

Northeastern Montana Boulder Rock Art

Mavis Greer and John Greer

Paper Presented at the
Annual Meeting of the Montana Archaeological Society
Sidney, Montana
April 1999

Continuing our regional study of Montana rock art, we turn our attention to petroglyph boulders. This distinctive rock art form occurs throughout the northeastern part of the state and since the 1960s has been the subject of several site forms and a few articles. Publications have focused on individual motifs and individual sites. The only overview of boulder rock art is a 1969 article by Judy Hoy, who reported on ten sites in Phillips County. Our interest is in building on these earlier works, examining boulders from a regional perspective, and using different archeological methods to increase knowledge about the distribution, age, and function of this kind of site.

For purposes of the boulder study the northeastern Montana region is defined as the ten counties north of the Missouri and extending west along the Marias River. The distribution of petroglyph and pictograph modified boulders coincides with glacial boulder deposition through this region. The red flags on the map to the right indicate the locations



of recorded petroglyph boulders. Large continental glaciers did not reach this area until they had grown to their maximum size, and by then the ice sheets were moving slowly and thinning. These glaciers did not cause the extensive landscape erosion in Montana that they rendered further north, but geologists recognize their presence by materials left behind during their retreat, particularly erratic boulders — smooth, nonlocal, transported rocks scattered across the landscape and of different materials from the bedrock and deposits upon which they occur. In northeastern

Montana erratics are mostly sandstone from local sources, but there are also granite, quartzite, and other crystalline rocks from at least as far away as northern Manitoba. These rocks stand out on the plains and attracted rock art producers in all states and provinces in which they occur.





These boulders are some of the earliest references to rock art in the ethnohistorical literature of Montana. In an ethnography of the Gros Ventres, published in 1908, Kroeber wrote, "A complete buffalo of stone, with hump, horns, ribs, and other parts, half of it underground, has been seen by the Gros Ventres, and many offerings and prayers have been made to it." In 1892 Grinnell mentioned a buffalo boulder in the Milk River area, and noted that all Plains Indians held it in reverence, and that the Blackfeet left presents around it. Ewers reports on offerings left by the Blackfeet at a boulder along the Marias River. Rock art boulders were (and still are) places where offerings were left for a variety of reasons generally associated with ensuring well being, and this undoubtedly accounts for the common term "Medicine Rock," by which most petroglyph boulders are locally referred throughout the Northern Plains.



Presently there are just over 700 rock art sites recorded in the SHPO state files. Of these, only 39 have been recorded in northeastern Montana, and of those 39 sites, 22 are boulder rock art forms; their distribution is shown on the close-up map to the left. Although this indicates that over 50% of the known rock art in this area is on boulders, this is probably an under-representation of the total percentage. Intensive survey for rock art in this northeastern region will probably greatly increase the number of boulder sites relative to other kinds of rock art.

One reason boulder sites are so under-represented is that the rock art itself is easily overlooked or not recognized. For example, several site forms note that the modification was recognized only after returning to the site many times and seeing the boulder in just the right lighting. This appears to happen most frequently when the boulder is associated with other components that are bigger, more impressive, and draw the attention of the recorder, such as large multi-component bison kills, where rock art boulders are often comparatively overwhelmed by the surrounding materials. Boulders are also often more portable than panels on cliff faces or caves and are more easily removed from the site and carried away to other



locations, particularly with the help of modern equipment. Among the 22 recorded boulder sites, seven have been moved. The photo to the left shows a boulder that now resides at the CM Russell Museum in Great Falls, and its original location south of Big Sandy, its context, and its original orientation are unknown.

The small number of recorded rock art boulder sites is reflected in the limited number of publications, with only five references specifically to Montana boulders. Additionally, unlike other rock art settings in the state, fewer people have devoted time to searching for, recognizing, and recording boulder sites, and it has not been a site type that has attracted rock art recording or conservation contracts from government agencies. Montana boulders have not been the focus of any of the new dating techniques nor volunteer rock art projects, such as those sponsored in the mountainous areas of the state. Thus, the past 30 years have not resulted in a substantially increased rock art database for the northeast, unlike all other regions of the state, but this does not mean that the boulder rock art form has been entirely neglected. This kind of site has been the focus of archeological work in surrounding areas, in the 90s in especially southern Saskatchewan.



