UTAH ROCK ART

Volumes XXV and XXVI

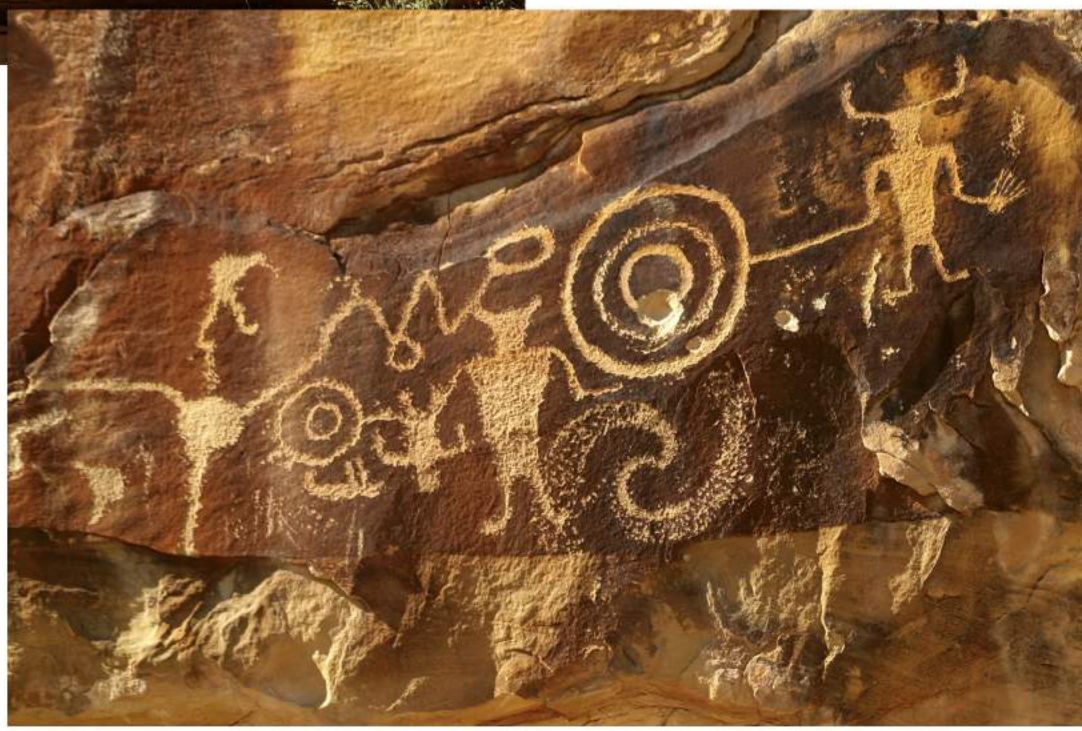
Papers of the Utah Rock Art Research Association

Twenty-Fifth

Annual Symposium

October 7-10, 2005

Price, Utah



Twenty-Sixth

Annual Symposium

October 6-9, 2006

Vernal, Utah

Edited by Anne McConnell and Elaine Holmes

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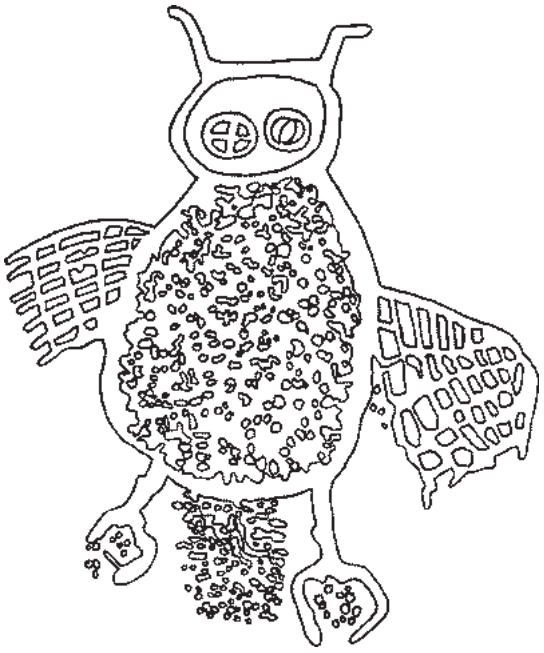

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THE IMPORTANCE OF THE ROCK ART IN NINE MILE CANYON, UTAH

The Twenty-fifth Annual Symposium of the Utah Rock Art Research Association was held in Price, Utah, because of the threat to the rock art of nearby Nine Mile Canyon. Everyone attending the symposium was encouraged to take this opportunity to visit Nine Mile Canyon and see for themselves the adverse impacts that are occurring to the rock art in the canyon. Because of this situation, I am going to focus this paper on why the rock art in Nine Mile Canyon is important. This paper is divided into three parts. The first part is a brief discussion about the natural gas explorations and extraction activities that are impacting the rock art in Nine Mile Canyon. The second part is a discussion of previous research in Nine Mile Canyon for those who are not familiar with this topic and as a foundation for the information that is presented in the third part. The third part presents examples that demonstrate some of the reasons why the images in Nine Mile Canyon are important and why they should be preserved. This discussion cannot include all that is known about the importance of the rock art, it would require a book to do that, but these examples should be sufficient. In this paper I wish to emphasize the importance an individual panel can have and show how much information can be obtained from just one panel, and what images in these panels tell us about people who came to Nine Mile Canyon hundreds, and even thousands, of years ago.

PART I

THE THREAT TO THE ROCK ART OF NINE MILE CANYON

Oil and principally natural gas extractions on the West Tavaputs Plateau and the adjacent southern rim of the Uintah Basin threatens to harm and has harmed the important prehistoric images that exist in Nine Mile Canyon. Dust created by commercial vehicles traveling on the dirt roads is being deposited on petroglyphs and pictographs making it difficult in some instances to even see the images. Numerous construction trucks, tankers with large trailers, large gravel trucks hauling road base, drilling rigs, water tankers, and other large commercial vehicles travel up and down the unimproved dirt road in the canyon 24 hours a day. Currently about 40 commercial trips are made every day over the road in Nine Mile Canyon, which was never designed for 80,000-pound vehicles.

[Note 2008: The number of vehicle trips is expected to reach 2,853,370 over the 33-year life of the project (WTP DEIS, Section 2.2.10), which, for 168 new wells, would be 575 trips a day. This figure represents only part of the development of the natural gas and oil resources because this number of vehicle trips is only from one major natural gas company—Bill Barrett Corporation—and several small companies. Even this number is only an estimate. Actual vehicle trips will certainly exceed this number; just as the actual number of vehicle trips today is almost double Bill Barrett Corporation's previous estimate.]

As these semi-trucks and trailers travel over the dirt road, great clouds of dust fill the canyon. The dust settles on the vegetation and the rock art that lines the canyon walls. The numerous petroglyphs and pictographs that were created hundreds and even thousands of years ago are now becoming obscured by this dust (Figure 1). When it rains, the dust turns to mud, which flows down over the images impacting them even more (Figure 2).

Figure 1. Left: Oct. 2000. Right: Oct. 2005. Sometime after this picture was taken, the dust was removed from this and the Great Hunt panel, apparently with a pressure washer, by persons unknown.

