CHAPTER 9

The End of the Buffalo Hunt

It is truly a melancholy contemplation for the traveller in this country, to anticipate the period which is not far distant, when the last of these noble animals, at the hands of white and redmen, will fall victims to their cruel and improvident rapacity; leaving these beautiful green fields, a vast and idle waste, unstocked and unpeopled for ages to come, until the bones of the one and the traditions of the other will have vanished, and left scarce an intelligible trace behind. – George Catlin, 1851

The air was foul with sickening stench, and the vast plain, which only a short twelvemonth before teemed with animal life, was a dead, solitary, putrid desert. – Colonel Richard Dodge, 1860s and 1870s

The serenity of smoke drifting up from the tops of conical tipis, wafting down the serpentine course of the Oldman River, and countless other sublime places on the northern Plains, was about to be broken forever. What Native hunters couldn’t do in twelve thousand years – kill off the vast herds of bison – the inexorable westward spread of so-called civilization managed to do in the nineteenth century. A way of life, seemingly as timeless as the land itself, was about to come crashing to an end.

They had roamed the immense prairies of North America for hundreds of thousands of years, but they were doomed to come within a heartbeat of extinction. Bison, the great monarch of the Plains, the staff of life of Aboriginal cultures, were just too numerous for their own good. It was precisely their staggering numbers that in large part led them to straddle the thin line of extinction. How can thirty or fifty million animals be reduced, in the span of little more than a century, to perhaps a few hundred? It ranks as one of the most tragic and a – very nearly – one of the most complete slaughters of
any form of wildlife in human history. It seems inconceivable. And that is exactly the point. For those who blasted away at the immense herds, it must have seemed impossible that there could ever be an end to the animal that blackened the prairies. If anything on earth seemed endless, it must have been the herds of bison. It was as if they would spring eternal (as many Native origin stories foretold) from the depths of the earth or from beneath the waters of great lakes. They were shot from boats to relieve the boredom of travel.† They were shot on hunts organized by the likes of Buffalo Bill Cody and Wild Bill Hickock to see who could bag the most in a day. They were shot from moving trains during events that were advertised as sport and for which people paid good money. They were shot for all reasons and for no reason.

At times bison were shot for no apparent reason other than to torment the animals and as a play activity for the hunters. There are countless examples of this senseless slaughter; the journal of Edward Harris provides one sad case. Writing in the mid-1800s, Harris describes how one of his European colleagues rode after a bull. He put two balls into the side of the bull, wounding it severely and bringing it to a halt. Harris and another man then ran to join the mounted hunter. The wounded bull had difficulty turning to face his enemy, a fact played on by the three hunters who “would jump aside and discharge our six-barreled pistols at his side with little more effect than increasing his fury at every shot.” Harris then stood in front of the bull and put a bullet in its head, an act for which the bull almost managed to kill him. Figuring the animal was still dangerous, another round was put through his chest and lungs, dropping the bull. Adding insult to injury, Harris concludes, “He proved to be very poor [lean] and a bad skin and we left him for the wolves and birds of prey.”

The Skin of the Animal

Most of all they shot buffalo for their hides, which were increasingly useful to a rapidly industrializing New World. Bison hides are as thick and tough as that of any animal in North America. Building the factories and industry in the east demanded belts to drive the new machines of the industrial age. There were no better, more durable belts than those made of bison hide. Countless millions of bison were slaughtered exclusively for their hides, the carcasses left

† Lewis Henry Morgan penned the following account of senseless slaughter on the Missouri: “We saw two bull buffalo standing on the edge of the river ... They had gone in after water and could not get out... There are over thirty men with rifles on board ... They had the first shot and dropped one of them, but he got partly up again. A moment after a volley from our boat brought down the other, but they both [buffalo] rallied, and they poured into them shot after shot, until they were finished. One of them got into deep water and along the boat ... As soon as he raised his fore quarter he was killed, and floated off down the river. The other was drawn with a rope and tackle on to the steamboat, not yet dead when the rope was put around his neck, but he was dead when they began to hoist him.” On the same river, Edward Harris recorded, “On getting on board I found that Bell had been amusing himself with firing at this gang of Buffaloes, which then consisted of 7 and a calf, he fired 5 times, once with small shot at the calf which he wounded, and he also wounded badly a young bull ... He had to leave them, they were no doubt killed.”
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As the railroads pushed west, trains would stop so passengers could get out and shoot buffalo. Worse, passengers sometimes fired into herds while the train chugged along. (Courtesy Glenbow Archives/NA 1406-188)

to rot and stink on the prairies. Chronicling the slaughter, Colonel Richard Dodge succinctly charted the convergence of events leading to the demise of the bison:

