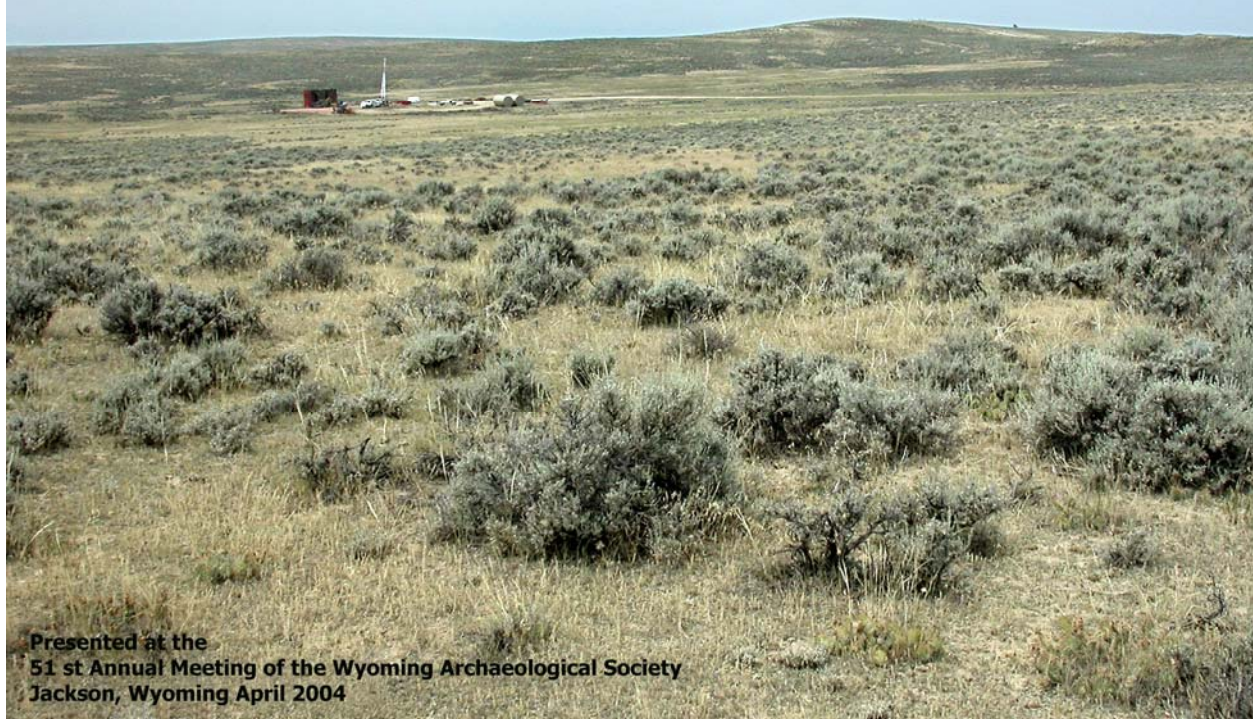


**PATTERNS AND OUTLIERS:
NOTEWORTHY FEATURES AND ARTIFACTS IN WYOMING**

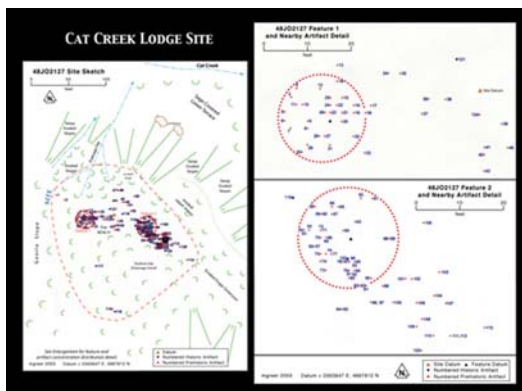
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Uncommon features and artifacts in the archeological record always draw attention because they are not what one would expect. But this attention does not necessary result in the same level of recording, analysis, and protection afforded common artifacts because they do not fit a pattern, which is what many research designs and management plans are geared toward. The management and common research emphasis on patterns arises not only because certain common site types, such as tipi rings, must be dealt with on a daily basis by many agencies but also because outliers are considered insufficient for meaningful distributional or comparative studies. This can result in evaluation and analysis regulations that cannot accommodate something out of the ordinary, and unusual sites types or artifacts can be slighted because specific literature is absent on the significance of such cultural resources. Yet such sites and artifacts enhance our knowledge of prehistory and history by providing a more holistic view of earlier cultures. Today we want to show you three examples of outlier sites and artifacts we have dealt with in Wyoming.



