



Head-Smashed-In Buffalo Jump  
*World Heritage Site*

## LOWER TRAIL GUIDE



## LOWER TRAIL SELF GUIDING TOUR

Head-Smashed-In Buffalo Jump is one of the oldest, largest and best preserved buffalo jump sites on the western plains of North America. It was designated as a World Heritage Site by UNESCO in 1981. The nearly 6,000 year-old story of Head-Smashed-In is based on the rich oral traditions of the Blackfoot Nation, journal accounts of early European explorers and the science of archaeology.

The walking tour will take you to the butchering site located on the lower plains, and then up to the kill site beneath the buffalo jump escarpment. The activities that took place at the butchering and kill sites were an integral part of the lifestyle, traditions and spirituality of the indigenous plains people for many generations.

The walking tour will take approximately one hour. Look for the stone markers that correspond to each point of interest. Refer to map, centre page.



*Scottsbluff Point*

While these spear points are clear evidence that people camped here 9,000 years ago, there is still no evidence that these early people used the buffalo jump. Just what the makers of Scottsbluff spear points were doing at Head-Smashed-In remains a mystery.

## PLANTS AT THE CENTRE

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There are in excess of 80 different types of flowers, shrubs and trees in the vicinity of Head-Smashed-In.

Examples include Lupines, Blue Beards Tongue, Creeping Juniper, Buffalo Beans and Larkspur. Some of the less pleasant plants include burdock and stinging nettle. Many of the plant species growing at Head-Smashed-In are still collected by Aboriginal people and used for both medicinal and ceremonial purposes.



*Buffalo Beans*





*Pelican Lake  
Point*

### PELICAN LAKE PHASE 3,600 TO 2,000 YEARS AGO

Pelican Lake projectile points are well made and are often mistaken for arrowheads. However, these points were actually used to tip long, thin wooden darts that were thrown with the aid of a throwing stick called an *atlatl*.



*Mummy Cave  
Point*

### MUMMY CAVE COMPLEX 5,000 TO 3,000 YEARS AGO

The deepest and oldest use of Head-Smashed-In as a buffalo jump is found some 7 to 9 metres below the surface. The points found at this level are called Bitterroot or Mummy Cave.

Over time, soil and debris have accumulated at the base of the cliff, gradually making the drop shorter. During the Mummy Cave period bison were falling a greater distance than what you see today. The fact that these points are rare suggests that when the jump was first being used the plunge from the cliff was more lethal and there was less need to kill buffalo with stone points.

### A MYSTERY AT HEAD-SMASHED-IN

Two very ancient spear points were found in the spring channel below the buffalo jump. This type of point is called Scottsbluff, and is known to date to about 9,000 years ago.

### THE TIPI RING

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This tipi ring is one of only a few that have been found at Head-Smashed-In. There is a story in Blackfoot oral traditions of a large tipi that was used to perform the Iniskim Ceremony. This ceremony made use of an Iniskim, or Buffalo Rock, and was intended to call the buffalo to the site. The power of the Iniskim Ceremony was revered and believed essential to the success of the hunt. Blackfoot tipis are made with up to 24 poles between four and five metres in length, and



*Tipi Rings*

with a base diameter of about five metres. Buffalo hides were used to cover the tipis and rocks were used to anchor the hide to the ground. Most tipis were set-up with the openings facing east to honour the Creator and to face the morning sun. In southern Alberta, this was also very practical due to the constancy of the west wind.



## THE BUTCHERING AREA

2



*Meat Drying Rack*

Once the Iniskim Ceremony was complete and the buffalo runners had begun the critical task of herding bison to the jump, the butchering area became the scene of intense activity.

In anticipation of the kill, meat drying racks were prepared, boiling and roasting pits were dug, fuel, rocks and water were gathered, and finally the dogs were muzzled to prevent them from scaring the buffalo herds.

Buffalo dung was a major source of fuel, with huge amounts gathered and stored in readiness for the hunt.

After the kill, quartzite rocks were heated for use in boiling and roasting pits where meat, fat and bones were cooked.

Meat was cut in thin strips and hung on wooden drying racks. Dried meat was lighter to transport and remained edible for long periods of time.



