

Jeffers Petroglyphs Pre-Visit Package

All tours will be led by a staff guide. Groups may be divided into units of up to 15 students and each will visit the following areas. (A chaperone must accompany each group).

Station 1. Multimedia Show

Everyone will begin together in our theater. A brief overview of the site will be given, as well as an explanation of the different interpretive areas and what the students will be doing during their visit. The guide will explain our three main rules of the site, which are: stay on the trails, listen to the guide, and stay together with their chaperone. Then the eight minute multimedia show is shown. This presentation is different from most shows of its kind in that it has no narration. It seeks to stir your imagination about who the people were, and why they made the carvings. We have received many positive comments about the show.

Station 2. Wani'yetu Yawapi (Winter Count Program)

“A people without history is like wind on the buffalo grass.”

Background: Fundamental to understanding some of the purposes of the petroglyphs at Jeffers is an awareness of Native American picture writing and Native American ways of thinking about and recording history. This activity revolves around a Dakota Winter Count or history. Winter counts are a written account of passing years created by Native American historians called “keeper of the count”. A picture or pictograph to represent each year is recorded on a tanned hide of bison, elk or deer. The picture for each year represents an important or unusual event of the twelve-month period. A year was figured from the first snow through the winter, spring, summer and fall until the next first snow. Winter Counts function as both histories and calendars to preserve a record of important events to instruct future generations. They were histories in the English sense of the word and used to note the progression of years for reckoning one year from another. One could use a Winter Count to ascertain his or her age by finding the pictograph corresponding to the year one was born and then counting to the present year.

We have a replica of a Winter Count made by the Dakota Keeper of the Count, Lone Dog. The replica is laid out in the center of a circle around which the students are seated. This particular Winter Count is a record of Lone Dog's people from 1800 – 1871. The pictographs used to create Lone Dog's Winter Count are a form of writing related to petroglyphs. They are methods of communicating ideas. We explain the Winter Count, why it was made, and explain the meaning to some of the symbols. After a period of discussion, each student is given a piece of paper with an outline of a hide on it. We ask them to draw a picture that would represent an important event in their life in the last year that

could be their pictograph symbol if they were doing a Winter Count. After making their drawings, some or all of the students are asked to show and explain their drawing.

Learning Objectives:

- Understand that American Indians had a recorded history before contact with Europeans.
- Understand that pictographs are a form of written communication.
- Better understand the culture of the people who created the glyphs and other items created by the prairie people.
- Understand the nature of symbols.

Some questions that may be asked during the discussion of the Winter Count include:

What is writing?

What is a symbol?

What is the difference between a pictograph and a petroglyph?

What is history?

Why is it important to write history?

How did Native Americans record their past?

Who wrote history in Native American communities?

Why was history important to Native Americans?

Station 3. Travois Programs

This station includes two programs: “Packing a Can yu sdoan (Travois)” and “Buffalo People”

Packing a Can yu sdoan (Travois) Program

Background: One of the first things you will see upon entering the visitor’s center is our model of a dog pulling a travois. The word travois gets its origin from the French word “travail” which means labor. The dictionary describes a travois as a “sledge or drag consisting of a platform or netting supported by two long poles, the forward ends of which fastened to a horse (or dog), the rear ends trailing on the ground.” The purpose of this station is to allow students to see, touch, and discuss the everyday objects Native Americans of the prairie used, and come to a better understanding of how they survived in their environment. Students will notice their clothing, shelter, and household materials were all made of animal, plant, or rock materials. With no stores, all they needed had to come from their surrounding environment. Of all life’s necessities, food, water, and shelter are foremost. A chief source of food and other material needs to the people of the prairie was the buffalo. Because this great animal migrated, the Dakota people also regularly moved as the seasons, water and food supply dictated. Therefore, their material goods needed to be packable and lightweight. Moving camp was an undertaking, which involved coordination of the whole group of people. Upon instructions from “The Ones Who Decide”, families dismantled their lodges and packed their belongings on the travois. An entire village could be on the move within fifteen minutes. While discussing the objects, and the way of life, we ask students to help pack the travois as though they were people of the prairie.

Learning Objectives:

- Identify assorted tools used by people to survive on the prairie.
- To better understand the culture of the people who created the tools and other items created by the prairie people.
- Appreciate the skill and ingenuity of the people who lived on the prairie and understand the biological basis of the sophisticated technology of these people.
- Learn that the movement of the prairie people was part of a sophisticated interaction with the prairie, and part of a deeper interrelationship involving nature, sacredness, life, community, and family.

Some questions that may be discussed during the Travois Program include:

Could you pack your entire household and be ready to move to a distant location in 15 minutes?

