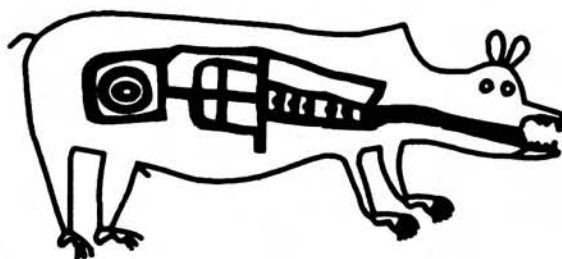


Bear Imagery in Central Montana Rock Art



Mavis Greer and John Greer

Bear images are some of the most impressive painted figures in central Montana, especially when the entire animal is portrayed. Isolated images of heads, faces, paws, and tracks are also easily recognized. the purpose of this paper is to discuss the current knowledge of central Montana bear imagery and to consider similar imagery across the state. Counts on bear images in central Montana and distribution across the state are based on fieldwork data and file and literature searches completed through May 1996. In this discussion, the *Paws* category designates a foot or footprint (track) not connected to the rest of the body. The *Bodies* category designates the portrayal of the complete bear but (for analytical purposes) also includes the *Face-Mask* category of the isolated head or face only.

Occurrence and Distribution

Of the 650+ rock art sites recorded statewide, bear imagery is reported from only 67 sites, or about 10%. It was initially expected that sites with the *Paws* category would outnumber those with *Bodies* because it seemed intuitively that *Paws* were more common. However, of the Montana sites with bear imagery, the situation is actually reversed—23 have *Paws* only and 37 have *Bodies* only. The motif count statewide (the number of individual figures) is essentially equal—59 *Paws* and 54 *Bodies*. Seven sites in Montana have *Paws* and *Bodies* together on the same wall, but only one of these seven sites is in central Montana.

How representative these numbers are remains to be seen. Concentrations of bear images plotted on Figure 1 seem to reflect rock art recording projects more than the actual distribution of figures. Numerous rock art sites have been recorded in western Montana, although apparently no recognizable bear imagery has been reported in Montana west of the Continental Divide (Figure 1). This is unexpected since animals are common motifs in the western part of the state (Keyser 1992a, 1992b; Keyser and

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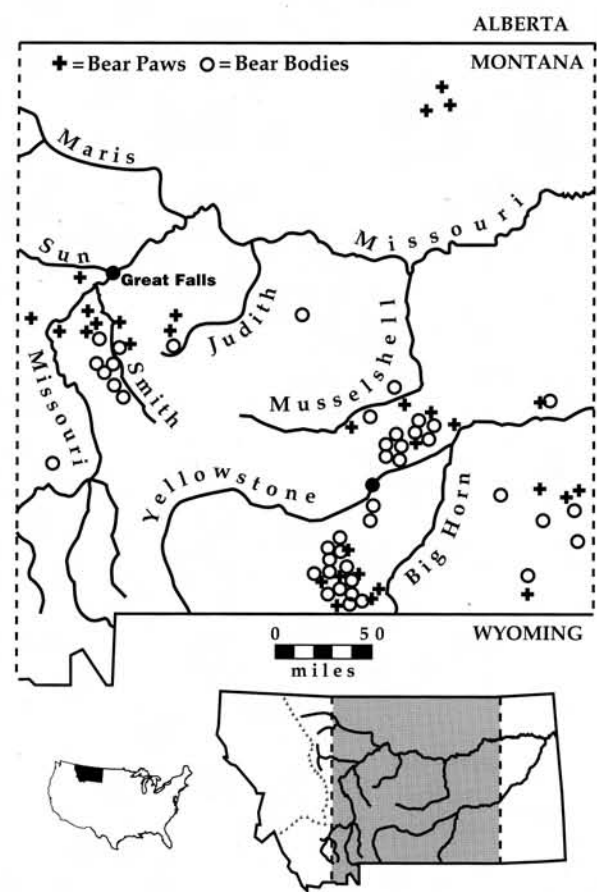


Figure 1. All sites with bear imagery in Montana are shown on the enlarged portion of the state map; no sites with bear portrayals have been reported outside that area (i.e., on the lateral blank portions of the small state map).

Knight 1976) but are infrequently portrayed in central Montana (J. Greer and M. Greer 1992, 1995; M. Greer 1995; M. Greer and J. Greer 1992, 1993a, 1993b, 1994a, 1994b, 1994c, 1996). Still, the abundance of bear track petroglyphs throughout the adjacent Columbia Plateau (Keyser 1992a) and surrounding areas suggests they should occur in western Montana also.