Figure 2. Petroglyph panel showing the effects of road dust and rainwater, Oct. 2005.

Figure 3. Part of a large newly fallen section of a cliff face on the Nine Mile Canyon road, Oct. 2005. A pictograph panel is now missing on the cliff face above. The bright red-orange paint is to alert drivers of the now hazardous rock.

The use of corrosive magnesium chloride and other chemicals which have recently been applied to the roads in an effort to control the dust, also ends up on the pictographs and petroglyphs as the extremely heavy trucks eventually break up parts of the dirt road and churn it to powder. Pollution from diesel exhaust and compressor stations fouls the air and adversely affects the rock art. Vibrations from the heavy trucks are also loosening the rocks on which the rock art was placed, hastening the image's total destruction. Figure 3 shows part of a cliff face that once contained pictographs that is now lying on the road.

In the fall of 2004, the National Trust for Historic Places designated Nine Mile Canyon as one of the "Eleven Most Endangered Historic Places in America*."* The Carbon County Commission, the State of Utah, and the Bureau of Land Management have all failed to take any substantive preventive measures to protect the prehistoric rock art of Nine Mile Canyon. Their primary failure is that they did not require all commercial vehicles to use an alternative route past the town of Sunnyside, bypassing Nine Mile Canyon entirely.

PART II

PREVIOUS RESEARCH

The following is a brief summary of what researchers have understood about the rock art in Nine Mile Canyon and in Utah. This summary provides a description of how the prehistoric images in Nine Mile Canyon have been studied by researchers, as well as what has been understood about the origins, cultural affiliations, styles, areal distributions, currently defined classifications, etc. of these images. This summary will also briefly review how various systems of classification were developed and demonstrate the variety of types of rock art present in Nine Mile Canyon. It will also provide relevant introductory information for the discussions in Part III. The developments in rock art research are arranged in order of occurrence.

Garrick Mallery

Almost certainly, the earliest attempt at investigating the rock art in Utah was by Garrick Mallery in 1882 and 1889 (published in 1886 and 1893 respectively). In the late 1800s, little was known about Utah rock art outside of Utah (Mallery 1886:116–121). The situation in Utah was entirely different. Members of the Church of Jesus Christ of Latter-Day Saints (Mormons) had settled next to the Great Salt Lake in 1847. Two years later colonization efforts were commenced that led to small settlements throughout much of what would later become the western United States. The people who settled the Price area were soon acquainted with the rock art in Nine Mile Canyon.

In about 1888, the ancient inhabitants of Utah and the southwestern region of the United States were known as Moki Indians. Mallery's work not only represents the early stages of categorization, but also the determination of cultural affiliation and the distribution and meaning of rock art. Mallery attempted to correlate comparable images from various regions to show a consistency in the meaning of the images and therefore establish a cultural continuity. He determined that various types of rock art located in Utah were comparable to that which existed in surrounding regions and he concluded that it was also created by the same cultures and that it had interrelated meaning.

Julian H. Steward

Julian Steward in 1929 described a style of petroglyphs that he identified in the western United States, i.e., from eastern California to the Rocky Mountains of Utah (Steward 1929:220). This area, called the Great Basin, is west of Nine Mile Canyon, which is situated on the Colorado Plateau east of the Wasatch Mountain range. Steward noted that the images found in the Great Basin consist principally of curvilinear design elements, such as meanders and wavy grid patterns, which often filled the entire surface of a boulder. Steward named these images the Great Basin Curvilinear Style. The style also includes circles, chains of circles, spoked wheels, hand and footprints, animal tracks, mountain sheep, simple human stick figures, along with "abstracts that defy description." Mallery was also aware of this type of image (Mallery 1893: plates I–XI) but he did not suggest a name for them. Steward attributed these panels to the Desert Archaic Culture. In Utah and Nevada, they apparently continued to be created into the Formative Period with the addition of small Fremont anthropomorphs. These images extend farther eastward than Steward realized.

Albert Reagan

In about 1930, Albert Reagan, a schoolteacher with the U. S. Indian Field Service who was teaching in Ouray, Utah, became interested in the rock art in Nine Mile Canyon and in the Uintah Basin of northeastern Utah. He published several papers in which he classified the rock art in the Ashley and Dry Fork Valleys into a kind of cultural-history scheme (Reagan 1931, 1933a).

His categories were Basketmaker, The Earth-Lodge Pueblo People, People of the Round or Circular-Bodied Drawings, and The People of the Head-Hunting Square-Shouldered Drawing Era.

Up to Reagan's time the differences between the archaeology and rock art of eastern Utah and the surrounding areas were still little known, so Reagan believed, as did others, that Utah was a fringe area of the Anasazi from the Four Corners region of Arizona, New Mexico, Colorado, and Utah. At that time, Utah was considered by archaeologists to be part of the "Northern Periphery" of the Anasazi.

Reagan's initial paper was followed by a number of others over a period of several years (principally 1931–1935) in which he expanded his thesis. Reagan believed that the first occupants of Utah were Basketmakers and that they were confined largely to the Ashley-Dry Fork Canyon and to Nine Mile Canyon (1933a:3). The panels where "Puebloan" elements superimposed "Basket-maker" elements were evidence to Reagan that the Puebloan people of the "Willard-Beaver Culture" of western Utah migrated into the area. Later occupation by Pueblo people resulted in the creation of the panels in Hill Creek Canyon where "…men carrying the image of the horned snake, kachina scenes, and women with whorled hair as Hopi virgins wear their hair at the present time" (1933a:6). Reagan also described panels in Nine Mile Canyon purportedly depicting Puebloan ceremonial scenes with masked participants (1935:707–708), Puebloan horned or plumed serpents (1933b), and Puebloan domesticated turkeys (1933a:6).

Reagan believed that the fourth and last group to migrate into the region were the Head Hunters, who appeared to be an amalgamation of peoples, including some of the Shoshonean family, more or less allied with the ancient peoples from which the present Ute-Chemehuevi people descended (1933a:7).

Most of Reagan's explanations for the cultural affiliation and interpretation of rock art in Nine Mile Canyon have been superseded by later research; and although he used names for various types of rock art images in Nine Mile Canyon that have not stood the test of time, the temporal sequence that he proposed for the various images is surprisingly accurate. Reagan's papers are also still valuable because they contain photographs and descriptions of rock art and archaeological features that no longer exist or are badly vandalized.

Noel Morss

Also in 1931 a report was published by Noel Morss, an archaeologist from Harvard University, that changed archaeologists' views of the prehistoric cultures in Utah. Morss identified the rock art in Utah as being unique from that of the general Southwest and determined that it was characteristic of a distinctive culture, which he named the Fremont, after the Fremont River drainage in central Utah where he was excavating sites.

Morss notes that the rock art of the Fremont region is,"among its most interesting antiquities" and at the same time concluded that the images "…present some of the most difficult problems" (1931:34). Morss believed that the images could be associated with the materials that he excavated; however, variations from what he considered normal always seemed to lead to great uncertainties. Morss noted that "…studies in style, subject matter, and superimposition do little to clear up the confusion" (1931:34).

