theresa A. Ferguson and Clayton Burke, "Aboriginal Communities and the Northern Buffalo Controversy," in Foster, Harrison, MacLaren, eds., *Buffalo*, 191.

Ferguson and Burke tie wildlife management in with the treaty negotiations. They write:

> From the local Native perspective, this concern for the right to manage wildlife is of long standing. Native spokespersons stressed the point strongly in the Treaty Eight negotiations (1899). As a result, the Treaty included a clause which guaranteed that Native people had "the right to pursue their usual vocations of hunting, trapping and fishing" with the proviso that this was "subject to such regulations as may from time to time be made by the Government of the country"[Treaty No. Eight, made 21 June 1899, and Adhesions, Reports etc. (Ottawa: Queen's Printer, 1966), 12]. The intent of this proviso is clarified in the written comments on the negotiations by the Treaty Commissioners. These comments indicate that the Treaty Commissioners had assured the people that "only such laws as to hunting and fishing as were in the interest

of the Indians and were found necessary in order to protect the fish and fur-bearing animals would be made, and that they would be free to hunt and fish after the Treaty as they would be if they never entered into it"(Treaty No. Eight, made 21 June 1899, and Adhesions, Reports etc., 6).

[26]Burns, "Bison: Back from the Brink," 18.

[27]Kelly, "United States Indian Policies, 1900-1980," 78-80, in Washburn, ed., *History of Indian-White Relations*.

[28]Ferguson and Burke, "Aboriginal Communities and the Northern Buffalo Controversy," 192.

[29]Doug Stewart (Northwest Territories Resources, Wildlife and Economic Development, Director of Wildlife and Fisheries) to Mike Carpenter (United States Fish and Wildlife Service), 10 August 1999, 5.

[30]Ibid., 2 and Payne and Stock, "The Re-Establishment of Endangered Wood Bison in Manitoba," 7-8.

[31]Payne and Stock, "The Re-Establishment of Endangered Wood Bison in Manitoba," 8.

[32]Ibid., 2 and Kim Morton(Alberta Environmental Protection Natural Resources Service wildlife biologist), "Wood Bison Re-Introduction: Hay/Zama Herd Progress Report – April 1999," unpublished paper in the author's possession.

[33]Payne and Stock, "The Re-Establishment of Endangered Wood Bison in Manitoba," 2-3.

[34]Morton, "Wood Bison Re-Introduction," 1-3.

[35]Ibid., 3 and Gates, Chowns, and Reynolds, "Wood Buffalo at the Crossroads," 152.

[36]*Great Buffalo Saga*.

[37]Morton, "Wood Bison Re-Introduction," 3.

[38]Gates, Chowns, and Reynolds, "Wood Buffalo at the Crossroads," 152.

[39]Ibid. and Morton, "Wood Bison Re-Introduction," 3.

[40]Morton, "Wood Bison Re-Introduction," 3.

[41]Ibid., 3-4.

[42]Ibid., 5, 10.

[43]Kim Morton, interview with the author, 12 August 1999, High Level, Alberta.

[44]Gates, Chowns, and Reynolds, "Wood Buffalo at the Crossroads," 153.

[45]Ron LaFramboise, interview with the author, 16 August 1999, Little Red River, Alberta.

For Native harvesting around Wood Buffalo National Park, see Gates, Chowns, and Reynolds, "Wood Buffalo at the Crossroads," 157.

[46]Peter Lamb (Field Superintendent of Southwest Northwestern Territories), "Welcome to Wood Buffalo National Park," *Wood Buffalo National Park Tales 1998* (Fort Smith: Parks Canada, 1998), 2-3.

Collaboration between various government agencies and First Nations extended beyond field management. For example, at Wanuskewin Heritage Park in Saskatoon, Sasckatchewan local and provincial government agencies worked with First Nations, namely the Cree, to establish a park depicting the northern plains and its indigenous inhabitants from their perspective. The project reached full stride in the 1990s [Brian Fagan, "Bison Hunters of the Northern Plains," *Archaeology* (May/June 1994), 37-41].

Even more specific to bison, the 1987 opening of the interpretive center at Head-Smashed-In buffalo jump outside of Fort McLeod in southwestern Alberta fully reflected the input of the Blackfoot First Nation. The World Heritage Site managed by the Alberta Government, Department of Culture and Multiculturalism employed many Native personnel. As well, the use of Blackfoot tradition to tell the story of the buffalo jump illustrates a commitment of Canadian government toward its Native constituency [Jack Brink, "Blackfoot and Buffalo Jumps: Native People in the Head-Smashed-In Project," 19-43 in Foster, Harrison, MacLaren, eds., *Buffalo* and Leo Pard, Peigan (Piikani), interview with the author, 10 August 1999, Head-Smashed-In Buffalo Jump, Alberta].

[47]Ferguson and Burke, "Aboriginal Communities and the Northern Buffalo Controversy," 202.

[48]Ibid., 189-192.

[49]Ibid., 189-190.

[50]Ibid., 195-196.

[51]Ibid., 194.

[52]Ibid., 192, 195-196, 198-199.

[53]Ibid., 204 and Gates, Chowns, and Reynolds, "Wood Buffalo at the Crossroads," 160.

[54]George Kurszewski, personal communication with Theresa Ferguson, 18 July 1991, in Ferguson and Burke, "Aboriginal Communities and the Northern Buffalo Controversy," 204.

[55]"RAC Who's Who," *Bison Research and Containment Program Newsletter*, 1:1 (summer 1996), 9.

[56]"Integrated Traditional and Scientific Knowledge," *Bison Research and Containment Program Newsletter*, 1:1 (summer 1996), 13.

[57]"Containment Program," *Bison Research and Containment Program Newsletter*, 1:1 (summer 1996), 14.

[58]"Hook Lake Recovery Project: Progress Report," unpublished paper in the author's possession, winter 1997-1998, 1-4.

[59]William Karesh, "Society Page: Wood Bison Recovery Project," *Wildlife Conservation* 101:6 (November/December 1998), 8.

[60]"Hook Lake Recovery Project: Progress Report," 1-4.

[61]Karesh, "Society Page: Wood Bison Recovery Project," 8.

[62]Janna Van Kessel, interview with the author, 14 August 1999, Fort Resolution, Northwest Territories.

[63]Ibid., and Karesh, "Society Page: Wood Bison Recovery Project," 8.

[64]Darren Campbell (wildlife biologist, Integrated Resource Management Program), interview with the author, 13 August 1999, Fort Providence, Northwest Territories and Greg Nyuli (chief, Dene Got ie), interview with the author, 13 August 1999, Fort Providence, Northwest Territories.

For numbers on the Mackenzie bison herd, see also Gates, Chowns, and Reynolds, "Wood Buffalo at the Crossroads," 150 and Stewart to Carpenter, 2.

[65]Darren Campbell, a wildlife biologist serving the Northwest Territories in the Integrated Resources Management Team, claims that Hunters and Trappers Associations prevalent in Northwest Territories wildlife management are a model of the success that can be gained from local autonomy over resources. He states, "I've never seen any blatant waste of any kind" (Campbell interview, 13 August 1999).

Art Look, an 82 year-old man (1999), had served on these committees for many years and helped form the Fort Providence Hunters and Trappers Association. A veteran trapper and outdoorsman, well-versed in the lore of

Natives having been a speaker of Cree since his boyhood, Look commented in 1999 on the Natives with whom he has worked in wildlife management and harvesting. Regarding the Native role as conservationists, he stated, "To a certain point they are, though many will kill for meat." He added that the local populace responded well to education and peer pressure in wildlife management (Art Look, interview with the author, 13 August 1999, Fort Providence, Northwest Territories).

[66]Campbell interview, 13 August 1999 and Greg Nyuli (Dene), interview with the author, 13 August 1999, Fort Providence, Northwest Territories .

[67]Nyuli interview, 13 August 1999.

[68]Ibid.

[69]Look interview, 13 August 1999.

[70]Nyuli interview, 13 August 1999.

[71]Ibid., and Campbell interview, 13 August 1999.

[72]Nyuli interview, 13 August 1999.

[73]Ibid.

[74]Ibid.

[75]Darrell Bellerose (Métis), interview with the author, 17 August 1999, Kikino, Alberta.

[76]For a work addressing the Métis and their conservation ethic during the bison harvests of the 1800s, see John Foster, "The Metis and the End of the Plains Buffalo in Alberta," 61-78, in Foster, Harrison, MacLaren, eds., *Buffalo*. Foster contends that the Métis never were a subsistence people and that "consumerism had become institutionalized in their culture" (72-74).

For another work on the Métis specific to the fur trade, see Arthur J. Ray, "Reflections on Fur Trade Social History and Métis History in Canada," *American Indian Culture and Research Journal* 6, 91-107. For a more general work, see Jacqueline Peterson and Jennifer S.H. Brown, *The New Peoples: Being and Becoming Métis in North America* (Winnipeg: University of Manitoba Press, 1985).

[77]Bellerose interview, 17 August 1999 and Ron Delorme (Plains Cree), interview with the author, 18 August 1999, Whitefish Lake Reserve, Alberta.

[78]Darryl Steinhauer (Plains Cree), interview with the author, 18 August 1999, Whitefish Lake Reserve, Alberta.

[79]Geist, *Buffalo Nation*, 122.

[80]Steinhauer interview, 18 August 1999.

[81]Ibid.

[82]Alvin Stonechild (Plains Cree), telephone interview with the author, 27 February 2003.

[83]Ibid.

[84]Ibid., and Ramona Stonechild (Iroquois), telephone interview with the author, 27 February 2003.

[85]Sue Michalsky (The Nature Conservancy, Canada), e-mail correspondence to the author, 3 March 2003.

[86]Edwin Small Legs [Piikani (Piegan], telephone interview with the author, 27 February 2003.

[87]Harley Frank (Blood), interview with the author, 9 August 1999, Cardston, Alberta.

[88]Ibid., and Richard Manning, *Grassland: The History, Biology, Politics, and Promise of the American Prairie* (New York: Viking Press, 1995), 239-244.

[89]Harley Frank interview, 9 August 1999.

[90]Ibid., and Lois Frank (Blood), interview with the author, 9 August 1999, Cardston, Alberta; and Pard interview, 10 August 1999.

[91]Harley Frank interview, 9 August 1999.

CHAPTER 7
Conclusion

"Contemporary Indian people have debated the issue of how bison can be sacred on one hand, yet still be used in a way that can boost their economy. It could be argued that both points of view can be achieved if done with the proper amount of moderation, respect for, and ethical treatment of, the buffalo."
--Jim Garrett (2001)[1]

Perhaps the most striking example provided by the indigenous effort to restore the bison landscape comes from the range of the northern bison. When the various layers of government and local constituents join Native people as advocates for the buffalo nation, then free-ranging wild bison can exist. Already, this occurs in northern Canada. Many Native Americans hope that it can occur to the south as well all the way to the southern plains. They long for the opportunity to bring back the bison.

Optimism exists in Indian Country for bison restoration. The acceleration of bison and bison range acquisition in the 1990s offers positive proof. Indeed, much of this manuscript hinges on dates such as the saving of the bison in the 1870s or 1880s and the restoration of bison herds on reservations in the 1970s, 1980s, or 1990s. However, for many Indian people, these dates possess little meaning in bison history. Rather, the relatively recent births of white buffalo prove far more significant to the cosmology of North American native people. "Miracle" became the name of the first of these calves born, which occurred in 1994.[2] The first Native American pilgrim arrived less than 24 hours later and 75,000 other visitors appeared in the first two years of the calf's existence. Native people everywhere interpreted the event differently with one Lakota medicine man likening the birth to the "second coming of Christ."[3] Two years later, two more white bison calves entered the world in the town of Michigan,

North Dakota, and a fourth white youngster born on the Pine Ridge Reservation joined them in 1996.[4] Regardless of interpretations, for Native Americans the prevailing theme regarding these births hinged on the dawning of a new age, and one often symbolizing the return of the buffalo nation.[5]

Two features about the birth of white buffalo require explanation. First, whether or not the buffalo is a true albino or whether or not it changes colors as it matures does not deter the spirituality of the birth for Native American spiritual leaders. In fact, for the Lakota, the color phase change proves paramount and symbolizes the color changes of the White Buffalo Calf Woman who originally made the covenant between the buffalo and Lakota nations.[6] Second, statistical significance bears consideration. White buffalo births occur very infrequently; therefore, the increase in such births most likely reflects growth in the bison population, a key step in bison restoration.[7]

Many Native American spiritual leaders feel the time is right for the return of their bison brethren. As made evident by Canada's return of the northern bison, other entities must join the indigenous people to effectuate the return of the buffalo. This requires acquisition of the idea that a buffalo landscape is a good thing and probably requires acceptance on three planes: aesthetic, ecological, and economic, across a wide spectrum of government agencies and elements of the population.

The first point, aesthetics, finds easy acceptance within society. Bison are an icon of American and Canadian society. They appear as government symbols such as the Department of Interior seal in the United States or the Royal Canadian Mounted Police seal in Canada or as cultural phenomena such as team mascots, e.g., the Buffalo Bills of the National Football League. National

parks feature bison. The public outcry over the Yellowstone slaughter occurred for many people because of the displeasure caused by the sight of agents gunning down an American icon. The academy award winning film *Dances With Wolves* (1990) featured bison and the buffalo landscape helped the film win an Academy Award for Best Cinematography.[8] Seemingly few people of any ethnic background staunchly oppose the notion that bison ought to run on the North American landscape at least in some capacity.[9]

Moreover, some key factors indicate that some influential non-native citizenry seek a return of the buffalo. Most notably, Ted Turner, the cable news mogul accumulated a virtual bison empire over the course of the 1990s vowing that aesthetics and ecology reigned first as his primary concerns, with economics second. By 1996, his ranches, in a manner similar to that of the ITBC, ran 12,300 bison on 1.3 million acres spread across Montana, New Mexico, and Nebraska.[10] His land total equaled that of the Nature Conservancy, a group committed to aesthetic and ecological health, which itself boasted a bison restoration project centered on its 37,000 acre Tallgrass Prairie Preserve in Pawhuska, Oklahoma where land stewards expect the original herd of 300 to reach 2,000.[11] Turner and the Nature Conservancy are marquis due to their ubiquity, but they certainly do not stand alone. For example, a former Montana rancher forged an organization in the late 1980s and 1990s called the Big Open Project. The project originated by Bob Scott aimed to restore 39,000 square kilometers in central Montana to bison range.[12] As well, the Great Plains Restoration Council created a broad coalition of individuals and groups as part of its Million Acre Project to restore the buffalo landscape on a million acres as a first step toward a broader restoration on the western plains.[13]

Such commitment begs analysis in light of a statement once posited by Lakota Chief Luther Standing Bear:

> The white man does not understand America. He is too far removed from its formative processes. The roots of the tree of his life have not yet grasped the rock and soil. The white man is still troubled by primitive fears; he still has in his consciousness the perils of this frontier continent. The man from Europe is still a foreigner and an alien. And he still hates the man who questioned his path across the continent. But in the Indian the spirit of the land is still vested: it will be until other men are able to divine and meet its rhythm. Men must be born and reborn to belong. Their bodies must be formed of the dust of their forefathers' bones.[14]

Perhaps the fear has subsided and longevity on the continent facilitates a desire to enjoy the native landscape. Will others join the native people enough to allow the buffalo to roam?

