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BISON ECOLOGY, BRULÉ AND YANKTON WINTER HUNTING, AND THE STARVING WINTER OF 1832-33

RICHMOND CLOW

On 6 February 1833, William Laidlow, the American Fur Company's leading official at Fort Pierre wrote that Brulé (*Sicangu*) and Yankton (*Iha"kto"wa*) camps "have been in a state of starvation all winter, and have suffered most dreadfully."¹ The entire winter of 1832-33 was a "starving time" on the middle Missouri River in present day south-central South Dakota because these skilled tribal hunters found no bison in a land where the herds were frequently described as "immense."² Why knowledgeable and efficient professional tribal

hunters, as well as post employees, were hungry that winter, in this apparent land of abundance, presents an important environmental historical question.

This hard winter represents a fluctuation of the region's bison winter residence rather than the disappearance of the bison. Our knowledge that overhunting brought an end to the bison half a century later has invited us to read this conclusion back into earlier contemporary accounts, leading us to believe that tribal overhunting was a reason for tribal starvation.³ George Catlin formulated an overhunting interpretation in 1832 after Fort Pierre traders described to him a communal Lakota bison hunt that spring. Based on this information, Catlin wrote that "an immense herd of buffaloes had showed themselves on the opposite [east] side of the river, almost blackening the plains for a great distance" and tribal hunters, after "spending a few hours amongst them" returned to the post "with *fourteen hundred fresh buffalo tongues*." Catlin claimed that this unusual hunt "fully supports me in the seemingly extravagant predictions that I have made as to their extinction, which I am certain is near at hand."⁴ Though Catlin was aghast at

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this event, the sale of 1400 bison tongues did not even warrant an entry in the Fort Pierre daily journal because tongues were an important bison trade item.⁵ Also, traders whose livelihood came from bison kills did not exhibit the same emotional outpouring as Catlin who never worked in the bison trade and believed that slaughtering buffalo for their tongues was irrational.⁶

Edwin Thompson Denig, a long-term American Fur Company employee, arrived at Fort Pierre in 1833 and subscribed to Catlin's tribal overhunting thesis, though, like Catlin, he neither witnessed the 1832 spring hunt nor made any follow-up observations. Writing years later, Denig wrote that the 1832 hunt "was the greatest number killed at one time" and intimated that after that day the bison "have gradually retired from the eastern territory, moving west and northwest and compelling the Indians . . . to follow."⁷ Denig and Catlin both suggest that tribal overhunting reduced bison numbers, bringing starving times to the tribal populations living near Fort Pierre the following February, 1833.

Historical assertions change by examining evidence from different perspectives and often revise previously comfortable judgments. One way to test Catlin's assumption is to create an environmental history that integrates the hunters' actions, the bison's behavior and demography, and environmental conditions into a dynamic, interconnected story. Seeing these tribal hunts of the early nineteenth century in this holistic light raises the possibility that something considerably more complex was occurring than Catlin's simple tale of destructive overhunting leading to the subsequent starvation of hunters and the ultimate extinction of the bison.⁸

According to the post journal, from January 1832 until the middle of August 1832, bison, ranging from the isolated bulls to "plenty of bison," were found in the vicinity of Fort Pierre. These animals provided subsistence for post employees, revealing that bison remained available for local consumption even after the 1832 spring hunt that Catlin and Denig argued

was the beginning of the bison's decline on the middle Missouri River. Then, no bison were seen for months and the post journal recorded on 17 October 1832, that "Indians [were] arriving from all quarters, all starving."⁹ What had happened? Why by October could the tribesmen find no bison? Nor were they alone—employees of the American Fur Company stationed at Fort Pierre also suffered that winter because they too were unable to find bison.

Weather patterns, not overhunting in the spring of 1832, may provide an answer. In planning for their 1832 fall hunt, Brulé and Yankton hunters may simply have failed to adjust their hunting plans to changing weather conditions. Extreme climatic fluctuation is the most prominent characteristic of this semi-arid land. The northern Plains are "subject to a great seasonal temperature range and highly variable rainfall" and these tremendous fluctuations in temperature and moisture create human and animal stress. This variability generally forced tribal hunters and bison to endure cold winters, hot summers, and prolonged drought, but because of the region's variability, it was not uncommon for human and animal populations to experience periodically warm, dry winters and cool, moist summers.¹⁰

The bison coped with the region's variability and availability of water, shelter, and forage by being "widely dispersed and . . . mobile."¹¹ By traveling, bison took advantage of grazing, shelter, and watering opportunities where they could be found. In years when summers were hot and winters were cold, bison moved from the interior grasslands, lying east and west of the Missouri River, to winter on the river valley and returned to the interior short grass prairies in spring. Pierre-Antoine Tabeau, an early nineteenth-century trader, explained the reason for the fall migration to the Missouri River: "The winter obliges them to abate their march and to approach the great rivers, as much to be in the shelter in the ravines as to find pasture there on the low points and in the brush of the little streams."¹²

Until severe winter weather forced the bison to seek shelter, the Missouri River country claimed by the Brulés and Yanktons was frequently barren of bison. Jean Baptiste Truteau's party moved up the middle Missouri River in the summer of 1794 and never saw a bison. On their way down the river from the Arikara village they "killed a very thin cow" on 17 October, the first bison they had seen in bison country. Then, six days later, Truteau observed "Deer, roe, and wild cattle hurried along the banks of the [Missouri] river in herds."¹³