_The danger from Indians and the great distance from market had heretofore protected the buffalo from wholesale slaughter by whites, but by 1872 the buffalo region had been penetrated by no less than three great railroads, and the Indians had been forced from their vicinity. About this time too it was discovered that the tough, thick hide of the buffalo made admirable belting for machinery, and the dried skins readily commanded sale at three to four dollars each. The news spread like wild-fire, and soon the Union Pacific, Kansas
The waste was appalling. Millions of buffalo carcasses were simply left on the Plains to rot. (Courtesy Glenbow Archives/NA 207-68)

† For the three years from 1872 to 1874, Dodge estimated that trains from the west hauled away 1.4 million buffalo hides, 6.7 million pounds of meat, and 32.4 million pounds of bones. From these figures, Dodge estimated that “at least five millions of buffalo were slaughtered for their hides” in the three-year period.

Pacific, and Atchison Topeka and Santa Fé railroads, swarmed with hunters from all parts of the country, all excited with the prospect of having a buffalo hunt that would pay. By wagon, on horseback, and a-foot, the pot-hunters poured in, and soon the unfortunate buffalo was without a moment’s peace or rest. Though hundreds of thousands of skins were sent to market, they scarcely indicated the slaughter. From want of skill in shooting, and want of knowledge in preserving the hides of those slain, one hide sent to market represented three, four, or even five dead buffalo.

Certainly meat was sometimes taken. Entire boxcars of ribs and tongues chugged off along the railway tracks to the eastern markets. Bones, too. Huge mounds of buffalo bones, like massive white worms, would line the sides of railroad tracks for several kilometres in each direction of a station, waiting to be shipped to the east.† Bones were valued in the sugar refining process, and their high phosphorus content was used to make fertilizer and gunpowder.

Mostly it was the hides that created an overnight, profitable industry. In the rapidly settling West, there was still little else a person could do to earn a living. Ever-increasing numbers of hide hunters flocked to the West to try and make their fortune. Many knew nothing about bison, hunting them, or skinning them. Many were outcasts, the dregs of their own culture whose only way to fit in was to leave. “They are usually the most abandoned and worthless among the
whites who adopt the life of the wandering hunters,” Edwin James proclaimed early in the 1800s, “frequently they are men whose crimes have excluded them from society.” Many perished, lost on the vast prairie, caught in winter storms, stampeded to death by the very animals they sought, or killed by the increasingly angry Native tribes tired of watching their precious life source disappear. But the rumours of riches to be made kept the hide hunters coming. In some years, hundreds of thousands of bison hides were shipped east. Bearing in mind Dodge’s comment that many more were killed than were shipped, it was a slaughter of unprecedented proportions, and it was one that could not be sustained.

Bison didn’t just face wave after wave of merciless hide hunters and Natives riding horses and armed with rifles. They also faced competition for space and grass. The non-Native colonizers of the West brought with them millions of head of cattle and horses, and they built farms, ranches, and endless barbed wire fences to contain them. Bison had been the primary large grazers of the Plains; now they had to share that space with hordes of other large grazers. There was only so much room, and competition began to take its toll.

Bison fought hard against the westward expansion of civilization, as did Native hunters. Exceedingly fond of scratching themselves, and lacking much to rub against in the treeless prairie, they pushed over

Although the vast majority of buffalo bones were simply left to decay, countless tonnes were shipped east by rail to be used for fertilizer, gunpowder, and in the sugar refining process. (Courtesy Glenbow Archives/NA 250-15)
Imagining Head-Smashed-In

Buffalo hides were the staple of the slaughter. The thirst for more hides was unsustainable and destroyed the bison population. (Courtesy Kansas State Historical Society)

† Bull bison in rut are of a single mind. Referring to the mating season, Lewis Morgan recorded, “It is at this time when the males are seeking the females that they stampede [wagon] trains which happen to be in the line of their march. At such times the herd press forward and carry everything before them.”