People concerned with ecology often banter about the benefit of bringing buffalo back to the landscape.[15] Observers utilizing anecdotal research often cite that when Europeans arrived they found a rich landscape managed by Native American stewards and rich in flora and fauna, e.g., the buffalo landscape of the plains contained a rich fertile sod that became the breadbasket of the world.[16] As part of the hegemonic process, agriculture and ranching replaced the buffalo. Hence, much of the debate about the ecology of the plains rests on whether or not cattle can graze and retain a healthy range like bison. Apparently, cattle sustainably can graze on the North American grasslands. However, they require intensive management.[17] Much of cattle's detrimental effect comes from its habituation around water sources, which requires mitigation to avoid "ecological costs."[18] As journalist William Stolzenburg stated in a 2000 article: "No longer is the blame for the beaten range to be pinned solely on the four-legged beast of burden. Rather, the solution ultimately lies with the two-legged keeper walking

behind it."[19] However, it is this comparative high maintenance of cattle on the North American range that has encouraged many individuals to acquiesce that bison better fit the range and perhaps the finances of range utilization as well.

Regarding the economics of bison, one rancher stated it quite clearly, "What it comes down to is this: bison are half the work and twice the money."[20] Thus, many ranchers have jumped from cattle into bison. By 1993, bison ranching became the top growth industry in Alberta.[21] In 1995, bison meat fetched twice as much on the market as beef.[22] That same year, the North American Bison Cooperative, not to be confused with the ITBC, opened markets in Europe and across the United States for USDA inspected bison meat. Thus, the following summer when North Dakota ranchers lost money on cattle sales, they doubled their money on bison returns.[23] Such statistics spurred the commercial bison industry. By 1998, 300,000 bison existed around the globe.[24] The number grew to more than 350,000 in less than two years and launched projections of one million buffalo by 2010.[25]

Nonetheless, in much of the western plains, the benefits of the bison industry could not save the dwindling economy of the area due to the mechanization of agriculture, low prices, overproduction, environmental degradation and the globalization of agricultural competition. Human populations in the western Dakotas, Nebraska, Kansas, Oklahoma, and Texas along with eastern Montana, Wyoming, Colorado, and New Mexico suffered and were characterized by what geographers Frank and Deborah Popper referred to as "land distress," which included a loss of ten percent of the population, less than four people per square mile, a median age in excess of 35 years, and a poverty rate higher than 20%.[26] In 1987, the Poppers published their data and added that

perhaps the western plains best would function as a federally sponsored buffalo commons where people could live in a sustainable environment.[27] People of the plains initially responded vehemently to the Popper's Buffalo Commons proposal.[28] However, over the years, the attitudes softened and by 1999, Frank Popper announced to the ITBC that "the Buffalo Commons is happening, more creatively and less federally." He was referring to the piecemeal buffalo commons effectively being patched together by reservations, government parks and grasslands, environmental organization landholdings, and bison-friendly real estate tycoons.[29] In 2000, Frank Popper went on to call the commons a "done deal" as the forces toward coalescence based on a bison landscape continued.[30]

A theme pervades some of the bison restoration literature that Easterners saved the bison with their efforts to establish parks and refuges for the buffalo. The famed work of characters such as William Hornaday, Teddy Roosevelt, and their colleagues in the American Bison Society indicate such.[31] Careful analysis of these restoration efforts though reveals that the Easterners' restoration concept did not embrace a widespread bison landscape, unlike that recently envisioned by the Poppers. Rather, these bison advocates sought a conservation accompaniment to their vision of a progressive landscape dominated by Euro-American industry and agribusiness from which individuals could take respite in a countryside that preserved remnants of the indigenous flora and fauna. Indeed, they relegated this sample of former America to the enterprises of sites for tourism and safari zones for recreational and trophy hunting.[32]

Further examination shows that these Eastern efforts ultimately capitalized on the work of Westerners such as the saviors of bison that propagated the

species from its nadir. As well, the Native Americans involved in this early restoration and since, always maintained a vision of a free-roaming bison landscape and they did all that they could to implement their vision on as wide a scale as possible. Thus, Westerners not only saved the bison, but kept alive the idea of providing the aegis for bison to roam as bison.

Parallels to these East versus West origins of restoration more than a century ago have occurred in the recent past. Thus, while the Poppers from New Jersey provided intellectual support for a buffalo commons, and Ted Turner from Georgia continued acquiring lands and buffalo for bison ranching, and the Nature Conservancy based in Virginia augmented the effort with the acquisition of land and bison in the West, Western Native Americans quietly began focused work to realize the buffalo commons envisioned by them for generations and shared by many mainstream Americans in contemporary society. For example, Lakota scholar Edward Valandra offered his quite focused data suggesting the possibilities of a bison commons in western South Dakota as a vanguard to a larger buffalo commons of the western plains. An expert on indigenous landscape restoration, Valandra claimed four criteria necessary for a buffalo commons: first, sufficient acreage on the order of at least 10,000 to 20,000 acres; second, land available outside reservation boundaries; third, an intact ecosystem, preferably a watershed; and fourth, an area traditionally habituated by bison. For Valandra, the nineteen counties of western South Dakota present the opportunity to synthesize the four criteria for a buffalo commons. Private entrepreneurs own sixty percent of the region with government agencies including the Bureau of Land Management and Department of Agriculture, proprietor of the national grasslands, along with a small amount of State control

dominating the other forty percent. Moreover, the average ranch size in the region stands at more than 3,000 acres, which would facilitate the consolidation of significant landholdings with minimal amounts of land transfer legalities owing to comparatively few sales given the quantity of land involved.[33]

Meanwhile, the western South Dakota counties possess a recent history of fairly severe land distress. Population decreased from 1970 to 2000 in fourteen of the nineteen counties. Thirteen of the nineteen counties contained fewer than four people per square mile by 2000. The average age of ranch owners exceeded fifty-two years old and the region lost 50,000 young people in the 1990s. Soil scientists contend that soil distress due to erosion plagues more than a third of the counties. Meantime, the poverty rate rose to nearly twenty percent by the end of the 1990s while one-fourth of the ranches made less than $10,000 income annually at the turn of the new millenium. For Valandra, this data indicated a "bison conducive" area ready for re-introduction.[34] Fellow Lakota scholar, Professor Joseph Dupris augmented Valandra's stance when Dr. Dupris, a direct descendant of Mary and Frederick Dupuis, explained the necessity of bison programs functioning as public service venues. He stated: "The tribe needs to make a commitment to the people at the same time as the buffalo."[35]

Another attempt to facilitate the bison commons came with the 1999 "Tribal Alternative" for the northern Great Plains management plan environmental impact statement process. Written by Jim Garrett, the tribal alternative possessed four salient points including elimination of the present grazing lease permit system, adoption of native species and a bison refuge system philosophy along with implementation of the refuge system, adoption of co-management

responsibilities between the U.S. Forest Service and tribal colleges, and the adoption of the grasslands as tribal college field research facilities and laboratories.[36] The plan noticeably contained elements not unlike those of successful programs in Canada where First Nations assist in policy-making and management of bison landscapes. Ultimately, the Department of Agriculture did not endorse the plan although it received consideration.

All the while reservations on the western plains began creating their own comparatively larger-scaled buffalo commons awaiting a possible future conjunction with other bison areas to form a greater grasslands bison commons. These reservations already met the majority of the criteria explained by Valandra even without extending the bison range off the reservation. For example, the Crow tribe built their herd in the 1990s to well over 1,000 animals on 22,000 acres.[37] To the north, the Assiniboine/Gros Ventres of Fort Belknap grew their herd of 400 plus animals on the same amount of acreage.[38] To the east, the Cheyenne River Lakota increased their tribe's herd to more than 2,000 animals grazing more than 30,000 acres with the idea of creating a tribal park.[39] Their fellow Lakota from the Rosebud Reservation committed their reservation to the same type of large-scale operation and offered to become part of a conglomerate bison commons with grasslands, parks, and private landholdings just as that envisioned by Valandra.[40]

Worthy of note, Native Americans have shown the resolve to bring back the bison unilaterally if necessary, but the likelihood of success in restoring the largest possible buffalo commons has hinged on collaboration between both native and non-native entities. Indeed, the efforts of these native Westerners could stand alone in recent time only as much as they could a century and a

quarter ago until federally-ordered land allotments ended any hope of a continuous relationship with relatively free ranging bison. The cooperation of other groups better ensures the restoration of the bison landscape. For example, Ted Turner owns 172,000 acres in western South Dakota, which indicates the possible area that mergers of bison territory could ensnare.[41] The Turner land managers possess a positive portfolio for working with Indians. Regarding his work in New Mexico with Turner's workers, Richard Archuleta of Taos commented in 1999: "The Turner people are great."[42] At the same time, a consortium of ranchers in the Great Plains Buffalo Association endorse the bringing back of buffalo as wildlife.[43] Of course, environmental organizations such as the National Wildlife Federation, Defenders of Wildlife, and the Nature Conservancy, with millions of members, all participate in ecological restoration involving bison as a keystone species.[44]

At the same time, scientists and Native Americans find themselves in agreement about land management.[45] Bison acting as bison and not being manipulated like cattle ultimately benefit the landscape. This marriage of indigenous culture and western science offers a powerful alternative to current land use practices in much of the former buffalo country, particularly in the western plains. The key lies in allowing the bison to live as bison would in a natural setting where they can roam with the rhythms provided by their habitat. Valerius Geist posits this notable element: "Conservation requires the preservation of environments that continually challenge the adaptations of the species conserved."[46] Otherwise, deterioration occurs. Other scientists, such as Mary Meagher and Jim Shaw, also warn of the deleterious effects of intensive management and restriction of movement that "eventually convert a wild species

into another form of livestock."[47] For their part, Native Americans offer the same view with slightly varied diction. Louis Larose explains: "One thing we know, Grandfather meant for bison to be wild. We must constantly remind ourselves that we must maintain its nature and do everything in our power to do that."[48] Carla Rae Brings Plenty adds:

> The buffalo are the real stewards of this land, the caretakers of all animals, plants and people. The buffalo have been and always will be, better for this land than any 'slow elk' (cattle) will ever be. Many Native people were killed trying to get this point across a hundred years ago.[49]

As noted in the first chapter, two debates linger as a virtual trial of Native Americans as stewards of the landscape. The first debate rages over the Pleistocene extinctions. Overkill advocates contend that North America's aboriginal inhabitants destroyed the vast majority of the megafauna by way of over-harvesting. Overchill advocates maintain that environmental change spelled the doom of the megafauna and that, at most, Paleo-Americans slightly accelerated a foregone conclusion that the megafauna could not survive the climatic changes associated with the onset of the Holocene epoch. The second debate considers the role of Native Americans in annihilating the bison population during the nineteenth century. Scholars and supporters advocating that Indians killed off the buffalo point to the high volume of the robe trade and pemmican industries, and that the robe trade focused on killing females thereby exponentially reducing the reproductive capability of the bison herds. The opposition to this over-harvesting maintains that millions of bison continued roaming the American West until the arrival of the American buffalo runners following the Civil War. These men destroyed the last of the buffalo herds.

However, the future should play host to a third argument over Native American land stewardship and bison conservation. What was the role of Native Americans in bringing back the bison? Suffice to say, they led the way in bison restoration. From the capture of the original herds to their growth in a free ranging environment, North America's native people sought to maintain the buffalo nation. Moreover, Indians worked to allow their animal brethren to fulfill their inherent tendencies and to share in the dynamics of the landscape. In part, as well, this acquiescence that Native Americans began saving the buffalo even before its demise ought to vindicate them from guilt thrown upon them by proponents of the second argument that Native Americans caused the destruction of the bison. After all, native people demonstrated through their actions that they always sought a home for the buffalo to roam, a landscape capable of again nurturing the prolific herds. Indians have demonstrated phenomenal cultural perseverance spanning more than 125 years to bring back the bison once again as part of a sacred symbiosis.

Endnotes

[1]Garrett, *Cheyenne River College Tatanka Management Program*, 39.

[2]Pickering, *Seeing the White Buffalo*, 1-14 and Louann W. Murray, "Miracle, the White Buffalo," *Persimmon Hill* 24:2 (summer 1996), 62-63.

Pickering's monograph details the story of white buffalo both historically and in the present. Regarding Miracle's birth, his book covers four perspectives: that of the owners, cultural views of aboriginal people, biological implications, and spiritual ramifications.

For a historiographic view of white buffalo, see Harold McCracken, "The Sacred White Buffalo," *Natural History* (September 1946), 304-309, 341.

[3]Diane Carroll (*Kansas City Star*), "American Indians Differ in How They See Birth of White Buffalo," *Lewiston Morning Tribune*, 18 September 1994, 9A and Pickering, *Seeing the White Buffalo*, 2, 131.

[4]Pickering, *Seeing the White Buffalo*, 92-93.

[5]Ibid., 51-72.

[6]Carroll, "American Indians Differ in How They See Birth of White Buffalo," 9A and Murray, "Miracle, the White Buffalo," 63.

[7]Pickering, *Seeing the White Buffalo*, 74-96.

