

Bison Jumps and Rock Art on the Northwestern Plains

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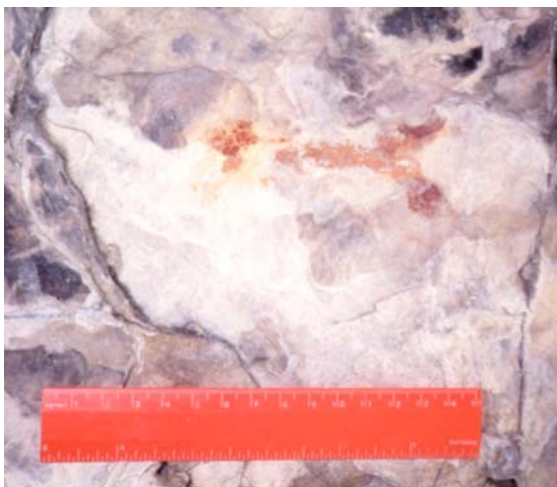
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Several bison kill sites on the Northwestern Plains contain rock art. This is not surprising since the physical feature of a steep cliff used for a bison jump is the same setting normally used for rock art. Obviously, co-occurrence of the two site types could be coincidental. However, other kinds of bison kill sites, such as steep embankments without rocky cliffs and trap areas in drainage bottoms, also occasionally have associated petroglyphs, and this occurrence argues for the intentional association of rock art and bison kills. The purpose of this paper is to present some preliminary observations on bison kills with rock art and point out problems determining association of the two activities. Examples in this paper are from Montana. Other examples can be found throughout the Northwestern Plains such as Head-Smashed-In in Alberta, where paintings are associated with the main jump.

Although dating of rock art is now possible and could help determine if the two uses at each site are contemporary, dating is expensive and politically sensitive. Figures to be dated are necessarily impacted and in some cases completely destroyed, so it is not yet a universally utilized tool for researchers and probably will not be in the near future. Also, simply ascertaining that rock art and kill remains occurred within the same time frame does not affirm a functional relation. Therefore, we need to look at other avenues of

analysis and have found that the kinds of figures at bison kill sites, where the association appears solid, are helpful in suggesting whether pictographs and petroglyphs are likely associated with a kill component or with a separate activity.

Rock art at bison kills usually occurs either as pictographs painted on a cliff over which the bison were driven or as petroglyphs either on the cliff face or on a detached boulder. In some cases association is not possible to determine from surface evidence, and in such cases it is not known if the rock art had anything to do with the kill planning or activity. In other cases evidence suggests a coincidental co-occurrence, such as at the Freeman Creek site in central Montana (see photo to right), which consists of a small limestone rockshelter above an embankment with eroding cultural deposits. The cave is a small rectangular hole 14 feet wide and 25 feet deep, with a red anthropomorph painted on the ceiling (see photo below). Also in the cave are amorphous red smears typical of other central Montana sites.



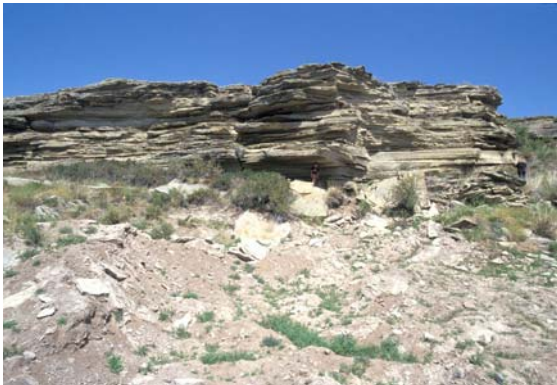
The eroding stratified deposits 20 feet below the cave contain burned rocks, charcoal, processed bison bones, and bone fragments. An association between the rock art and the presumed nearby bison kill has no support other than proximity. The painted figures are typical of this central Montana region and are within a local area of many similar small caves, also with limited numbers of figures. The human figure and smears are generic with no accoutrements that would suggest a ritual attachment to the kill. Therefore, the co-occurrence of rock art and kill remains here could be coincidental.

Rock art on boulders at bison kills provide more conclusive evidence of direct association. Four boulder sites in northeastern Montana fit this pattern. In all cases a small boulder next to bone deposits is carved with bison representations, mainly hoofprints. Although the moving of most of these rocks probably would have required more than one person, some like the small carved boulder at the Wahkpa Chu'gn site in

northern Montana (see photo to right) can be transported. Such rocks could have been brought to the site to serve a ritual purpose associated with the hunt, and bison representations would be expected for this kind of activity. Additionally, excavated kill sites, such as the Ruby site in northeastern Wyoming with its shaman pole, give time depth to ethnographic accounts that describe bison procurement as including rituals. Thus, carved boulders at kill sites are the best examples of what appears to be intentional association.



Rock art that occurs on cliffs over which bison were driven provides the most impressive figures and the greatest variety. However, because of the diversity of figures it is more difficult to determine direct association with the kill. Two examples are Ulm Pishkun south of Great Falls and the Kobold Site on the Rosebud Battlefield in southeastern Montana.



At Ulm Pishkun (photo to left) pictographs and petroglyphs are along the sandstone cliff used for the jump. Most of these are paintings that occur on four main areas along the 550-foot portion of bluff. All aboriginal pictographs and petroglyphs appear to relate to the same general use of the site, and the lack of horses and guns suggests the figures here

may predate the Protohistoric Period. Although there are hundreds of paintings, many are not identifiable as representational. In some cases these were probably simply smears typical of central Montana, while others may have deteriorated past the point of identification. On a traversable ledge is a red bear paw with a solid pad and four toes (see photo to right). The paw is vertical as if walking up the cliff.