John C. Luttig, clerk for the Missouri Fur Company, believed that he would constantly see bison along the Missouri River as he traveled north to Fort Manuel Lisa in 1812. His party entered the Missouri River bison country that summer and Luttig saw no bison. He wrote "we had flattered ourselves to meet some Indians or Buffalo but were disappointed." Like Truteau, Luttig chronicled the bison moving toward the Missouri River in early December near Fort Manuel Lisa. He observed "1000 of Buffalo opposite" the fort on the east side of the river. Bison numbers increased for the next six days and then he wrote that "opposite the fort the Prairie is covered with Buffalo." On 14 December, Luttig recorded "plenty Buffalo about." On the following day, the "Buffalo [were] constant in the Prairie" then began drifting away from the post.¹⁴

Maximilian, Prince of Wied, also reported on seasonal bison movements. In early May 1833, as his Missouri River party passed between the mouth of the Big Sioux River and the mouth of the James River, he wrote "At the spot where we now were, it is said that large herds of buffaloes are seen in the winter, but we had not yet met with one of the animals" because they were in the interior at that time of the year.¹⁵

Bison mobility was a response to the climatic variability of the northern Plains and the region's limited winter shelter and forage. Wanderings for pasture and shelter were common during the region's cold winters, but these were irregular forage travels, not migrations.

The animals were not seeking specific breeding or calving grounds. Thus, any changes in local weather patterns either reduced or increased the bison's need for winter forage and shelter and altered their normal locations at any given time.¹⁶ Contemporary bison studies confirm these seasonal cold weather travels. The distances bison have traveled varied. In the twentieth century, some Wood Buffalo National Park bison moved between five to ten miles at the onset of cold weather while other animals traveled more than 150 miles to reach winter pasture.¹⁷

Brulé and Yankton hunters had observed these bison winter and spring travels based on local, seasonal variations common to the region's climate. Since bison were mobile, Brulé and Yankton hunters had to find them. Knowing that bison traveled in "aggregate numbers" to the Missouri River when the weather turned cold and returned to the interior when the weather warmed was valuable information to tribal hunters when making their hunting plans. In late fall or early winter, Brulé and Yankton communities moved to the Missouri River, and the tribal hunters prepared to intercept the bison as they moved toward, and then along, the Missouri River in search of forage and shelter.

These late fall–early winter hunts were crucial to the hunters because the bison were in prime condition. By focusing on the fall bison hunt, the Brulé and Yankton hunters increased their caloric dependency on the bison.¹⁸ These bison patterns, which were tied to seasonal climatic conditions, encouraged the Lakota to conduct their fall communal surround hunts, known as a *wani-sapa*, which required a large number of persons. Even the Lakota described fall as "the time we hunt the most."¹⁹

Some Lakota groups constructed wood lodges at their Missouri River encampments to take advantage of the regular cold weather travel patterns of the bison. In 1815, the Sans Arcs made a large lodge and lived there, instead of in hide lodges, at Peoria Bottom, above present day Pierre, South Dakota, on the east side of the Missouri River. Roan Bear's winter

count reveals that the Sans Arcs lived in a permanent lodge in 1830.²⁰ The fall-winter bison movements had to be partially consistent and the herds of a sufficient size to warrant both the congregation of such a large body of people and the construction of such permanent winter dwellings.²¹

Lakota hunting rituals reveal the eastward and westward autumn travels of bison toward the Missouri River. To insure the bison's continual return to the Missouri River, the Lakota conducted bison-calling ceremonies at their autumn river encampments. Maximilian, Prince of Wied, described a Lakota bison-calling ceremony location near Fort Pierre in 1833, "Round an isolated tree in the prairie I observed a circle of holes in the ground, in which thick poles had stood." He added "A number of buffalo skulls were piled up there; and we were told that this was a medicine, or charm, contrived by the Indians in order to entice the herds of buffaloes."²² At that site the Lakotas practiced divination, gathering information through ceremony about a future event, their fall bison hunt.

Lakota ceremonialism continued after the bison reached the Missouri River in the fall. The old cows were the first to approach the Missouri River, and the tribal hunters were careful to not kill them because they acted as guides for the bison following them. After the initial cows were "sufficiently invited" through the calling ceremony, the hunters addressed the bison and then ordered the surround. Before the actual hunt occurred, another ceremony was conducted. Tabeau summarized their hunting as being conducted "with a sort of religious respect and are subject to laws that no one would dare to break." The number of bison killed in a surround was between 200 and 450 animals, and the surround was probably applied only several times a season, when all conditions were favorable. The large spring kill of 1832 that Catlin and Denig described was an anomaly among the Brulé and the Yankton hunters because the bison were generally dispersed on the interior grasslands and

the tribesmen focused their subsistence activities on other resources.²³

For hunters, cold, snowy, windy winters provided the best bison hunting opportunities. The cold and snow forced the bison to congregate and drove them toward the shelter of the river bottoms. Under the conditions that prevailed during most winters, the hunters were able to plan their hunts with some degree of certainty. They knew where the animals would most likely be found and applied hunting techniques that provided the greatest rewards. When deep snow prevented them from using a surround, the Lakota wore snowshoes to hunt bison.²⁴