Why would you want to pack your entire household so quickly or so often?

Where do you get your food?

Where did the Native Americans get their food?

What kinds of things do you think prairie people needed to survive?

What kinds of materials do modern peoples use to make tools?

What kinds of materials did the prairie peoples use to make tools?

Do you think these people lived a good life?

Buffalo People Program

Background: Native American culture of the prairies is the buffalo culture, a culture that is very old with customs that sustained a beautiful way of life. Central to Native American life is the understanding that they are related to all things. Buffalo are close relatives of prairie peoples and their lives were inseparably intertwined. Both needed each other to survive. Buffalo thrived on the prairie plants. Native Americans burned the prairie and kept the ever encroaching trees at bay and allowed tender young grass to sprout. Buffalo favored more nutritious young tender grass. People could survive on the prairie because buffalo provided the essential dietary and raw materials needed to live. As a result, buffalo was one of the most important components of the cultural relationships that existed between people and their environment. Located in the travois area are a number of objects used by the Prairie People that were derived from the buffalo, including a water bladder, stomach paunch cooking pot, bone hide scraper, sinew thread, raw hide, tanned hide, horn cup, buffalo skin with hair, as well as other articles. The students are invited to look, touch, and speculate as to what buffalo part they came from, and what they were used for. A Dakota story of the origin of the relationship of the buffalo and the Native Americans is told. Central to the story is the idea that the buffalo sacrifices its life so the people can live, and so the people honor the buffalo in their dances and ceremonies. The many carvings of buffalo on the rocks may have been one way of honoring the buffalo.

Learning Objectives:

- Understand the cycle of interdependence between humans, prairie, and buffalo.
- List uses prairie people had for various parts of the buffalo.
- Better understand the culture of the people who created the tools and other items created by the prairie people.

- Relate the items in the discovery area to their experience on the site itself – both the prairie and the rock carvings.

Some questions that may be asked to discuss this program include:

Do you know what a “Super Walmart” is?

Why could the buffalo be compared as the prairie people’s Super Walmart?

Station 4. Atlatl Program

Background: Just outside the visitors center is our atlatl range, with a life size model buffalo serving as the target. Depending upon time and group size, some or all of the students will have an opportunity to use an atlatl system to launch a dart at the buffalo. An atlatl is a two foot long throwing stick used to launch a five foot long dart. The atlatl was the first complex weapons system developed by humans, originating 17,000 years ago and spreading to everywhere humans lived. The atlatl and dart were used and improved upon for so long by our ancient ancestors that the bow and arrow can be considered a recent development. The atlatl was so powerful and effective that scholars believe that it was a factor in the extinction of the woolly mammoth in North America at the end of the Ice Age. While the bow and arrow largely replaced the atlatl around a thousand years ago, some Native Americans were still using it when Europeans arrived 500 years ago. The atlatl allowed people to become powerful hunters, extending their throwing range 2 – 3 times farther than what they could throw a spear. Over 80 atlatl carvings have been identified on the rock face, with only one carving of a bow and arrow. It is one of the reasons scholars believe that the carvings at the site could be as much as 5,000 years old. Many visitors have never heard of an atlatl, and so a hands on experience and explanation helps in understanding the atlatl symbols on the rock face.

Learning Objectives:

- Understand what an atlatl is.
- Understand how the atlatl was important in buffalo hunting and the survival of the prairie people.
- Understand the importance of the atlatl as a symbol.
- Understand the nature of symbols.

Some questions that may be discussed at this station:

What do you consider to be the most important invention in the last one hundred years?

What technology was needed for that invention, and how did the invention impact human lives?

What do you think were the most important inventions of the last 20,000 years?

Why do you think the atlatl was an important invention?

How could you get close enough to the buffalo so that it was in throwing range?

Why do you suppose there are so many carvings of atlatls on the rock face?

Station 5: Prairie Walk Program

Background: The Jeffers site includes 80 acres of native and recreated prairie. The prairie environment present today is similar to the immense prairie ecosystem that would have been the

environment in which the people who made the carvings lived. Of all the North American biomes, the prairie has been the most altered, with only 1% of the original prairie land still being prairie. An appreciation for the complexity and importance of the prairie seems to be increasing, and so many visitors are attracted to the site because of the opportunity to see a healthy, functioning prairie. Over 100 species of prairie plants are present at the site. The prairie includes plants representative of the three prairie types: dry, mesic (medium moisture) and wet. All three types are found in a relatively small acreage because of the presence of the rock face and the way it influences soil depth, drainage, and water holding capacity. The walk from the visitors center to the rock face is about .2 miles, and during this walk a discussion of the prairie is held. Important blooming plants are identified, as well as how prairie plants are adapted for survival through drought and fire. A federally endangered plant, the prairie bush clover, thrives on this prairie, and our efforts to identify and protect it is discussed. If your visit allows for enough time, an additional ¾ mile grass trail begins at the end of the rock face which allows for more opportunity to view and discuss the prairie, both from the aspect of how the prairie environment provided the resources for the Native American way of life, and present efforts to conserve existing prairies. A prairie scavenger hunt for plants has also been developed in which students are asked to find certain representative prairie plants, mark on a map where they found the plant growing, and analyze the location it is living in as to wet, mesic, or dry prairie. This activity can be included in your visit if time permits.