Categories of Bear Imagery

For organization and comparison of motifs, bear imagery is divided into two mutually exclusive categories, *Bodies* and *Paws*. These, in turn, are subdivided according to the appearance of the figure (e.g., perspective, morphological variation) and expressive medium (application method, kind of paint, color, solid versus outlined, etc.). These criteria are time sensitive within the long history of

rock art on the Northern Plains (M. Greer 1995). Subcategories listed below are preliminary and specific to this initial analysis, based as it is on admittedly limited statewide data, and will probably change with a larger sample and with different kinds of analyses.

Bodies, which are more diverse than *Paws*, are divided first according to perspective, which in Montana is time sensitive and appears to be chronologically more important for complete bear motifs than the ratio of paintings to engravings (the opposite may be true for anthropomorphs, where production methods appear to be more time sensitive). *Bodies* are subdivided into *Dual Perspective Body*, *Interior Line Body* (outlined and with interior detail), *Combination Body* (dual perspective plus interior lines), *Solid Body*, *Outlined-Only Body* (no interior detail, single perspective), and *Face-Mask* (included within the general *Bodies* category)—regardless of whether produced as pictographs or petroglyphs. *Paws* are subdivided according to whether they are painted (*Solid Liquid Paws* and *Outlined Liquid Paws*) or are

Table 1. Bear body categories in Montana. Central is included in the statewide counts.

Body Category	Central	Statewide
Dual Perspective	2	7
Interior Line	3	6
Combination	0	5
Mask-Face	1	1
Solid Liquid	4	7
Outlined-only Liquid	1	3
Solid Petroglyph	0	1
Outlined-only Petroglyph	0	7
No Information	1	17
Total Bodies	12	54

Table 2. Bear paw categories in Montana. Central is included in the statewide counts.

Paw Category	Central	Statewide
Solid Liquid	14	14
Outlined Liquid	3	3
Realistic Petroglyph	0	29
Distorted Petroglyph	0	9
No Information	0	4
Total Paws	17	59

petroglyphs (realistic or distorted)—*Realistic Petroglyphs* are solid only, *Distorted Petroglyphs* may be either solid or outlined. Categories do not overlap, and no other categories are documented within the present sample. Categories pertain to the statewide sample, and not all categories occur in central Montana (Tables 1 and 2).

The *No Information* entry in Tables 1 and 2 is for figures with unknown characteristics. These include figures which, in the field, were found to be too indistinct (fragmentary or eroded) to discern internal body characteristics or figures mentioned on state site forms simply, without elaboration, as “bear” or “bear paw.” Some controversial figures suggested by recorders to be bears, but negated by the opinions of others, are not included in these tables. For all categories, the “Central Montana” provenience is included within the “Statewide” totals.

It appears now that production methods are more limited for bear images than for other kinds of motifs. *Bodies* are painted with liquid paint or are engraved and sometimes pecked; there appear to be no crayon (hard dry paint) figures. *Paws* are made with liquid paint, by incision, or by pecking and grinding; again, crayon appears to be absent. The absence of crayon figures (either *Bodies* or *Paws*) suggests that bears were portrayed during early times with liquid paint; and by the late period, when there is a shift from liquid paint to dry crayon figures, bear imagery was no longer being produced, was relatively rare, or was being done almost solely as petroglyphs.

Body forms that occur in Central Montana include *Dual Perspective Body*, *Interior Line Body*, liquid *Solid Body*, liquid *Outlined-Only Body*, and one *Face-Mask*. Two of the four paw categories (Table 2) are reported in central Montana—*Solid Liquid Paws* and *Outlined Liquid Paws*. Painted paws—both solid and outlined—occur only in central Montana, and no painted paws are reported from other parts of the state. Petroglyphs are essentially the opposite—petroglyph paws, solid petroglyph bodies, and outlined petroglyph bodies only occur outside central Montana. The painted *Face-Mask* category occurs only in central Montana, though at only one site.

Bodies

The following subcategories apply to body form. The first four are distinguished mostly by internal features and the remainder as solid or as simple outlined forms. All categories apply to both pictographs and petroglyphs.

Dual Perspective Body (Figure 2a). The body and head are drawn in profile, but with both eyes portrayed, thus producing a dual perspective for the head. The profile emphasizes the snout, mouth, and teeth, while both eyes look out toward the observer.

Interior Line Body (Figure 2b). Bears are portrayed in profile and contain lines inside the torso that range from a single heart line to complex interior designs. The face is detailed in single perspective profile (if at all), although both ears may be shown.

