



UNEARTHING A STORY AT **Head-Smashed-In**

As archaeologists uncover a 1600-year-old artifact at one of North America's oldest buffalo jumps, a new chapter is added to its ancient history.

By Meghan J. Ward

Standing amidst the tall grasses that carpet the base of the Head-Smashed-In Buffalo Jump, I close my eyes and try to imagine the buffalo stampede approaching. An inescapable dust cloud forms as their hooves pound the earth, sending a shockwave of thunder through the landscape. The herd's panic is palpable as it is rushed to the cliff edge, driven by hunters. Then it happens: hundreds of beasts hurtle over the cliff, cascading to their deaths in a massive heap. Soon the pungent smell of smoke, blood and flesh permeates the air as the Blackfoot work swiftly to preserve the meat for the long winter ahead.



Photo: Jeremy Fokkens / Illustration: James Lay

I open my eyes. Centuries of erosion have worn away the base of the cliff, shortening the drop and burying layer upon layer of bones – 11 metres worth – beneath a jumble of soil, grass and rubble. To the untrained eye, the cliff looks... unimpressive. But time has changed the landscape. And what now appears to be a non-threatening tumble used to be an 18-metre-high fatal drop.

There is more than meets the eye at Head-Smashed-In, not only with the buffalo jump, but also with the interpretive centre constructed into the adjacent cliffside. From the exterior, the structure disguises itself well, blending inconspicuously with the exposed sandstone that extends from the grass-covered escarpment. Enter the seven-tiered building, however, and a world of discovery is revealed.

The cliffs and plains that make up this buffalo jump have an intriguing story to tell – one that continues to unfold today.

**This article uses the two terms interchangeably.*

THERE IS ACTUALLY NO SUCH THING AS A NORTH AMERICAN BUFFALO; THE NAME HAS STUCK SINCE IT WAS FIRST USED BY EARLY EUROPEANS. HOWEVER, THE PROPER TERM* FOR THIS MAMMAL IS A "BISON."

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THE WOOD BISON IS NORTH AMERICA'S LARGEST LAND MAMMAL. LARGE MALES CAN WEIGH OVER 2,000 POUNDS.

A UNESCO WORLD HERITAGE SITE

Located in the Porcupine Hills of southern Alberta, just east of the Rocky Mountains, Head-Smashed-In is one of North America's oldest, largest and best preserved buffalo jumps. Its operation as a buffalo jump – or *Pis'kun*, as the Blackfoot call it – goes back somewhere between 5,700 and 10,000 years. The practice was eventually made obsolete by the introduction of horses and, consequently, hunting on horseback.

What exactly is the buffalo jump? Head-Smashed-In is comprised of three different sections: the gathering basin, a natural grazing area where hunters directed buffalo towards the cliff edge; the kill site, where herds of buffalo were killed either by the fall off the cliff or by hunters waiting there to finish off lame animals; and the campsite and processing area, where all parts of the buffalo were processed for food, tools, clothing and other daily needs (see Figure 1). Due to its cultural and historic significance, and the remarkable preservation of the various aspects of the buffalo jump, the site was designated a UNESCO World Heritage Site in 1981.

The Head-Smashed-In Interpretive Centre, which opened in 1987, features exhibits, historical records, high-definition videos and stories from the Blackfoot in order to help visitors understand and appreciate the site's significance. Walking trails take you to the top of the jump and down into the camp and processing areas. Visitors can also benefit from the stories of resident interpreters at Head-Smashed-In – people for whom the site holds spiritual significance.

“Head-Smashed-In Buffalo Jump has always been and will always continue to be a sacred site to the Plains Blackfoot people,” explains Quinton CrowShoe, the site's marketing and events coordinator. “Each and every day the Blackfoot staff, including myself, carry out a smudge [the burning of sweet grasses] and prayer acknowledging this fact.”

In their blessings they also acknowledge the spirits that have existed on the cliffs for thousands of years. “The daily smudge ceremony is taught to us by our elders,” says CrowShoe, “and will be our responsibility to pass on to the upcoming generations.”

“BLACKFOOT” REFERS TO FOUR TRIBES: THE BLACKFOOT PROPER (*SIKSIKA*), THE BLOODS (*KAINAI*), THE NORTHERN PEIGAN (*AAPATOHSIPIIKANI*) AND THE SOUTHERN PEIGAN (*AAMSSKAAPIIKANI*).

- ARCHITECT ROBERT LEBLOND WON THE GOVERNOR GENERAL'S AWARD FOR ARCHITECTURE IN 1990 FOR THE DESIGN OF THE INTERPRETIVE CENTRE AT HEAD-SMASHED-IN.