In 1929, Morss made a "…hasty trip as far as Nine Mile Canyon, well up on the Green River, where evidences of the same culture, or something very like it were found." The principal area visited by Morss in Nine Mile Canyon was centered on a large cave at the Rasmussen Ranch. The now well-known and heavily visited site is called Rasmussen Cave. Morss concludes from his

observations in the cave that, "It seems probable that the painted groups at least are the product of a culture similar to, if not indistinguishable from, that of the Fremont valley…" (1931:40). Morss also stated that: "The Fremont anthropomorphs seem to have been developed from Basketmaker prototypes and indicate the personification of supernatural beings in forms similar to those now familiar in the Southwest" (Morss 1931:42). Morss's understanding of the distinctive nature of Utah rock art was undoubtedly influenced by his visit to Nine Mile Canyon.

David S. Gebhard and Harold A. Chan

In 1950, Gebhard and Chan described a distinctive type of rock art located in western Wyoming. At that time, it was recognized as existing in the area around Dinwoody Canyon and Dinwoody Lake. It therefore became known as Dinwoody Style rock art. The Dinwoody Style plays a major part in the importance of the rock art in Nine Mile Canyon, so it will be described here in some detail. As described by Gebhard and Chan (1950), the images exhibit an emphasis on extraordinarily abstract and supernatural anthropomorphic forms. They commonly appear in outline form with complex, sometimes elaborate, body decorations consisting of patterns of horizontal and/or vertical lines and geometric designs. The anthropomorphs frequently are associated with wavy lines, groups of circles, and dot patterns. Occasionally, abstract forms exist that resemble the form of a body, but no (or few) arms, legs, or heads appear. Although these images generally resemble humans, some appear to represent birds because of the presence of what appear to be wings and claw feet. These particular images appear owl-like. Another characteristic feature of the images is that they have short stubby arms and legs and the heads sit directly on the shoulders of a generally rectangular body with rounded corners. The images range in size from six inches to six feet (0.15 to 1.8 m). Animal figures also occur. The outlined figures are generally larger than the solidly pecked figures where they appear together. Gebhard and Chan (1950:221) classified these images into four classes and four subclasses based on superimpositions, weathering, and/or differences in style, which they note are "from a realistic primitive to a more complex advanced style."

In 1969, Gebhard discussed these images in more detail. During the interim between publications, Gebhard and others found additional examples and extended the distribution of the style to include the Wind River Mountains, the southern Big Horn Basin, and the Boysen Basin. Gebhard also revised the previous style classifications into three general styles, which he defined as the Early Hunting Style (Style 1), the Interior Line Style (Style 2), and the Plains or Late Hunting Style (Style 3). Gebhard stated that the Interior Line Style "…is the predominant style at Dinwoody and gives the area its distinctive quality" (Gebhard 1969:16).

Gebhard, noting that images from other parts of the west also contained anthropomorphs with rectangular bodies decorated with interior lines, was of the opinion that this demonstrated a commonality, i.e., all of these images were in some way related. He also noted the existence of remarkably similar images occurring in a panel in Dry Fork canyon in northern Utah and two panels near the Utah-Wyoming state line near Flaming Gorge that, "… exhibit classic examples of the Wyoming Interior Line figures" (Gebhard 1969:20). Based upon the existence of these figures, Gebhard noted that it was entirely possible that the Interior Line Style extended southward into northern Utah and Colorado.

Beverly Childers in 1984, while studying the Dinwoody type petroglyphs in Fremont County, Wyoming, created four subclasses of Gebhard's Interior Line Style. These were Linear Winged Anthropomorphic Figures, Major Anthropomorph Figures, Abstract Designs, and Representational Figures. She found that Abstract Designs virtually always accompany Representational Figures, and

in many cases are physically connected to them (Childers 1984:8). Analyzing the levels of repatination, amount of lichen growth covering the images, and differences in style she found that the oldest figures appear to be the Linear Winged Anthropomorphic Figures, followed by the Major Anthropomorph Figures, then by the Representational Figures.

James D. Keyser and Michael A. Klassen

Two archaeologists from northwestern Wyoming, James D. Keyser and Michael A. Klassen, redefined Plains Indian rock art in 2001. They classified the rock art of the Northern Great Plains into traditions. They define a tradition as a descriptive organizational division based on traits shared by a group of images. Each of their 11 traditions consists of a set of related styles for which a temporal, spatial, and cultural continu-ity can be established (Keyser and Klassen 2001:13–15).

Keyser and Klassen disagree with several of Gebhard's conclusions. For example, they state: "The characteristic interior body designs have led some authors to group these petroglyphs into a more widespread Interior Line Style that occurs across much of the southwestern United States. *The Dinwoody tradition itself is restricted to a small area of western Wyoming that includes the Wind River Valley and adjacent southern Bighorn Basin"* (Keyser and Klassen 2001:107, italics added). Keyser and Klassen further state: "One of the most important characteristics of the Dinwoody tradition rock art is its restricted geographic range—a fact noted by every scholar who has studied it (Francis 1994; Wellmann 1979a; Gebhard 1969; Keyser 1990; Loendorf 1993)" (2001:121). They also note that "Dinwoody tradition motifs are found almost exclusively in the Wind River and Bighorn Basins. So notable is their absence to the east of the Bighorn River that Francis has proposed that the river was a prehistoric territorial boundary" (Keyser and Klassen 2001:121–122). Keyser and Klassen (2001:122) do however note that: "A few sites with similar, although somewhat simpler motifs occur to the south of the Wind River Basin. …several others occur in the Green River drainage of southwestern Wyoming and northeastern Utah (Gebhard 1969 and Cole 1990)." The images referred to by Gebhard and Cole are similar to Dinwoody tradition figures, but they do not have the same comparative detail in the form and features of the images, as do the images in Nine Mile Canyon.

Keyser and Klassen are also of the opinion that the Dinwoody tradition is likely the best-dated rock art in North America. They state that five major dating techniques, including superposition, differential weathering, dated archaeological deposits, portrayal of dateable objects, and rock varnish dating have established a date starting at 1000 B.C. and ending at A.D. 1775 for the Dinwoody tradition.

Some of Keyser and Klassen's conclusions regarding the Dinwoody tradition are incorrect because they are based on incomplete information. Their search for Dinwoody tradition images would benefit from a search for these images beyond "a small area of western Wyoming." Dinwoody images are found in Nine Mile Canyon, as described below; moreover, the rock art in Utah has been dated at least as accurately as the Dinwoody tradition.

Robert E. Heizer and Martin A. Baumhoff

In 1962, Heizer and Baumhoff published the results of a three-year study on the rock art of Nevada and eastern California. They built upon the work of Julian Steward and identified five main rock art styles. These are: (1) Great Basin Pecked, (2) Great Basin Painted, (3) Great Basin Scratched, (4) Puebloan Painted, and (5) Pit and Groove (1962:197). Of these, the Great Basin Pecked Style is likely the most significant here because, unknown to Heizer and Baumhoff, it extends eastward far into Utah. This style was further divided by Heizer and Baumhoff into two

sub-style categories: the Great Basin Representational Style and the Great Basin Abstract Style. The Great Basin Abstract Style was further subdivided by Heizer and Baumhoff into the Great Basin Curvilinear Abstract and the Great Basin Rectilinear Abstract Styles. The definitive elements of the Great Basin Rectilinear Abstract Style are dots, rectangular grids, bird tracks, rakes, and crosshatches, while those of the Great Basin Curvilinear Abstract are circles, concentric circles, chains of circles, sun disks, curvilinear meanders, stars or astral, and snakes. Heizer and Baumhoff suggested that these two styles date at least from about 1000 B.C. to about A.D. 1500 with the Great Basin Curvilinear Abstract appearing earlier (1962:233).