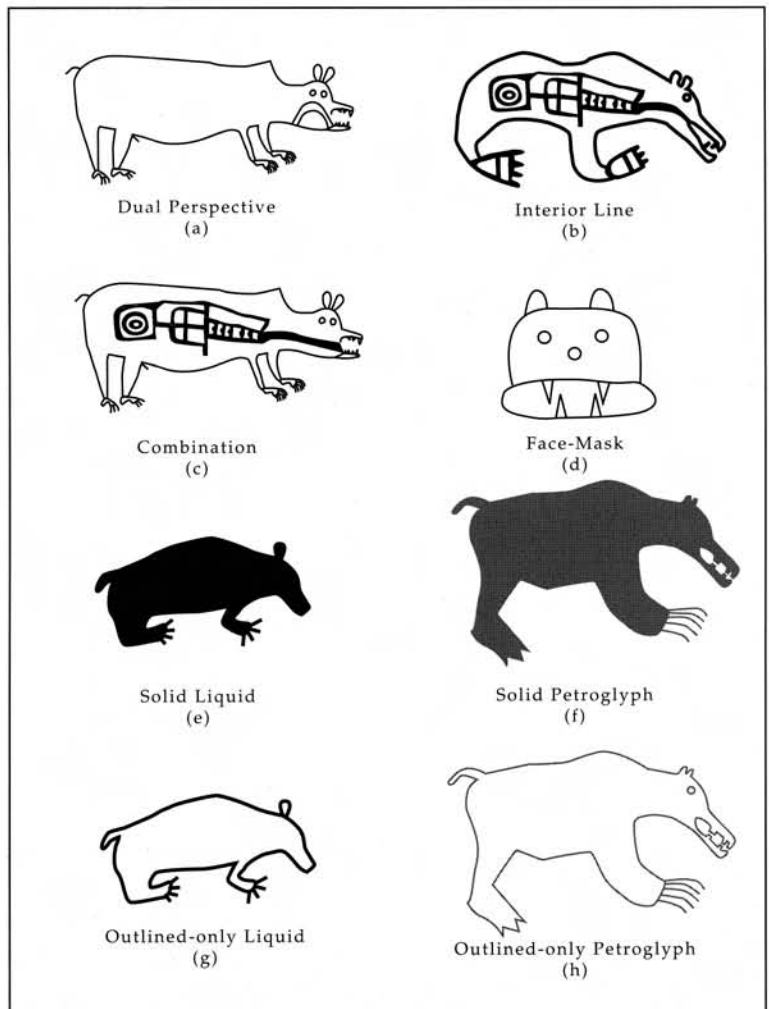


Figure 2. Bear body categories. Images are generic representations only and not actual figures from any one site.

Combination Body (Figure 2c). Bears are portrayed with interior body lines and a dual perspective face.

Solid Body (Figure 2e-f). The solid body is shown in profile with no interior lines or other features. The face is detailed in profile (if at all), although both ears are often shown. Paint is solid, usually red, and petroglyphs are fully pecked.

Outlined-Only Body (Figure 2g-h). An outlined body is shown in profile with no interior lines or other features. The face is detailed in single perspective (if at all), although two ears are often shown. Painting is usually fingerline, and petroglyph bodies are outlined by pecking or incising.

Face-Mask (Figure 2d). The isolated face is portrayed in frontal view and seemingly is intended as either a portrait or a mask.

Paws

The following descriptive subcategories for *paws* pertain to the method of production.

Solid Liquid Paws (Figure 3a). Solid triangular, rectangular, or square pads with rounded corners are drawn in liquid paint. If dots representing toes are included, they are placed a short distance from the distal end of the pad. If claws are shown, they are drawn as slightly curved or straight lines, usually a short distance from the distal end of the pad but occasionally attached.

Outlined Liquid Paws (Figure 3b). Outlined triangular or rectangular pads with slightly rounded corners are also done in liquid paint. In most cases a line is painted across the paw about one-third distance from the distal end, and attached claws are shown as slightly curved or short straight lines.

Realistic Petroglyph Paws (Figure 3c). "Standard" bear paws appear as a complete, fully pecked (solid) pad—triangular, rectangular, or square with rounded corners—and attached long, slightly curved, claws.

Distorted Petroglyph Paws (Figure 3d). "Nonstandard" paws have either the pad or the claws distorted or abnormally shaped. Pads may be compressed or just partially present, and claws may be somewhat stylized to not at all realistic. Figures may be either solid or outlined.

Bear Bodies in Central Montana

Dual Perspective Bodies

Two images of this kind occur in central Montana, one in each of two sites. Both sites are on the same tributary to the Smith River. Five more figures are known in other parts of the state.