The bison cows left the Missouri River after the end of February, returning to the interior grasslands to give birth to their calves.²⁵ These cow herds may have moved from five miles to one hundred fifty miles or even farther away from the Missouri River. Most likely, animals that went west followed the Moreau, Cannonball, Grand, Niobrara, White, and Bad Rivers, eastward flowing tributary creeks and rivers of the Missouri, to reach spring calving and summer ranges. In the western interior coulees, there existed "large tracts of table land from ten to fifty miles in breadth on which no timber is seen, but where the spontaneous grasses are very thick and of fine quality." Although the same herds did not return to the same pasture each year, it was on these short grasses that "the buffalo delight to roam undisturbed, quietly cropping the choice blades" of grass.²⁶

A year of successful fall and winter hunts passed into early spring, a difficult time for Brulé and Yankton hunters. The bison were undernourished and thin, providing no animal fat for the hunters because grazing was poor, the bison were moving, and cows were lactating.²⁷ After the bison departed for the interior grasslands, the Lakotas also withdrew from the Missouri River at the beginning of April.²⁸ Maximilian, for example, observed an abandoned Lakota winter camp near the Missouri River in May 1833, in the same vicinity

where bison frequently wintered.²⁹ On the surface it appeared to be a simple cause-effect relationship; when the bison left the river valley, the tribespeople followed them.

That was not the case. Because of the bison's undernourished condition, the Brulés and Yanktons were seeking plant carbohydrates from the early growth of the prairie turnip.³⁰ Tabeau described the Brulés' and Yanktons' scattering in the spring to harvest prairie turnips as crucial to "preserving them from death during the frequent famines to which they are exposed." He added that "All the wandering nations leave regretfully the districts where the prairie turnip grows abundantly and leave it, too, only after having dried great quantities of it."³¹

The turnip's abundance and nutrition negated the need for a large spring bison hunt, a time when bison provided hunters the fewest calories. This would partially explain why tribal hunters took only the tongues from the bison killed in the spring of 1832—the rest of the carcass had little nutritional value. Also, spring hides could not be manufactured into robes for the robe trade, making the tongues the only part of these animals Fort Pierre traders would take. Between 1815 and 1830, the region's bison robe trade was a low-level, low-volume affair where traders sought only prime winter robes, supplying 26,000 a year to downstream customers.³² By 1839, the Upper Missouri River robe trade reached 45,000 robes then escalated another two fold in the 1840s.³³

By focusing on the spring prairie turnips, the people scattered themselves into small dispersed plant-harvesting communities across the prairies. At the same time, the bison were dispersed on the interior grasslands, making it difficult for the scattered tribesmen to plan for communal hunts. The early spring harvest of prairie turnips also reduced hunting pressure on the bison when the animals were calving (March) and undernourished, their hides almost worthless to Missouri River traders. The Brulés and Yanktons resumed their intensive hunting practices by mid-summer, as

the animals were gathering for the rut, when the robes and animals were reaching their prime, the prairie turnip harvest had ended, and various berries were ready to pick.

Prevailing weather patterns, hot summers and cold winters, aided the hunters in locating bison throughout the year. But as noted, bison winter travels to the Missouri River were tied to weather conditions—any dramatic change in the region's accustomed seasonal weather patterns would disrupt bison movements, making them unreliable prey. Tabeau observed in 1803 that "When the Ricaras lack maize, which happens very often, they find that the buffalo cow is also a very uncertain resource."³⁴

The winter of 1830-31 provides an insight into the relationship between unseasonable, but not unprecedented, warm winter weather and bison movements toward the Missouri River. Daniel Lamont, the American Fur Company trader at Fort Tecumseh, near the mouth of the Bad River, regretfully informed Pierre Chouteau in late December 1830, that "The Robe trade in this quarter I fear will fall much short of the return of last year." The reason, Lamont explained, was the weather which "until lately . . . has been unusually mild, the Missouri having kept open until the 11th of this month." As a result, the bison stayed away from the river and Lamont concluded that "up to this time there has not been a Buffalo killed on the Missouri River."³⁵

Then in January 1831 there was a heavy snow. Great quantities of snow continued to fall in the Black Hills throughout the remainder of the winter. The commencement of a lengthy cold, stormy spell drove the bison east toward Brulé and Yankton Missouri River hunting camps. The result, Lamont happily observed in a revision of his earlier estimate, was "the season has been altogether without a parallel." He added that "Cattle [meaning bison] have been in the greatest abundance at nearly all the trading posts, and the returns I think will fully equal if not surpass all made" in the past season. Kenneth McKenzie, a

veteran Missouri River trader, reported that "The Sioux, Rees, and Cheyenne have made full as many Robes, this year as they did the last."³⁶ Late changing weather patterns warded off hunger that winter in the tribal camps and salvaged the Fort Tecumseh bison robe trade.

The fall of 1831 was cold, forcing the bison to travel early to the Missouri River. Even though William Laidlow had not seen a bison by late November, he was not worried, reporting, "I have not seen a Buffalo since you left us they are said to be plenty." One month later, he informed Pierre Chouteau that "Our prospects in this part of the country are flattering, as we have plenty of cattle in every direction; they have seldom, or perhaps never been in greater abundance; and we have got the Indians to make much better Robes than they ever did, since I have known them."³⁷

The starving winter of 1832-33 began ten months after Laidlow wrote that glowing report on the previous season's robe trade. The autumn weather was mild and warm, but Brulé and Yankton groups began arriving at Missouri River encampments in anticipation of future bison hunts. This first Missouri River fall hunt was crucial as prime bison would increase the hunter's caloric intake.³⁸ They made their usual plans to kill fat bison cows that congregated in winter shelters. Maximilian observed that during winter cold the bison "take refuge in the forests on the banks, when great numbers of them are killed, and it is often almost impossible to drive them out of the wood."³⁹