The 22 boulder sites recorded in Montana contain a total of 68 boulders. Although the majority of sites have only one rock, four sites have two rocks, and one, the Simaton's Petroglyph Site, has 43 rocks.

Boulder rock art occurs in two basic forms. The most common is when individual figures (such as shown in the photo above), either representational or conventionalized, are placed on the surface of the rock — these are motifs typically found in a variety of settings and not unique to boulders. The other form of boulder rock art is when the rock itself is shaped into a figure. When this occurs in northeastern Montana and across the Northern Plains, the figure generally represented is a buffalo, the photo to the right shows one in a highway display. Although other rock art settings may make use of the natural shape of the rock, or irregularities in the surface, and integrate these into the pictograph or petroglyph, no other setting is so completely



transformed into the figure itself as are the boulders. However, most boulders recorded to date are not made into a figure but instead have figures placed on them.

Site forms and publications were used to identify kinds of figures placed on boulders in this region. Categories are based on those developed by John Park for the Simaton's Petroglyph Site, with some additions. Some of Park's detailed geometric categories were combined because some site forms lack precise information on those figures. Of the 22 numbered sites, only five contain no information on the kinds of figures, but the remaining 17 sites provide a sample of the kinds of figures that are expected to occur on boulders in this region.

Hoofprints are the most common motif class. Of the 68 total rocks in the inventory, 35 have bison hoofprints. They occur as the only kind of figure on one boulder, but more frequently they are only one kind of many different figures. However, whenever hoofprints are present, bison prints are always among them. Drawings of bison (that is in contrast to the entire rock being formed



into a bison) were noted on only one boulder. Overwhelmingly, people who have written on Montana boulders in the past felt they were associated with bison hunting in some regard. Certainly some of them were, particularly the three that are parts of bison kill complexes. In



addition to bison, hoofprints of deer, elk, and antelope have been reported. The only site with horse hoofs noted to date is Hoofprint Boulder published in 1975 by Ann Johnson in *Archaeology in Montana*. This petroglyph boulder (shown to the left), which also has bison prints, a circle, and some conventionalized or nonnaturalistic figures, often referred to as abstractions or geometrics.

was made of those petroglyphs, and the data may change with a more intensive reexamination of the site. Twelve boulders have circle representations, six have ovals, and five have crosses. Such figures are often combined to make a geometric design, and in some cases the combination of a circle and line were probably made to represent a stylized bison hoofprint.

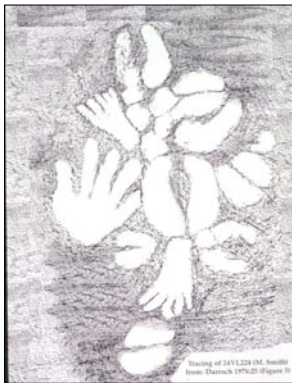
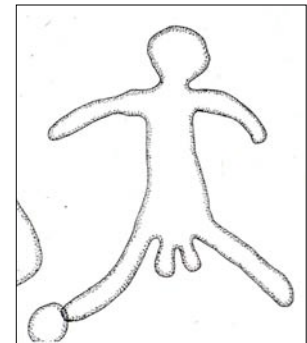
The geometric category was noted on 30 boulders. Two boulders contain nothing but geometric figures, based on the sketchy information available, but only a general description





Human representations are rare. Two human faces have been recorded and both may be masks, as exemplified by the one on the CM Russell Boulder (shown in the photo to the left), which appears to be a figure in a bison headdress. Lines curve out and up from the bottoms of the eyes to form horns, and the stand-up collar around the neck appears to indicate the top of a wrap-around robe, which hides the arms.

A full-bodied human has been reported in Hill County. Although the site form states that this is obviously a female figure, from the drawing the gender is not obvious (see drawing to the right). In addition to these human portrayals, the only others that have been reported from the boulder sites are a stick figure and a V-necked figure.