[8]*Dances With Wolves*, Jim Wilson and Kevin Costner, prods., Kevin Costner, dir., 1990.

[9]For a work addressing the effect of culture on landscape restoration, see Annie Whittey, "Ways of Seeing: Restoration and the Perception of Landscape," *Restoration & Management Notes* 15:1 (summer 1997), 67-73.

[10]Geraldine Fabrikant (*New York Times*), "Turner's New Empire," *The Oregonian*, 29 November 1996, A44, A46 and Donovan Webster, "Welcome to Turner Country," *Audubon* (January-February 1999), 48-56.

[11]Webster, "Welcome to Turner Country," 52 and "A Site to See," *Nature Conservancy* (July/August 2000), 36.

In contrasting the land ownership by magnates such as Turner as opposed to the government, community, or ecological interest group, Valerius Geist poses the following question: "Would we and those that follow us not be better served by a wilderness in the center of the continent than let the land disappear into private duchies ruled over by the corporate and Hollywood nobility?" (Geist, *Buffalo Nation*, 135).

[12]Bob Scott, "The Big Open," *Restoration & Management Notes* 10:1 (summer 1992), 51-52.

[13]Jarid Manos, "Ready for a Buffalo Commons – Getting the Hard Work Done," *Necessity: The Magazine of Great Plains Restoration Council* 1 (summer 2001), 1.

[14]Luther Standing Bear, *Land of the Spotted Eagle* (Boston: Houghton Mifflin, 1933), 248.

[15]A fine example of such banter emerged from a series of articles and responses in *Conservation Biology*, see Thomas L. Fleischner, "Ecological Costs of Livestock Grazing in Western North America," *Conservation Biology* 8:3 (September 1994), 629-644; Thomas L. Fleischner, "Livestock Grazing: Replies to Brown and McDonald," *Conservation Biology* 10:4 (August 1996), 927-929; Joseph P. Dudley, "Paleontological and Cultural Perspectives on Livestock Grazing in Southwestern Rangelands: Response to Brown and McDonald," *Conservation Biology* 11:1 (February 1997), 267-269; James H. Brown and William McDonald, "Historical and Cultural Perspectives on Grazing: Reply to Dudley," *Conservation Biology* 11:1(February 1997), 270-272.

For arguments over whether to graze bison or cattle on a specific site for conservation purposes, see Michael Mansur (Knight Ridder), "Future of Tallgrass Prairie Debated," *Lewiston Morning Tribune*, 22 February 1999, n.p.

For a comparison on cattle and bison grazing, see Glenn E. Plumb and Jerrold L Dodd, "Foraging Ecology of Bison and Cattle on a Mixed Prairie: Implications for Natural Area Management," *Ecological Applications* 3:4 (1993), 631-643 and Van Waggoner, "Summer and Fall Browse Utilization by an Alaskan Bison Herd," *Journal of Wildlife Management* 50:2 (1986), 322-324.

For a general work on wildlife conservation and restoration, see Michael L. Morrison, "Wildlife Conservation and Restoration Ecology," *Restoration & Management Notes* 13:2 (Winter 1995), 203-208.

[16]See Garrett, *Cheyenne River College* <u>*Tatanka*</u> *Management Program*, 14-19, 24-26 and Sam McNaughton, "Grazing Lawns: Animals in Herds, Plant Form, and Co-evolution," *The American Naturalist* 6: 863-883.

[17]For a work on manipulating livestock to simulate native ungulate grazing regimes, see Allan Savory, *Holistic Resource Management* (Washington: Island Press, 1988).

[18] Fleischner, "Ecological Costs of Livestock Grazing in Western North America," 629.

[19]William Stolzenburg, "Good Cow, Bad Cow: A Two-Headed Question Over Cattle on the Range," *Nature Conservancy* (July/August 2000), 19.

[20]Callenbach, *Bring Back the Buffalo!*, 122.

[21]Doug Dunn, "Bison Ranching in Canada," *Western Horseman* (November 1993), 156.

[22]Robert LaFranco, "Bison Meisters," *Forbes* 27 March 1995, 64-65.

[23]Jim Robbins, "In the West, A Matter of the Spirit," *New York Times* (L), 21 January 1997, A21.

[24]Sam Albrecht (National Bison Association President), "Bison – Status and Future of Bison and Bison Industry," presentation at the Bison Conference 2000, 8 April 2000, University of Nebraska.

[25]AP, "Buffalo Market Volatile; 1 Million Head by 2010 Projected," *Wenatchee World* 29 October 2000, C9.

[26]Anne Mathews, *Where the Buffalo Roam: The Storm Over the Revolutionary Plan to Restore America's Great Plains* (New York: Grove Weidenfeld, Grove Press, Inc., 1992), 20-21.

For another alternative for the plains, see Callenbach, *Bring Back the Buffalo!* Callenbach proposes replacing cattle with bison and utilizing the wind of the plains for energy production thereby producing a two-fold sustainable economic base.

[27]Deborah Epstein Popper and Frank J. Popper, "The Great Plains: From Dust to Dust," *Planning* (December 1987), 572-577.

[28]See Mathews, *Where the Buffalo Roam* and Deborah Popper and Frank Popper, "The Bison Are Coming," *High Country News*, 2 February 1998, 15.

[29]Frank Popper, "The Buffalo Commons and Its Environmental Implications," presentation at the ITBC Second Annual Conference, 21 September 1999, Polson, Montana.

[30]Frank Popper, "Buffalo Commons," presentation at the Bison Conference 2000, 8 April 2000, University of Nebraska.

[31]Barsness, *Heads, Hides & Horns*, 168-172; Coder, *National Movement to Preserve the American Buffalo*, 118-170, 322-329; Dary, *Buffalo Book*, 236-240; Garretson, *American Bison*, 205-214; and Isenberg, *Destruction of the Bison*, 168-188.

[32]For analysis of Eastern interests in bison restoration, see Coder, *National Movement to Preserve the American Buffalo*, 322-329 and Isenberg, *Destruction of the Bison*, 168-188. For a counterpoint emphasizing the primary role played by Westerners, see Ken Zontek, "Hunt, Raise, Capture, Increase: The People Who Saved the Bison," *Great Plains Quarterly* 15 (spring 1995), 133-149.

In *Destruction of the Bison*, Andrew Isenberg writes, "Although preservationists probably save the bison the bison from extinction, they saved the species not as a functioning part of the plains environment, but as a functioning part of the American economy: a curiosity, tourist attraction, target for hunters, and domesticated beast" (191-192). His analysis well describes the Eastern interests in bison restoration and even the enterprises of Charles

Goodnight and Buffalo Jones; however, the Native Americans involved in saving the bison far more concerned themselves with maintaining a functional bison landscape with free roaming buffalo capable of self-sustenance. The facts surrounding the efforts of Sabine, Walking Coyote, Mary and Frederick Dupuis, Sarah and Scotty Philip, and James McKay indicate lack of consideration for bringing back the buffalo for tourism or the manipulation of a species associated with domestication.

[33]Edward Valandra, "Seeking Refuge: Establishing a Native American Bison Refuge within the Bison Range Boundary Area," presentation at the Bison Conference 2000, 8 April 2000, University of Nebraska.

[34]Ibid.

[35]Joseph Dupris, "Revitalizing the Buffalo Way of Life: Community Service and Tribal Citizenship," presentation at the Bison Conference 2000, 7 April 2000, University of Nebraska.

[36]John Stromnes, "Proposal Would Return Native Grasslands to Tribes," *The Missoulian*, 21 September 1999, B-1.

[37]Jodi Rave (Lee Newspapers), "Revival of a Heritage: Plains Indian Tribes Work Hard to Maintain Important Cultural Link," http://www.billingsgazette.com/region/980920_reg025.html, visited 25 March 2003 and *American Buffalo: Spirit of a Nation*.

[38]Rudner, *Chorus of Buffalo*, 96, 100, 106 and Azure interview, 19 August 1999.

[39]*Fate of the Plains* and DuBray, comments at the screening of *American Buffalo: Spirit of a Nation*, Bison Conference 2000, 8 April 2000.

[40]Bill Harlan (AP, 26 August 2001), " Rosebud Sioux Endorse Massive Effort to Bring Back Buffalo," reprinted in *Necessity: The Magazine of the Great Plains Restoration Council* 1:2 (winter-spring 2001-2002), 1.

[41]Ibid.

[42]Richard Archuleta (Taos), interview with the author, 18 January 1999, Taos, New Mexico.

[43]T.R. and Kay Hughes, "Buffalo Are Wild Animals – And Why They Need to Remain So," *The Great Plains Buffalo Association Newsletter* 4:1 (January-March 2000), 1-2. For the appeal of bison for a rancher concerned with conservation and switching from cattle to bison, see Dan O'Brien, *Buffalo for the Broken Heart: Restoring Life to a Black Hills Ranch* (New York: Random House, 2002).

[44]See the following websites for program overviews: http://www.nwf.org/buffalo/programHomepage.cfm?cpId=15&CFID=25203&CFTOKEN=83404864; http://www.defenders.org/wildlife/new/prairie/ferret.html; and http://nature.org/wherewework/northamerica/states/oklahoma/preserves/tallgrass.html.

[45]For a presentation of alternative science based on indigenous knowledge and described as "spiritual management," see Vine Deloria, Jr., "Prospects for Restoration on Tribal Lands," *Restoration and Management Notes* 10:1 (summer 1992), 48-50.

For the positive effects of land stewardship considering indigenous knowledge in grasslands and semi-deserts, see Paul A. Olson, ed., *The Struggle for the Land: Indigenous Insight and Industrial Empire in the Semi-Arid World* (Lincoln: University of Nebraska Press, 1990).

[46]Geist, *Buffalo Nation*, 133. For a description of the negative effects on wildlife caused by game ranching, see Valerius Geist, "Game Ranching: Threat to Wildlife Conservation in North America," *Wildlife Society Bulletin* 13 (1985), 594-598.

[47]Shaw and Meagher, "Bison," 462. See also pp. 458-459.

[48]Louis LaRose, "Yellowstone: The ITBC Alternative," presentation at the ITBC Second Annual Conference, 22 September 1999.

[49]Carla Rae Brings Plenty, "The 'Land of Plenty' Needs Bison," *Necessity: The Magazine of the Great Plains Restoration Council* 1:2 (winter-spring 2001-2002), 3.

Appendix A
Buffalo Country, Indian Country

"Buffalo Nation, we need you. We're depending on you. We're depending on you again. Today is a sacred day. So, Grandfather, hear my prayers."
--Rocke Afraid of Hawk (1995)[1]

Figure 1. Yellowstone bison bull in Hayden Valley, Yellowstone National Park (1999). This monarch of the range probably possesses the genetic heritage of bison saved by Native Americans and the free roaming link between past ages and the present. Buffalo Jones brought Pablo-Allard bison into the park in 1902, and their progeny spread across the park by the 1920s mingling with the wild herd.[2] Unbeknownst to this bull, he represents an icon. Photo by author.

Figure 2. Jim Garrett, Lakota, at the Second Annual ITBC Conference in Poison, Montana (1999). Garrett, a direct descendant of Frederick and Mary Ann Dupuis, carries on the work of bison restoration. Influential as a bison consultant for the Cheyenne River Lakota, the ITBC, and Tatanka Studies Annual Institutes, Garrett's landmark work consisted of his primary role in developing a model tribal college bison program.[3] Photo by author.

Figure 3. Rosalie Little Thunder (Lakota), Carl Tsosie (Picuris), and Louis LaRose (Winnebago) [seated left to right in front of the screen] at the Second Annual ITBC Conference in Polson, Montana (1999). These leaders of the bison restoration movement and their tribal affiliations represent the pan-Indian nature of the effort to bring back the buffalo. The ceremonial staff symbolizes the unification of the ITBC tribes.[4] Photo by author.

Figure 4. Richard Archuleta, Taos, with the Taos bison herd in northern New Mexico (1999). Active in the ITBC serving often as treasurer, Archuleta epitomizes the multi-talented bison stewards in the ITBC. The successful Taos program has provided seed stock for other Pueblo tribes and also collaborated with bison handlers affiliated with Ted Turner's sizeable bison restoration effort.[5] Photo by author.

Figure 5. Taos bison herd in the Taos bison pasture (1999). One of the older herds in the ITBC, this herd has proven very successful in providing surplus for distribution. This January photo reveals dry conditions that marked much of the West from 1998 through 2002. The drought conditions slowed the rate of increase for tribal herds as bison stewards sought to keep herds in alignment with carrying capacity.[6] Photo by author.

Figure 6. Floyd Fisher, Northern Cheyenne, in front of bison on the move near Lame Deer, Montana (1999). Like many bison stewards in Indian Country, Fisher gained his experience with cattle. Passionate about his tribe's herd, he quickly recognized that although bovid, bison lead a life quite distinct from cattle.[7] Photo by author.