Under the main jump area is a small rockshelter with pictographs on both the wall and the ledge above the shelter. There is a possible bird track (see photo to the right), an unidentifiable four-legged animal, and possibly remnants of other figures now deteriorated into red stains.



Just west of the shelter is an overhang about 100 feet long with the largest area of continuous paintings at the site. Here red figures were painted 5 to 10 feet above the ground, although many are now somewhat dull in appearance. The central area is a more well defined rockshelter about 40 feet



long. The area in front of the shelter was excavated by Montana State University in the early 1990s by Tom Roll and Jack Fisher. On the east side of the shelter are about 50 impressed positive handprints, some of which are smeared (see photo to left). There are also some individually painted straight fingerlines and some that criss-cross. Below the handprints is an area of fine spatter

where paint was thrown against the wall.

Several of the painted red figures on the ceiling may be shields. Most are small circles about 10 cm in diameter and with interior painting no longer identifiable as intentional designs (see photo to the lower right). Therefore, these are not typical of shields within the region, which are usually easily identifiable. Ulm Pishkun has a noticeable lack of bison representations, in contrast to the bison orientation of figures on boulders in northeastern Montana kill sites.

However, the kinds of figures at Ulm Pishkun, especially handprints, smears, the bear paw, and a low frequency of human and animal representations are typical of central Montana rock art in general. Therefore, the association of rock art and kill activities at Ulm, while assumed, is not directly indicated by the kinds of figures.



The Kobold site in southeastern Montana was excavated in 1968 by George Frison. Like Ulm Pishkun, Kobold is a sandstone cliff over which bison were driven and on which petroglyphs were carved (general view of site to right).

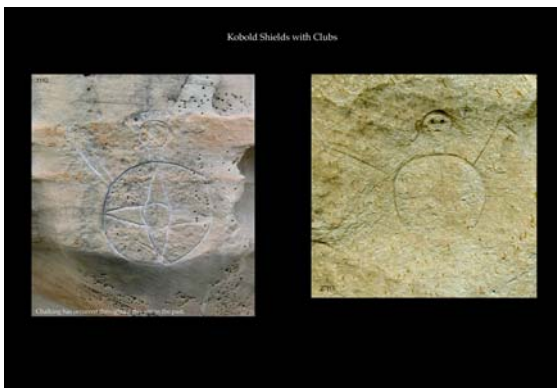


Some, particularly the shield designs, may also have been painted at one time. Since then



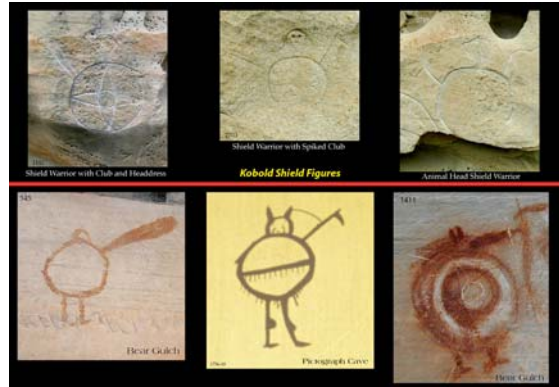
there has been considerable vandalism by both chalk and graffiti, and weathering has caused large pieces of the cliff to fall since the 1968 excavations. Even so, the site still has much to offer.

Shields dominate Kobold and eleven still are at least partially present (see photos to left). Of these, two appear to be modern replications of aboriginal shield designs and probably date no earlier than the 1950s. Of the nine aboriginal shields, four are typical shield-bearing warriors, and the remaining five are decorated circles with no associated humans. Such unattended circles could, of course, be drum covers, as has been suggested by Bill Strange for similar figures in Wyoming. Shield-bearing warriors at Kobold are similar to others in Montana and Wyoming and do not have characteristics unique to kill sites.



Two warriors have clubs like those at Pictograph Cave near Billings, several at Bear Gulch near Lewistown, and others at the Cut Bank Creek site east of Glacier Park.

One warrior has a possible animal head cover and a spiked club, another characteristic noted mainly at Bear Gulch and Pictograph Cave. Rounded and spiked clubs, unlike the spear or bow and arrow, are not a common shield accessory and have a limited distribution in the region. Most shields at Kobold have simple linear designs, with the star being the only representational figure on a shield. Only one warrior has a crown-like headdress.



In addition to shields and shield warriors, there are four other human figures at Kobold, all with rectangular bodies and apparently contemporary. All aboriginal figures at Kobold appear to have been made within a relatively short time, based on their stylistic similarity. The lack of horses, guns, and bows and arrows and the large size of the warriors' shields, presumably for pedestrian use, suggest that these shield figures were made prior to 1700 and possibly much earlier within the Late Prehistoric Period. Like Ulm Pishkun, the Kobold figures reflect the local southeastern Montana tradition. Therefore, the Kobold petroglyphs, with the absence of bison representations, cannot be tied conclusively to kill activities, although the association seems likely.

In summary, these preliminary observations indicate that a relational function between rock art and kill activities cannot always be shown just because bison kill remains and pictographs or petroglyphs are present at the same location. Figures at all sites reflect general regional rock art patterns, although boulders seem almost certainly selected specifically for association with kill or processing related activities. At the jumps, the reasons for specific figure or motif selection, exactly what those figures referred to, or how they functioned are unknown, but they were not necessarily made in association with the kill. It is possible, however, that locations were specifically selected for bison jumps because they already contained rock art, while other nearby suitable cliffs without rock art were not used.