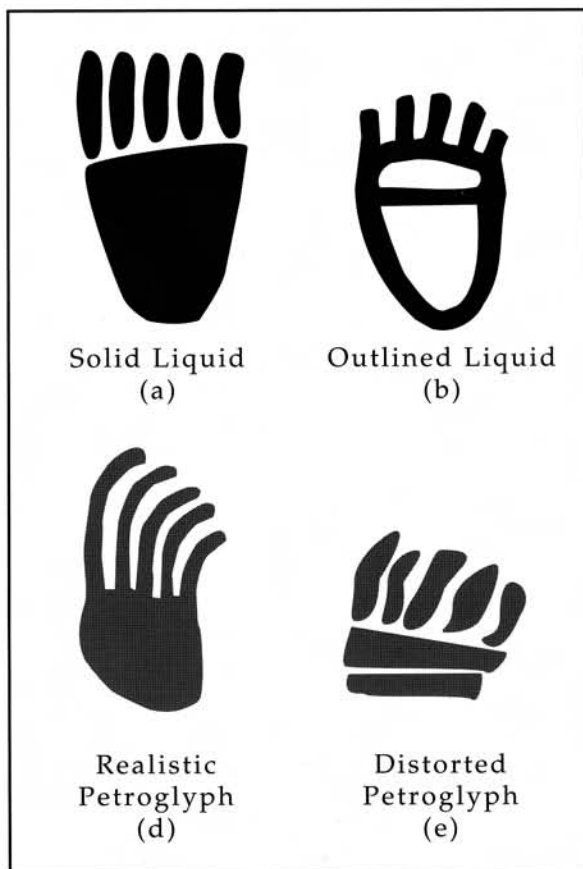


Figure 3. Bear paw categories. Images are generic representations only and not actual figures from any one site.

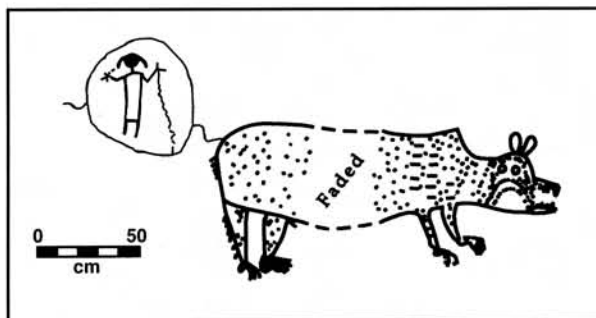


Figure 4. Large "Dual Perspective" bear and adjacent shaman at Rainbow Bear Cave (24ME340).

Rainbow Bear Cave (24ME340) is a moderately large, enclosed room entered from the canyon bottom by a low duck-under entry (thus the room is always in twilight darkness). Pictographs are on the long vertical faces of two flat ceiling ledges near the rear of the room. The main panel (with the bears) faces the entrance. A *Dual Perspective* grizzly 5 ft long is on the right end of the main panel and faces the

entrance, although the figure is nearly against the right wall of the cave and is always in near darkness. The bear is outlined in red liquid paint and filled with red liquid dots and dashes (Figure 4).

Next to the large bear, and connected to it by a wavy powerline, is a small anthropomorph, apparently a shaman with upraised arms and holding a powerline staff. The wavy line from the bear—an extension of his tail—connects to a line that encircles the shaman, then continues winding its way to the left across the cave, passing two birds, two masks, two ivy-leaf-shaped figures connected with a wavy line, and a small ungulate with a curved line over its head resembling a rainbow, before ending on the left side of the cave at a second bear. The second bear is not so well preserved but may be a smaller version of the large grizzly (category identification is not possible). The long wavy line connects the figures of this panel into what appears to be the depiction of a single shamanistic event.

The second *Dual Perspective* bear is at the Canyon Mouth Site (24ME341) just downstream from Rainbow Bear Cave. Faded red paintings, partially covered with calcium carbonate, are on a small limestone bluff next to the river terrace. A right-facing bear head is the dominant figure on the western panel. The similarity between this figure and the head of the large bear in Rainbow Bear Cave suggests that the Canyon Mouth Site head also represents a grizzly, although most of the body appears not to be present. An anthropomorph is just to the left of the bear head, much in the same manner as the shaman at Rainbow Bear Cave.



Figure 5. "Interior Line" bear at Audrey's Overhang (24ME58).

All seven *Dual Perspective Body* figures in Montana are large figures regardless of their location. So far, more have been recorded in southeastern Montana than in the central part of the state (Table 1). Four of the five in the southeast are petroglyphs.

Interior Line Bodies

Three bear bodies with interior detail lines occur at two sites in central Montana (three more occur in other parts of the state). Two are in the Little Belt Mountains near the Smith River; the third is in the forested Homestake-Pipestone area east of Butte.