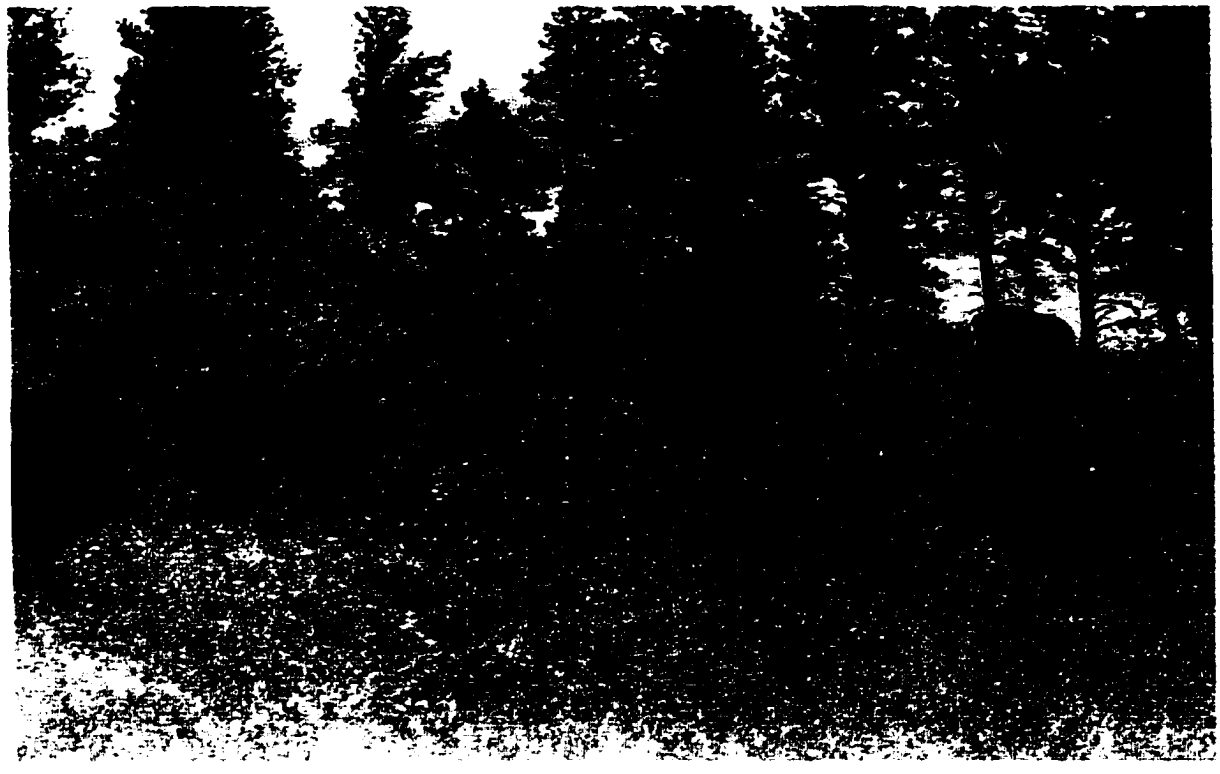

Figure 7. Northern Cheyenne herd near Lame Deer, Montana (1999). The Native American bison effort hinges on successful procreation. The presence of these calves signifies the prolific capabilities of bison if given a safe environment free from interference in which they can reproduce.[8] Photo by author.

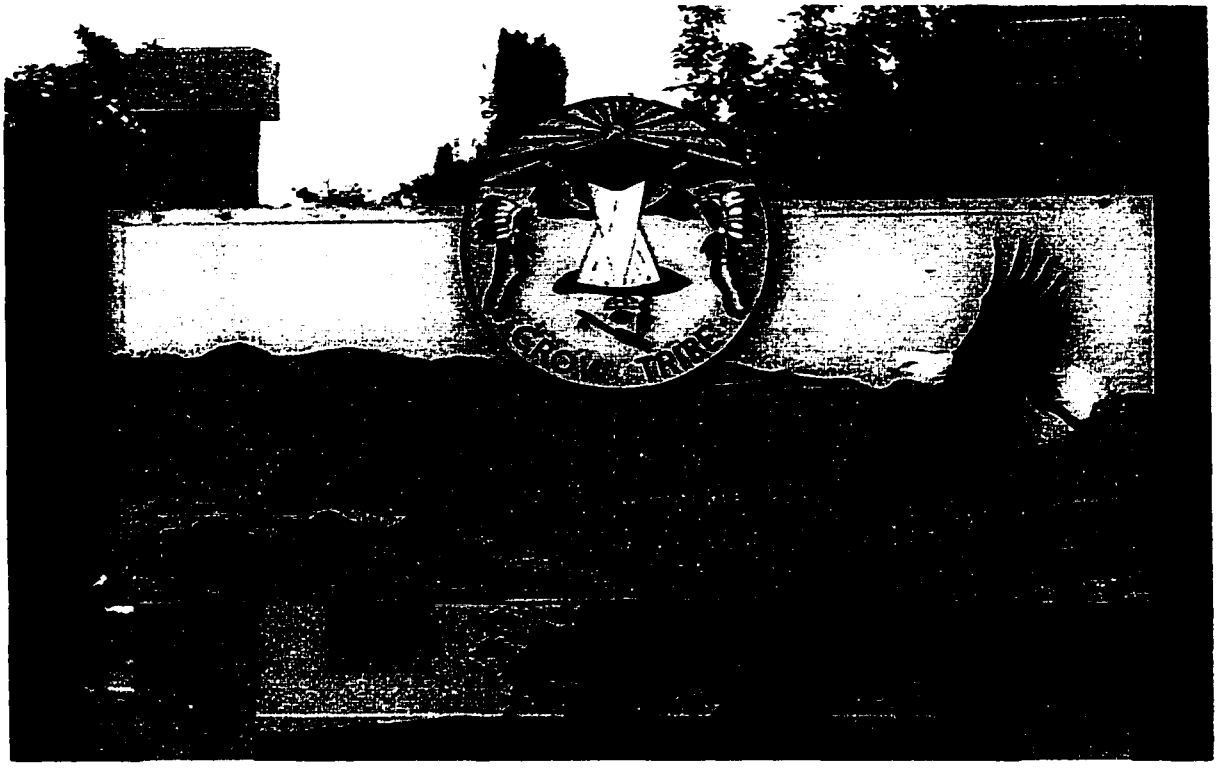

Figure 8. Crow tribal sign at the tribe's headquarters in Crow Agency, Montana (1999). Many tribes maintain signs depicting bison. In the case of the Crow, the sign somewhat belies the fact that the tribe maintains the second largest herd and one of the oldest in Indian Country.[9] Photo by author.

Figure 9. Wayne Azure, Assiniboine, in front of the Fort Belknap bison herd near Harlem, Montana (1999). Azure's description of the emotion and spirituality associated with harvests taken from the tribe's herd revealed the stark contrast between bison programs in Indian Country and the majority of cattle operations in North America.[10] Selective take of individual animals on the range with field dressing complete with prayer and ceremony lies far from feed lot-to-slaughterhouse livestock systems. Photo by author.

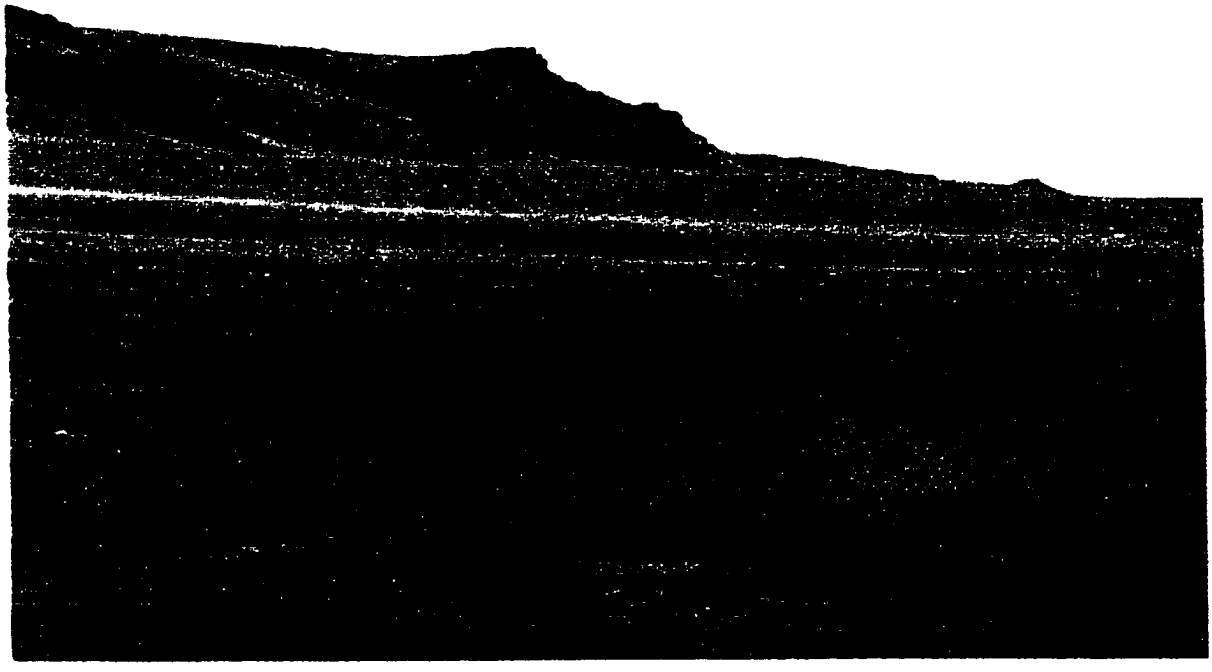

Figure 10. Fort Belknap bison herd grazing with Snake Butte in the background (1999). Fort Belknap runs a model bison program in accordance with ITBC standards. Tribal stewards manipulate the animals very seldom. The bison enjoy a large pasture with supplementation of feed a rare occurrence. The bison are allowed to be bison. Meanwhile, the healthy and protected condition of the bison range prompted federal officials and environmentalists to collaborate with the tribes in using the site to attempt to re-introduce the black-footed ferret.[11] Photo by author.

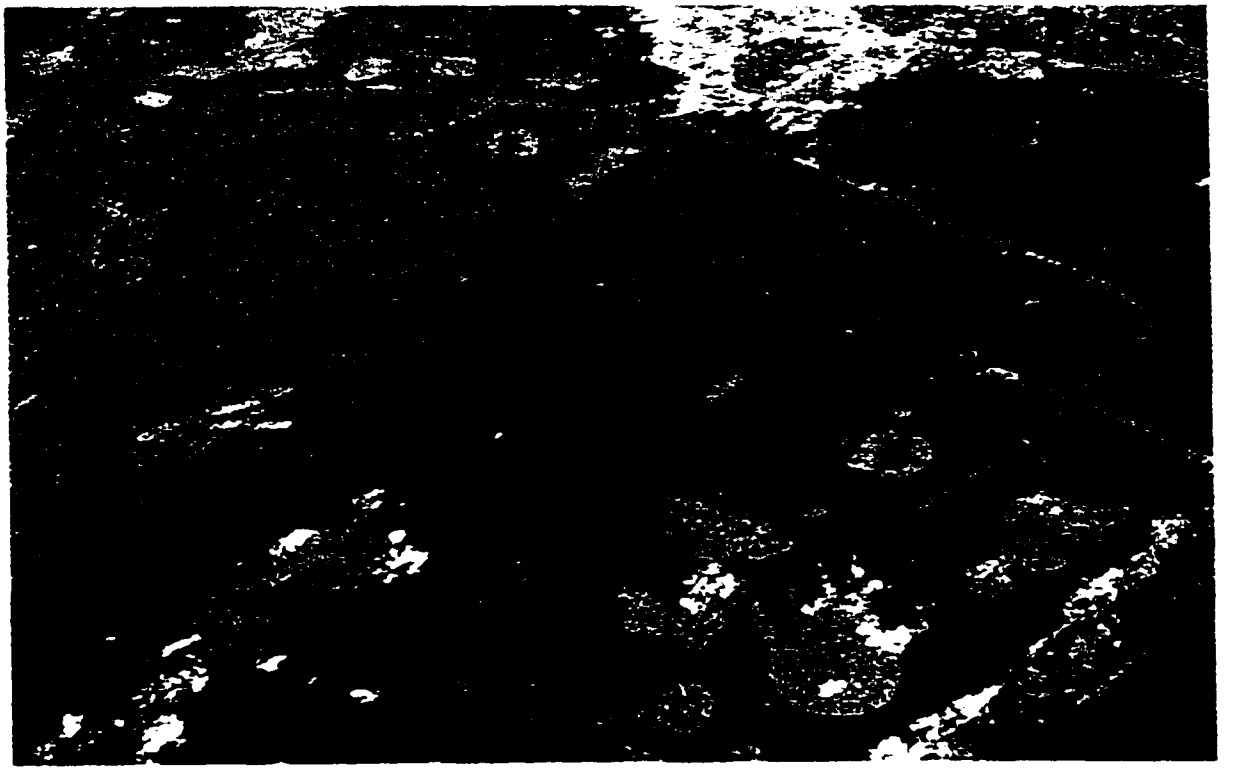

Figure 11. Petroglyphs on Snake Butte, Fort Belknap Reservation (1999). As the tribe's bison graze on the surrounding range, these centuries old petroglyphs of bison hoofprints, a handprint, and a directional line suggest ancient interaction between bison and humans. Perhaps, the drawing illustrates features of a bison drive to a buffalo jump.[12] Photo by author.

Figure 12. The bison range at Fort Belknap (1999). The large bison range of Fort Belknap offers a snapshot of the landscape envisioned by Native Americans concerned with bison restoration. Moreover, the potential to enlarge the range encouraged the tribal council and wildlife officials to offer a sanctuary for refugee bison from Yellowstone National Park.[13] Photo by author.

Figure 13. Yakama tribal herd near Toppenish, Washington (2003). As bison populations in the Northwest in recent prehistory and history were fairly spotty, Yakama-bison interaction never became as thorough as that of tribes inhabiting the plains.[14] Still, the tribal council and community share a common bond of pride in their bison recovery effort, originally started privately by a tribal member. Though the tribe does manipulate the bison minimally, the irrigated pasture offers limited room to roam.[15] Photo by author.

Figure 14. The arrival of ITBC bison from South Dakota to the Yakama tribe near Toppenish (2003).[16] Distributing and transporting bison remains a primary function of the ITBC. Most tribes seek to enhance the genetic diversity of their herds by bringing in bison from new sources.[17] Photo by Ross Courtney, *Yakima Herald-Republic*.