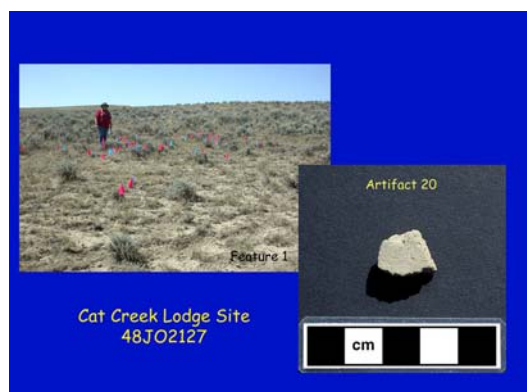
Large skin-covered lodges or tipis on the northern Plains were mostly held down with pegs by the time Europeans started recording and photographing them. However, such peg-held houses are not easily identified in the archeological record. Last summer we recorded a site in Johnson County, on a high bench overlooking Cat Creek east of Buffalo, that appears to be the location of two such features. Identification of the houses or lodges is based on dense circular concentrations of artifacts. The high density of materials across the site forms a diverse assemblage and includes three aboriginal pottery sherds. Pottery is not common in this part of the Powder River Basin, and the SHPO database lists only five other sites in Johnson County as containing pottery.



The two features are about 60 feet apart. Feature 1 is 20 feet in diameter, and Feature 2 is 23 feet. Diameters were defined in the field from visual examination and exact GPS plottings of the flagged artifacts. Both features appear to have been enclosed areas where items were left scattered across the floor and not swept back to the edges of the house or out the door. This is a different configuration from another

possible peg-held lodge site we recorded north of Biddle, Montana, still in the Powder River Basin where artifacts were found in a circular pattern around what was assumed to be the edge of the living floor. House artifacts in the Cat Creek site appear to have been lost or discarded under a floor covering of hides or mats rather than on a dirt floor that was swept clean. Artifacts, including tools and manufacture by-products, are present across all of each circle.

The three small aboriginal sherds, two in one house and one in the other, are not typical of the region. They have a much finer paste composed of extremely fine sand with no grog, crushed sherd, or rock temper. The sherd in Feature 1 is plain grayware with a medium gray interior and a buff exterior. The



interior and exterior are both finely smoothed but not floated, and the fine sandy paste has a few dark sand inclusions. The interior core is also buff colored with no firing bands.

The other two pieces were in Feature 2 and include another small body sherd with a smooth interior. The exterior surface is somewhat irregular and may be part of the neck. The very dark brownish-gray paste is extremely fine and again without obvious temper. The other small body sherd has a slight curvature and may be from the lower part of the neck. Both surfaces are well smoothed, and the exterior has an intentionally applied reddish or orange wash.



Other artifacts at the site include several scrapers. These are noticeably larger and cruder than at other sites in the area; have a thick motley or thinned proximal hafting element, and exhibit a high incidence of typical scraper breakage evidenced by snapped distal bits. While it is possible that many of the scrapers were used by hand, it is more reasonable that they were hafted onto unusually large shafts,

thus differing from the typical small thin scrapers common during the Late Prehistoric Period. It is assumed that the materials here are no earlier than terminal Late Prehistoric and more likely are Protohistoric in age. The broken scrapers are especially abundant in the house features. Also in the houses are numerous pieces of burned and heat fractured chert, which were brought in from another source. Present are artifacts of nonvolcanic glass, which although native to the



Powder River Basin continues to be rare on sites, and obsidian as well as nonlocal chert and quartzite. A portable metate is located between the two houses in a location that appears to be a defined external use area.

In addition to the metate, pottery, and lithic artifacts, three hole-in-top cans may be contemporary with the lodge use.