Supply and Survival: The Great Provider

Plains Aboriginal people hunted the buffalo to provide for every need imaginable. Here is an overview:

BUCKSKIN (TANNED HIDE)

moccasins, cradles, winter robes, bedding, breechcloths, shirts, leggings, belts, dresses, pipe bags, pouches, quivers, tipi covers, gun covers, lance covers, coup flag covers, dolls, suitcases, games, weapon wraps

RAWHIDE

containers, clothing, headdresses, food, medicine bags, shields, buckets, moccasin soles, rattles, drums/drumsticks, splints, cinches, ropes, thongs, weapons, saddles/stirrups, knife cases, bull boats, quirts, snowshoe strings, lance cases, horse masks, horse ornaments, bullet pouches

TAIL

medicine switches, ceremonial staffs, dance outfits, whips, lodge decorations, paint brushes, fly brushes

SKIN OF HIND LEG

boots, moccasins

STOMACH

buckets, cups, dishes, cooking pots

HAIR

headdresses, saddle pad filler, pillows, ropes, ornaments, halters, medicine balls, games balls

HORNS

cups, spoons, ladles, headdresses, fire carriers, powderhorns, awls, signals, toys, games

BRAIN

hide preparation

SKULL

altar at religious ceremonies

TONGUE

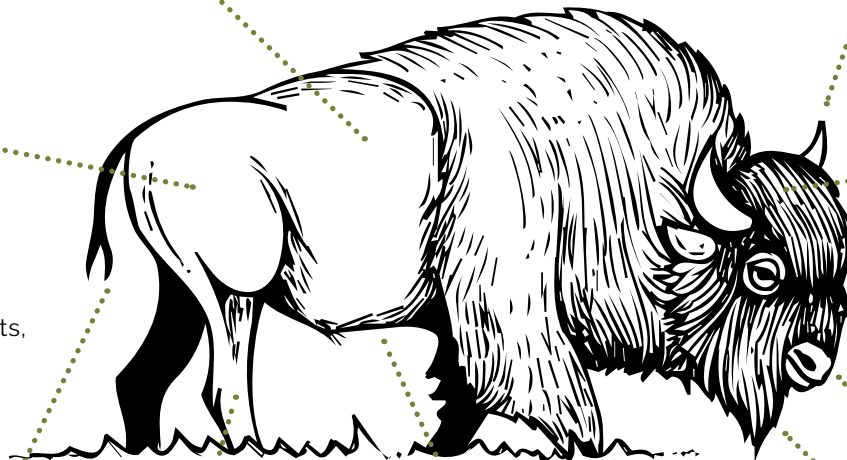
best part of the meat

BEARD

ornaments for weapons

HOOVES & FEET

glue, rattles, hatchets



BONES

knives, arrowheads, shovels, scrapers, winter sleds, saddle trees, war clubs, game dice

MEAT

pemmican, hump & ribs, jerky (dry meat), inner parts

FAT

soap, cooking oil, hair grease, filled pipe sealer

DUNG

fuel

[Figure 1]



Photo: Jeremy Fokkens

Head-Smashed-In Buffalo Jump is a sacred site to the Plains Blackfoot people.

WHAT LED TO THE DECLINE OF THE BUFFALO? A COCKTAIL OF FACTORS, INCLUDING HABITAT LOSS DUE TO THE EXPANSION OF FARMS AND RANCHES; LARGE-SCALE HUNTING FOR HIDES, MEAT AND SPORT BY SETTLERS; AND INCREASED HUNTING BY INDIGENOUS HUNTERS DUE TO THE INCREASED DEMAND AND TRADE POTENTIAL FOR BUFFALO PRODUCTS.

HISTORY LIVES ON

Head-Smashed-In is a relic of a bygone era, when subsistence living necessitated ingenuity and efficiency. The buffalo was the single most important resource for all Plains Aboriginal people, including the Blackfoot, and the animal is celebrated in their mythology, art, songs and oral history. With the decline of the buffalo, a way of life was largely destroyed. Fortunately, we are left with bone fragments and tools – and stories passed down over generations – that together tell the story of these remarkable people.

A recent discovery will help to connect modern-day Albertans to an ancient way of life. The roots of the discovery go back 26 years, when Bob Dawe, an assistant curator of archaeology at the Royal Alberta Museum, was on a dig in the campsite and processing area of Head-Smashed-In as part of a public archaeology program. In the last week of an eight-year project he came upon some bones which were still intact – an oddity, considering all other bones in the processing area were found disassembled and broken. A bit more digging revealed some charcoal and a basin of rocks, and Dawe realized they were the contents of a roasting pit with a meal – enough to feed a few families – still preserved inside.