telegraph poles, fence posts, walls of wooden forts, town buildings, and wagon carts. In newly formed western towns and forts, sharpshooters had to be on standby to fire into the massive herds whose only interest was in having themselves a good rub against something that suddenly appeared vertical in their environment. They routinely stampeded and trampled the endless waves of hide hunters that deluged the Plains, not out of conscious malice but because something foreign happened to be in their way.†

For the same reason, bison did not take well to the appearance of the railroad trains. As the first tracks cut a swath through the unbroken prairies, bison wreaked havoc on passing trains. Inexplicably, they seemed compelled to cross to the opposite side whenever a train approached. Hundreds of them would slam into the sides of passing trains, undeterred by the size and power of the machines, condemning themselves to death. As unfathomable as it seems, trains were routinely derailed by the sheer force of the mass of bodies—once two trains in a single week. Conductors were finally ordered to stop whenever a bison herd was sighted. It was one of the few concessions made in the otherwise iron-fisted push to settle the West.
The situation was not helped by the fact that Native people, too, killed bison in greater numbers than they ever had before. Why? Certainly not because there were more people to feed. Just the opposite was true. Europeans had brought with them to the shores of a new world a number of microbes to which North American Native people had never before been exposed. Foremost among these were smallpox, measles, and influenza. Because Natives had no time to build immunity, these diseases absolutely devastated indigenous societies. In some cases it eliminated an entire people from the face of the earth. More often it reduced them to staggeringly low numbers, often claiming up to 80 per cent or more of the population. Blackfoot, for example, are estimated to have lost some six thousand souls, or about 70 per cent of all their people, during the course of the nineteenth century.

Europeans also brought horses and guns. As these offered such superior hunting advantages, Native people did all they could to get plenty of both. Armed with rifles, especially repeating rifles, and straddling a fast pony, Aboriginal hunters were suddenly on par with European hide hunters in their ability to bring down great numbers of bison in a short space of time. While there were fewer Native people to feed than previously, remember that they subsisted year round on bison, unlike the mainly summertime European hunters. Natives also needed hides for tipi covers, winter bedding and robes, moccasins. In addition, buffalo had now become an important economic commodity for Native people. They still needed the meat and hides for their own use, but they soon realized that a surplus of hides could be traded to Europeans in exchange for more guns, powder, bullets, metal knives and axes, glass beads, and a great number of other exotic goods never before available to them. They occasionally traded for horses but preferred to steal them from hostile neighbouring tribes and from white settlers. Then they raised their own stock, eventually amassing huge herds of horses needing grass and water, which lead to a major shift in patterns of Native camping and movement.

Caught up in a lucrative and seductive European-based economy, Aboriginal hunters at times killed more bison than needed for their own survival. They also probably became fussier about the cuts of meat they took from carcasses. Try to appreciate the magnitude of the change from twelve thousand years of having to devise clever and complex traps to capture bison to the sudden freedom of being able to
swing over the back of a horse and ride out almost any time to shoot down an evening meal. This new-found freedom transformed Native culture, allowing them to roam great distances for war and hunts and to take only the choice cuts from the animals they killed.

There is no shortage of blame to go around. Many Europeans blamed the Indians; Aboriginal hunters blamed the white intruders. “In winter, there are periods of abundance during which they kill buffaloes just for their tongues and their skins,” said Victor Tixier of the Osage people in 1840; “It is impossible to make these improvident people understand that to kill buffaloes in such a manner is to hasten their complete disappearance.” Henry Youle Hind, having witnessed Aboriginal mass killing of bison, observed, “man in his savage, untutored, and heathen state shows both in deed and expression how little he is superior to the noble beasts he so wantonly and cruelly destroys.” Yet Edward Harris, among many other Europeans, recounts the same for his people: “I am almost ashamed to tell you that we left our Bulls, and fine fat ones they were, on the ground for the Wolves, carrying away nothing but the tongues.” Later, Harris adds a melancholy note on the nature of their behaviour: “We now regretted having destroyed these noble beasts for no earthly reason but to gratify a sanguinary disposition which appears to be inherent in our natures.” Edwin James, early in the 1800s, laid the blame at the feet of his own people:

*It would be highly desirable that some law for the preservation of game might be extended to, and rigidly enforced in the country where the bison is still met with; that the wanton destruction of these valuable animals, by the white hunters, might be checked or prevented. It is common for hunters to attack large herds of these animals, and having slaughtered as many as they are able, from mere wantonness and love of this barbarous sport, to leave the carcasses to be devoured by the wolves and birds of prey; thousands are slaughtered yearly, of which no part is saved except the tongues. This inconsiderate and cruel practice is undoubtedly the principal reason why the bison flies so far and so soon from the neighbourhood of our frontier settlements.*