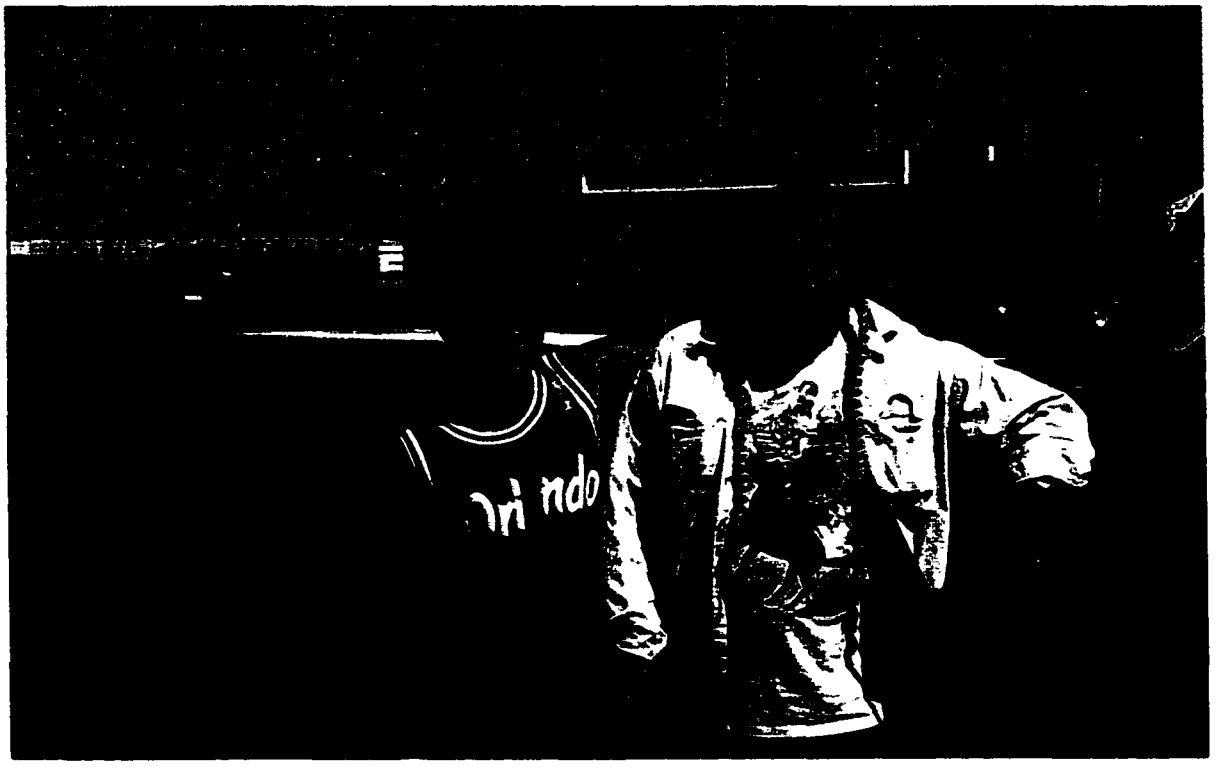

Figure 15. Son, Joseph Nathan Warrior Wagner, and father, Curly Bear Wagner, Blackfeet, in Browning, Montana (1999). The Wagners run a cultural tour business on the Blackfeet Reservation. Tours feature a buffalo jump site and views of the tribe's herd. Curly Bear Wagner prays daily that the return of the bison from Yellowstone may happen.[18] Photo by author.

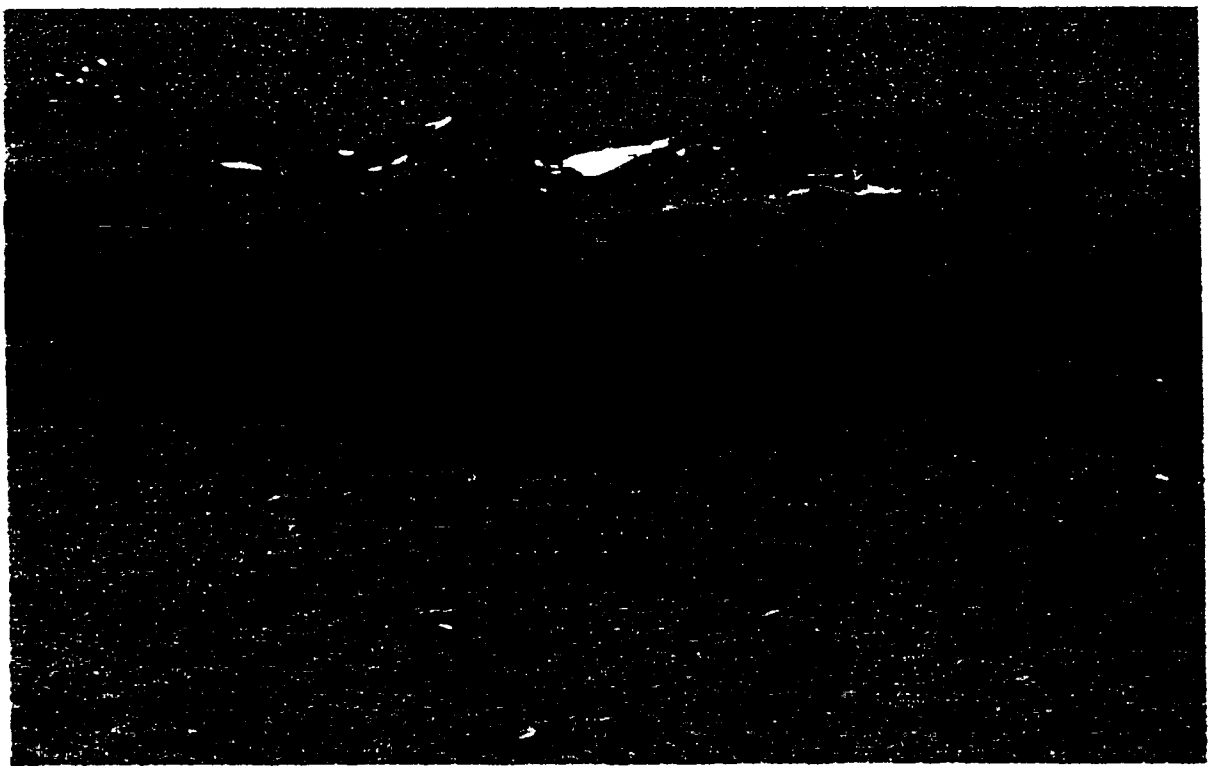

Figure 16. Blackfeet tribal herd near Browning, Montana (1999). These bison graze in pastures below the backbone of North America, the continental divide in Glacier National Park seen in the background. The railroad line behind the buffalo illustrates the landscape change wrought by Euro-Americans especially when juxtaposed to a native animal. Photo by author.

Figure 17. Private bison herd grazing on a ranch within the confines of the Salish-Kootenai Reservation near Hot Springs, Montana (1999). The vast majority of bison in Indian Country belong to tribes and not individuals. Still, bison ranches, either Anglo or Indian-owned, do appear on reservation landscapes such as this one in northwest Montana.[19] Photo by author.

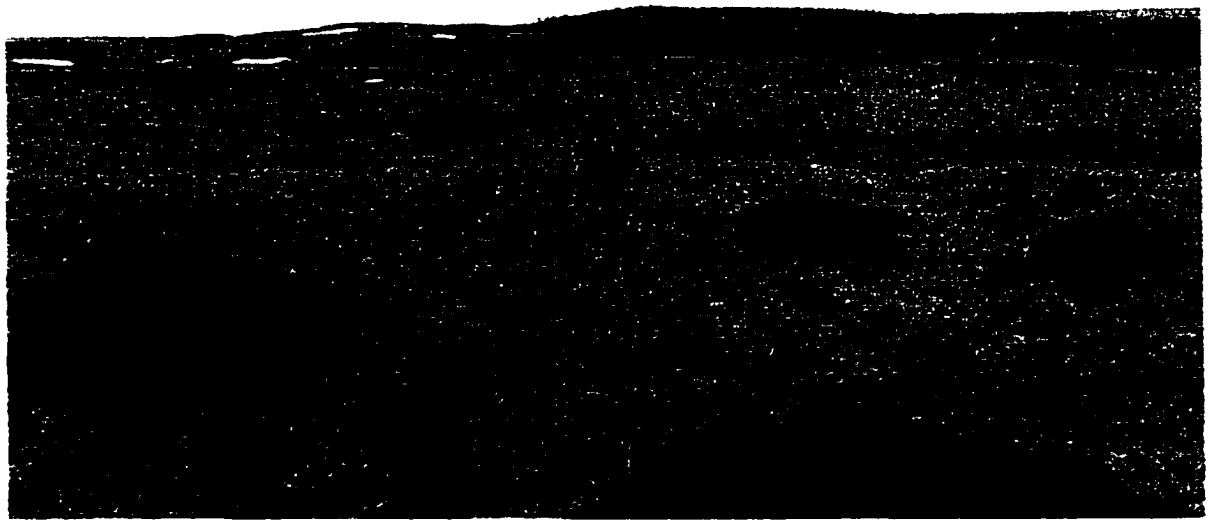

Figure 18. Yellowstone bison in Hayden Valley (1999). Summer grazing provides rich forage for these bison. However, winter conditions necessitate that they move in order to retain their social bonds given that forage opportunities diminish significantly with snow and ice. Their movement may take them out of the park where gunmen representing the Montana Department of Livestock often await them.[20] Photo by author.

Figure 19. Yellowstone bison moving through a lodgepole pine stand in Yellowstone National Park (1999). Views such as this one of bison in woods or in mountain valleys of Montana and Wyoming high country led many observers to believe that the Yellowstone bison were a distinct subspecies, wood or mountain bison. More recent scholarship indicates that Yellowstone bison are *Bison bison* without a subspecies distinction. This simplifies management policies unlike the concerns in Canada regarding wood bison species conservation.[21] Photo by author.

Figure 20. Rosalie Little Thunder comments at the ITBC Second Annual Conference (1999). Little Thunder became the Native American champion for free roaming bison in the late 1990s with her peaceful protests and prayers at Yellowstone National Park referring to the slaughter of the bison as "genocide."[22] Photo by author.

Figure 21. Gray wolf near the Lamar River in Yellowstone National Park (1999). Environmentalists hoped that the wolf might make some of the controversy surrounding the bison a moot point due to predation. However, with plenty of other prey available, the wolves indicated little desire to confront the bovid remnant of the mighty megafauna.[23] In fact, this collared wolf just finished eating the remains of a deer fawn before pausing and allowing a photo. Photo by author.

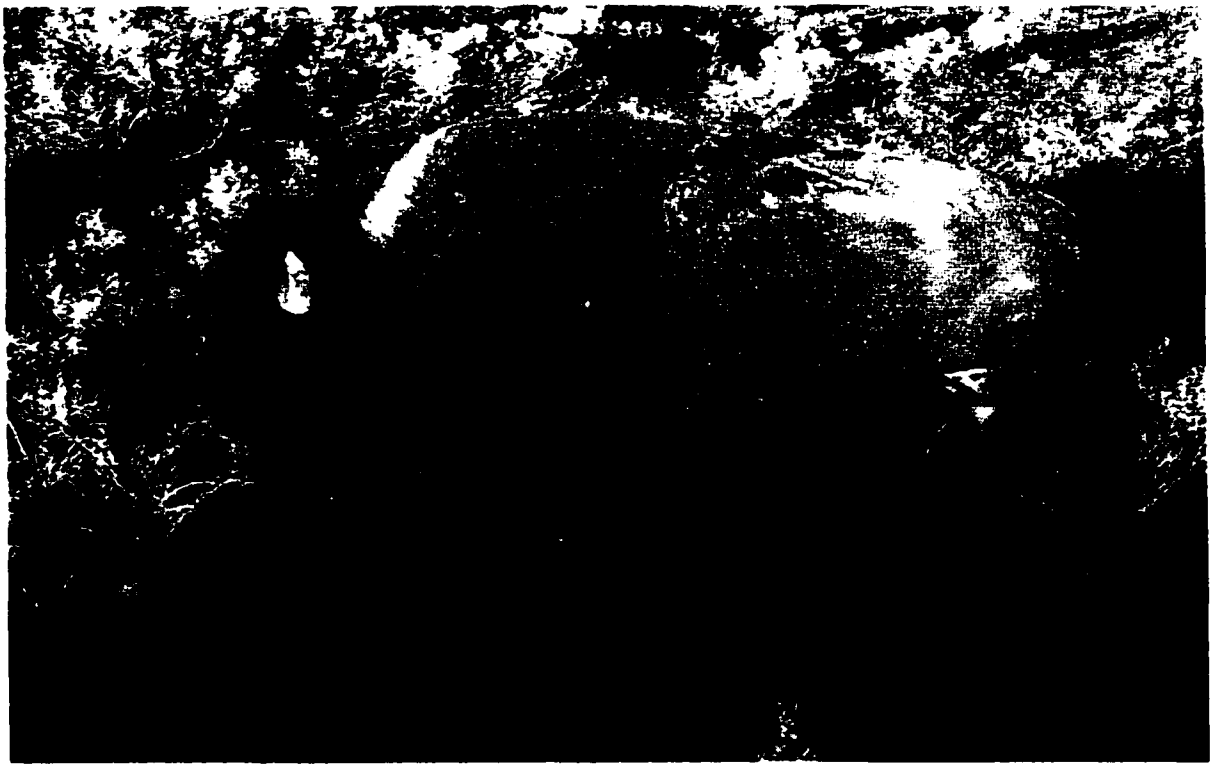

Figure 22. Yellowstone bison in Hayden Valley (1999). The novice observer might note the scar tissue on the rear flank of this bison and guess that perhaps a wolf pack failed in an attempt to bring down the buffalo. If that were true, then the pack continues finding a way successfully to bring down buffalo. Such knowledge requires information transfer only accomplished with sustained interaction among bison and wolves along with wolves teaching other wolves.[24] Photo by author.

