

Pentagon Site  
Bighorn Canyon National Recreation Area  
West of Barry's Landing off Highway 37  
Fort Smith vicinity  
Big Horn County  
Montana

HABS No. MT-105

HABS  
MONT  
2-FOSMI.V  
1-

WRITTEN HISTORIC AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY  
Intermountain Support Office - Denver  
National Park Service  
P.O. Box 25287  
Denver, Colorado 80225-0287

# HISTORIC AMERICAN BUILDINGS SURVEY

## PENTAGON SITE

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**Location:** West of Barry's Landing off Highway 37, Bighorn Canyon National Recreation Area, Fort Smith vicinity, Big Horn County, Montana.

**Present Owner:** United States Department of Interior, National Park Service

**Present Occupant:** Vacant (archeological site)

**Significance:** The Pentagon Site contains two good examples of crib-style timber structures. Hundreds of crib-style timber structures were once found in the Northern Plains. Today only about 50 or 60 structures remain in upright positions. They housed Indian war parties and were most common during the historic period when Plains Indians increased their expeditions to steal horses. They were likely built between A.D. 1825 and 1875.

**Historical Information:** The Pentagon Site consists of two deadfall timber structures that are located in Montana on a high bench to the east of the Pryor Mountains and the west of Bighorn Canyon.<sup>1</sup> The site area is within the confines of Bighorn National Recreation Area, a unit of the National Park Service that encompasses Bighorn Canyon and adjacent lands along the sides of the canyons. The recreation area is linear in shape as it spans the Montana and Wyoming border with a narrow corridor of land along the western side of Bighorn Canyon. An ancient trail system, named the Bad Pass Trail by fur trappers because the terrain was so rugged, is found spanning the Wyoming and Montana border through this same area (Loendorf and Brownell 1980). The Pentagon Site is situated with a good view of the Bad Pass Trail.

Deadfall timber structures have been identified by various names in the literature such as lodges built of horizontally cribbed logs, wooden habitation structures, dome-shaped log and brush habitation lodges, and war lodges. Each of these names was considered during research at the Pentagon site and abandoned in favor of deadfall timber structures. Logs suggests something which have been cut either by chopping or sawing to fell the tree and trim it of branches to make a log. Structures like those at the Pentagon site are made from trees that have fallen over from natural causes and commonly called deadfall or down timber. Wooden also denotes some preparation as we speak of a wood frame house and it is not a good descriptor for deadfall timber. Habitation and lodge suggest they were used as domiciles, and lived in by family units. The majority of the

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<sup>1</sup> The name Pentagon was assigned by archeological field crewmembers that noted the five-wall pentagonal shape of the structures. The archeological site number is 24CB913. The Universal Transverse Mercator location has been calculated but withheld in this document to protect the site.

structures excavated do not contain significant evidence for use as places where families lived and for this reason many are believed to represent the remains of war parties or segments of the population, rather than the remains of family houses. The name deadfall timber structure is sufficiently generic that it does not bias any interpretation.

Hundreds of crib-style deadfall timber structures were once found on the northern Plains. They are reported by explorers, fur trappers and early ranchers beginning with Lewis and Clark (Cous 1965:297,324, 350). The structures have been the subject of archeological investigations since the 1940's but throughout the intervening decades only about 20 of them have been excavated. They are subject to deterioration and collapse through the normal erosion processes but they are most vulnerable to fire (Johnson et al 1991). Today only about 50 or 60 of them remain in upright positions.

They are most common east of the Rocky Mountains and west of the Great Plains in the broken terrain to the south of Canada and north of Colorado. Concentrations of them remain in the Bull Mountains of south central Montana and the Pryor Mountains where ten, including the two at the Pentagon Site, are still standing and in relatively good condition.

The walls of the remaining structures are constructed by stacking the timber into four or five sides. No three sided or six sided structures are known. The decision as to whether the structure should have four or five walls was probably based on the number of individuals it needed to hold. The five-sided design may have also been a better defensive structure inasmuch as the corners offer good protection but also present openings to stick a gun through for return fire.

The structures were made as temporary housing by all of the northern Plain tribes. The Crow Indians, for example, describe three kinds of temporary structures: 1) a conical-shaped variety with poles standing in the form of a teepee, commonly called a wickiup; 2) a domed-shaped variety with a flexible framework of willow, chokecherry or other flexible material that is bent and pushed into the ground, the common frame for a sweat lodge; and 3) the crib-style lodge made of deadfall timber (Voget 1977). The Crow made them to shelter hunting parties, eloping couples, visionaries and war parties (Lowie 1956:89).

Anthropologist Fred Voget interviewed Crow Indians in the 1940's and learned that the majority of the crib-style structures were used to house war parties. Furthermore, Voget suggests that the crib-style structures were most common in the historic period when northern Plains Indians increased their expeditions to steal horses. The primary factors in this development are:

- 1) a prolongation of warfare into the winter which necessitated protection from severe cold,
- 2) an increase in the number and possibly the size of war parties which required defense against surprise attack,
- 3) the gun, which required adequate protection from its penetrating power, and

- 4) the horse which had to be sheltered and confined if it were to be retained as booty (Voget 1977:11).