In Audrey's Overhang (24ME58) a large bear dominates the center of the ceiling at the cave mouth. The bear is in the smaller of two adjacent, deep rockshelters high on the hillside overlooking a steep narrow canyon. The figure was originally described as an abstract human (Keyser 1977) because it seemed to be oriented toward the right side of the shelter. However, when viewed from the perspective of the top toward the cave interior—the most common orientation—a grizzly bear with interior lines is clearly recognized (Figure 5). It is now clear that the figure is a bear with a hump on its back, a jaw similar to other grizzly bear portrayals, and distinctive bear-paw feet with the identifying line across the pad and projecting claws.

The second bear, apparently similar to the previous one, is also on the ceiling at Audrey's Overhang. It is mostly obscured by calcium carbonate deposits, and its details are not clear.

The third known *Interior Line* bear in central Montana is at Lower Whitetail #3 (24JF605). The painting is on the vertical face of a huge granite boulder on a gentle hillside next to a grassy terrace. Later handprints surround and cover the bear, although a layer of calcium carbonate between the layers of paint indicates the handprints were added considerably after the initial drawing of the bear.

Three other *Interior Line Body* bear figures have been reported in Montana (Table 1). A pictograph is near the Musselshell River north of Billings, and two petroglyphs are south of Billings.

Face-Mask

The only bear mask recorded in Montana is in the central part of the state. Bear Mask Cave (24ME1010) is a small cave in a bluff with a series of eroded (phreatic?) tubes, truncated by stream channel erosion and opening near the base of a high limestone



Figure 6. Bear Mask Cave (24ME1010), looking south.

cliff next to the usually dry creek channel. What appears to be a bear's face is painted in red on the vertical face just over the cave entrance (Figure 6). A high curved arc outlines the head by extending down to the cave mouth so the cave opening forms the mouth of the bear. Two large red dots form the eyes, and a natural indentation between and below the eyes appears to be the unpainted nose. The cave entrance forms the mouth of the animal just as it does in some cave and pyramid sites we have seen in Mexico (also see Bassie-Sweet 1991 for examples of the cave mouth being the portal between the spirit and secular worlds). A person entering or emerging from the cave does so through the bear's mouth; and a shaman, chanting from inside the cave, especially at night, would make it seem that the bear was producing the sounds. To the right of the bear mask is a large anthropomorph with upraised arms, again another possible associated shaman like at Rainbow Bear Cave and the Canyon Mouth Site.

Solid Liquid Bodies

Solid Liquid bears in central Montana are represented by one figure at each of four sites. All are smaller than bears of other categories. Three more are known in other parts of the state, and all are large (Table 1).

Fraunhofer Cave (24CA354) is a deep east-facing shelter overlooking the Smith River. The naturally sloping floor has been flattened during prehistoric times by intentionally stacking limestone slabs along

the front of the shelter, and then filling in behind to form a level terrace. A loose limestone slab on the floor has a small red image of a solid painted grizzly, facing right, with a hump on its back. It is the only painting in the shelter.

Black Hole Rockshelters (24ME365) are high on a south-facing hillside overlooking Rock Creek, a tributary to the Smith River. Most paintings are in the eastern shelter, where the floor again has been leveled by fill placed behind intentionally stacked limestone slabs (like in Fraunhofer Cave). The single bear is in the western shelter and is small (ca. 30 cm long) and solid red. It faces right, has prominent ears, and displays a distinctive back and belly. It has no discernible claws.

Pink Shelter (24ME370) is at the base of a south-facing bluff overlooking Tenderfoot Creek, another major tributary to the Smith River. The main panel—with both a right-facing bear and two other paws—is the only site in central Montana to have both *Bodies* and *Paws*. The small solid bear and solid paws are painted in orange liquid paint.

The only *Solid Liquid* bear in central Montana outside the Smith River drainage is at Judith Bluff Pictographs (24JT223), about 50 miles east of the other three sites. The paintings, on a high limestone bluff bordering the left bank of the river, were made by standing in the water. Unlike other bears in central Montana, this small solid red bear faces left and has vertical scratches across its body.

Outlined-Only Liquid Bodies

One bear of this category has been reported in central Montana. Two others are in Pictograph Cave (24YL1) south of Billings.

Bear Gulch (24FR2) is a large rock art site southeast of Lewistown. The bear has a prominent hump on its back and rather crudely portrayed claws (Secrist 1960:9). It is on an extensive panel with many other figures, apparently of different ages.

Comments on Bear Bodies

All recorded *Bodies* in central Montana—and many in the rest of the state—appear from humps on their backs to be grizzlies. However, of the 54 bears noted in state site records 17 are simply recorded as “bears” without further elaboration (Table 1). No petroglyph *Bodies* have been recorded in central Montana, and all five bears with combined *Dual Perspective* and *Interior Line* characteristics are large petroglyphs in southeastern Montana.