Human hands and feet are also represented, with feet more common than hands. Only two hands have been recorded, one on each of two boulders. One is on a boulder from Valley County that is now in the Museum of the Rockies. The figures, shown in the drawing to the left, were traced by Marc Smith and published in *Archaeology in Montana* in 1976. Four boulders have feet, and all but one has more than one foot. Feet are more frequently portrayed in Montana in petroglyphs than in pictographs. However,

whether a painting or a pecked image, sometimes feet and hands are hard to distinguish from bear paws, and an example of that confusion is shown in the photo to the right. However, four other boulders have definite bear paws.



The only other animals reported on northeastern Montana boulders are a turtle and two snakes. The snake at the CM Russell Boulder is very distinctive, and it is shown in the photo on the following page.



The snake has a horn or feather protruding from its head (on the right in the photo to the left) and prominent rattles on its tail (on the left in the photo to the left). It is similar to snakes at other sites in the west including pictographs on the Smith River.

To summarize motif information, presently available data indicate that petroglyph boulders in this region are characterized by hoofprints, particularly bison. Other animals are rare, but those observed — the turtle, snake, and bear — are known to be powerful entities on the Plains. Geometric figures, including lines, dots, circles, ovals, crosses, and combined designs are other prominent motifs. Some geometric figures are probably stylized representations of various hoofprints, further strengthening the importance of animals in boulder rock art. Humans, on the other hand, do not appear to have the same level of representation on boulders as they do in other settings, and when indicators of humans are found, they are most often feet, which can be confused with bear paws.



The predominance of animal representations over other kinds of figures sets boulder rock art apart from the central, western, and southwestern regions of Montana. However, this comparison is based on limited data and is a research question for future consideration.

The recording and analysis of boulder rock art shares most methods and problems with other rock art settings. But boulder sites have a unique character that results in a high confidence in associating the rock art with artifacts, features, and soil samples obtained from excavations around the base of boulders. The chance that the boulders were used for activities other than those associated with the petroglyphs is low, as has been demonstrated by several examples from Saskatchewan. In contrast, excavations of a rockshelter or cave that happens to

have rock art may provide information on the occupation of the site separate from the rock art since those sites functioned in other ways. In most cases excavation around boulders may not be able to identify an absolute age to the creation of the figures since these rocks appear to have been continually used as shrines once they were created. Excavation often can provide a minimum age for association of shrine use with existing rock art. In addition, the kinds of associated artifacts can provide information on continued or renewed function of the rock art, which may change through time based on changes in the kinds of offerings left around the rock.

Excavation around rocks is the best method for obtaining additional information on the site, but in many cases subsurface disturbance is not permissible. In cases where this is not a possibility, a metal detector examination of the rock base would be a relatively inexpensive, time saving, and unintrusive means of checking for buried deposit potential. Although metal detectors will only indicate possible Protohistoric or early Historic use of the boulder as an area of offerings, it can indicate use of the shrine and perhaps predict earlier use of the site. This, in turn, could help in evaluation of the sites age and justify continued investigation of the site and perhaps excavation. The metal detector could also be used to test boulders that appear today to be unaltered for previous use as shrines — boulders that were possibly painted or pecked in such a manner that the figures are no longer apparent, are obscured by weathering or changing lighting conditions, or no longer exist. Such metal detector investigation could be used to locate the Medicine Rock of the Marias reported by John Ewers. This boulder was apparently painted with earth paint, but it is doubtful that the natural reddish sandstone boulder could be recognized as painted today. However, Grinnell visited the rock in the late 1800s and mentioned that remnant offerings were present, including a steel finger ring, brass ear rings, and a bottle made of two copper cartridge cases. Provided these were not all collected, they would still be easily detectable today and would provide confirmation of the site. Today, metal detectors are being used by archeologists as tools of the trade and are no longer thought of as used only by pot hunters. They are one means of investigating boulders to identify buried deposits, provide information on age and function of the sites, and confirm use when it is no longer evident by surface inspection.