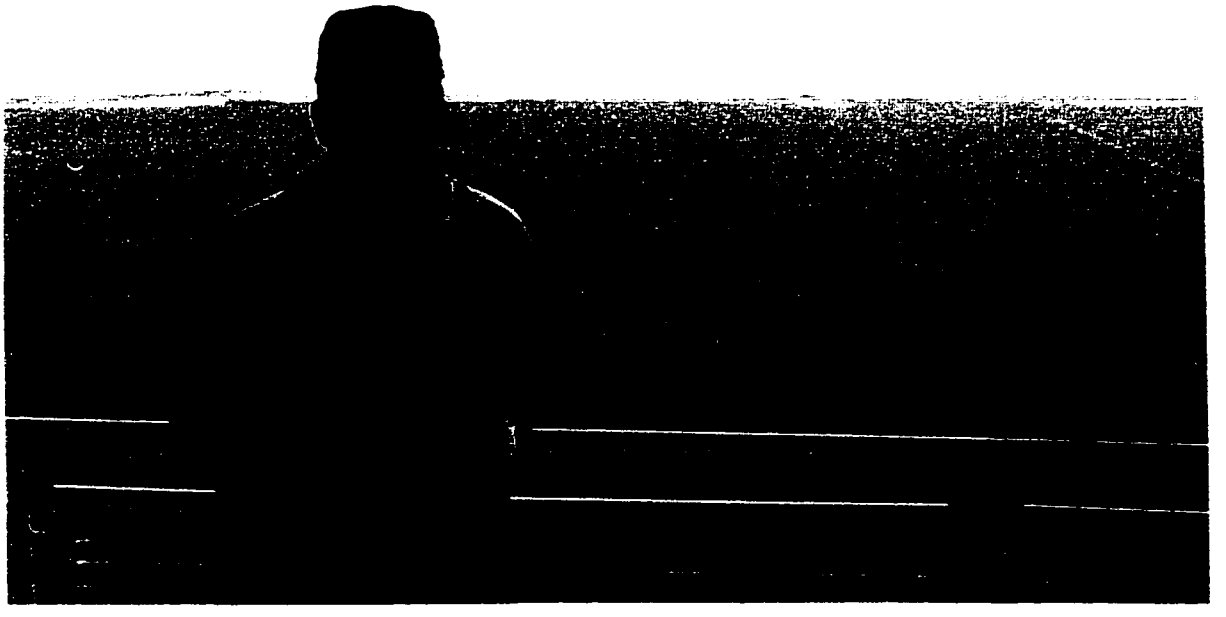

Figure 23. Leo Pard, Piikani, at Head-Smashed-In Buffalo Jump (1999). Cultural interpreter for Head-Smashed-In, Pard enjoys this vista from the top of the jump as a "window to the past." Some days, he can see the Blackfoot tribal herd on the CY Ranch down in the valley.[25] Photo by author.

Figure 24. Harley Frank, Blood, with "Buffy," one of his bison (1999) near Cardston, Alberta. Frank brought bison to his First Nation following a series of dreams about bison restoration. He put down the mother of this calf due to a broken hip and then performed a c-section. He says that Buffy "thinks I'm her mother." Buffy lives near Frank's house and refuses to go out to pasture with the rest of the herd.[26] Photo by author.

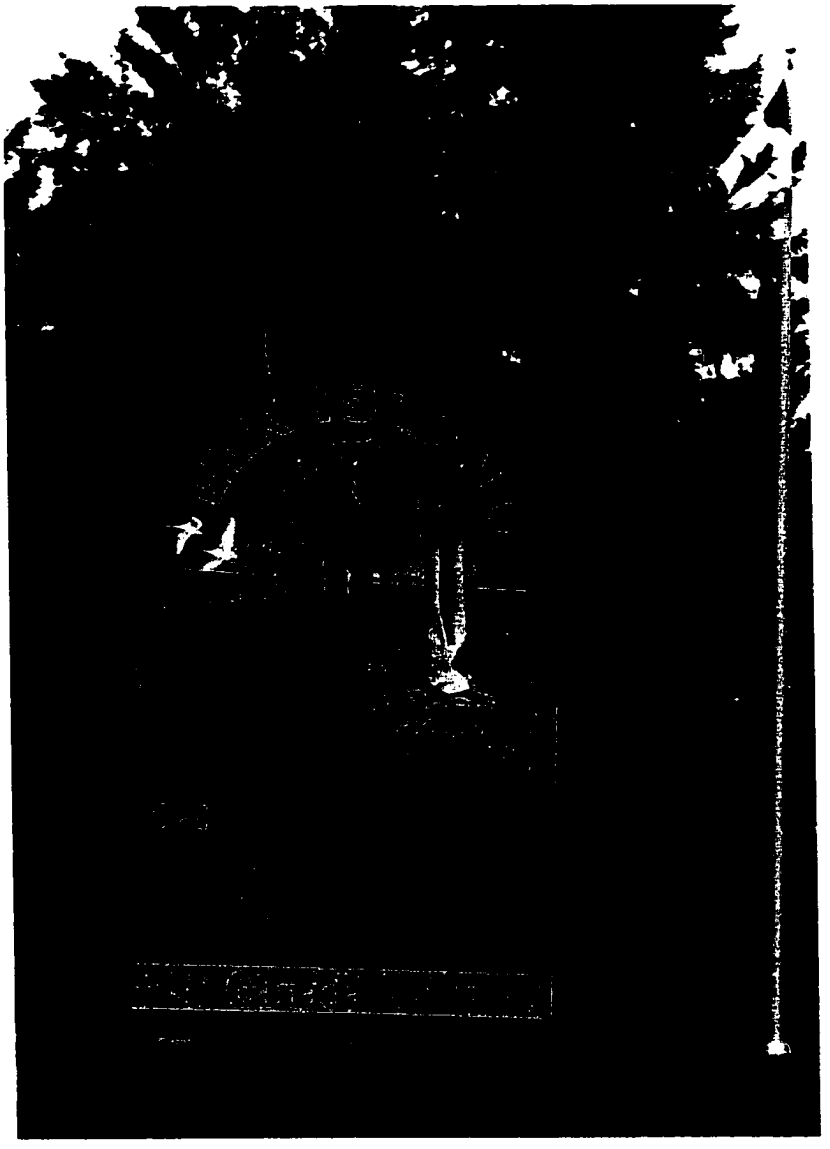

Figure 25. Parks Canada sign for Elk Island National Park, Alberta (1999). The bison in the foreground of the Elk Island park sign symbolizes the important mission of the park for bison restoration. The park has supplied numerous bison for restoration programs, including those of First Nations, around western Canada.[27] Photo by author.

Figure 26. "Plains Bison" in Elk Island National Park (1999). The Canadian government's controversial official policy through the 1990s advocated the subspeciation of bison into "Wood Bison" and "Plains Bison." Therefore, fences and a highway separate the two groups in the park.[28] These Plains Bison live north of Highway 16 in Alberta. Photo by author.

Figure 27. "Wood Bison" in Elk Island National Park (1999). Canadian officials transplanted bison from an isolated herd in the Nyarling River area of Wood Buffalo National Park in 1965 to maintain a seed stock "Wood Bison" herd for bison restoration projects often involving First Nations.[29] Photo by author.

Figure 28. Whitefish Lake First Nation bison stewards and part of the herd near Goodfish Lake, Alberta (1999). Darryl Steinhauer (at left) and Ron Delorme (Plains Cree), manage the bison operation largely as a business that easily pays for itself, which more so typifies Canadian aboriginal bison restoration programs as economic ventures before cultural traditions as opposed to those in the United States.[30] Photo by author.

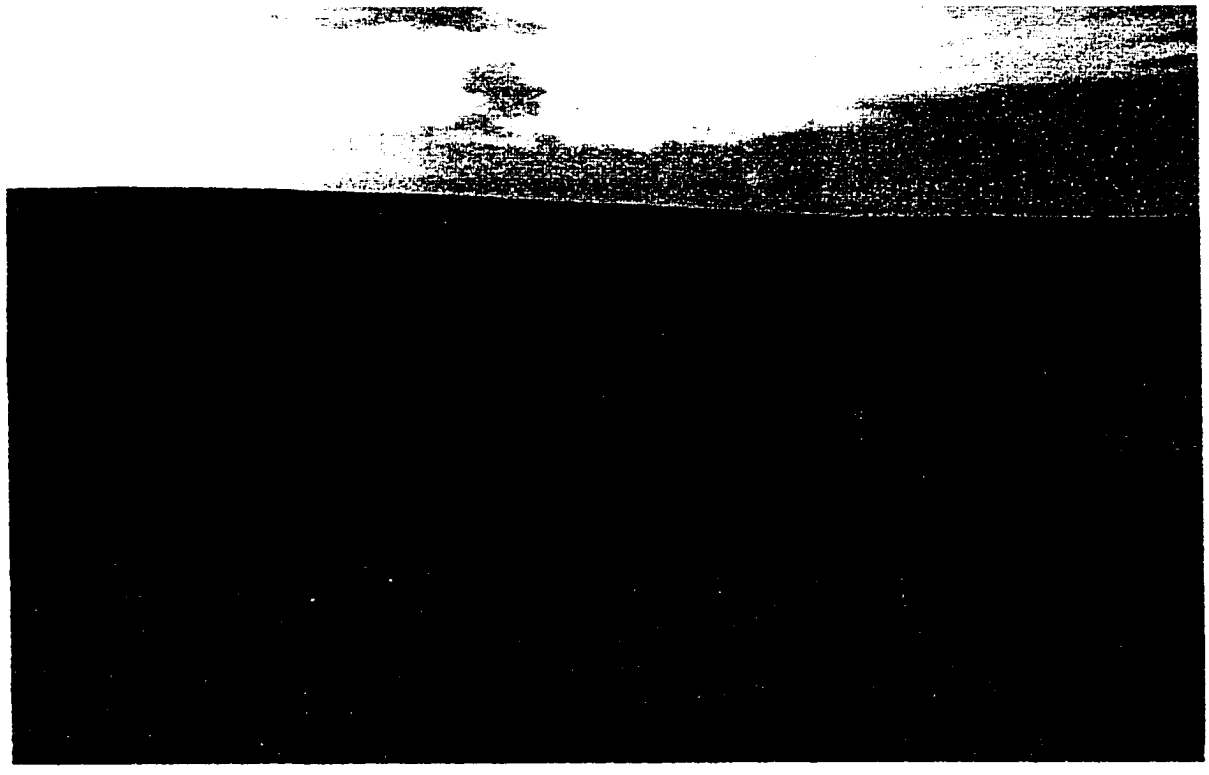

Figure 29. Whitefish Lake First Nation bison (1999). In 1999, these bison and about 300 others ran on four sections of cleared pasture adjacent to eight sections of "bush pasture." The First Nation plans continually to increase its pasture area to accommodate a larger herd.[31] Photo by author.

Figure 30. Kikino Métis Settlement sign in Kikino, Alberta (1999). Like signs on First Nation reserves or Native American reservations in the North American West, this Métis settlement sign signifies an association with the bison. Photo by author.

Figure 31. Métis bison wranglers, Kikino, Alberta (1999). Darrell Bellerose's (at left) father established the Kikino herd in 1978 with twenty-four bison from Elk Island National Park. The community agreed to establish a herd primarily for economic benefit and secondarily for cultural tradition.[32] Photo by author.

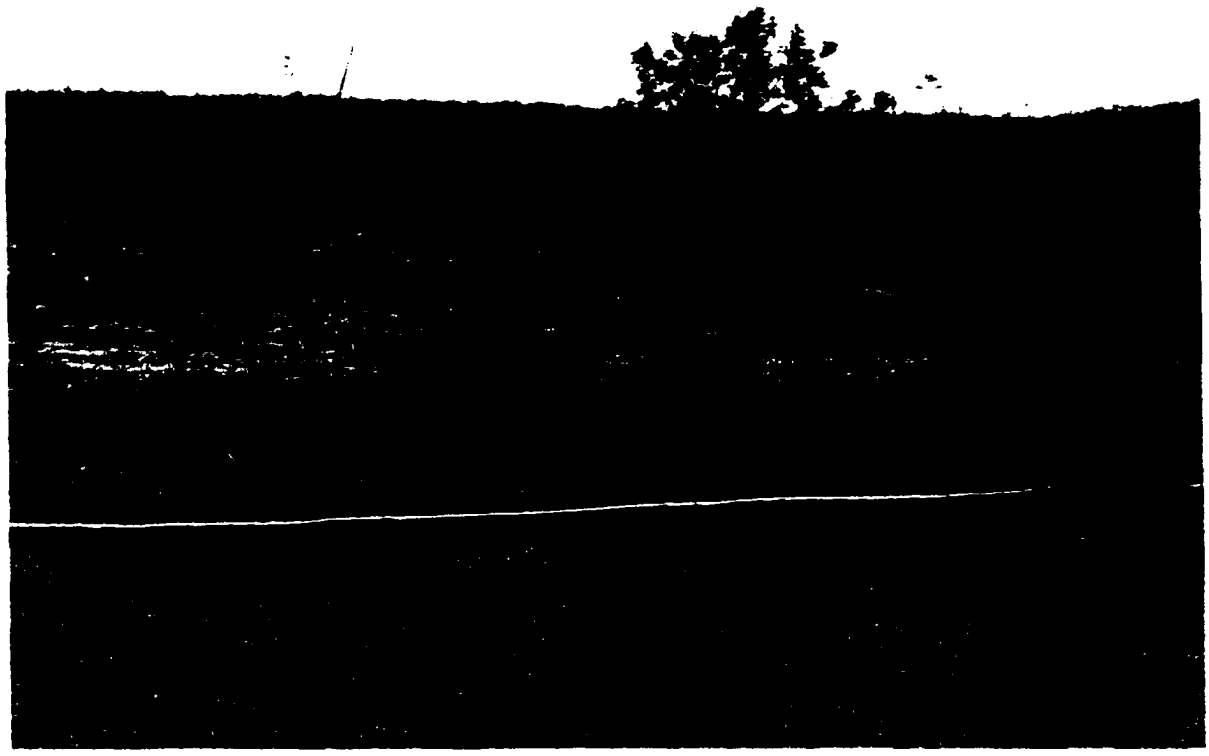

Figure 32. Kikino Métis Settlement bison herd (1999). These bison live in bush pasture and require supplemental feeding owing to the lower quality forage available. The settlement held trophy hunts in the past for culling and income but discontinued the hunts late in the 1990s in order to grow the herd.[33] Photo by author.

Figure 33. Métis bison handler Darrell Bellerose and a bison that developed an unexplained affinity for him (1999). Bellerose prides himself on working with the bison but notes that the ranch set-up is required since the demise of the "buffalo days."[34] Photo by author.