In a previous chapter I addressed the issue of Aboriginal hunters as overkillers of bison at the great communal kill sites. Understandably, the issue surfaces again in debates about the ultimate demise of the animal. My take on this has been that ancient Aboriginal hunters were first and foremost human beings, much like all human beings
who have inhabited every continent since time immemorial. They were no better, no worse, and subject to all the spurs of rationality mixed with outrageous folly that has been the hallmark of our collective existence. I picture times of great privation on the Plains, perhaps induced by extended drought or disease, when many groups verged on starvation, some perishing completely. I further imagine a number of these destitute groups coming together to organize communal bison kills. If the effort met with success there would be great feasting in the community, thanks given to the spirit powers, and a dedicated effort to extract every possible ounce of edible material from every carcass.

But certainly there were opposite situations, when people and their neighbours were already relatively well fed as they set about orchestrating a great communal kill. A hundred, maybe two hundred, buffalo plunged to their death over a cliff or were slaughtered in wooden corrals. Did these people scrounge every scrap of the bison carcass – the stomach and intestine contents, hair, hoofs, ligaments and tendons, sinew, and every one of over two hundred bones in each animal? I suspect not. I think they probably exercised reasonable judgment and took their favourite parts, the most nutritious cuts, and left behind less useful parts of the carcass. I have asserted that it is a disservice to Native culture to argue that these hunters mechanistically used every part of every animal after every single bison kill regardless of such important contingencies as the degree of hunger, the number of people available to do the work, and the number of animals killed. It denies their humanity, their ability to make rational decisions, to exercise common sense when faced with differing conditions of life.

It is certainly true that Aboriginal people of the Plains used every part of the buffalo.† It’s astonishing how seemingly useless elements were pressed into service for common, everyday uses. Tails were used as flyswatters and, whip-like, to flick water onto the hot rocks of a sweat lodge. Some of the outer sheaths of the hoofs were boiled to make a thick, gooey glue and others were strung together to make rattles.‡ Bones were cut, drilled, and shaped into tools used to scrape the flesh off hides, straighten arrow shafts, and pierce hides for sewing. Bones from old carcasses were even sometimes piled up to make temporary dwellings. The people did at times eat the contents of the stomach and intestines. But to say that they used every part from

† For the Cheyenne, Grinnell stated, “They left nothing behind, but carried everything in. Even the bones were carried in, and the entrails, for the buffalo were hard to get and were only had occasionally, and the people felt that nothing was to be wasted or left behind.”

‡ “They keep the Hoofs of those little Creatures,” wrote Father Hennepin, “and when they are very dry, they tie them to some Wand, and move them according to the various Postures of those who sing and dance. This is the most ridiculous Musical Instrument that I have ever met with.”
every animal at every kill relegates human beings to the status of unthinking creatures. They made sensible decisions based on the complexities of life that went with being a hunting and gathering people and with what their spiritual beliefs prescribed.

The Last of the Buffalo Jumps

It wasn’t the near demise of the bison herds that brought an end to the age-old communal hunting methods of the Plains people. The mass-kill methods of jumps, pounds, surrounds, and all the others slipped slowly into disuse over the course of about a hundred years, from about the mid-1700s to mid-1800s. There were still plenty of bison around during these times. The abandonment of traditional techniques can be traced to the sudden availability of new technology in Plains culture: guns and, especially, horses. The introduction of these two elements into traditional culture spelled the end of the pedestrian-based hunting methods and brought about dramatic changes for the Plains groups.

Blessed with swift ponies, young men could sweep out onto the surrounding Plains and seek out buffalo that previously lay well beyond their grasp. They didn’t need to kill hundreds at one time any more. They could kill a few any day and every day. They also had the awesome power of the horse to transport carcass parts back to camp that would have previously been far too heavy to carry on foot. Bison could be procured much more regularly and dependably with horse-based hunting than they could with as the episodic, risky, and seasonal communal kills. It no longer made sense to gather together the hundreds of people required to outfit the drive lanes, find distant buffalo herds, coax them to the kill site, then kill and butcher the mass of animals. As the population of horses increased among the Plains tribes, and their skill in riding them grew, the incidence of the great communal kills waned.