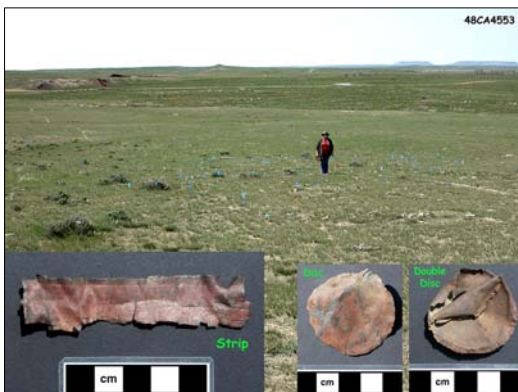
The can style suggests historic manufacture between 1880 and 1900 based on the presence of the machine-soldered non interlocking side seams. Thus, although the exact age of the occupation presently is not known, if the lithics, pottery, and cans are contemporaneous a late 1800s use by local Indians is a good possibility. There is a potential for buried cultural deposits, and excavation might be able to

provide information on the age, function, and affiliation of the site.

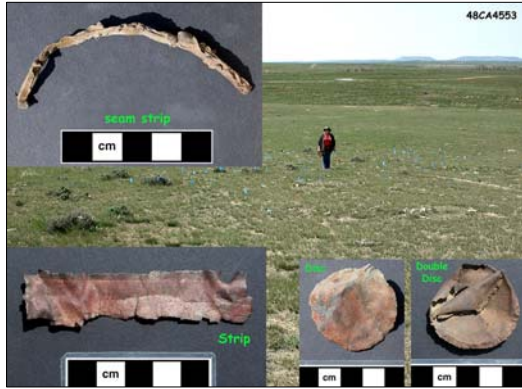


Another historic site type we've been finding and investigating for several years is what we descriptively term *strips-and-discs*. Artifacts at these sites are either exclusively or overwhelmingly dominated by metal strips cut from hole-in-top cans, and discs stamped or machine-cut circular pieces one and a half inches in diameter, always unperforated

The strips are cut around the circumference of the can (as opposed to lengthwise) to form a shape longer than it is wide and usually measuring 1/2 to 1 inch wide, perhaps a finger-width or some other eyeball type intended width. Strips at some sites are evenly and very carefully cut, while those at other sites are crude and uneven.



Discs occur as single metal circles or doubled where two discs were cut out together and are still stuck together in perfect alignment. In most cases double discs have the edges even and together so they are best recognized by thickness, but edges on folded double discs often separate and are easily identified as two. Very narrow strips of specifically and carefully removed can seams are also present.



These are usually 1/4 inch wide and were cut along either side of a hole-in-top can end seam.

So far we have found and recorded fourteen of these sites — six in Converse County and eight in Campbell County. Kay Hammer has told us of three concentrations of strips and discs on the large Cedar Ridge Site in Natrona County, west of Casper, and Dick Enders told us of another strips and discs site in

Converse County. Our experience with this site type has shown that they are difficult to recognize because the small pieces of metal are usually camouflaged in the natural color of the ground surface or are coated with a thin veneer of mud that hides them during surface survey. However, even when they are recognized, they may not be considered artifacts worthy of recording by some field workers, and we are sure that many have been overlooked either accidentally or intentionally. It is likely that most sites of this type have not been found (or recorded) during routine surveys, and our sample is not at all representative of the site type.

Counts of observed objects (mostly surface) on known strip+disc sites.
 Only sites 48CA3445 and 48CA3450 were searched with a metal detector,
 and only 48CA3445 was intensively collected.

In this table all strips and discs regardless of fragmentation
 or doubling are included in the general column.
 Lithic artifacts and later cans are in the *Other* column.