Sites with Bear Paws

Counts and distributions of bear *Paws* are shown in Table 2. As noted, only painted *Paws*—and no petroglyphs—are reported in central Montana. Furthermore, all painted *Paws* are in central Montana, and none is outside this area. Even with changes in a future larger sample, the distinction seems noteworthy.

Solid Liquid Paws

Fourteen *Solid Liquid Paws* occur in eight sites in central Montana and display somewhat more variety than *Outlined Liquid Paws*. All are various shades of red or orange. Most are in a vertical position with claws upward.

Pink Shelter (24ME370) contains the only two paws with short claws—five on each foot. These orange paws are together on the wall below a complete bear. The larger is triangular, the smaller more square (Figure 7a). A dark red paw at Sage Creek Cave (24JT123) has slightly longer claws 3.5–5 cm long.

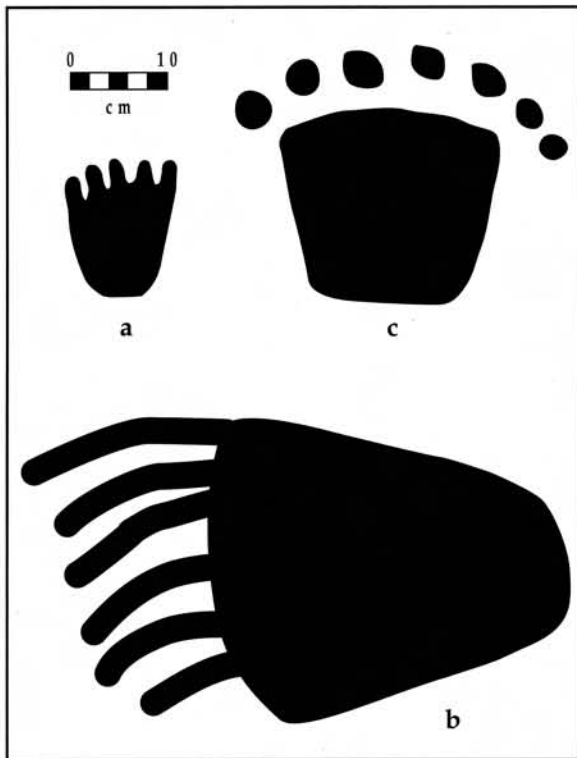


Figure 7. "Solid Liquid" paws at (a) Pink Shelter (24ME370), (b) Rock Creek Pictographs (24LC33), and (c) Indian Cave (24CA347).

Three of the largest *Solid Liquid Paws* in central Montana have claws almost as long as their pads. At Heaven Shelter (24CA433) a single orange paw 29 cm tall has attached claws 14 cm long. The dark red paw at the Elkhorn Upper Boulder Site (24LC248) has a pad 23 cm tall and claws 11 cm long. At the Rock Creek Pictographs (24LC33) a large dark red paw in horizontal position—immediately below a large shield 72 cm across—has a pad 42 cm long and six claws 10–20 cm long (Figure 7b).

Hillside Pictographs (24JT404) has six red paws, the most of any site in central Montana. Four of the paws are small, and two are large. One large paw (26 cm long) was drawn partially over a smaller paw. The two large paws and one small paw were intentionally scratched along the bottom.

Ulm Pishkun State Monument (24CA1012) is a large bison jump, processing station, and associated campsite west of Great Falls. The long sandstone bluffs contain many pictographs and some petroglyphs. A vertical paw in red liquid paint has an oval pad and four red dots just above that represent the toes; there are no attached claws. The only other toe representations in central Montana are at Indian Cave (24CA347), where a fairly typically shaped red forefoot paw has an unusual seven toes (Figure 7c).

Throughout central Montana there are several sites with short alignments of four to five small dots or vertical finger lines. These may be heretofore unrecognized abstractions of bear paws, as suggested by figures such as ones at Ulm Pishkun.

Outlined Liquid Paws

Outlined Liquid Paws occur at only two sites in central Montana, both in the Smith River area. Deep Creek Cave (24CA404) has two orange paws, the larger of which is positioned horizontally facing the cave entrance (Figure 8a); the smaller is oriented in the more common vertical position (Figure 8b). Crystal Cave (24CA102) has a single paw in black liquid paint, and it also is unusually oriented in a horizontal position facing the entrance. Thus, the only two horizontally oriented bear paws in central Montana are both outlined, both are in the Smith River area, and both face out toward the entrance of an enclosed room.