The horse was the single most important element in bringing an end to laborious mass killing methods that prevailed on the Plains for thousands of years. It made the whole world of the Aboriginal people smaller. The availability of guns was likewise a factor, but a much less significant one. Native people already possessed a reliable killing weapon, the bow and arrow. To a large extent, Natives kept using the bow and arrow for buffalo hunting even after guns became
available. That they were extraordinary experts with this weapon is attested to in numerous eyewitness accounts from Europeans. In the 1830s Josiah Gregg provided the following:

*The arms of the wild Indians are chiefly the bow and arrows, with the use of which they become remarkably expert. A dextrous savage will lay a wager, at short shots, against many riflemen. Indeed, there is hardly any more effective weapon than the bow and arrow in the hands of an expert archer. While the musketeer will load and fire once, the bowman will discharge a dozen arrows, and that, at distances under fifty yards, with an accuracy nearly equal to the rifle. In a charge, they are eminently serviceable; for the Indian seems to discharge his arrows with about as much certainty when running at full speed as when standing.*

Zebulon Pike put nineteen balls into a bison before it crashed to the ground. The Cheyenne frequently killed bison with a single arrow, according to Grinnell, and, astonishingly, sometimes two animals with the same arrow: “Big Ribs, a Northern Cheyenne at Pine Ridge, Hunting on horseback allowed Aboriginal people to be selective in ways that had never before been possible. Communal kills claimed the entire target herd; equestrian hunters could run alongside the herds and pick out the prime, fattest animals at any time of year. Painting by George Catlin. (Courtesy Bruce Peel Special Collections Library, University of Alberta)
and Strong Left Hand, at Tongue River Agency, are known each to
have shot one arrow through two buffalo, killing both at a single shot.”
In about 1860 Lewis Morgan recorded the following interview:

_White Cloud says that the Indians still prefer the bow and arrow to the gun
for hunting buffalo. That the animal is easily killed, and the arrow does it
with great certainty and that they can fire, or rather shoot, from the saddle
much easier with the bow than with the gun. That the motion of the gun is
liable to be unsteady, and therefore to shoot over, while with the bow they
have no difficulty._

“An arrow kills more efficiently than a bullet,” Tixier likewise
reported; “If the arrow has not completely disappeared into its chest,
the savage drives it in with his foot. Rarely is a second arrow neces-
sary.” Josiah Gregg, among the Indians in the 1830s, compared
classical weaponry to the gun: “the Indian is apt to kill double as many with his arrows or lance.”

These observations provide interesting insight into the practice of
adoption of European goods by Aboriginal people. There is a common,
and erroneous, perception that Native people simply abandoned all
their ancient technology and practices as soon as European goods and
methods were presented to them. This misconception stems in part
from the assumed superiority of anything European compared with
the presumed primitiveness of anything Native. To be sure, many
European goods proved a vast improvement over ancient technology
and were immediately adopted. The superiority of metal knives for
cutting meat, and metal axes for chopping wood, were indisputable.
Likewise, metal pots and kettles were immediately judged superior
to heavy, breakable pottery vessels. Traditional pottery-making dis-
appeared so quickly after the availability of metal pots that Native
people in the nineteenth century had almost no memory of ever mak-
ing it. Glass and ceramic beads, delivered by fur traders in bags by the
thousands, put a quick end to traditional time-consuming bead-mak-
ing from shell, antler, and bone. The list goes on, but these examples
should not be seen as indicating that everything European was judged
superior and immediately replaced its Native counterpart. The use of
the gun in buffalo hunting is a case in point.

Certainly guns were highly coveted by Aboriginal people. When
first exposed to them, people thought them to be magical implements.
Early encounters with Europeans left Native people with the belief
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that it was the noise of the gun that somehow killed the target; after all, guns fired a projectile that was invisible as it flew through the air.† But they soon understood and mastered the use of rifles and recognized the new-found ability to bring down game animals or enemy warriors at great distances. But the early rifles traded to the Plains people were cumbersome muzzleloaders, requiring a great deal of paraphernalia to keep them operating.