These factors match well with the Pentagon site structures and lead to the conclusion that a party of Plains Indian warriors built them.

Charcoal found in excavations in the structures indicates the use of fires. The large amounts of charcoal suggest these fires were burned for some time, probably for warming during a winter or other cold season use of the site. The site is situated at about 4500 feet in elevation on the lee side of the Pryor Mountains where there are not significant amounts of snowfall. The area does get cold, however, and it would not be unusual for the site to experience several winter weeks of night time temperatures below zero degrees Fahrenheit.

Each of the structures would house five individuals for comfortable sleeping. Because the structures were probably not used for the full round of household activities the statistics which compare floor area to the number of individuals in a house do not apply. Crow Indians slept in their war lodges with their feet toward the central fire (Clark 1982:404). If five warriors slept in a structure they would each have a corner to defend. The extra deadfall fragments stacked against the corners of Pentagon 1 suggest increased protection for defense. The limestone rocks used for chinking, especially in the lower tiers, are may have served to protect sleeping individuals or warriors defending the structures from the prone position. These rocks also served to conceal the fire.

Small war parties, ranging from 4 to 12 men, were favored on the northern Plains (Ewers 1955:177). The estimate of ten warriors using the Pentagon site is a relatively large group that would have needed the protection of two structures. This number fits well with Voget's conclusion that an increase in the numbers of warriors on raids in the historic period created the need for more crib-style fortification structures.

The gunflints from Pentagon 1 are evidence for the use of the gun in the structures. Guns came into general use in the region after the horse, so the individuals who used the site had access to horses. It was common for Plains warriors to go on their horse raids on foot with plans to steal horses that they would ride home. This means that the individuals who used the Pentagon structures did not necessarily have horse with them on the site. Although there is permanent water on the site, there is very little feed for horses and there is no evidence, like the remains of a corral that horses were kept there.

Plains Indian horse raids followed a prescribed pattern. A war party leader or captain selected several young men to go with him and after preparation they set off on foot with their war medicine, weapons, rawhide ropes, an extra pair of moccasins and an awl and sinew for repairing the moccasins. Once they reached enemy territory they would build temporary structures at a well-concealed location, often with good vantage. From this location the war leader would send out scouts to locate an enemy village or camp. After the scouts found an appropriate target, they returned to the temporary structures and

the raiding party attacked the village, stealing as many horses as they could. Then they rode with all haste for their home territory (Ewers 1955:176-190).

There are a number of factors at the Pentagon Site which match this pattern. The site is on a high point of land with good vantage of the Bad Pass Trail. It is well concealed and the landform blends into the mountainside in such a way that it is not possible to predict a flat campsite from below. The freshwater spring supports green vegetation that might give its location away to a thirsty traveler but water can be obtained much easier at the streams and springs at lower elevations. The trees surrounding Pentagon 1 and the basin in which Pentagon 2 is situated completely hide the structures. They cannot be seen from below, even with the aid of binoculars.

The structures would also be difficult to see from above. They are on the highest point in their vicinity against the eastern scarp of the Pryor Mountains. It might be possible to see them from the top of East Pryor Mountain but ridges and vegetation block the view. Several attempts with a high powered spotting scope from the appropriate location on the mountain top have been unsuccessful in locating them

The water on the site is important. It meant that the occupants did not have to leave the location and still be able to observe what was happening below them. The Bad Pass Trail was used by nearly a dozen different tribes in the historic period. Campsites with dozens of teepee rings indicate that these groups of travelers camped at the streams and springs along the trail. Several of these locations are in full view from the Pentagon Site. Warriors, who waited for the appropriate target to stop below them, could have used the site without the need to send out scouts.

The two structures are set on the site with maximum protection in mind. The separation between them means that another war party could only effectively attack one structure at a time. Quite possibly one structure might be attacked without even discovering the other one was nearby. This would allow its occupants to come to the rescue of the one under siege.

The artifacts from the structures also indicate a use by warriors. Gunflints for guns and an awl to repair moccasins are part of the equipment Plains warriors took with them on their raids. These are not the artifacts of visionaries and although hunters could have used them, the terrain around the Pentagon Site is not conducive to hunting. Bison, deer, elk and bighorn sheep would have passed through the area but the terrain between the canyon and the mountain is limited. Better graze and feed is found to the north where there are open expanses of grass in an area known to the Crow as "Where Men Packed Meat" or "Where Men Always Find Game" (Medicine Crow 1992:89).

In sum, the site location, the number and placement of the structures, and the artifacts indicate a party of Plains Indian warriors used it. The identity of these warriors remains unknown. All of the northern Plains tribes built temporary structures when they were on horse raids. The location of the site, at the boundary between Shoshoni and Crow territories, might favor one of these groups as the occupants but there is no conclusive evidence to support either group. In addition to the Crow and the Shoshoni, other tribes

like the Blackfeet, the Sioux, the Flathead, and the Gros Ventre used the Bad Pass Trail. One of these groups could have constructed the site as well.