Site #	Total Objects (sans other)	Strips	Discs	Seams	Other
48CO1381	1	0	1	0	0
48CO1246	34	34	0	0	0
48CO1629	350	300	50	0	0
48CO1643	602	476	26	0	0
48CO1645	201	186	15	0	0
48CO1692	67	58	9	0	0
48CA2645	1	0	1	0	0
48CA3445	60	29	20	11	2
48CA3450	76	76	0	0	1

48CA4259	132	121	11	13	0
48CA4455	305	269	16	20	4
48CA4552	53	43	6	4	2+
48CA4553	122	110	4	8	1
48CA4729	79	70	7	2	12
TOTAL	2083	1772	166	58	22+

In general there is no artifact diversity, and most sites contain nothing but strips, discs, and a few trimmed seam by-products. Other items, all rare, are invariably from unrelated earlier or later uses of the same location. The number of strips and discs at recorded sites is variable, as shown on this table which details inventories at sites we have recorded, but the density may have some significance to the number of people involved in related activities, or perhaps the intensity of the manufacturing activity. Boundaries of strips and discs concentrations are usually fairly well defined, with central areas more heavily concentrated and outlier scatter probably the result of animal trampling and some degree of wind dispersal. Because artifacts are often covered with a thin layer of sediment or hidden in the sod, we have learned that the number of items in inventories done without the use of a metal detector is only a percentage — usually half or less — of those actually present. To date, only two strips and disc sites have received a complete metal detector recording, and only one has been collected.

Of the fourteen recorded sites, two contain only a single disc each and no strips, and two others have strips only. Six sites have what appear to be unrelated historic or prehistoric items, in addition to strips and discs, and these items are listed as “Other” in the table shown here. In all cases the non-strip and disc items appear to be only fortuitous aerial overlaps, with no occupational or use relation because the sites are located in settings that are also typical locations for campsites of any period. Therefore, it is not surprising to find lithic materials or historic items at these locations.

The “Other” items include a tobacco can, a copper piece from an electrical apparatus (presumably a light bulb), an insulator fragment, and unmodified recent sanitary food cans. Site CA4552 has what is believed to be is a later component consisting of animal pen remains evidenced by large sandstone slab tie-downs wrapped in barbed wire and two sanitary cans. Site CA4455 contains four prehistoric lithic artifacts, and site CA4553 has an isolated arrowpoint. In the two sites with lithics, it appears that the items represent generalized use of

materials at two sites south of Gillette). It is also possible that people at these sites were making knives, arrowpoints, conchos, decoration for clothing or horse trappings, decorations on knife handles or spears, or strip wrappings on knife handles or spears. Of these possibilities, tinklers seem most likely. Most ethnographic tinklers were made from a pie-shaped or wedge-shaped piece to form a conical form, small at the upper end and more open at the lower, manufactured by wrapping the cut piece around a small metal awl. These completed conical pieces, usually about 3/4 to 1 inch long, are suspended from a shoe, shirt, or other garment. Items from some of the strip and disc sites (notably CA3445 and CA3450) suggest that some items may be more



complicated than simple conical tinklers and may have been suspended or strung horizontally. Examples at those two sites appear to be curled or rolled on one side-end, essentially identical to a typical tinkler, but with the other side-end of the strip cut with one to four tabs. The tabs could have been used to attach the tinkler to a garment, allowing the horizontally rolled piece to dangle; or the tinkler

could have been strung (or sewn) to a garment horizontally, allowing the tabs to dangle downward. Thus, at this point, we believe the strips and discs are associated with historic period Indian activities in the latter part of the 1800s and are apparently manufacture stations represented by discarded by-products and rejects of that production. The final position, use, and even final intended form of the objects are not known. The site type needs much research before conclusive statements can be made concerning the age, function, and cultural affiliation of individual sites. We would appreciate hearing any thoughts or comments you might have on this site type.

Least you forget that our main research interest remains rock art, we would like to end with an example of outliers in rock art that deserve additional attention. Like the rest of the archeological record, rock art researchers tend to focus on patterns within and between sites and give little attention to outliers or individual figures for which there is little or no comparative information.