The caloric deficiencies of the hunting peoples eased during the summer, as the condition of the animals they hunted improved, but the bison did not provide their maximum nutrition until late fall. Because the big fall hunt would provide protein to increase Brulé and Yankton nutritional levels, it was not uncommon to find early fall food shortages in the tribal camps before the winter hunts. As a result, Laidlow reported on 17 October 1832, that the "Indians [were] arriving from all quarters, [and] all starving." Twelve days later, Laidlow added that the Lakota who remained

at Fort Ogallalla, Thomas Sarpy's trading post at the junction of Wounded Knee Creek and the White River, were hungry. The reports from the post revealed that the bison were absent from the upper White River.⁴⁰

This warm fall was to be followed by a warm winter. Fort Pierre employees also suffered because no bison moved toward the Missouri River. Laidlow reported on 6 November 1832 that his hunters returned from a hunt but "did not see a Buffalo and consequently returned light." Three days later, the post hunters killed some bison. In late December, Fort Pierre men killed thirty bison on an excursion onto the plains. Laidlow reported that they were fortunate the weather remained mild because the hunters were "destitute." On 25 December 1832, two bison were killed in back of Fort Pierre. These animals were probably isolated old bulls that frequently remained near the Missouri River year round.⁴¹

As long as the unseasonably warm weather continued, no bison came toward the Missouri River. Laidlow reported at the end of December that the Yankton camp near Medicine Hill, twenty miles northeast of Fort Pierre, had no bison. On 10 January 1833, the Brulé trader Pascal Gabreil Cerré reported that no bison had been seen so far that winter on the White River, a favorite Brulé hunting territory.⁴²

Laidlow was not only an experienced trader but a knowledgeable hunter and he understood why the bison had not moved to the Missouri River. In late December he informed Chouteau that "the weather [is] so very mild that the Buffalo keep out in the plains." Because the weather was mild and warm, Laidlow predicted that the "prospects for making Robes in this part of the country is far from being flattering [sic]." Without the bison on the river, he added, "we have had a sad struggle to make a living this far and if the Cattle [bison] do not soon make their appearance, we shall be placed in a most deplorable situation; my men are mostly all scattered about the different camps, and barely make out to subsist."⁴³ This statement reveals that the post employees and their dependents were also struggling to eat that

winter, and Laidlow could compare the condition of post residents to that of the tribespeople.

That same day, Laidlow sent a letter to Enillian Primeau telling him that the robe trade appeared to be bad because "the weather has been, and still is so fine, that the Cattle keep far out in the plains an [sic] all our Outposts in this part of the country are in a starving situation."⁴⁴ But, where *were* the bison?

One hundred miles west of Fort Pierre, Oglala, Hunkpapa, and Blackfeet Lakota camps near the forks of the Cheyenne River had plenty of bison. These western Lakotas made fall camps near the bison herds, and as long as the bison did not move to the Missouri River, these Lakotas did not move. Likewise, Yanktonais wintering at the forks of the Little Cheyenne, fifty miles north of Fort Pierre on the east side of the Missouri River, also found bison abundant along the river.⁴⁵ On the other hand, Brulé and Yankton hunters failed to find bison along the White River that fall and moved to the Missouri River hoping to intercept the herds when they sought winter shelter and forage. Instead of eating bison, they ate any stored provisions and local small game. Neither provided the hunters and their families with the same bulk of calories as prime bison. This was especially true for small game, which required a high energy output for very small gain. Many raccoons, or similar animals, would have to be killed to equal one bison. Also, the bison provided the hunters with large quantities of winter robes, a highly valued trade item, which other animals could not provide.

The Brulé and Yankton hunters had made a sound decision based on their knowledge of bison behavior and the region's climate. Since they did not find any bison on the White River, they moved to the Missouri River in October and began to wait for cold weather to drive the bison toward them. They waited until the middle of January, demonstrating tremendous patience, self control, and endurance, traits essential for hunting success. Then they began to travel north and south along the Missouri River, hoping to locate wintering bison

herds that might have moved from the interior.

Once they decided to move, Brulé and Yankton families passed Fort Pierre for several days. On 14 January 1833, tribal hunters arrived at Fort Pierre from the south, probably from White River. Two days later, twenty new Brulé and Yankton lodges were camped at Fort Pierre, and the people were hungry. Twenty additional Brulé and Yankton lodges were camped at Fort Pierre on 19 January 1833. The next day, more hungry tribespeople arrived, but this group left to hunt bison on 21 January 1833. The next day other tribal hunters and their families replaced those who had just departed. All were starving. Three days later, another hungry Brulé and Yankton group arrived at Fort Pierre, and then nearly everyone left the next day to hunt bison.⁴⁶

The hunters' methodical movement past Fort Pierre represented the second phase of their fall-winter plans to find bison. After reaching the Missouri River earlier in the fall, the hunters waited to intercept the bison moving toward them. When the bison did not appear, the hunters then decided to travel north and south along the river, hoping to locate wintering herds that might have moved from the interior and were now either above or below the hunters' winter camps.