Comments on Bear Paws

Outside central Montana, particularly in the northeast, petroglyph *Paws* are fairly common ($n=38$), and most are portrayed in a fairly standard, realistic

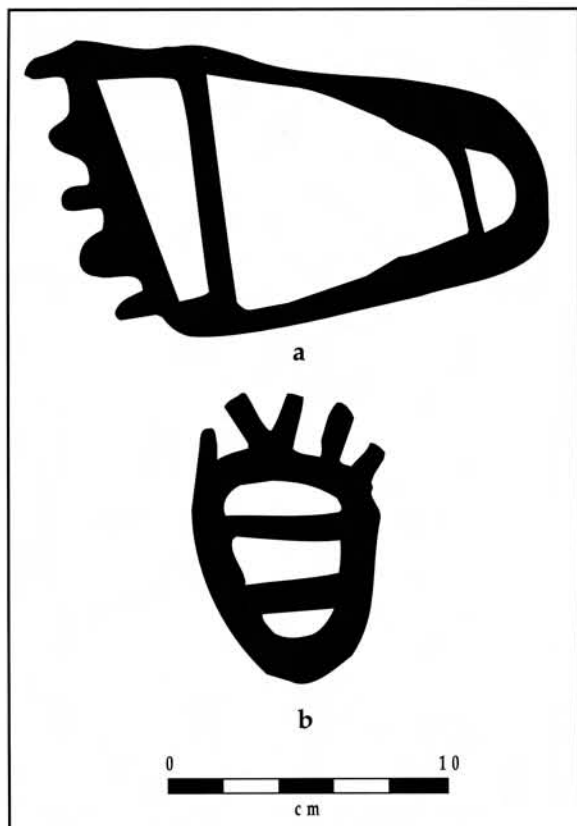


Figure 8. "Outlined Liquid" paws at Deep Creek Cave (24CA404).

shape (n=29). Nonstandard, somewhat distorted petroglyph *Paws* are mostly known from Carbon County, near the Wyoming state line south of Billings.

Function of Bear Imagery in Montana

Bears were associated with the supernatural and recognized during ritual by most prehistoric cultures throughout the northern hemisphere (Hallowell 1926; Rockwell 1991), and with many Northern Plains groups the bear was considered special and was often associated with medicine bundles and curing (Ewers 1982; Loendorf and Porsche 1985:74-78; Rockwell 1991; Schaafsma 1992:88). Bears and shamanism were closely connected, and several photos and drawings of shamans in full bear costumes were made during early encounters between whites and Indians (Ewers 1982; Rockwell 1991). In several parts of the country, such as the Southwest—but not yet recorded in central Montana—rock art depictions of a combination

bear-shaman usually have a human body with attached bear attributes such as feet, claws, or teeth (Schaafsma 1992:105). The connection between bear and shaman in central Montana is represented by shamans drawn next to bears, and sometimes attached with a wavy line.

Bear images in central Montana rock art appear to be associated with supernatural functions that do not include hunting or killing the animals—they are not drawn with hunting paraphernalia (such as spears or arrows) or other indicators of killing. Instead, integrated panels include bears associated with powerlines or shamans (M. Greer and J. Greer 1997). In southeastern Montana, however, nine petroglyph bears are portrayed with spears or arrows piercing the body, suggesting these figures were drawn for a different function.

Age of Bear Imagery in Montana

The only absolute date for a bear image in Montana is from the Bear Shield Site (24CB1090) near the state line south of Billings (Loendorf 1992). The cation-ratio date on a *Dual Perspective Body* petroglyph suggests an age of <1000 years, or sometime after A.D. 950, during the Late Prehistoric period. The figure has characteristics similar to painted figures in central Montana.

Superposition and seriation of central Montana pictographs indicate that kinds and colors of paint are the most consistent and sensitive attributes for chronological change (M. Greer 1995). The resulting chronology of motif introduction suggests that *Outlined Liquid Paws* were introduced earliest, followed by *Solid Liquid Paws* and small *Bodies*, and then large *Dual Perspective Bodies* and *Interior Line Bodies* (Figure 9). The *Outlined Liquid Paws*—the earliest bear imagery—appear to have been painted during the Late Archaic, around 1000 B.C., as suggested by the use of orange and black liquid paint and an association with geometric and abstract designs and other key figures. Solid figures continued in use until the end of the bear imagery sequence, apparently coeval with late, more complex forms.