Christy G. Turner II

In 1963, following the archaeological salvage operations of the Glen Canyon Dam, a report was published by Christy Turner in which he classified the rock art in the Glen Canyon Region into categories that he called "style horizons." This was, and still is, arguably the most important study of Utah rock art. While some of Turner's categories have to some extent been refined, renamed, and reordered by others, it is the only comprehensive work categorizing rock art that takes into account artifact association, image type, pottery and petroglyph association, method of manufacture, repatination, superimposition, and geological context.

To conduct a study of this type today would be difficult or likely impossible. Turner was fortunate to work in a region that, at the time, had received sparse historic human visitation; artifacts were actually still present at every site. Today nearly all of the surface artifacts have been removed, or are in the process of being removed by the public. This is not only true in southern Utah, but at nearly all archaeological sites in the entire western United States, even though Federal and state laws prohibit the removal of all prehistoric artifacts without a permit.

Turner's work is exceptionally important because what occurred in Glen Canyon during the past 8,000 years, or longer, also occurred adjacent to Glen Canyon. Thus, Turner's classification of rock art can be applied to a much larger region. For example, in the Fremont area north of Glen Canyon where Nine Mile Canyon is located, similar changes over time and general characteristics also occur in the rock art there. This indicates that Turner's findings are indicative of a broad cultural manifestation that occurred over a very large area. It should be noted that a cultural classification scheme comparable to that developed for the Anasazi realm, i.e. the Pecos Classification, has not been developed for the Fremont area, so Turner's cultural periods, which are based on Anasazi Basketmaker and Pueblo periods, cannot be (or have not yet been) directly applied to corresponding periods in the Fremont culture.

Turner described his style horizons as follows: Style 1 was the most recent, and it dated from 1850 to the present. It was made by Navajo, Paiute, and Anglo-Americans. It principally depicts cowboys (both on and off horses), horses with saddles, mules, cattle, sheep, goats, rabbits, eagles, and the names, dates, likenesses, and initials of people who have lived in or passed through the area. Style 1 also includes imitations of existing prehistoric elements. These are generally easy to distinguish because of their fresh appearance. Historic repecking of prehistoric designs was also noted. Turner also observed that: "The Navajo-Paiute pecking technique is an outline form with the enclosed area seldom pecked out. Dints are shallow and broad, seldom placed equidistantly, and appear to have been done with a metal tool" (Turner 1963:5). This description could just as easily be applied to some Ute rock art in eastern Utah.

Style 2 dates from 1300 to the present, and it was created by the Hopi. Hopi potsherds were found at some of the sites. The images were produced by shallow dinting and incising, which is similar

to images located around Hopi Villages. The images generally consist of identifiable Kachina figures, crosshatched sandals, clan symbols, sheep, and poorly executed anthropomorphs.

Style 3 was created during the period from roughly A.D. 1200 to 1300. Turner concluded that it was created by the Kayenta and Mesa Verde Anasazi in the late P-III period. The pecking appears to have been done with a sharp stone hit directly against the rock surface resulting in a generally poorly executed outline form with broad irregular-edged lines. Images include sheep, broad-bellied lizard-men with occasional ear pendants, an occasional broad-lined stick figure, concentric circles, and negative designs. Turner noted that "The horns of the sheep tend to stem from the neck region rather than from the head and the sheep often have the nasal region extending and drooping like the snout of an elephant. Naturalistic designs are poorly done, but the negative designs are often the most striking of a specific panel" (Turner 1963:6). Turner further notes that the images are generally not naturalistic and always fall short of the quality of the earlier Style 4 figures. "Elaboration of elements does not characterize this style horizon. Rather, its complexion is a retrogression from the plasticity and peerless extensibility of Style 4. Designs can thus be recognized by hammerstone pecking technique, paucity of element variation, and position of the sheep's horns" (Turner 1963:6).

Style 4 was believed by Turner to have been produced in the P-II/P-III period or about A.D. 1050–1250 by the Kayenta Anasazi along with Mesa Verde Anasazi influence. This style was considered by Turner to be the most widespread and most well executed in the area, and it was consistently associated with P-II/P-III pottery. Turner noted that dints are shallow to deep and are generally spaced equidistantly and the pecking technique was usually a well-controlled hammerstone and chisel method. Incising is rare. The figures are both solid pecked and outlined forms.

Turner notes that the subject matter is so variable, compared to the other four styles, and the pecking technique so well executed, that this style is easily recognized. Turner stated that the Style 4 diagnostic designs are birds, flute players, hunting scenes, anthropomorphs with enlarged appendages and genitals, bird-bodied open mouthed cloven-hoofed sheep, concentric circles, watch spring scrolls, and triangular-bodied elaborately head-dressed anthropomorphs. Other images cataloged by Turner in Style 4 are listed in Figure 4. These same elements can be found in Fremont rock art in the same period.

Abstract (non–representational) designs
bird tracks
bird-bodied sheep
bow-and-arrow carrying anthropomorphs
complex blanket or pottery designs
concentric circles
dotted-center sunbursts
extremely large-handed anthropomorphs
extensive non-representational design motifs
flat-bellied lizards
flute players
game-playing anthropomorphs
hat-topped anthropomorphs
humped-back anthropomorphs or snails
hunting shafts
hunting scenes
large-footed birds
large-footed sheep
left and right handprints and foot prints
lizard-men
long-necked birds
masks
notched toe sandal designs
paired sandals
possible birth scenes
reclining flute players
rectangular frames
sheep
sheep hoof prints
shields
simple blank designs
snakes
solid triangular anthropomorphs
watch-spring scrolls

Figure 4. A partial inventory of elements listed by Turner as appearing in Style 4 (Turner 1963:6–7).

Turner also describes an unusual image found in the region. These are the "triangular-bodied anthropomorphs wearing a bird-bodied headdress." Turner notes that these figures appear at sites with Mesa Verde ceramics along with the above designs. Other differences at these sites led Turner to conclude that these images: "…may be considered to represent a Mesa Verde division of Style 4" (Turner 1963:7).

Style 5 was classified by Turner as the oldest rock art in Glen Canyon. It often had no ceramic association, being created prior the advent of pottery. The degree of obliteration and re-patination of Style 5 petroglyphs suggested to Turner that they were twice as old as Style 4. Turner indicates that Style 5 consists almost exclusively of rectilinear outline forms, occasionally filled within the outline with parallel or vertical lines or with combinations of the two. Triangular forms are rare; instead, there is an emphasis on rectilinear shapes. Many of the figures were created with deeply incised, broad straight lines. Dints are the deepest of the five styles. They are relatively well placed. Solid pecked areas are very rare, as are narrow lines.