This second phase of their winter hunt was a sound tactic, but the ongoing warm winter weather simply meant that large bison herds stayed away from the river. Even the few bison found close to the Missouri River near the mouth of the Little Cheyenne River began moving inland by early February. Soon tribal hunters reported that "Buffalo are getting scarce" on the Little Cheyenne River because the bison were moving east of the Missouri River toward the interior plains.⁴⁷

When they did not find bison on the river, the Brulés split their camps. Some went farther north toward the Ree villages on the Missouri River while others traveled south and west toward the Platte River. In late January 1833, some Brulés moved "a long distance out on the plains and nearly in state of

starvation.”⁴⁸ Because of the absence of bison on the White River drainage, these Brulés moved beyond the headwaters of the White River and established camps on the Platte. After the Brulés left the White River in 1833 to look for bison, the American Fur Company also left. Laidlow reported that “Pascal [Cerré] has been obliged to abandon his post on White River in consequences of all the Indians having been obliged to leave that part of the country, they have been in a state of starvation all winter, and have suffered most dreadfully, many of them have gone towards the Platte, and others somewhere about the Ree Villages.”⁴⁹

Whatever tendencies there had been to divide the Brulé community became more pronounced following the winter of 1832-33 and the absence of bison along the Missouri River. After that time, those who stayed on the Missouri became known as the Lower Brulés while those who moved to the Platte River were called the Upper Brulés or the Brulés of the Platte.

As the warm, mild winter weather continued, competition increased between tribal and non-tribal hunters. After the nearest bison herd to Fort Pierre left the vicinity of the Little Cheyenne, tensions escalated between tribal and non-tribal hunters, making it more difficult for the relatively few American Fur Company employees to get bison. On 11 February 1833, Laidlow wrote that the Little Cheyenne bison herd had moved east onto the grasslands and “we cannot procure any meat of consequence from the Indians and they will not allow us to hunt. . . . they [tribal hunters] keep continually threatening to kill our horses, so we were obliged to abandon the chase altogether from the Mandan down to the Little Cheyenne.”⁵⁰ Since whites were not hunting bison for commercial purposes, their trading licenses restricted them to subsistence hunting only, this tribal ban against white subsistence hunting reveals the extent of tribal suffering.

February 28 was the coldest day of that winter, but the weather warmed quickly and the

bison remained in the interior. The unseasonably warm winter weather at least brought an early spring, enabling the undernourished Brulés and Yanktons to scatter and to begin harvesting prairie turnips. Some tribal hunters returned to Fort Pierre in May 1833 to trade robes from bison they had killed among a herd that had returned to the upper White River in late winter, but the animals provided few calories.⁵¹

For the tribal hunters and their families, the starving winter of 1832-33 ended with the spring turnip harvest. Though the Fort Pierre correspondence for the following winter is not as rich, leaving gaps in the historical story, the continuation of a mild fall and winter in 1833-34 provides a strong explanation for the bison's continuing absence. Laidlow requested supplies in August 1833 because the bison had remained in the interior prairie five or six days away from the Fort Pierre.⁵² The bison supply remained sparse throughout the winter, for when Maximilian reached Fort Pierre on 26 April 1834, he wrote that “We found Fort Pierre in great want of fresh provisions, no buffaloes having been seen during the whole winter.”⁵³ Maximilian did not specify why the bison were absent, but he did observe that “in winter, the land-scape is extremely dead and monotonous. The extensive white plain is enlivened by neither man nor beast, unless, indeed, some herds of buffaloes are in the neighbourhood or a few hungry wolves are prowling about in search of food.”⁵⁴

After a two year absence, the bison returned to Fort Pierre in the fall of 1834 in astonishing numbers, for the weather had turned seasonably cold. Francis A. Chardon's journal from Fort Clarke, upstream from Fort Pierre, explains the appearance of the bison on the Missouri River. The fall of 1834 was cold, windy, and rainy. On 25 September 1834, Chardon reported “Snow for the first time this year made its appearance today.”⁵⁵ Two weeks later, the bison were moving south from Fort Clarke and toward Fort Pierre.

Within two weeks, the bison had reached Fort Pierre, downstream from Fort Clarke.

Jacob Halsey, post clerk and trader, reported that "the bison are coming in from north—in immense herds—hope this year will have more robes than last." Before Halsey even sent the letter, the bison had arrived, and he added a revealing postscript, "Since writing the foregoing . . . Indians have arrived . . . [and the Lakota] all say they have now plenty of Buffalo. . . . they tell me they are so plenty, that they think the dead ones have all come to life again."⁵⁶

This was the Brulé and Yankton hunters metaphorical means to describe the great number of bison numbers found at Fort Pierre in the fall of 1834, a number larger than ever before. Unlike the Brulés and Yanktons, who had suffered through the mild winter of 1832-33, the bison had benefitted from mild winter weather that reduced animal mortality and allowed more young and old animals to survive. At the same time, because the hunters could not find the herds, tribal hunting pressure was light, contributing to an overall bison population increase. Only a small number of robes reached Fort Pierre during the mild winter.⁵⁷ Based on rough estimates, Frank Gilbert Roe claimed that historically "an average increase of 18 per cent would not be too high for buffalo in a primitive state."⁵⁸ Warm weather and low hunting pressure would be factors contributing to an even higher increase, accounting for the tribesmen's claim that the dead bison had returned.

The winter of 1832-33 also reveals Lakota and Yankton fall and winter hunting practices. Instead of breaking into small winter camps, they gathered and waited in larger encampments near the Missouri River, planning their communal fall and winter bison hunts as the animals sought shelter near the Missouri River. This illustrates that Brulé and Yankton people did not follow the bison herds but tried to intercept the animals at the Missouri River. If they animals were late, the hunters waited, even if they were hungry, because this was an efficient bison hunting strategy. This refutes the comforting story that Brulé and Yankton camps followed the bison; if they had, they

would never have starved because they would have had access to a "walking commissary" at all times. But neither Brulé nor Yankton camps could move all their belongings to keep daily pace with the animals. They planned their fall and winter hunts by anticipating the bison's customary move to winter shelter and attempting to intercept the herds that migrated from the interior to the Missouri River. The mild winter of 1832-33 disrupted the hunters' plans, forcing them to follow an alternative strategy.