There is one account of an Indian raid in the Pryor Mountains that matches many of the characteristics associated with the Pentagon site. William T. Hamilton and 24 other free trappers spent the winter of 1848 – 1849 in a camp they had established in a basin in the Pryor Mountains (Hamilton 1910). The precise location of this camp is unknown but a former trapper's cabin (almost completely collapsed) on the divide between Sage Creek and Crooked Creek is a logical possibility. The location of their winter camp is not relevant as the more important information relates to a raid on the camp by a party of seven Blackfeet who arrived in the night, on foot, to steal horses. According to Hamilton, the trappers were waiting for the Indians. They killed two and in the morning they set out on the trail of the other five so the location of their camp would not be revealed to the entire tribe. They discovered one of the Blackfeet warriors, apparently wounded in the battle of the night before, in a grove of willows near a spring that flowed into Pryor Creek.<sup>2</sup> After killing him, they discovered the trail of the others following it along the base of the "southwest end of the mountain" until they finally cornered and killed the remaining four warriors (Hamilton 1910:238).<sup>3</sup> The Blackfeet warriors had a carved pipe, bows and arrows, knives and tomahawks, and two pistols. Hamilton returned to the winter camp, but four of the trappers continued to explore and "crossed the north end of the mountain around its base on the east side and there struck an Indian trail going south."<sup>4</sup> It was evidently the track of the band that had attacked our camp (Hamilton 1910:239)". These trappers returned to camp after finding no more signs of Indians.

Hamilton's description of the attempted raid is instructive in several ways. It took place in the winter when the warriors needed protection of a deadfall timber structure and a fire for warmth. The warriors were on foot, and presumably they came from a base camp somewhere on the eastern face of the Pryor Mountains. The raid took place in 1848 at a time when archeologists believe the Pentagon site may have been used. Seven warriors were engaged in the raid. This is less than the estimated ten occupants the deadfall structures might have held, but seven men is probably too large to use one lodge. The Indians had pistols and gun flints from pistols were recovered in the Pentagon site.

Of course, this discussion is conjectural and the Blackfeet who attacked the trapper's camp are probably not the ones that utilized the Pentagon site. None the less, the raid is precisely the kind that would have taken place from the Pentagon site. It offers a human element to the site and allows us a glimpse into the days when Plains Indian warriors roamed the Big Horn Canyon region.

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<sup>2</sup> The location would be somewhere on the present Crow Indian Reservation between the heads of Sage Creek and Dryhead Creek.

<sup>3</sup> The location is somewhere along Sage Creek where the route would be along the southwest side of East Pryor Mountain.

<sup>4</sup> The location is in the Dryhead about 15 miles north of the Pentagon Site.

**Bibliographic Sources:**

Clark, William

1982 *The Indian Sign Language* University of Nebraska Press. Originally published in 1885.

Cous, Elliot

1965 *History of the Expedition Under the Command of Lewis and Clark*. New York.

Ewers, John C.

1955 *The Horse in the Blackfoot Indian Culture* Bureau of American Ethnology Bulletin 159. Smithsonian Institution, Washington D.C.

Johnson, Ann M., Stuart W. Conner and Kenneth J. Feyhl

1991 Post Fire Identification of Nineteenth Century Wooden Structures. *Archaeology in Montana* 32(2):33-47.

Hamilton, William T.

1910 Trapping Expedition. 1848-9. *Contributions to the Montana Historical Society*, Helena, Montana.

Loendorf, Lawrence

1996 Two Deadfall Timber Structures in the Bighorn Canyon National Recreation Area, Montana. *Archaeology in Montana* 37(1):67-86.

Loendorf, Lawrence and Joan Brownell

1980 The Bad Pass Trail. *Archaeology in Montana* 21(3):11-102

Lowie, Robert

1956 *The Crow Indians*. Holt, Rinehart and Winston, New York.

Medicine Crow, Joseph

1992 *From the Heart of Crow Country* Orion Books, New York

Nabokov, Peter

1969 *Two Leggings, The Making of a Crow Warrior*. Thomas Y. Crowell Company, New York

Secoy, Frank Raymond

1953 *Changing Military Patterns on the Great Plains*. American Ethnological Society Monographs 21. JJ. Agustin, Locust Valley, New York

Voget, Fred

1977 Timber Shelters of the Crow Indians. *Archaeology in Montana* 18(2 & 3):1-18.

**Project Information:**

This project was undertaken by the Intermountain Support Office of the National Park Service, Denver, Colorado. The project management and drawings was conducted in 1997 by Richard J. Cronenberger, Historical Architect, Cultural Resources and National Register Program Services, and Richard Lasko, Chief of Resources Management, Bighorn Canyon National Recreation Area. The historical report was prepared by Lawrence L. Loendorf, based on the document "Dead Fall Timber Structures in the Bighorn Canyon National Recreation Area, Montana" by Lawrence L. Loendorf and Duane Klinner, 1995. The large format photographs were taken by Clayton B. Fraser of Fraserdesign.