Turner describes the anthropomorphs of Style 5 as sometimes having very large elongated bodies that are also occasionally filled with the horizontal and/or vertical line pattern. Arms and legs are minor features, usually being a single line. The heads often have elaborate headdresses. Anthropomorphs occasionally hold hunting shafts, and there is an emphasis on sheep. These sheep also often have exceptionally large rectangular bodies with head, tail, and legs disproportionately small and with the same interior lines.

These images in Style 5 were originally thought by Turner to be made by people living before A.D. 1050 and to include the Archaic (Desert Culture) and the Anasazi—both Basketmaker and P-1 Pueblo. Turner modified this in 1970. Following additional geological and archaeological findings Turner extended the beginning of rock art in Glen Canyon to 4,000 to 8,000 B.P. Evidence for this was: (1) the similarity of Style 5 to the split twig figurines (dated at that time to 4,000 B.P.), (2) occupation in the Glen Canyon dated to 8000 B.P. and (3) the apparent occurrence of Style 5 throughout most of western North America. Turner notes that the Glen Canyon Style 5 petroglyphs are "… the best candidates for the earliest rock art in the New World" (1971:469–471). Turner also states that Style 5 could likely be usefully subdivided, which was an insightful and accurate observation.

Polly Schaafsma

In 1971, the Peabody Museum of Archaeology and Ethnology at Harvard University published a monograph by Polly Schaafsma wherein she classified the rock art of Utah into a number of artistic styles. She accomplished this by using a collection of photographs and drawings accumulated by the late Donald Scott of the Peabody Museum (Schaafsma 1994[1971]:xvii–xix). Schaafsma's work is centered nearly exclusively on the Fremont rock art of Utah, since that was apparently Mr. Scott's main interest, or at least one of them. Unlike Turner, Schaafsma's data did not come from personally visiting the sites. Therefore, information on patination levels, construction techniques, associated dateable artifacts, site context, geology, etc., were not available. She notes that even "the scales of the figures were unknown" (Schaafsma 1994 reprint preface). Schaafsma's study, then, was one conducted principally on the basis of the artistic qualities of the images. While the data available to Turner was missing, her study is no less important than Turner's work.

Schaafsma's classification structure was developed by first sorting the numerous photographs and drawings from all over Utah according to their "general appearance and on the basis of an intuitive evaluation of the elements present" along with the "aesthetic qualities." In addition to these

features, she tabulated the frequency of occurrence of the various elements. Then, noting the existence of patterns in the rock art, she grouped the photographs according to geographic distributions. Schaafsma found that they nearly corresponded to Ambler's Uintah Fremont and Northern and Southern San Rafael designations (Ambler 1966:273, Figure 51). The styles that Schaafsma defined, which are applicable to Nine Mile Canyon, are as follows:

Classic Vernal Style (Uintah Fremont). The area in which this style principally occurs is the Uintah Basin in Northeastern Utah and northwestern Colorado. Schaafsma rightly considers that this style "embraces the most advanced expression of Fremont petroglyphic art" (1994[1971]:8). She notes that the panels contain many grand human figures with broad shoulders. These anthropomorphs have large trapezoidal bodies with simple large, round, rectangular, or bucket heads. Many of them have outlined bodies. Hands are often missing. Feet are often exaggerated. The images often exhibit elaborate decorative detail. Heads have facial designs and headdresses and the ears have pendants. The figures often have ornate necklaces. Schaafsma also notes, "Small anthropomorphic figures, quadrupeds, and abstract designs are often found in the panels with the large dominating anthropomorph" (Schaafsma 1994[1971]:8).

Northern San Rafael Style. South of the Uintah Basin is a region Schaafsma refers to as the San Rafael. Schaafsma defined the existence of two styles in this region. These are the Northern San Rafael Style (which includes all of Nine Mile Canyon) and the Southern San Rafael Style. The Northern San Rafael Style area includes the southern and northern drainages of the Book Cliffs, Roan Cliffs, and the Tavaputs Plateau from Price, Utah, to Grand Junction, Colorado. Schaafsma (1994[1971]:28) states that the element and attribute data of sites in this area "exhibit a stylistic phase of Fremont rock art which is internally consistent and distinct" from areas around it. She notes that the area lacks the large well-executed, highly-decorated anthropomorphs. Instead of the "pleasing visual patterns" present in the Classic Vernal Style, both large and small panels are "crowded and busy, with a wealth of small solidly pecked figures that are carelessly executed and ill defined" (1994[1971]:29). Schaafsma also notes that the area contains a greater percentage of paintings than the Uintah Basin.

Southern San Rafael Style. Schaafsma's Southern San Rafael Style zone virtually covers all of southwestern Utah, with the exception of the southeast corner and the area southwest of the Kaiparowits Plateau. Schaafsma notes that the sites in this region are widely scattered and show a high degree of variability. She observed that the panels lack the stylistic unity found to the north, a fact that she attributes to the rugged terrain of the region. Schaafsma discusses sites in this region on a panel-by-panel basis.

Some of the distinctive features of this region, as indicated by Schaafsma, are the diagonal line drawn through the torso of anthropomorphs and the absence of dot patterns and round hair bobs or earrings. Schaafsma also notes that one of the factors that make this region distinctive is the presence of Anasazi characteristics—such as "rows of hand holding figures, flute players, and animal tracks" (1994[1971]:53). It is obvious from Schaafsma's discussion of this area that, unfortunately, Scott's files were sorely lacking in information about the wealth and diversity of rock art sites from this region.

Barrier Canyon Anthropomorphic Style. Schaafsma observed that "…Within the San Rafael Fremont region there is a group of rock paintings in which life-size paintings are dominant, but which are stylistically distinct from the Fremont tradition described above." (Schaafsma 1994[1971]:65) She named these paintings the Barrier Canyon Anthropomorphic Style after the tributary where the largest number

of known panels was located. Schaafsma described these images as follows: "The dominant motif in these paintings is the long dark form of the human torso" (Ibid:69). "These highly abstracted and mummy-like anthropomorphs which seem to hover against the cliff walls determine the overall aesthetic impact of the Barrier Canyon Style, not only because of their repeated occurrence in each site, but also because of their great size in comparison with the few other elements occurring with them which are often tiny adjuncts to the major anthropomorph theme" (Ibid:69). Schaafsma notes that the decorative detail is distinctive: "The torso may be intricate and textile like. Heads occasionally have crowns of white dots or short lines" (Ibid:69). Birds often accompany the large anthropomorphic figures. Citing what Schaafsma believed to be Fremont images superimposed over Barrier Canyon Style images, she concluded that they were Archaic in origin (Ibid:135)

San Juan Anthropomorphic Style. In 1980, Schaafsma defined an additional style in southeastern Utah. This was the San Juan Anthropomorphic Style. The diagnostic feature of this style, Schaafsma notes, is the "large, broad-shouldered anthropomorph figure depicted in rows, in pairs or scattered across a cliff face" (1980:109). The anthropomorphs are often elaborately decorated with ornate headdresses, necklaces of various types, belts, etc. Arms and hands with fingers, and legs with feet and toes usually hang straight down at the sides. The bodies are usually trapezoidal.