Hunger was common in the Brulé and Yankton hunting camps during the early years of the nineteenth century. The horse did not provide them with as much mobility as might be thought, and they chose to place their wager on the frequent arrival of the bison within hunting and transport range of their usual winter camps at the Missouri. When they lost the wager, they starved, sometimes with regularity. Tabeau observed in 1803-04 that "The Sioux . . . reckon everything from the periods in which famine has made terrible ravages among them." Three decades later, Missouri River fur trader David D. Mitchell also observed famine: "throughout this whole range of country no buffalo had been seen for several months so that the Indians were soon reduced to a state of starvation."⁵⁹

The hunters inability to find bison brought on hunger, but why they were unable to find bison must be examined with greater care. Brulé and Yankton hunters had no access to bison during the starving winter of 1832-33 because the onset of mild, warm, weather never forced bison to move toward shelter and waiting hunters. Unlike contemporary residents of the northern Plains who want mild winters, early nineteenth-century Lakota and Yankton hunters depended on severe weather to insure successful winter hunts. For them, the alternative was warm weather and lean times.

The Missouri River traders provided crucial evidence to illustrate the effect uncommonly warm winter weather had on seasonal bison movements. Not only were many traders astute hunters who understood bison behavior, but their livelihood depended on

successful tribal winter hunts for robes. Over the years they reported the reoccurrence of warm weather and poor hunts, revealing that the winter of 1832-33 was not an isolated incident. The winter of 1850-51 was mild and Blackfeet and Crows starved. The following winter was also mild and some tribesmen lacked adequate provisions. The winter of 1854-55 was again mild, and "the buffalo herds avoided the river valleys and the robe trade decreased." On the other hand, heavy snows fell and temperatures dropped during the winter of 1855-56 proving "to the St. Louis fur companies that the recent severe, snowy Upper Missouri winter had not damaged the trade and the prospects were good for the coming year."⁶⁰ The role of weather in determining either the success or the failure of fall and winter bison hunts cannot be underestimated. When the hunts failed, climatic conditions provide one crucial explanation for hunger among the northern plains bison hunters.

The starving winter of 1832-33 revealed the complex interconnections among characteristics of the semiarid land, including its variable weather patterns, a mobile bison resource, fluctuating bison numbers, and tribal bison-hunting strategies. Brulé and Yankton people were hungry that winter because the onset of mild winter weather disrupted their well-prepared hunting plans. What is suggested by the Brulé and Yankton hunters' starving winter of 1832-33 is that weather created the local "absence" of the bison that the witnesses observed. Such episodes seem to have occurred commonly among other tribal communities on the northern Plains.⁶¹

This story also provides one environmental reason for starving times among this human population in this time and place. Frequently it was nature that contributed to the Brulé and Yankton hunters' occasional boom and bust hunts prior to 1835. In most cases, both nature and culture were steady, reliable, and predictable. Until, that is, the advent of a runaway robe trade, the arrival of Métis and white hunters, and the Sharps rifle,

which all combined to create the last, worst bust of all.

NOTES

The author thanks Kenneth Lockridge, Dan Flores, and the anonymous readers for helpful suggestions.

1. William Laidlow to Henry Picotte, 6 February 1833, Fort Pierre Letter Book, December 20, 1832 - August 25, 1835, Part 1: The Chouteau Collection, 1752-1925, Papers of the St. Louis Fur Trade, University Publications of America; hereafter cited as Chouteau Collection.

2. During his upstream journey on the *Yellowstone*, Catlin walked overland with Pierre Chouteau and others from the Ponca villages to Fort Pierre, in May 1832. He wrote "On this journey we saw immense herds of buffaloes." George Catlin, *The Manners, Customs and Conditions of the North American Indians* (London: 1841) 1: 219.

3. Dan Flores argues that drought that began in 1846, the relocation of large numbers of tribespeople, along with their horses, the introduction of bovine diseases, and increased tribal market hunting explain tribal starving on the southern Plains during the first half of the nineteenth century. Flores, "Bison Ecology and Bison Diplomacy: The Southern Plains from 1800 to 1850," *The Journal of American History* 78 (1991, No.2): 465-83.

4. Catlin, *The North American Indians* 1 (note 2 above), pp. 256-57.

5. Merrill G. Burlingame, "The Buffalo in Trade and Commerce," *North Dakota History* 3 (1929, No. 4): 264, 268-69, 276-77, 282.

6. January 27, 1832 - August 30, 1832, *passim*, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833, Part 1: The Chouteau Collection. Farley Mowat experienced similar emotions following World War II after he witnessed a tribal caribou hunt in Canada. He was fascinated yet repulsed to see a caribou herd become bloody heaps of meat within thirty minutes. See Mowat, *People of the Deer* (London: Souvenir Press Limited, 1989), pp. 67-68.

7. Edwin Thompson Denig, *Five Indian Tribes of the Upper Missouri: Sioux, Arickaras, Assiniboines, Crees, Crows*, John Ewers, ed. (Norman: University of Oklahoma Press, 1961), p. 30. Denig claims that this bison hunt occurred in 1830, two years earlier than Catlin claimed. Since Denig wrote this manuscript later in life, Catlin's date will be accepted, as he was at Fort Pierre when the traders described the hunt.