Learning Objectives:

- Understand plant adaptation to their environment.
- Understand a deeper interrelationship involving nature, sacredness, and life.
- Understand how the prairie people utilized the prairie for their way of life.
- Be inspired to further investigate prairie conservation concepts, the unique plant and soil types at Jeffers, and other broader themes connected to the prairie.

Some questions that may be discussed during the prairie walk:

What is a prairie?

How many plant communities do you see living at Jeffers?

What is the most threatened ecosystem in North America?

Which North American habitat harbors the most plant species?

Why are fires good for prairies?

Why don't all prairie plants bloom at the same time?

Station 6. Rock Face Program

Background: An exposed rock face positioned at the highest point of the Jeffers site is where over 2,000 petroglyphs are located. The rock is composed of Sioux Rock Quartzite, an important and ancient geological formation of southwestern Minnesota. The rock is dated by scientists to be 1.6 billion years old. First laid down as a sand and mud deposit, this quartzite is a metamorphic rock formed from sandstone by heat and pressure deep in the earth. The sand and mud were once a part of an estuary-beach environment much like the modern-day Florida Everglades. Evidence of the water origin of the rocks can be seen in ripple marks and dried mud patterns permanently recorded in the rock. The quartzite formation was covered by later formations whose great weight supplied the

pressure and heat needed to first form sandstone and further change it to quartzite. Forces of nature wore away the covering rocks to expose the once deeply buried quartzite. Evidence of the power of the glaciers which scraped over the rock can be seen by the many parallel lined scratch marks left on the surface of the rock. Other evidences of weathering can be seen, as well as a large population of lichens growing on the rock surface. Overall, though, the quartzite is one of the hardest rocks found in nature, and the chemicals making it up are quite resistant to weathering. Perhaps this is why the carvings can still be seen today. Scientists explain the red color of the rock as being due to the abundance of iron oxides (rust) present in the warm waters during the deposition of the sand and mud sediments.

Over 2,000 images were carved into the rock face. Although there is no reliable scientific method for dating the carvings at Jeffers, scholars believe that Native Americans first made rock carvings (petroglyphs) starting 5,000 years ago. They believe the carving continued through the centuries, with some of the petroglyphs done possibly as recently as 300 years ago. These dates are arrived at based upon the objects carved and archaeological studies done in the surrounding area.

The reasons for making the carvings are many, but often not well understood by non-Native people. The carvings are more than art or mimicry of the natural environment. They are powerful cultural symbols of the rich and complex societies of the peoples that inhabited this prairie long ago. To the descendents of these peoples, this is a place where spiritual leaders sought communion with spirits and a place to retreat for ritual and fasting. Native American travelers left written directions for those that followed and elders taught through stories pictured on the rock. These carvings of deer, buffalo, turtles, thunderbirds and humans illustrate the robust and sophisticated cultures that inhabited this area and still live today. Who were the people that made these long ago carvings? That remains unknown. We do know which Native Americans lived in the area in the past 350 years, beginning with the Ioway and Otto tribes. Cheyenne followed, until replaced by the Dakota people in 1750. The Dakota people are helping us to understand and interpret this site. Today American Indians visit and worship at this site, which they consider to be sacred.

While on the rock faces, guides will lead the students along the designated path, and help the students to see the carvings. We ask that the students stay together as a group, stay on the path, and behave in ways that are respectful to the Native Americans' view of the sacredness of the site.

Learning Objectives:

- Find and view various petroglyphs on the rock face.
- Better understand the culture of the people who created the glyphs in order to understand possible meanings to the glyphs.
- To provide a scientific and Native American context for understanding the geology of the Sioux quartzite.
- Understand the nature of symbols.

Possible questions that will be asked and discussed:

How was this ridge and outcrop formed?

What are lichens?

How did the people make the carvings?

When did the people make the carvings?

Who were the people that made the carvings?

Why are the carvings difficult to see?

What do the carvings mean?

Why is the rock red?

Why are there so many marks and scratches on the rock?

When were the carvings discovered?

Do these carvings still have meaning and importance to Native Americans?