Chihuahuan Polychrome Abstract Style. Also in 1980, Schaafsma added another style to the repertoire of Utah rock art. She defined a Chihuahuan Polychrome Abstract Style. Schaafsma found these images distributed in caves and rockshelters in the Chihuahuan desert of southern New Mexico and in Eastern Utah. Noting the similarity of these images in design inventory to the Great Basin Abstract Style petroglyphs, she attributed the images to the Western Archaic (Desert Culture). This is reinforced by a site in Grand Gulch where the Polychrome Abstract images are high out of reach on the back wall of a tall and deep rockshelter, while Anasazi Basketmaker images are beneath them. The Chihuahuan Polychrome Abstract Style is composed principally of rows of short parallel lines (which sometimes descend from a horizontal line), zigzags, circles, circles with a single descending line, concentric circles, dot patterns, and wavy lines. Despite the presence of a major Chihuahuan Polychrome Abstract Style just 60 miles south of Nine Mile Canyon, no examples of this style have been found to this date in Nine Mile Canyon.

William G. Buckles

In 1971, William G. Buckles defined two styles of rock art in western Colorado that were attributable to the Ute Indians. These styles are the Early Historic Ute, which date from the time the Utes acquired the horse (about 1640 to 1830), and the Late Historic Ute (1830 to 1880) when the Utes were removed from the region and settled in the Ute Indian Reservation in northeastern Utah. Buckles (1971) noted that Ute rock art contains both pictographs and petroglyphs, with solid pecking predominating; although stipple pecked, grooved, and lightly abraded techniques exist. Most often the pictographs are painted in red pigment, however yellow, orange, and black are also used.

It is well known that the early Utes were nomadic and are described as living in loosely organized family groups, called bands. The people lived in wickiups and tepees. At one time, they occupied nearly all of Utah and Colorado, and the northern portions of Arizona and New Mexico (Pettit 1990). Following the acquisition of the horse, they ranged even farther. This subsistence pattern probably accounts for the variability in Ute rock art. Variability in artistic talents and abilities is probably more obvious in Ute rock art than in any other style. A particular Ute "artist" in

southeastern Utah imitated and elaborated Fremont rock art to such an extent that researchers still call it Fremont rock art, despite the fact that the panels have no repatination.

Nine Mile Canyon was at one time part of the Ute Indian Reservation, so it would be expected to contain many panels of Ute manufacture, which it does. Hill and Willow Creeks, on the opposite side of the Colorado River, along with other nearby drainages, also contain many Ute rock art panels.

Much of historic Ute rock art is easily recognizable because it depicts historic objects such as horses (both with and without riders), tepees, guns, trains, automobiles, period costumes—especially hats, etc. What constitutes prehistoric Ute rock is a different story. There are several conflicting theories about the Fremont/Ute period. Some researchers are of the opinion that Fremont groups were ancestral to the Numic-speaking Ute, Shoshone, and Southern Paiute who occupied the area at the time of Euro-American contact. A critical change in climate is believed responsible for forcing the Fremont back into a strict hunter/gathering way of life causing them to lose their Fremont cultural identity. The majority opinion is that there is no evidence of cultural continuity between the Fremont and the Numic-speakers. It is believed that Numic expansion into Utah took place around A.D. 1000 into what was basically an area entirely void of people. What constitutes Proto-historic Ute rock art, if any, is currently a never-ending debate. The rock art in Nine Mile Canyon may well hold the answer to this question.

Sally Cole

In 1987 and in 1990 Sally Cole defined additional style complexes in eastern Colorado. She notes the existence of an "Archaic Abstract Style" in eastern Colorado that is similar to those defined by Steward (1929) and Heizer and Baumhoff (1962).

Cole refined Schaafsma's Southern San Rafael Style and defined a style in southeastern Utah that she calls the Abajo-La Sal Style (Cole 1987:132–156; 1990:152–164). She dates this style as occurring between the Basketmaker II to early Pueblo I periods (Cole 1987:133). Cole describes the style as exhibiting "…forms and themes which are clearly similar to those of the Barrier Canyon Style and the San Juan Anthropomorphic Style" (1987:132). She notes, "There are, as well, some notable similarities to Basketmaker III–Pueblo I rock art of the San Juan…" and, "Additional complexity is provided by forms and themes of the Uncompahgre Style…" Cole states that the Abajo-La Sal Style rock art features broad shouldered triangular or trapezoidal anthropomorphs (Cole 1987:133). "Overall, Abajo-La Sal Style rock art is distinctive and reflects the cultural complexity and distinctiveness of the La Sal Anasazi…" (1987:133).

Cole (1990:96–108) also adds annotations on the Interior Line Style from western Wyoming. Her additions of image types into this style classification are more generous than other researchers. She also extends the distribution southward along the Green River past Nine Mile Canyon (1990:97). Cole, citing charcoal dates from a partly buried figure in the Legend Rock area (Walker and Francis 1989), proposes that the style dates from pre-A.D. 1 to at least 1000 (1990:100–108).

Steven J. Manning

In 2003, I defined a type of image based not on artistic style but on form, attributes, and method of manufacture (Manning 2004). These images are anthropomorphs that were created with fugitive pigments. The figures were made first by applying pigments to vertical stone surfaces, usually cliff faces or rockshelter interiors. Distinct features were then created by pecking or abrading away the pigment. When the pigment eroded, only the pecked or abraded features remained. These pecked features usually consist of facial features,

necklaces, bracelets, beltlines, hair ornamentation, etc., all of which vary from simple to ornate. An often-present feature is a large, single-pendant necklace. Sometimes the figure has an abraded line or area outlining it. This is presumably an effort to create a distinct edge to the figure by scraping away some of the uneven or excessive pigment.

These anthropomorphs exist throughout all of eastern Utah and western Colorado, and extend southward into northern Arizona and New Mexico. They occur in both the Anasazi and Fremont Culture areas. They are present, or constitute a major constituent, in Schaafsma's Classic Vernal Style, Northern and Southern San Rafael Styles, the San Juan Anthropomorphic Style, and Cole's Abajo-La Sal Style.

In some situations, the original form of the figure can be determined. First, a few of the figures remain that were covered with mud. The mud has weathered away revealing the original pigment. Second, the figures were created in caves and the original pigment remains; these were usually created using charcoal. Third, a silhouette of the original pigment remains because the rate of repatination was altered by the pigment. Fourth, other images with the same features were created with pigments that were not fugitive. In addition, the initial simple pecking and abrasions changed over time and increased to a point where the anthropomorphs with the same pecked or abraded features were nearly completely outlined with pecking so that their form is almost completely revealed.

A developmental sequence was established through superimposition, variation in repatination levels, and increasing size and complexity, and shown to occur relatively consistently throughout all of the large area in which the images exist. This indicated that the people living in the entire region were in contact with each other and that they shared the meaning, function, nuances of construction and, most importantly, they participated in the consistent changes of the images over time—at least for a period. The images apparently came into existence at the end of the Archaic period and ceased to be made at the time the Fremont culture ended.