8. Carole L. Crumley, "Historical Ecology: A Multidimensional Ecological Orientation," *Historical Ecology: Cultural Knowledge and Changing Landscapes*, Carole L. Crumley, ed. (Santa Fe: School of American Research and Advanced Seminar Series, 1994), pp. 3-4; Irwin Altman and Martin Chemers, *Culture and Environment* (Cambridge: Cambridge University Press, 1980), pp. 8-11.

9. 27 January 1832 - 30 August 1832, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833, Part 1: The Chouteau Collection. Though local post employees discussed the large kill, no one recorded the event in the post journal.

10. John Bennett, "Human Adaptations to the North American Great Plains and Similar Environments," *The Struggle for the Land: Indigenous Insight and Industrial Empire in the Semiarid World*, Paul Olson, ed. (Lincoln: University of Nebraska Press, 1990), pp. 49-50.

11. *Ibid.*, p. 51.

12. *Tabeau's Narrative of Loisel's Expedition to the Upper Missouri*, Annie Heloise Abel, ed. (Norman: University of Oklahoma Press, 1939), p. 71.

13. Abraham Nasatir, translator, compiler, editor, *Before Lewis and Clark: Documents Illustrating the History of the Missouri, 1785-1804* (St. Louis: St. Louis Historical Documents Foundation, 1952) 1: 278-79.

14. John C. Luttig, *Journal of a Fur-Trading Expedition on the Upper Missouri, 1812-1813*, Stella M. Drumm, ed. (New York: Argosy-Antiquarian LTD, 1964), pp. 50, 99, 100, 103, 104, 105.

15. Maximilian, Prince of Wied, *Travels in the Interior of North America, 1833-1834*, in *Early Western Travels, 1746-1846*, Reuben Gold Thwaites, ed. (New York: AMS Press, Inc., 1966) 22: 281.

16. Frank Gilbert Roe, *The North American Buffalo: A Critical Study of the Species in its Wild State* (Toronto and Buffalo: University of Toronto Press, 1970, 2nd ed.), pp. 84-85.

17. Dewey J. Soper, "History, Range and Home Life of the Northern Bison," *Ecological Monographs* 11 (1941, No. 4): 384.

18. John D. Speth, "Some Unexplored Aspects of Mutualistic Plains-Pueblo Food Exchange," in Katherine A. Spielman, ed. *Farmers, Hunters, and Colonists: Interaction Between the Southwest and the Southern Plains* (Tucson: University of Arizona Press, 1991), p. 24.

19. Royal B. Hassrick, *The Sioux: Life and Customs of a Warrior Society* (Norman: University of Oklahoma Press, 1964), pp. 176, 198.

20. Alfred Morgan, "A Description of a Dakota Calendar, With a Few Ethnographical and Other Notes on the Dakotas, or Sioux Indians, and Their Territory," *Proceedings of the Literary and Philo-*

sophical Society of Liverpool 33 (1879): 248; James Howard, "Two Teton Dakota Winter Count Texts," *North Dakota History* 27 (Spring 1960, No. 2): 72; James H. Howard, "Two Dakota Winter Count Texts," *Plains Anthropologist* 2 (December 1955, No. 5): 20.

21. George W. Arthur reached this same conclusion for the Blackfeet, Plains Crees, Gros Ventres, and Assiniboines. These northern plains communities established large tribal encampments in the fall, after the bison rut, when "the bison moved onto their winter range where they tended to form larger, more sedentary herds and aggregate herds" in the winter. See George W. Arthur, "An Introduction to the Ecology of Early Historic Communal Bison Hunting Among the Northern Plains Indians," *National Museum of Man, Mercury Series, Archaeological Survey of Canada*, Paper No. 37, 1975, p. 121.

22. Maximilian, *Travels in the Interior of North America* 22 (note 15 above), p. 318.

23. *Tabeau's Narrative* (note 12 above), pp. 195, 198-99, Luttig, *Journal of a Fur Trading Expedition* (note 14 above), pp. 74-75.

24. Joseph S. Karol, ed., *Red Horse Owner's Winter: The Oglala Sioux, 1786-1968* (Martin, South Dakota: Boster Publishing Co., 1969), p. 60.

25. *Tabeau's Narrative* (note 12 above), p. 71.

26. Denig, *Five Indian Tribes of the Upper Missouri* (note 7 above), p. 5.

27. Speth, "Some Unexplored Aspects" (note 18 above), p. 31.

28. Nasatir, *Before Lewis and Clark* 2 (note 13 above), p. 382.

29. Maximilian, *Travels in the Interior of North America* 2 (note 15 above), pp. 294-95.

30. Speth, "Some Unexplored Aspects" (note 18 above), p. 32.

31. *Tabeau's Narrative* (note 12 above), p. 98.

32. Burlingame, "The Buffalo in Trade and Commerce" (note 5 above), p. 266.

33. John E. Sunder, *The Fur Trade on the Upper Missouri, 1840-1860* (Norman: University of Oklahoma Press, 1965), p. 17.

34. *Tabeau's Narrative* (note 12 above), p. 74.

35. Daniel Lamont to Pierre Chouteau, 30 December 1830, Fort Tecumseh. Lamont provided the same information in another letter: "in consequence of the fine weather Buffalo have remained far in . . . not one having yet been seen on the Missouri." Daniel Lamont to Jean P. Cabanne, 30 December 1830, Fort Tecumseh; both U. M. O. [Upper Missouri Outfit] Letter Book, Part 1: The Chouteau Collection.