*Old Woman's Point*

### OLD WOMEN'S PHASE 1,100 YEARS AGO TO AD 1800

This phase is characterized by intensive activity at the jump site, with massive amounts of bone and projectile points uncovered. During Old Women's time, the killing of buffalo became almost "industrial" in scale, and thousands of buffalo were driven over the cliff.



*Avonlea Point*

### AVONLEA PHASE 1,900 TO 1,100 YEARS AGO

The Avonlea projectile point is thin, delicate and beautifully crafted. The small size of Avonlea points indicate that they were shot with the bow. The bow and arrow first appeared in the northern plains about 1,900 years ago, and marked an important technological revolution for the hunting culture of the plains.

even thousands of years ago. Archaeological study has helped explain the way that the animals were butchered, which parts of the carcass were most preferred, which body parts were moved to the camp below and which were discarded here at the kill.



*Buffalo Leg Bone*

## THE CLIFF KILL SITE

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Although there are numerous buffalo jumps in North America, Head-Smashed-In is exceptional because it is so deep, so old and one of the best preserved of all buffalo jumps. The kill site at the base of the cliff (where you now stand) saw tens of thousands of buffalo plunge to their death over thousands of years.

Archaeological excavation of the site was begun in 1938 by Dr. Junius Bird of the American Museum of Natural History, and continued in 1949 by Boyd Wettlaufer of the University of New Mexico. Much of our knowledge of Head-Smashed-In is based upon excavations by Drs . R. G. Forbis and Brian

## THE CREEK AREA

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A natural spring flows from under the bedrock of the cliff, carving out the channel that you see in front of you. This spring was an important source of water when the jump was in use. Water was needed for cooking, drinking and sanitation for the hundreds of people that camped here each time the jump was used. Native Elders say that all buffalo jumps had to be located at a dependable water source.



*Mint*

## SMALL ANIMALS

4

Several species of mammals and birds make their home at Head-Smashed-In, including the coyote, Richardson's ground squirrel (gopher), the yellow-bellied marmot and the Swainson's hawk.

Blackfoot tradition maintains that animals and human beings were able to communicate



with each other. The wisdom that animals possessed was given to the people if prayers were offered. This was especially important in times of danger or distress. It was believed that in such times certain animals could foretell the future and provide sage advice.



*Coyote*



*Richardson's Ground Squirrel*

## ARCHAEOLOGICAL STUDIES

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This spot marks the northern extent of the Head-Smashed-In kill site. The area where the killing took place extends south from here to the spring channel. Archaeological digs were conducted at the North Kill site from the 1960s to the 1990s. The oldest layers of buffalo bones and artifacts are much shallower at the North Kill site than they are the south end of the site. For this reason archaeologists have excavated here to try to recover evidence of the earliest use



*Mass of Buffalo Bones*

of the jump without having to dig as deep as at the south end.

Archaeologists carefully excavate through each layer of soil, removing and documenting every bone and artifact. By recording the nature and location of all the artifacts and bones it is possible to reconstruct the activities that took place here hundreds,



## SHRUBS

6



*Chokecherry Berries*

Numerous trees and shrubs populate this area of the butchering site. Three of the more important shrubs are Chokecherry, Saskatoon and Wild Rose.

The importance of these trees and shrubs to the Blackfoot people is based primarily on their useful qualities including dietary, spiritual and medicinal uses. The properties of spiritual healing possessed by the plants must be assessed by the healer for each individual. Unlike European healing, where medicines are prescribed according to a generalized dosage for all, the medicinal plants used in Aboriginal spiritual healing are particular for each individual, the type and dosage altered according to the insight of the healer.

## GRASSES

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Much of the natural grassland of the northern plains has been preserved in this area. Head-Smashed-In occupies what is known as a "transition zone" between the mixed grass of the foothills and the fescue grass of the plains.



*Blue Grama*

The grasslands and associated plants helped support large herds of grazing animals that, in turn, enriched the grasslands with their dung. Prairie grass fires sometimes raged across the plains creating panic among people and animals alike; but fire also renewed the soil that supported the hardy prairie grasses.

Of the many different grasses and plants that grow in this area, sage was considered one of the most important to the Blackfoot people. Used for both medicinal and ceremonial purposes, sage was reputed to have the power to cleanse, purify and renew the spirit.



*Sage*



- 9 Numbered stone markers
- Interpretive sign
- Bench