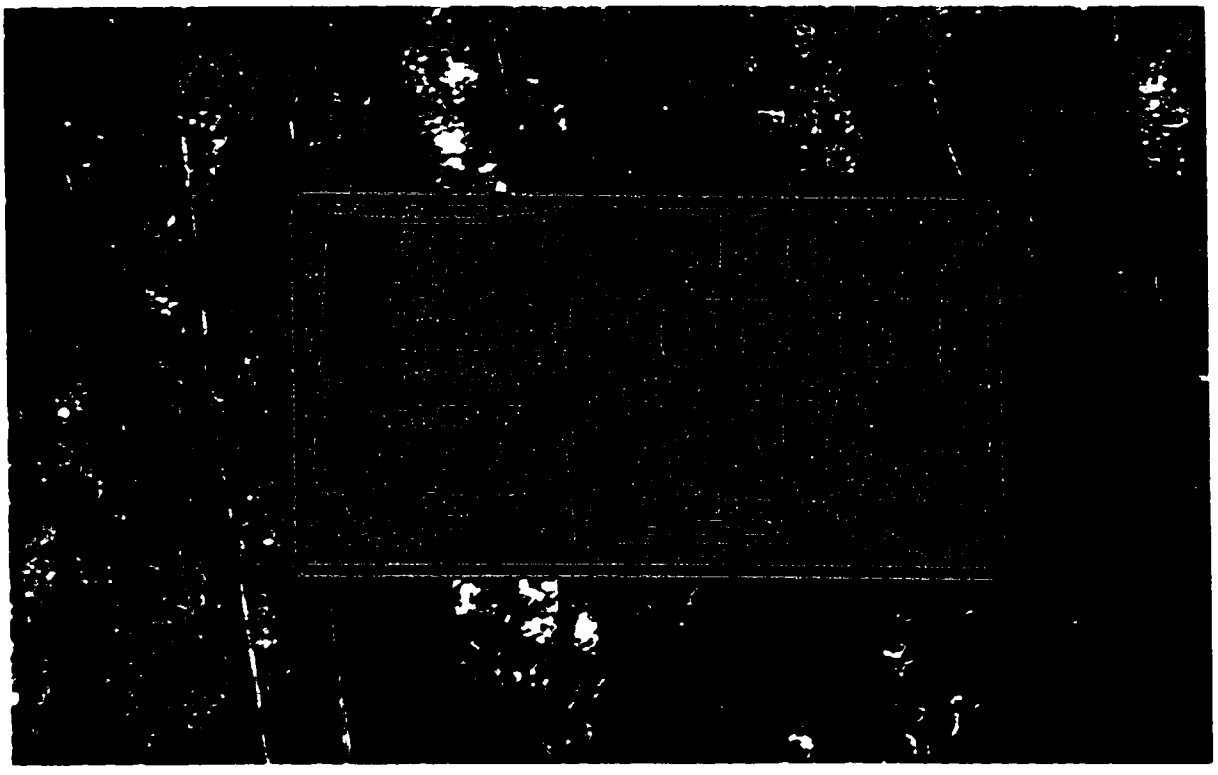

Figure 34. Alberta Bison Protection Area (1999). Alberta and the federal government of Canada cooperate in bison restoration and designate large areas for protection or exclusion owing to the nature of bison to roam. The free ranging bison population in this area remains relatively light and comes from the Dene Tha First Nation's bison project. Officials do not allow other bison to migrate into the area owing to disease concerns.[35] Photo by author.

Figure 35. Butchering a bison near Habay, Alberta (1999). Dene Tha First Nation members and officials from the Alberta Environmental Protection Natural Resources Service butcher a bison from the herd jointly managed by the two groups.[36] Kim Morton photo given to the author and reprinted with his permission.

Figure 36. Entrance to a bison management area in the Northwest Territories (1999). As part of the "Wood Buffalo" restoration project the Canadian federal government and First Nations carefully monitor bison movements in the Northwest Territories. The sign marks a bison control area that serves as a disease free zone between Wood Buffalo National Park and the Mackenzie bison herd. Wildlife officials will not allow bison movements between the herds in order to contain disease. Therefore, the "bison management area" indicates that bison are not allowed entrance.[37] Photo by author.

Figure 37. Exit from a bison management area in the Northwest Territories (1999). This sign indicates that motorists have returned to an area designated for bison to roam.[38] Photo by author.

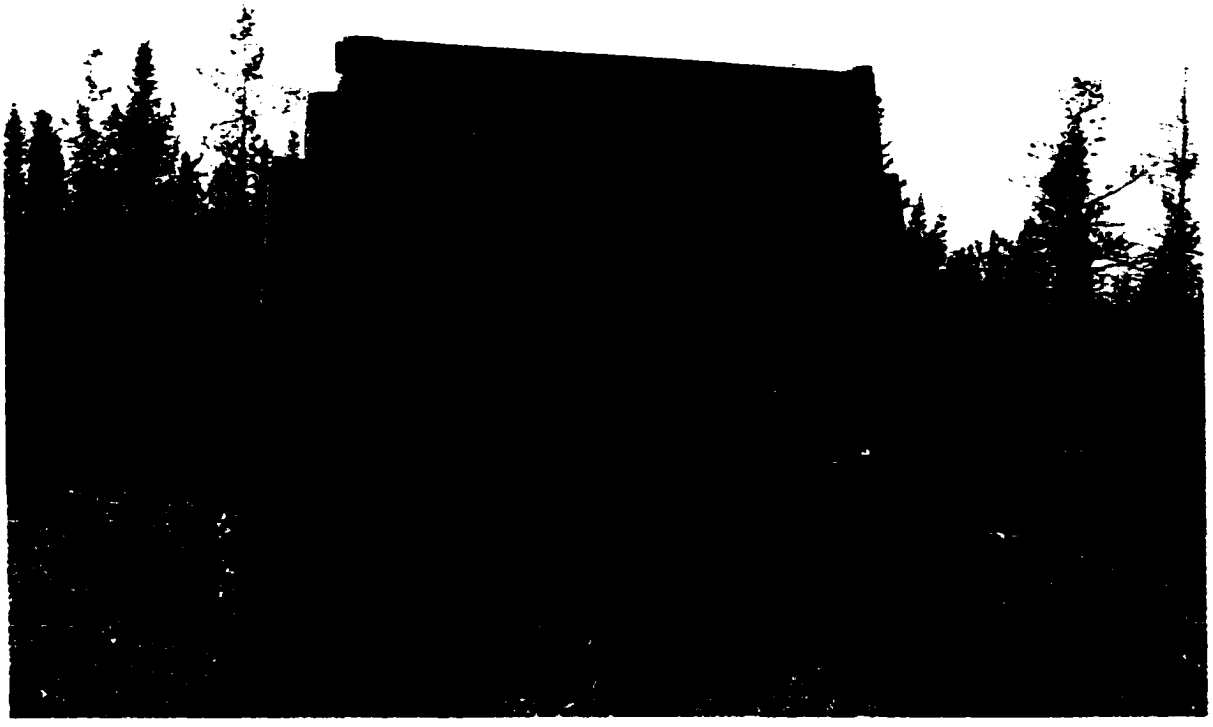

Figure 38. Wood Buffalo National Park sign (1999) at the park's north entrance. Wood Buffalo National Park (WBNP) showcases a free roaming bison herd complete with frequent wolf predation and native subsistence hunting when bison wander out of the park to the west. It preserves the northern boreal plains as one of the largest national parks in the world and the largest in North America.[39] Photo by author.

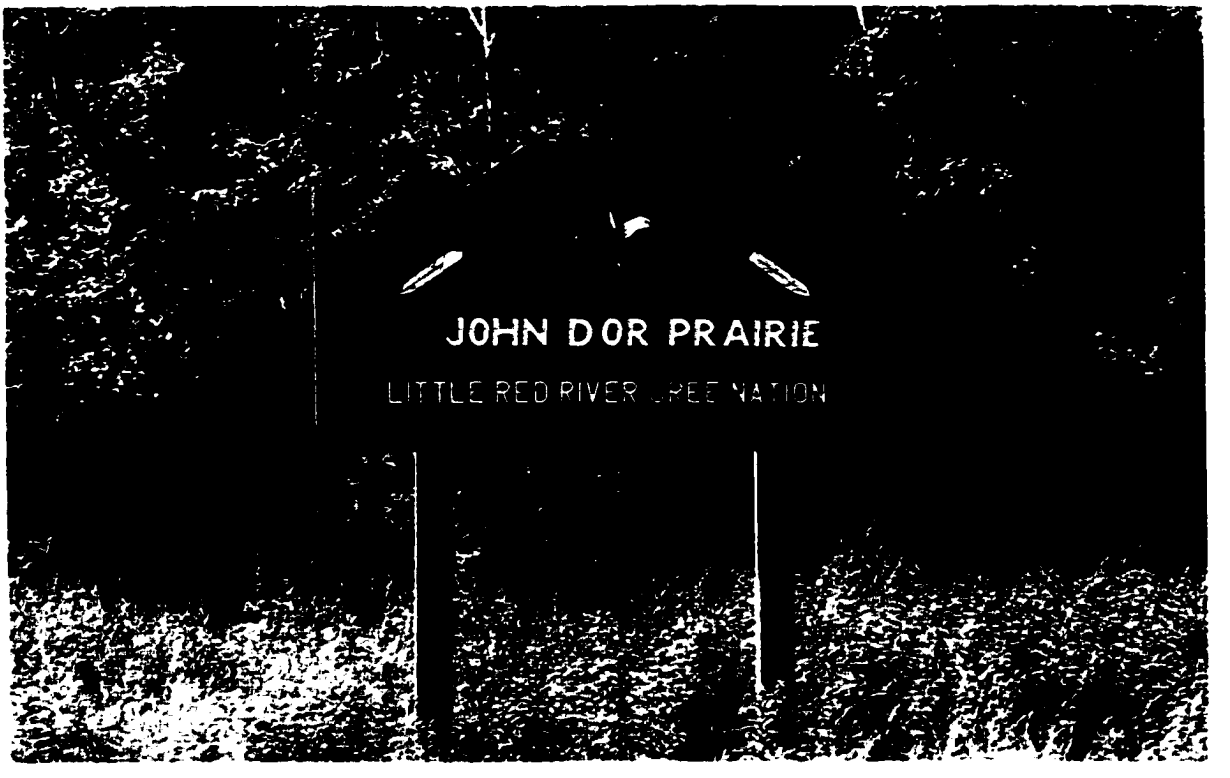

Figure 39. John D'or Prairie First Nation sign in John D'or Prairie, Alberta (1999). The Cree people of John D'or maintain one of the oldest continuous hunting relationships with bison in North America.[40] Thus, the bison figures prominently in the tribal sign. Photo by author.

Figure 40. Wentzel River, Alberta near John D'or Prairie (1999). The Wentzel River drains an important aboriginal resource area to the west of WBNP where Cree people still harvest nature's provisions.[41] Photo by author.

Figure 41. Canadian bush in northern Alberta west of WBNP (1999). Beyond these hills lie the Caribou Mountains often frequented by bison that roam from WBNP. Native Cree hunters have harvested bison in this area since time immemorial. Euro-Canadian hunters attempted to capitalize on the lack of provincial legal protection for these bison in 1998. Cree hunters confronted the trespassers in their aboriginal resource area and stalled the operation until all parties could negotiate later.[42] Photo by author.

Figure 42. Mackenzie Wood Bison Sanctuary sign near Fort Providence, Northwest Territories (1999). Bison roam freely in the Mackenzie Sanctuary unless they try to cross the Mackenzie River to the south into the Bison Control Area. Native people, by law, hold the majority of the seats on the herd's management board and also receive guaranteed harvest opportunities.[43] Photo by author.

Figure 43. "Wood Buffalo" bull, Mackenzie Wood Bison Sanctuary near Fort Providence (1999). Summer provides rich forage for this bull and his herd. However, the standing water and warm temperatures also bring a torment of insects as seen hazing this animal. Photo by author.

Figure 44. Bison and humans sharing a clearing in the Mackenzie Bison Sanctuary near Fort Providence (1999). (From left to right) Jason Shanahan, the author's nephew, Lester Antoine, tribal field hand, Greg Nyuli, chief of the Dene Got ie, and Darren Campbell of the Integrated Resource Management Program enjoy a bug free clearing as bison take advantage of the opportunity to dust themselves in the background. Antoine knows these bison well as he does much of the field observation required year round to monitor the herd.[44] Photo by author.

Figure 45. Harriet and Art Look near Fort Providence (1999). Art Look serves as advisor to the Mackenzie bison herd's management team. A speaker of Cree since he was a boy, he possesses extensive trapping experience in the north country and performs predator control for the herd when requested.[45] Photo by author.

Figure 46. Edjericon Buffalo Ranch of the Deninu Kué First Nation west of Fort Resolution, Northwest Territories. The Deninu Kué participate in a joint effort captive breeding program with the territorial and federal governments to revitalize the Hook Lake area's brucellosis and tuberculosis infested bison herd. The area is just south of the Great Slave Lake.[46] Photo by author.

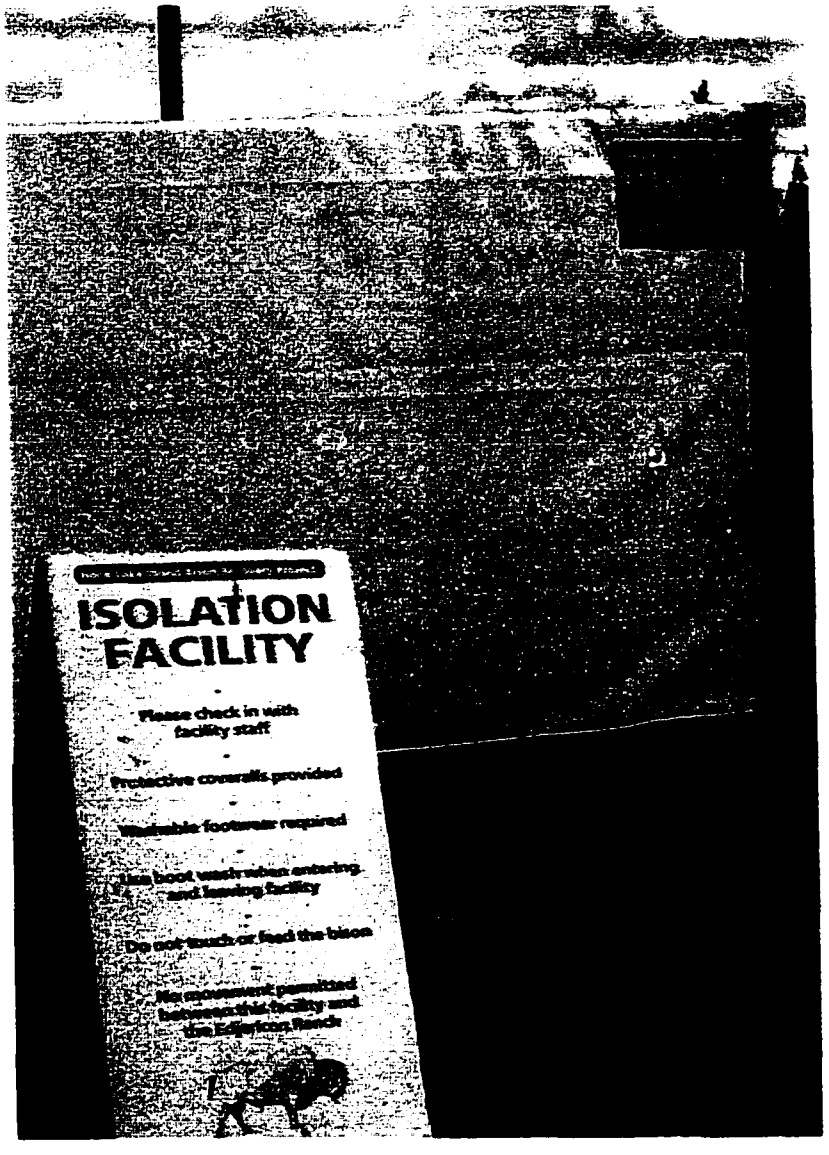

Figure 47. Hook Lake Recovery Project isolation facility, Fort Resolution (1999). The sign and vinyl paneling suggest the toxic nature associated with brucellosis and tuberculosis. Intensive management occurs in this facility as First Nations attempt to bring back the bison.[47] Photo by author.