These discoveries are significant because they show that the ideology from which the images originated crosscuts the lines of cultural and style demarcations that researchers have defined; and again most importantly, a constant change occurs over time throughout the entire area. These images show that there was a major ideological feature that existed in both the Fremont and Anasazi cultures whose existence has never before been determined. Apparently, these cultures may not have been as different ideologically as had been defined, at least during a period of their existence.

In 1997 and 2001, I described and defined the existence of Barrier Canyon Style petroglyphs (Manning 1997, 2001), which did not appear in Donald Scott's photographs. The discovery of petroglyphs provided the opportunity to use repatination levels to determine a relative date for the style. To this date, no Barrier Canyon Style petroglyphs have been located that have the same high degree of repatination as Turner's Glen Canyon Style 5 petroglyphs (see Part I), which indicates that Barrier Canyon Style is younger than Turner's Glen Canyon Style 5.

SUMMATION

This brief summary provides a glimpse of how rock art research has progressed since 1882 and the part that Nine Mile Canyon has played in this activity. This also shows that the rock art in Nine Mile Canyon has always been considered valuable and that it has played a significant part in defining the prehistoric cultures that have inhabited Utah and the surrounding area. In the following section, I will attempt to add important information about the rock art of Nine Mile Canyon that has not been considered before. The emphasis is on examples of rock art found in the canyon that are important

because they demonstrate that people living in distant areas, where different cultures existed, came to Nine Mile Canyon.

Typically, archaeologists do not discuss prehistoric cultures in Utah on the level of an individual person, or for that matter on a small number or group of people. This is because there is little, if any, archaeological data that differentiates one individual from another. There are no unique identifying marks on a projectile point to identify the individual who created it. A Rose Springs point in Nevada has the same form as a Rose Springs point in Utah. Rock art is different. Different people possess different levels of artistic skill and experience, and this is reflected in the images they create—much like differences in handwriting. People living in different cultural areas possess different ideas about their life, religion, and the world around them, so the images they create are different. Additionally, each individual person was apparently allowed some degree of freedom to express in rock art the ideology that existed at that particular time and place among the distinct group of people with which the person lived. Furthermore, the ideology from which the images sprang into existence appears to have been continually changing, resulting in modifications or variations occurring in panels of rock art. All of these changes occurring over time, space, and an individual's experience and personality explains why, with tens of thousands of rock art panels in Utah, no two are exactly alike; in fact, with only a very few exceptions, no two are even close to being alike. With sufficient data, it is possible to trace the locations where an individual person or small group of people lived while they were creating rock art specific to their time and place.

LIMITATIONS ON STYLE DEFINITIONS

In the past, the rock art in Utah, including that in Nine Mile Canyon, has been studied principally by classifying it into artistic styles. This categorization has been done in an attempt to determine the image's cultural affiliation and date of construction (Manning 1993). Most of the rock art in Nine Mile Canyon has been classified into one or more of these organizational schemes, but only in a broadly generalized way. There are rock art panels in Nine Mile Canyon that do not fit into any classificatory scheme, and images that argue against any local cultural affiliation.

It should be noted that while the stylistic classification method is most commonly used to categorize rock art, as demonstrated above, it is not without problems and limitations. Some of these are: first, stylistic identification and classification is not a perfect analytical system. It is for the most part an intuitive taxonomy, as it has been applied to this date. Disagreement, therefore, exists among researchers, not only concerning the conclusions reached from the data, but the initial definition and classification of the images themselves. One researcher's Archaic image is another researcher's Fremont image, and one researcher's Fremont image is another researcher's Ute image. This has created a nearly bewildering assemblage of images in various researcher's style categories. Second, the researchers are disadvantaged by a lack of data concerning their subject. Schaafsma, for example, only had available photographs and drawings collected by other people and Turner was working only in the Glen Canyon area. Considering that tens of thousands of rock art panels exist in Utah alone, styles have been identified from only a miniscule percentage of the existing sites. Some definitions of styles have been created by describing elements in only a few panels, and then a later and wider sampling has shown those particular elements are not at all a common feature of that style, and certainly not a defining feature of it. Third, not all rock art in Utah has been classified into one of these stylistic categories. Some rock art panels defy all classifications. Fourth**,** and the most important limitation of all, is that while stylistic categorization may help

determine temporal and areal distributions and cultural affiliations, it does little to determine the purpose, meaning, or function of the individual images.

NUMBER OF SITES IN NINE MILE CANYON

Some controversy exists about the number of recorded rock art sites in Nine Mile Canyon. Numbers range from 500 to several thousand and even to 10,000 sites. I would like to clear up this confusion. As of October 1, 2006, there were 663 recorded archaeological sites in Nine Mile Canyon that contain rock art. Compare this to the 8,510 archaeological sites that contain rock art that have been recorded in all of Utah. Nine Mile Canyon contains one of the highest densities of rock art sites in Utah—663 sites in one canyon.

It is important to note that stating the number of sites or panels does little to describe the amount of rock art in Nine Mile Canyon. Some recorded sites consist of only one small image. Other sites consist of 10 to 20 panels, some of which contain as many as 30 figures. Consistency in recording has also been a problem. One group of surveyors recorded rock art sites by defining a site as one or more panels until no other prehistoric evidences were found within a distance of 50 m (more-or-less the standard of separating archaeological sites), while another group has recorded nearly every panel as a site, with some being as close as 5 m. In addition, less than 10 percent of the land area has been surveyed, and most of the surveys have been done within 50 to 100 m of the floor of the canyon. The higher steep rugged canyon walls have not been surveyed, which means that less than one percent of the rock faces in Nine Mile Canyon have been searched for rock art. This variation and paucity of information makes conclusions regarding rock art density tenuous at best. One statement, however, is accurate, and it is: There is a lot of rock art in Nine Mile Canyon.

PART III

EXAMPLES OF SOME IMPORTANT IMAGES IN NINE MILE CANYON

The following is a discussion of a few of the panels in Nine Mile Canyon that have particular significance, as discussed in Part II. These panels, and the images that they contain, help us understand what happened in the past in Nine Mile Canyon. They provide significant information on who lived in the canyon over the last 6,000 years, what these people were like, how they lived, and more accurate information on when they lived. These images will, someday, also help us to understand why the descendants of the people who created the prehistoric images are no longer living in the canyon. Not only does the rock art of Nine Mile Canyon provide important information concerning the prehistory of Nine Mile Canyon itself, it also provides important information concerning the prehistory of Utah and even the prehistory of the western United States, as will be shown below.

The emphasis in this discussion is on images and panels in Nine Mile Canyon that provide information about the movement of people in prehistoric societies across the land in which they lived. The images in Nine Mile Canyon have the potential to determine if prehistoric people from other regions visited Nine Mile Canyon. They also provide information on when they visited and if they interacted with the inhabitants who occupied the area at that time. The images also might be able to provide information concerning the degree to which the visitors interacted with the local inhabitants and if this interaction influenced the ethnicities or beliefs of the people living there, or if there was anyone living there at all. An example of this type of influential interaction is the observation that Plains Indian characteristics in rock art increase in density from the southwest to the northeast across northeastern Utah.