The large *Dual Perspective Bodies*, *Interior Line Bodies*, and the *Face-Mask* figure in central Montana are probably attributable to people of the Besant and Avonlea cultures of around A.D. 100 to 1100. These people were presumably the main painters of the most complex figures in the largest and most elaborately decorated caves in the area (M. Greer

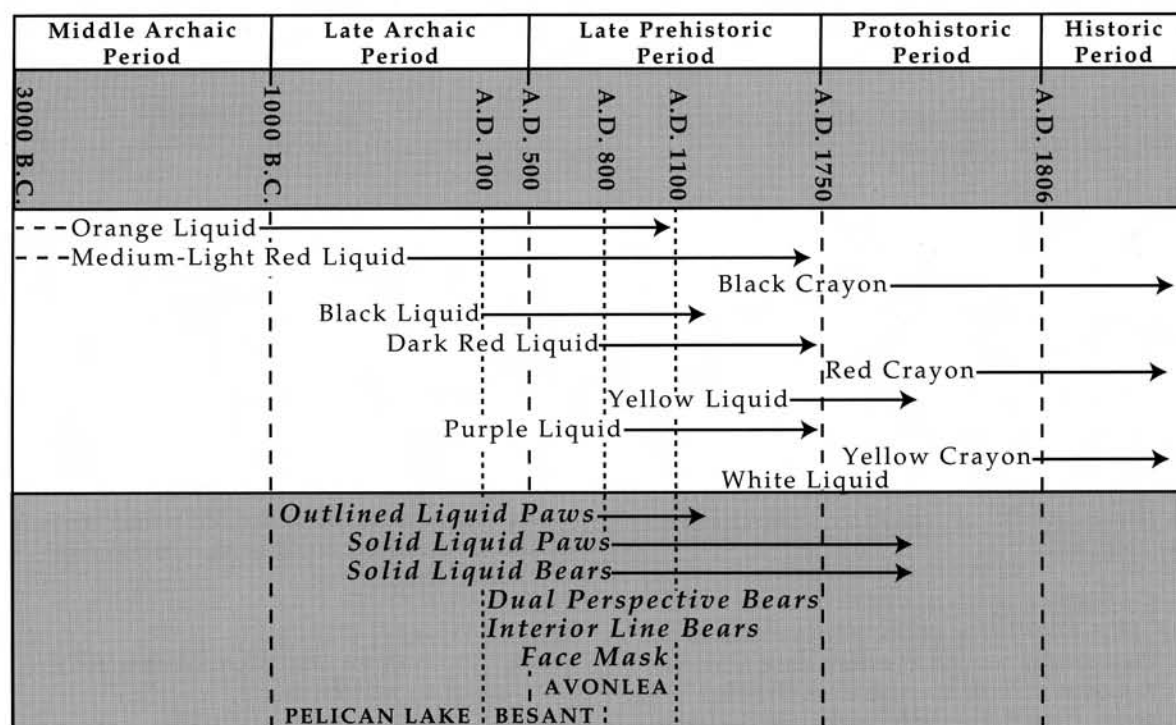


Figure 9. Rock art chronology in central Montana. Upper half shows distributions of paint attributes. Lower half pertains to bear imagery. (After M. Greer 1995).

1995). The paintings appear to have been made for ceremonial purposes associated with shamanism.

Final Remarks

Bear imagery appears to have made its first appearance in central Montana rock art during the Late Archaic as portrayals of outlined paws. These were followed by solid paws and small solid bear bodies. By the beginning of the Late Prehistoric period, when use of the bow and arrow was being established in the area, the most impressive bear figures in terms of both size and detail were being painted in association with other shamanistic depictions, probably by people of the Besant and Avonlea cultures.

Bear imagery is known in only about ten percent of the rock art sites recorded in Montana, but continued survey for new sites and collection of missing information on known sites will undoubtedly change the details presented here. In the interim, this overview indicates differences within the imagery of bear symbolism between central Montana and other parts of the state, as well as

similarities between regions. These differences and similarities, together with temporal changes in iconographic representation—and associated beliefs, rituals, and lifestyles—indicate a complex history of movement throughout and across the state and changes through time of the character of Native American occupation on the Northern Plains.

Acknowledgments. Many people continue to help us during our prolonged study, with contributions ranging from access to sites to animated discussions about bears and rock art. We really appreciate the efforts of Bill Galt (White Sulphur Springs), Elsie Gruel (Great Falls), Gary and Vi Anderson (Great Falls), Beth Curran Cummings and her mother Mrs. Michael Curran (Wolf Creek), Russ and Sue Weingartner (Helena), Stu Conner (Billings), Doug Habermann (Fish, Wildlife & Parks, Great Falls), Jim Keyser (Forest Service Regional Office, Portland), Richard Newton (Lewis & Clark National Forest, Great Falls), and Kelly Keim (Judith Ranger District, Stanford). Photographs in Figures 5 and 6 were computer enhanced in Adobe Photoshop to accentuate details.

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