Figure 48. Hook Lake Recovery Project oldest cohort paddock, Fort Resolution (1999). The Canadian philosophy of herd reintroduction consists of captive breeding and slaughter with plans to release the third generation disease-free into the open range. The Hook Lake facility contains three cohort areas. The two and three year olds occupy this paddock.[48] Photo by author.

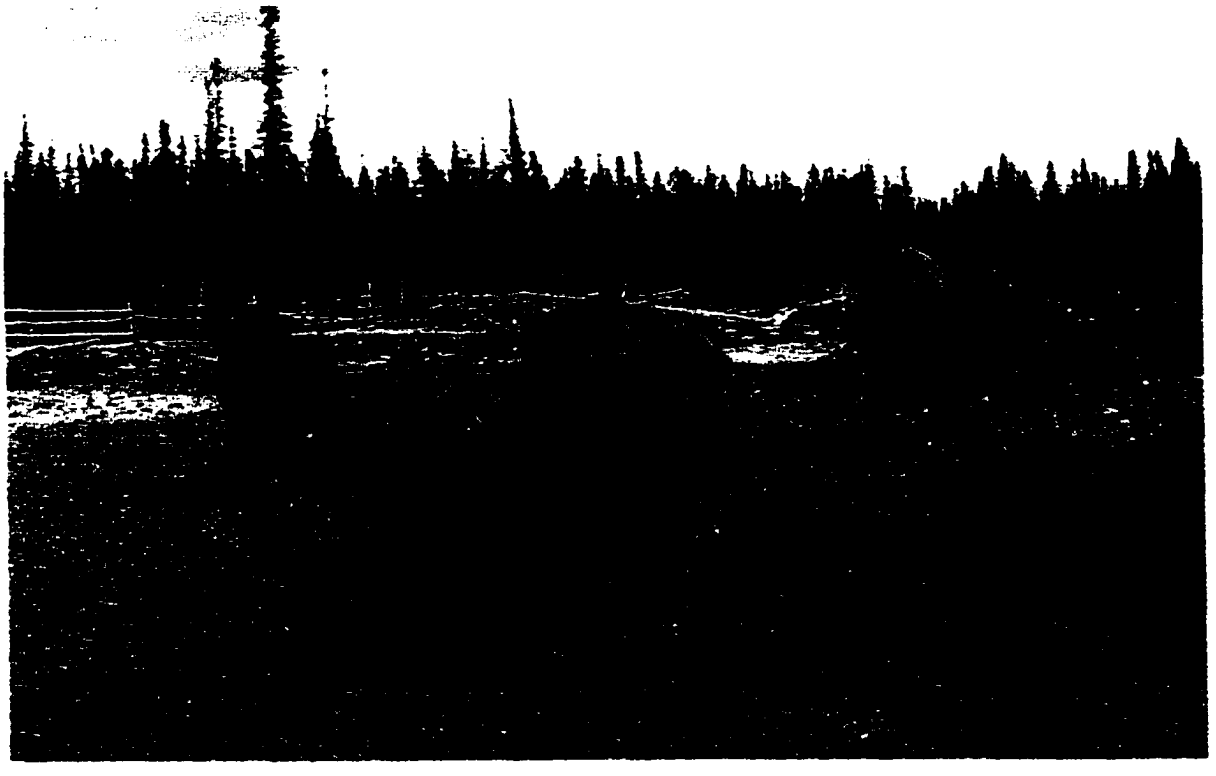

Figure 49. Hook Lake Recovery Project middle cohort paddock, Fort Resolution (1999). The yearlings reside in their own corral and do not mingle with the calves or older bison as the researchers isolate their generation to reproduce clean progeny.[49] Photo by author.

Figure 50. Hook Lake Recovery Project youngest cohort paddock, Fort Resolution (1999). This calf will become an open range animal if the herd managers can keep it disease-free. Thus, a healthy herd again should roam free in the Slave River lowlands.[50] Photo by author.

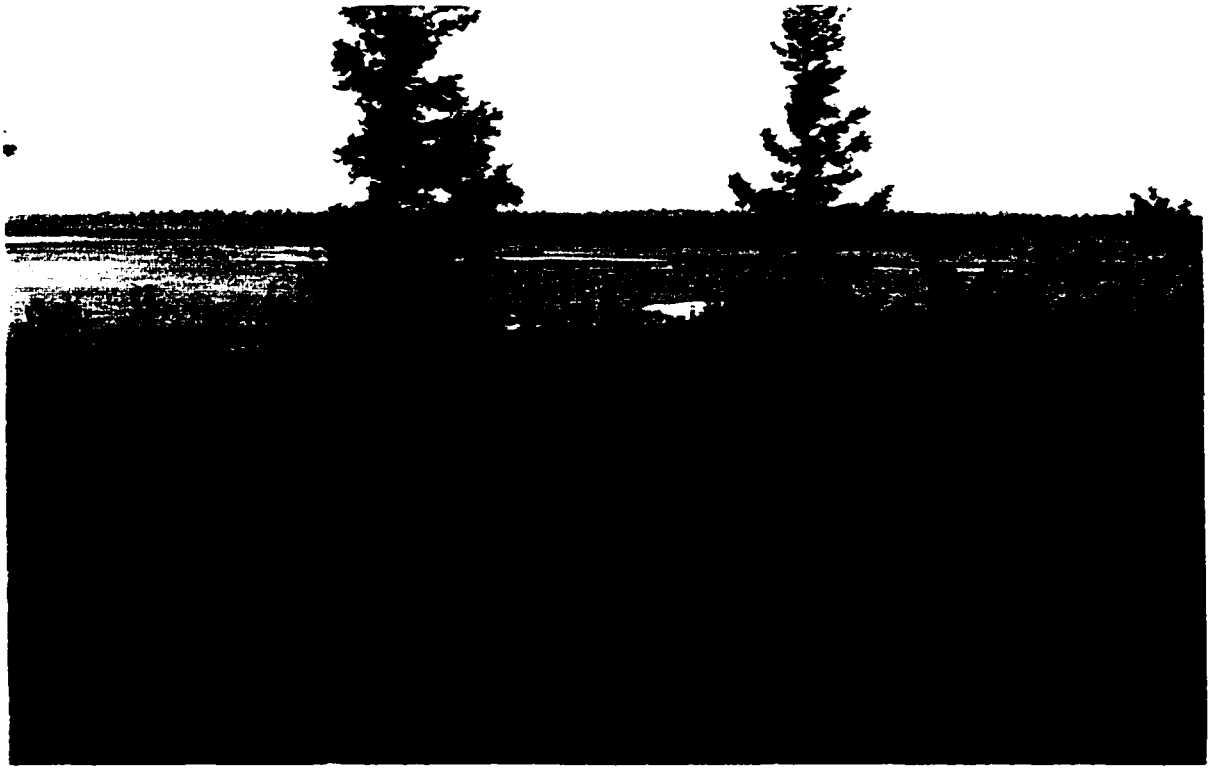

Figure 51. Slave River lowlands near Fort Resolution (1999). The Deninu Kué and Canadian government designed the Hook Lake Recovery Project to restore bison to these lowlands.[51] Photo by author.

Figure 52. Youngsters feeding bison at the Hook Lake Recovery Project, Fort Resolution (1999). "Paul" (facing the camera) represents the youth of native people. Bison restoration will fall to them as North America's indigenous inhabitants labor to bring back the cultural icon identified with their past, present, and future. Photo by author.

Figure 53. Bison bull in Elk Island National Park (1999). The photographer framed this shot to exclude the fence in the foreground. Perhaps in the future, owing to the efforts of native people in both the United States and Canada, it will become increasingly easier to photograph a landscape with bison roaming unfettered by fences. Photo by author.

Endnotes

[1]Rocke Afraid of Hawk, Lakota spiritual leader in *Return of the Native*.

[2]Meagher, *Bison of Yellowstone National Park*, 26-28.

[3]See Garrett, *Cheyenne River Tribal College Tatanka Management Program*, passim.

[4]For an explanation of the ceremonial staff, see *Return of the Native*.

[5]Archuleta interview, 18 January 1999.

[6]Ibid., and Follis interview, 21 January 2003.

[7]Fisher interview, 29 June 1999.

[8]Ibid.

[9]For details on the Crow herd, see *American Buffalo: Spirit of a Nation*.

[10]Azure interview, 19 August 1999.

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[14]Kingston, "Buffalo in the Pacific Northwest," 163-172.

[15]Hames interview, 14 January 2003.

[16]Mark Morey and Ross Courtney, "A New Home to Roam," *Yakima Herald Republic*, 16 January 2003, 1B.

[17]See Appendix B.

[18]Wagner interviews, 9 August 1999 and 4 March 2003.

[19]The interviews conducted to compile Appendix B revealed that some bison stewards knew of private operations on reservations, but that the numbers of animals typically remained low.

[20]Meagher interview, 26 June 1999, and Seelye, "Bison Rebound in Yellowstone," A6.

[21]Meagher, *Bison of Yellowstone National Park,* 14-17 and Meagher interview, 26 June 1999.

[22]Little Thunder, comments at the ITBC Second Annual Conference, 21 September 1999.

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[26]Harley Frank, (Blood), interview with the author, 9 August 1999, Cardston, Alberta.

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[28]"Plains or Wood Bison," 13.

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[30]Darryl Steinhauer and Ron Delorme (Plains Cree), interview with the author, 18 August 1999, Whitefish Lake, Alberta.

[31]Ibid.

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[33]Delorme, interview with the author, 18 August 1999. Delorme lived in Kikino before beginning his work with the Whitefish Lake First Nation.

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[36]Ibid.

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[47]Janna Van Kessel, interview with the author, 14 August 1999, Fort Resolution, Northwest Territories. Van Kessel worked as a graduate research assistant on the Hook Lake Recovery Project.

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Appendix B
ITBC Bison Program Survey Results

- 35 tribes surveyed, 1999-2003
- All categories reported by tribe, e.g., 1 ITBC member tribe established its current herd in the 1930s

Herd Origins

	Established Current Herd [28 resp.]	Joined ITBC [25 resp.]
1930s	1	
1960s	2	
1970s	3	
1980s	3	
1990	1	
1991	1	
1992	1	14
1993	3	3
1994	5	3
1995	4	1
1996		1
1997	1	1
1998		2
1999		
2000	2	
2001		
2002	1	

Bison Sources

- Many tribes report more than one source for original herd or additions.

	Original Herd [26 resp.]	Herd Additions [23 resp.]
Private	6	7
State Govt.	2	4
Natl. Pks. [unidentified]	1	4
Badlands N.P.	3	4
Ft Niobrara Ntl. Wld. Ref.	1	3
Natl. Bison Range		1
T. Roosevelt N.P.	5	1
Wichita Mtns. Natl. W. Ref.	4	5
Wind Cave N.P.	7	6
Tribes [unidentified]	1	2
Assiniboine/Gros Ventres	3	1
Crow	2	1
Kalispel	1	
Taos	2	2

Program Rationale

Reasons for Establishment [30 resp.]

	Primary	Secondary
Spiritual/Cultural	22	2
Health & Diet	8	3
Financial		2
Ecological		1
Novelty		1

Reasons for Continued Stewardship [30 resp.]

	Primary	Secondary
Spiritual/Cultural	22	2
Health & Diet	7	5
Financial		8
Ecological	1	4
Novelty		

Stewardship Style [28 responses]

Hands-Off	27
Manipulative	1

Feed [27 responses]

Range Only	6
Range/Limited Supplement	12
Irrigated Pasture/Lim. Supp.	5
Limited Range/Heavy Supp.	3
Pens/Full Supplement	1

New Stock Selection [21 responses]

Enhance Gene Pool	17
Appearance	3
Meat Production	1

Financially Self-Supporting Program [10 responses]

Yes	5
No	5

Harvesting and Culling [26 responses]

Community Distribution of Products	22
Harvest for Ceremonies	16
Live Donation	5
Live Sale	10
Products Sale	7

Ceremony/Prayer Accompanies All Harvest [21 responses]

Yes	16
No	5

Support Level Perceived

From Tribal Government [28 responses]

Very High	13
High	6
Medium	8
Low	1
Very Low	

From Tribal Community [28 responses]

Very High	9
High	14
Medium	5
Low	
Very Low	

Perceived Future of the Bison Program [25 responses]

Very Optimistic	10
Optimistic	14
Cautious	1
Pessimistic/Very Pess.	

Bison Numbers [35 responses]

0	6	201-350	3
1-10	2	351-500	3
11-25	4	501-1000	
26-50	2	1,001-2,000	
51-100	10	2,001+	1
101-200	4		

Acres of Pasture [25 responses]

0-99	2	1,000-4,999	6
100-199	1	5,000-9,999	2
200-299	1	10,000-19,999	1
300-399	3	20,000-29,999	
400-499	5	30,000+	2
500-999	2		

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