Imagine equestrian hunters galloping across the Plains in pursuit of stampeding bison. In one arm they carried their rifles, in their mouths were perhaps a dozen lead balls, bouncing against their sides were horns of gunpowder. Wadding and ramrods were luxuries frequently done without. Attempting to reload these rifles while riding at full tilt was a frustrating and risky business. If powder and balls were added without wadding, the tip of the gun barrel had to be kept pointed upward to prevent the ball from rolling down. Even a slight roll led to an explosion in the chamber rather than a clean fire, and historic accounts testify that many young hunters bore terrible scars on their hands and faces from pulling the trigger just a few seconds too late during a frantic buffalo chase.

In stark contrast, hunters equipped with bow and arrows – the latter stacked in a leather quiver – rode and shot with ease among the pounding herds. Leaning forward on their most prized horses (the buffalo runners), both hands free of the reins, hunters loosed arrows in rapid succession. Deftly moving one hand back from the bowstring to the quiver, retrieving the next arrow, they could in a matter of moments let fly a dozen arrows or more into the sides of the buffalo. There were no misfires, no explosions at the side of your face. “Sometimes the young men mount their horses, and pursue them [bison] and bring them down with their bows and arrows,” Daniel Harmon noted early in the 1800s, “which they find more convenient for this purpose than fire arms, as they can more easily take an arrow from the quiver, than load a musket, in such a situation.” Despite the awesome power of the rifle, bows and arrows continued to be used by many horse-riding hunters long after guns had become common possessions. Native people rationally and deliberately picked and chose those parts of European culture that fit the lifestyle they desired.

Although arrows continued to be delivered with wooden bows, stone tips quickly fell into disuse. Perfectly functional for centuries, arrow points chipped from stone had been the preferred material

† In one of the earliest records, dating to the late 1600s, Father Hennepin wrote, “They heard the Report, but did not see the Bullets, and they thought it was the Noise that kill'd them … [They] cry’d out … this Iron does harm to Men and Beasts: We do not know how it comes to pass, but we cannot sufficiently admire how the Noise of this round Instrument breaks the Bones of the largest Beast.”
with which to tip weapons. But rock is an unforgiving material. In a
great many instances, arrows loosed at game animals missed their
mark and sailed into the earth. Or they struck home and slammed
into a large bone in the body. Either way, breakage was exceedingly
common, as attested by the millions of snapped point fragments re-
covered from archaeological sites. Native hunters quickly discovered
the resilient nature of metal, that it could bend and then be reformed
to its original shape. Metal pots could get badly dented during travel
and use but were easily pounded back into their approximate shape.
The same was true of metal arrow points. Soon after the first metal
goods were brought to Native camps, people began using fragments
of worn out knives, pots, and barrel hoops to fashion their own metal
tips. When these arrows missed their mark or hit a bone, the bent tip
was simply hammered straight. European traders quickly noted this
adaptation and began importing bags of perfectly manufactured metal
arrow points to trade with the Indians.

The last of the buffalo jumps and pounds used on the Plains
can include metal arrow points mixed with the stone artifacts and
bones, but these are rare. Stone continued to be used because it was
locally available at no cost and because the Native hunters possessed
insufficient numbers of metal points. Also, metal was still a scarce
commodity and greater effort would have been made to retrieve these
points. But the primary reason that metal points are scarce at the great
communal bison kills is that horses were becoming common at the
same time as metal, and equestrian hunting soon made the ancient
traps obsolete.
Rivers of Bones

*As far as the eye could reach there were the bleached bones of the buffaloes.*
– Maximilian, Prince of Wied, 1832–34

Earlier in this book I referenced the many inspiring quotations from Europeans who ventured out onto the Great Plains and witnessed the astonishing numbers of bison in their native habitat. But the land and its people were changing. Railroads bisected the country, barbed wire partitioned little squares of turf, towns sprung from the prairie, and new people arrived in ever-increasing numbers. Inexorably, relentlessly, settlement ground its way west. As it advanced it chewed up and steamrolled over a way of life seemingly as much a part of the land as dust itself. The once uncountable and indefatigable buffalo began to vanish. Their massive bones, once the lifeblood of a people, became the quarry of worms, bugs, birds, and coyotes. As the prairie winds swept aside the bones of the mighty beasts, so too went the culture of people who for more than five hundred generations had thrived on their bounty. With the Plains becoming white with bones, the journals of western explorers took on a harrowing and melancholy tone.