“We know that it hasn’t been touched since the day it was prepared 1,600 years ago,” says Dawe. What archaeologists don’t know is why the meal was abandoned. Dawe speculates that it could have been an occasion like a blizzard or a prairie fire. “Probably something semi-catastrophic that would have interrupted them,” he explains.

With nowhere to exhibit the discovery at the time, the archaeologists left it there in the earth. But when an opportunity arose to have the roasting pit exhibited at the Royal Alberta Museum, where they could apply the environmental controls required for preserving such an artifact, plans were put in motion to excavate it, with the blessing of the Blackfoot and other First Nations groups in southern Alberta.

In fall 2016, Dawe returned to the site with a team to remove the roasting pit. Once they had established its parameters, which turned out to be a six-foot-wide by two-foot-deep area, they enlisted the aid of a palaeontology technician from the Royal Tyrrell Museum, Darren Tanke, who helped the team use a plaster jacket method normally used for dinosaur discoveries. The plaster jacket was essential in safely transporting the artifact from the Head-Smashed-In site to Edmonton, where it will be excavated and placed in the new Royal Alberta Museum.

WHAT'S IN THE NAME?

According to *Imagining Head-Smashed-In: Aboriginal Buffalo Hunting on the Northern Plains*, by Jack W. Brink, many Blackfoot “assert that the story of how Head-Smashed-In got its name is quite correct but that the location is wrong.”

Many visitors to the site assume that the name “Head-Smashed-In” comes from the way the hunters killed the bison by driving them over a cliff, where they would strike the ground, head-first, 18 metres below. But the real story involves a boy too young to join the hunt, so he watched the jump up close from a ledge on the cliff, protected by an overhang. When the buffalo came cascading over, they piled so high that he was caught behind them. When the buffalo stopped falling, hunters eventually discovered him “crushed against the cliff, his head smashed in,” writes Brink.

According to Brink, “it most decidedly is a well-remembered story in their culture” and there is also evidence of a place in this particular region of southern Alberta that is named after this idea of “breaking skulls” or “smashing heads.” But the site today known as Head-Smashed-In may not be where the young boy met his fate.

When asked what they called this site, Blackfoot elders said they simply called it the “buffalo jump.”

Sources: *Buffalo Tracks: Educational and Scientific Studies from Head-Smashed-In Buffalo Jump* (available at history.alberta.ca/headsmashedin/docs); *Imagining Head-Smashed-In: Aboriginal Buffalo Hunting on the Northern Plains*, by Jack W. Brink; *The Last of the Buffalo Return to the Wild*, Ed. by Harvey Locke; Bob Dawe; Quinton CrowShoe.

DID YOU KNOW? PLAINS BISON HUNTERS WERE SOME OF THE TALLEST HUMANS ON THE PLANET IN THE LATE 19TH CENTURY, ACCORDING TO MEASUREMENTS TAKEN IN THAT ERA. THIS FACT OFFERS CLEAR EVIDENCE OF THE NUTRITIOUS QUALITIES THE BISON PROVIDED.

HOPES FOR HEAD-SMASHED-IN

Just as there was more to those cliffs than meets the eye, there is more to the discovery unearthed at Head-Smashed-In than an old roasting pit embedded in the ground.

For Dawe, the cooking pit display from Head-Smashed-In will add more humanity to the story of these native people. While an exhibit of a stone knife or arrowhead may be hard to relate to, Dawe says it’s a lot easier to relate to the anticipation of a great meal and how “they would have sat around as a family group and enjoyed the celebrations at the end of a successful [buffalo] jump.”

That sense of humanity is exactly what CrowShoe hopes for – that visitors come with an open mind and leave with a better understanding and appreciation of the First Nations people and their history. “Additional information about our history is helpful in aiding the elimination of stereotypes and encouraging a greater sense of harmony amongst all people,” he explains. “Head-Smashed-In Buffalo Jump is a cross-educational resource, not only for visitors but also for those who work here and live in surrounding communities.”

Dawe’s conclusions about the roasting pit discovery echo CrowShoe’s comments. “I think this brings us a bit closer to those people that were there 1,600 years ago,” he says. “A different culture and a different time, but in many respects not so different from ourselves.” ▲



Photo: Jeremy Fokkens

A walking trail in the camp and processing area at Head-Smashed-In.