36. Daniel Lamont to Enillian Primeau, 13 January 1831, Fort Tecumseh; Lamont to Pierre D. Papin, 9 March 1831, Fort Tecumseh; Lamont to Pierre Chouteau, 4 April 1831, Fort Tecumseh;

Kenneth McKenzie to Jean P. Cabanne, 7 June 1831, Fort Tecumseh; all in U. M. O. Letter Book, Part 1: The Chouteau Collection. Fort Tecumseh employees sent 20,000 bison robes to St. Louis in the spring of 1830 and equalled that number the following spring.

37. William Laidlow to David Mitchell, 27 November 1831, Fort Tecumseh; Laidlow to Pierre Chouteau, 26 December 1831, Fort Tecumseh; both in U. M. O. Letter Book, Part 1: The Chouteau Collection.

38. William Laidlow to Pierre Chouteau, 20 December 1832, Fort Pierre Letter Book, December 20, 1832 - August 25, 1835; 17 October 1832, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833; both in Part 1: The Chouteau Collection; Speth, "Some Unexplored Aspects" (note 18 above), pp. 24, 44.

39. Maximilian, *Travels in the Interior of North America* 23 (note 15 above), p. 246.

40. 17 October 1832 and 29 October 1832, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833, Part 1: The Chouteau Collection; Chardon's *Journal at Fort Clark, 1834-1839*, ed. Annie Helosie Abel, (Pierre: Department of History, State of South Dakota, 1932), pp. 234, 228. Spelling of Fort Ogallalla is taken from Chardon's *Journal*, p. 228.

41. William Laidlow to Enillian Primeau, 20 December 1832, Fort Pierre Letter Book, December 20, 1832 - August 25, 1835; 6 November 1832, 9 November 1832, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833; William Laidlow to Pierre Chouteau, 20 December 1832, Fort Pierre Letter Book, December 20, 1832 - August 25, 1835; 25 December 1832, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833; all in Part 1: The Chouteau Collection.

42. 29 December 1832 and 10 January 1833, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833, Part 1: The Chouteau Collection.

43. William Laidlow to Pierre Chouteau, 20 December 1832, Fort Pierre Letter Book, December 20, 1832 - August 25, 1835, Part 1: The Chouteau Collection.

44. William Laidlow to Enillian Primeau, 20 December 1832, Fort Pierre Letter Book, December 20, 1832 - August 25, 1835, Part 1: The Chouteau Collection.

45. 15 November 1832 and 4 December 1832, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833, Part 1: The Chouteau Collection.

46. 14, 16, 19, 20, 21, 22, 25, and 26 January 1833, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833, Part 1: The Chouteau Collection.

47. 4, 5, and 6 February 1833, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833, Part 1: The Chouteau Collection.

48. 29 January 1833, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833, Part 1: The Chouteau Collection.

49. William Laidlow to Henry Picotte, 6 February 1833, Fort Pierre Letter Book, December 20, 1832 - August 25, 1835, Part 1: The Chouteau Collection.

50. William Laidlow to Pierre D. Papin, 11 February 1833, Fort Pierre Letter Book, December 20, 1832 - August 25, 1835, Part 1: The Chouteau Collection.

51. 28 February 1833, 3 March 1833, 14 April 1833, and 23 May 1833, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833, Part 1: The Chouteau Collection.

52. William Laidlow to Pierre Chouteau, 29 August 1833, Fort Pierre Letter Book, December 20, 1832 - August 25, 1835, Part 1: The Chouteau Collection.

53. Maximilian, *Travels in the Interior of North America* 24 (note 15 above), pp. 88-89. Maximilian added that the post employees survived that winter without bison by eating "salt pork and the flesh of the cabri [antelope]" (p. 94). Neither were good substitutes for bison.

54. Maximilian, *Travels in the Interior of North America* 23 (note 15 above), p. 236.

55. Chardon's *Journal* (note 40 above) p. 10. Daily entries in August, September, and October describe the weather at Fort Clarke.

56. Jacob Halsey to Pratte and H. Chardon, 6 October 1834, Fort Pierre Letter Book, December 20, 1832 - August 25, 1835, Part 1: The Chouteau Collection.

57. On 27 March 1833, 2800 bison robes from Fort Ogallalla reached Fort Pierre. These were the only robes reported at Fort Pierre during the winter of 1832-33. 27 March 1833, Journal of Fort Tecumseh, January 27, 1832 to June 1, 1833, Part 1: The Chouteau Collection.

58. Roe, *North American Buffalo* (note 16 above), p. 505.

59. *Tabeau's Narrative* (note 12 above), p. 75; David D. Mitchell to Major William Fulkerson, 10 June 1836, Upper Missouri Agency, Roll 884, Letters Received by the Office of Indian Affairs, 1824-1880, Microcopy 234, RG 74, National Archives, Washington, D.C.

60. Sunder, *Fur Trade on the Upper Missouri* (note 33 above), pp. 135-36, 145, 165, 173.

61. John R. Bozell reached a similar conclusion for the late prehistoric and early historic period of the central Plains, noting that bison populations fluctuated because of "climate shifts." See John R. Bozell, "Cultural, Environment, and Bison Populations on the Late Prehistoric and Early Historic Central Plains," *Plains Anthropologist* 40 (1995, No. 152): 159.