“The land was covered, in spots, with buffalo bones whitened by the dew and the sun. This camp was a sad sight,” wrote Victor Tixier. On the Platte River, Turnbull observed “Buffalo Bones, & dung laying as thick as it can lay.” Maximilian told of “bones and skulls, scattered...
all over the prairie.” The Earl of Southesk, “constantly finding the skulls and bones of former herds” during his travels, continued:

*The plains are all strewn with skulls and other vestiges of the buffalo, which came up this river last year in great numbers … They are now rapidly disappearing everywhere: what will be the fate of the Indians, when this their chief support fails, it is painful to imagine.*

Many Aboriginal people and whites alike saw it coming. The great John Audubon, his own team of men guilty of senseless slaughter, described the prairies as literally covered with the skulls of buffalo, “and before many years the Buffalo, like the Great Auk, will have disappeared; surely this should not be permitted.” Schoolcraft cites a venerable old chief: “I fear we shall soon be deprived of the buffalo: then starvation and cold will diminish our numbers, and we shall all be swept away. The buffalo is fast disappearing. As the White man advances, our game and our means of life grow less; and before many years, they will all be gone.”
Aboriginal buffalo hunters of the Great Plains had nowhere to turn – at least, nowhere that could provide the joys and substance of life as they had always known it. Flesh of the bison was “real food” as Flannery records for the Gros Ventre, “To those who had been brought up on buffalo meat, beef was a poor substitute. It was said, by those who experienced the change of diet after the disappearance of the buffalo in 1884, that many of the old people ‘died of starvation’ when deprived of buffalo meat.”

Attempts to encourage Native people to engage in alternative means of support were nearly all disastrous. Only the immensely naive could expect people thoroughly immersed in an ancient way of life to abandon, in no more than the blink of an eye, everything they cherished and that had provided meaning to their lives and to embrace an entirely foreign and meaningless lifestyle. Even Alexander Ross, profoundly critical of Native culture, could see the passion with which they clung to the cornerstone of their lives:

> There is no earthly consideration would make them relinquish the pursuit … so strong is their love for the uncertain pursuit of buffalo-hunting, that when the season arrives, they sacrifice every other consideration in order to indulge in this savage habit. Wedded to it from their infancy, they find no pleasure in anything else.

But the machine-like march westward of foreign peoples, cultures, and values was unstoppable and insurmountable. Before it, as Dodge wrote, “The buffalo melted away like snow before a summer’s sun.”

Final Abandonment of Head-Smashed-In

Despite the fact that the event is only about a century and a half old, we will never know the exact date of the final use of Head-Smashed-In. There was no one with pencil, notepad, or camera present to record the final plunge of bison from the cliff. Certainly the jump, and many others, continued to be used after horses were acquired. It must have taken several decades, at least, for the ancient tradition to fade. After all, much of Aboriginal ceremonial life revolved around ensuring the success of the communal kills. Most likely elders argued for the continuation of the great kills and the retention of all the spiritual significance they entailed. Young men, precisely those becoming the
most skilled and enthusiastic riders, probably pushed for hunting by the new methods.

The transition to equestrian hunting was likely gradual, with communal hunts abandoned for increasingly greater periods of time. There was even a brief period where the two hunting strategies melded. The great fur trader and explorer Peter Fidler has provided us with one of the earliest written records of Native life in the Canadian West. He spent the winter of 1792–93 with the Piikani of southwestern Alberta, right in the vicinity of Head-Smashed-In. By the time of Fidler’s stay the Piikani had acquired both horses and guns, although supplies for the latter were still in constant demand. To the best of my knowledge, Fidler is the only European who actually witnessed Aboriginal people attempting to drive bison over cliffs and who left us a written record. All other historic accounts of this activity were provided by people who either saw the kill sites and decayed carcasses of previous jumps (such as Lewis and Clark) or those who described how jumps worked based on Native informants (such as Edwin James).
Fidler’s journal records a number of attempts by horse-mounted Piikani to drive herds of bison over local cliffs, generally without success. On one day he records two such efforts. First: “Where we encamped yesterday was at a rocky precipice in a kind of Creek, but the rock was not very high. At noon the Men brought a herd of Buffalo to the rock but they all broke out at the outer end of the Dead Men & only one single one fell over the precipice & was killed.” Later the same day he records, “the men brought another large herd, but they all broke out among the Dead Men as before. However, the Men killed several upon horse back by galloping after & shooting them with arrows.”