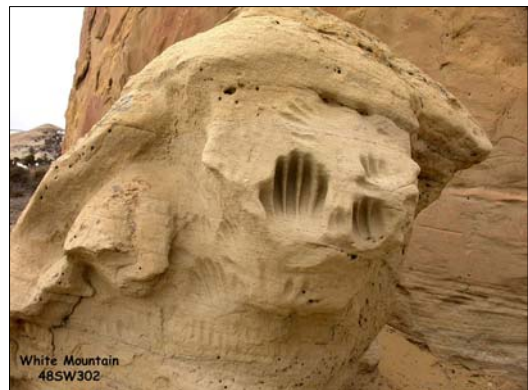


Actually, this problem may have been exacerbated in rock art research because until the past couple of decades it was not possible to date rock art without comparative figures and even now with advances in rock art dating, it is still more economical and conservation-oriented to use relative dating methods rather than more expensive and destructive absolute methods. Therefore, unusual figures did not and still do not receive the attention of motifs (that is, a recognizable, easily defined, and repeatedly used design or figure). However, unlike strips and discs, rock art sites are almost universally recognized as significant sites, so slighting outlier figures during recording or analysis will not lead to site destruction, and in most cases it will be possible for future researchers to pick up the pieces later.



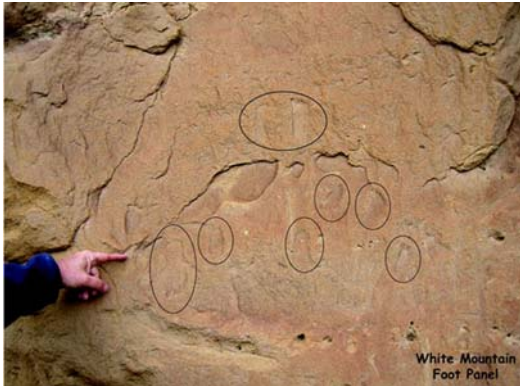
The example of a rock art outlier we focus on here is the human foot. Footprints of animals are motifs that receive much attention in the rock art literature. Occurrences of deer, bear, and horse prints are prolific, and by Protohistoric and early Historic times horse prints are commonly portrayed in both rock and ledger art to denote movement of people particularly in warfare. Bear prints occur in many

different shapes and sizes and often are drawn to differentiate front from rear paws, and black bears from grizzlies. However, when human prints are made in rock art they tend to be hands rather than feet. Human hands occur on rock art throughout the world, and the distribution of this motif has been examined for many regions and from many different functional scenarios. The interest in hands had led to research in determining age and sex of the rock art hand in addition to reasons for leaving handprints on the rock. Human feet, however, are not shown in the rock art with the same frequency, so



when they are found they draw attention, but they have not generated the same level of interest or analysis. In fact, in both Montana and Wyoming rock art they are relatively rare compared with any other kind of human portrayal, and there are even fewer examples when those feet that are ambiguous between humans and bears are removed from the sample. The only site we know of in Wyoming and Montana with several feet is White Mountain near Rock Springs.

One panel has eight feet, and unusual as that is in this area, even more so is that seven of them are baby-sized. The two feet at the top of the panel form a pair, which is the only site we know



of in the region where feet of any size are paired, although pairing is done with handprints. The pair is pointing up the wall, while the other six single occurrences include two pointing up the wall and four pointing down the wall. The significance of the number of small feet relative to large, their orientation on the panel, and their reasons for portrayal are unknown, and the comparative literature on this figure type is scarce especially when compared to the

amount published on the reasons for handprints in rock art and by whom. Feet may have as much to offer rock art researchers, but as outliers with a small comparative database, they have yet to realize this potential.



Patterns and outliers are both essential to archeological research and as such it is important not to let outliers fall through the cracks during the development of research designs and management plans that set forth regulations for evaluation and protection of sites and artifacts. Individual outlier rock art figures or infrequently found artifacts such as Clovis points are almost always afforded

protection because they occur within, or are associated with, a common site type whose patterning is recognized as important to research. But other uncommon items or site types, such as strips and discs or artifact concentrations that appear to represent peg-held tipis (especially if all artifacts are unmodified flakes), are easily overlooked as having nothing to contribute because individually they appear to be little scraps of metal or non-diagnostic lithics. Even when taken as a whole they form site types usually not recognized as being within the established pattern of sites deemed worthy of study. Thus, it is essential that management plans remain flexible to allow outliers a place within the system.