Fidler was witness to the transformation of hunting methods, a hybrid of newly acquired horses and ancient techniques employing jumps. It is interesting that the hybrid failed the Piikani. The whole system of steep drops and drive lanes had been designed, planned, and predicated on the employment of people on foot. The accumulated millennia of knowledge and trickery that made traditional jumps work could not simply be pasted onto the new technology of the horse.

A decade later Alexander Henry wrote, “Horses are sometimes used to collect and bring in buffalo, but this method is less effectual than the other; besides, it frightens the herds and soon causes them to withdraw to a great distance.”† We can only assume that use of jumps and pounds continued to fade as the 1800s wore on.

A few metal arrow points were found in the very upper (most recent) layers at Head-Smashed-In, though stone points still predominated, so clearly the jump was used in historic times. How often and at what date are unclear. For events as recent in the past as one hundred fifty years, radiocarbon dating of the upper levels of the site would be useless. The technique is simply not precise enough to establish actual years of site use. It is probably fair to assume that the site continued to be used, only very occasionally, until perhaps the middle of the 1800s. After that, I’d be surprised if it was used at all. By 1880 the bison were nearly extinct and the question becomes moot.

One clue we have is the earliest photograph of Head-Smashed-In. Taken in 1912, it shows a person standing on the side of the slope leading up to the cliff. Most apparent is the virtual river of bleached white bison bones sprawled across the slope. These must represent the bones of the final animals to be killed at Head-Smashed-In. That they are visible on the ground surface testified that no great span of

† Yet horses were occasionally used with success, at least when Native hunters continued to place humans along the route of the drive. Harmon provides testimony: “After this preparation, when a herd of buffaloes is seen at no great distance off, thirty or forty or more young men mount their racers, which are well trained to this business, and surround them; and little difficulty is found in bringing them, within the range of the stakes. Indians are stationed by the side of some of these stakes, to keep them in motion.”
A view up the slope of the Head-Smashed-In spring channel in 1912 shows bleached white buffalo bones littering the ground, testimony that the last jump had not been very long before. (Courtesy Glenbow Archives/NA 4035-14)
time had passed since the last kill. If it had, the bones would have been largely buried or rotted away. The stark visibility of the bones in the 1912 photograph suggests that the last jump had taken place probably within the past fifty years.

Whatever the date, Head-Smashed-In was finally abandoned for good, bison hunters having turned completely to equestrian hunts and, eventually, to none at all. Though the site was deserted, it was certainly not forgotten. One of the most common questions asked is when and by whom was the archaeological site of Head-Smashed-In discovered. It was never in any sense discovered, because it had never in any sense been lost. People who had last used the jump, almost certainly the Piikani Band of the Blackfoot Nation, continued to live in the shadow of the jump well into the first few decades of the twentieth century. Many of the children of these people, and in turn the grandchildren and great-grandchildren, still reside within a few kilometres of the jump. The knowledge of its existence, and the lore of its use, were diligently passed on to successive generations. Head-Smashed-In Buffalo Jump may be an unknown curiosity to modern visitors, but it has never ceased being a proud piece of the past for the local Blackfoot.

With the coming of the first non-Native settlers in the late 1800s and early 1900s, knowledge of the jump’s existence was passed on to a new culture. Nobody had to tell the ranchers and farmers about the buffalo jump; the bleached bones of the kill stood out like a sore thumb. It became a place for locals to gather, have weekend picnics, collect local berries, and poke among the dregs of the ancient kills for arrowheads and other curios. Several of the first settlers’ families still live in the area, and nearly all of them have artifacts collected over decades of casual visiting to the site.

Over the years I have noted with interest a great concern for Head-Smashed-In among the local non-Native residents. Though completely unrelated to their own ancestry, the site tells a story that strikes a chord with them. It is one of understanding the land and its animals, of challenges and the struggle against the elements to survive. Modern ranchers know first hand the difficulties of making a living working the land, and they respect those who have done it before them. Land is everything to ranchers. They are fiercely possessive and respectful of it and feel a certain bond with other people, however different from themselves, who have done the same.
The great drives and kills had come to an end, but Head-Smashed-In Buffalo Jump was never lost or forgotten. It entered a new phase of its existence, from a place of almost unimaginable drama and daring to one of silence and tranquility. The blood long dried and disappeared from the dusty soil, the bones weathered and cracked with age. But the story persisted. Head-Smashed-In ceased to be a place of valour, genius, and unbridled carnage. It entered the realm of memory. And imagination.