The people living in Nine Mile Canyon developed their own unique types of rock art. The existence of a few of these unique images outside of Nine Mile Canyon suggests that people who lived in Nine Mile also traveled outside of the canyon. Studies of the images in Nine Mile Canyon may also assist researchers in other regions by providing important information to assist them in placing these images into a cultural, temporal, and spatial context. The examples described in the following discussion are not exhaustive because of space limitations. The images are ordered by the period of time in which they occur.

PALEO-INDIAN PERIOD

The oldest rock art in Nine Mile Canyon would likely be from the Paleo-Indian period (approximately 11500 B.C. to 6000 B.C.), since this is the oldest period of occupation currently demonstrated to exist in Utah. However, as of this date, no rock art suspected to have been created in this period has been located in Nine Mile Canyon. However, since a panel from the late Paleo-Indian or early Archaic period has been found in nearby Range Creek Canyon south of Nine Mile Canyon by the author (Manning 2002), the potential exists that a Paleo-Indian image might exist in Nine Mile Canyon.

ARCHAIC PERIOD

The next oldest rock art in Nine Mile Canyon would be an Archaic style (or type) such as Turner's Glen Canyon Style 5 (Schaafsma's Glen Canyon Linear) or Steward's Great Basin Curvilinear Style (Heizer and Baumhoff's Great Basin Abstract Style), see Part II. Note that the Archaic period ranges from about 6000 B.C. to about 500 B.C. Turner's Glen Canyon Style 5 appears to be concentrated south of Nine Mile Canyon in the Four Corners region (particularly in Utah and Arizona), and the Great Basin Abstract Style is, of course, abundant in the Great Basin west of Nine Mile Canyon. These Archaic styles are present in contiguous areas north, west, and south of Nine Mile Canyon, but in the canyon, they are rare. I have found that the density of the Glen Canyon Style 5 images decreases rapidly from San Juan River in southeastern Utah northward toward Nine Mile Canyon. The Great Basin Curvilinear Style is considered by most scholars to terminate at the crest of the Wasatch Mountain Range that forms the eastern border of the Great Basin. It is suspected, therefore, that these types of Archaic rock art would be present in Nine Mile Canyon, but that the panels would be very limited in number. This is exactly the situation.

Glen Canyon Style 5

Only one clearly distinguishable image of Turner's Glen Canyon Style 5 has been located in Nine Mile Canyon to this date. There are probably more in the canyon. This image is a heavily repatinated and weathered quadruped that is located at site 42Dc169. It is shown in Figure 5. The image is at the top of the photograph. Because of its age, much of the image has, unfortunately, been lost to exfoliation and erosion. Only the back half of the body currently exists, along with two back legs, which are slanted backward at an angle. The front of the animal, including the torso, head, and front legs, has been lost due to spalling; however, there appears to be a small part of the top of the horn still present above the large spall and the natural horizontal banded inclusion in the sandstone. The vertical and horizontal lines on the interior of the body that are one of the defining characteristics of Glen Canyon Style 5 quadrupeds are still intact and reasonably visible. Turner, and many others following him, noted that this pattern is similar to Archaic split-twig figurines found in southern Utah and Northern Arizona that are radiocarbon dated to greater than 4,000 years ago (Turner 1971:469, see also Jett 1991). Notice the level of repatination on the image and in the spalled areas. This quadruped may be as old as 4,000 to 6,000 years.

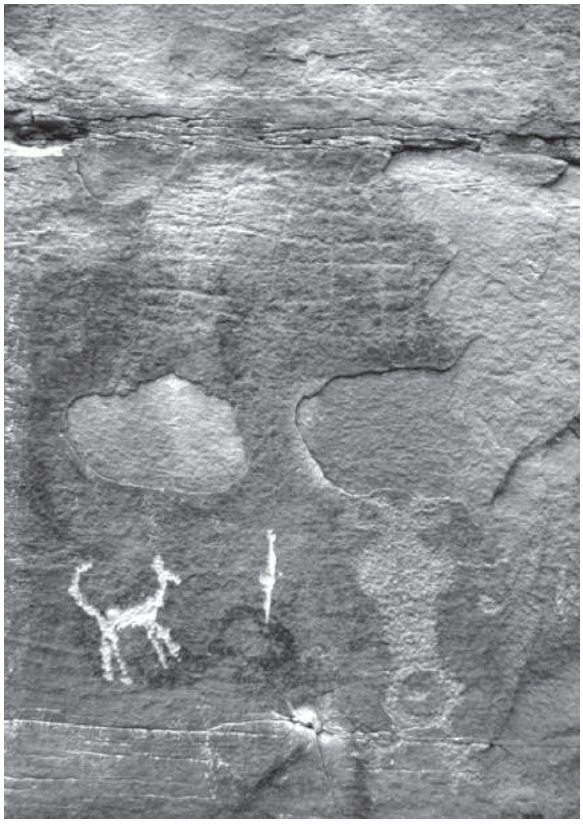

Figure 5. A Panel from Nine Mile Canyon showing a Glen Canyon Style 5 quadruped (top of picture).

The significance of this panel is further augmented by two additional images from other time periods. Each was created by people from a different culture. Below the center of the Archaic Glen Canyon Style 5 quadruped is an anthropomorph. This image has a lesser degree of repatination than the Glen Canyon Style 5 image and a lesser degree of weathering. Notice that the level of repatination on this image is about the same as in the spalled area where the front of the Glen Canyon Style 5 quadruped was lost. This image was created by the Fremont culture because it is similar in style (and form) and it has the same degree of repatination as many other Fremont images in the rest of Nine Mile Canyon and beyond. The anthropomorph is probably about 800 to 1,500 years old.

The brightest image in the photograph was likely created by historic Ute Indians. The vertical narrow scar in the panel appears to have been created by a metal hatchet. This is not the only panel in the region that contains hatchet marks. The same mark has appeared in other panels in the Book Cliffs in the last ten years. The animal with the long curving tail, which probably represents a dog, may have been created with the corner of the hatchet. Similar animals, also with little or no repatination, are found in Ute panels at a few other sites in Nine Mile Canyon—they are, however, not quite as roughly formed as is this image. The image was probably created recently.

Since the recent creation exposed the native color of the sandstone, it enables us to envision what the other images looked like when they were originally created. It also makes it possible to see the amount of repatination and the degree of weathering of the other images.

The primary significance of this panel is that it demonstrates the presence in Nine Mile Canyon of early Archaic people, who apparently traveled north from the San Juan River/Little Colorado River region of southern Utah and Northern Arizona. The origin and development of this type of image occurred in the San Juan/Little Colorado River area because the images are most abundant and varied in this location. The density of the Glen Canyon Style 5 images decreases in proportion to the distance northward from this region. This panel is one of the farthest north Glen Canyon Style 5 images known to exist. Without this image, it would likely never have been recognized that Archaic people came to Nine Mile Canyon from the San Juan/Little Colorado River region. If the person or people who created it traveled from the area with the highest density of these images, they would have traveled over 300 miles. This demonstrates the importance of just one image.

Great Basin Curvilinear Style

At least three boulders in Nine Mile Canyon conform to the definition of Steward's and Heizer and Baumhoff's Great Basin Curvilinear Style.

Figure 6. A Great Basin Curvilinear Style panel in Nine Mile Canyon.

Figure 7. A Great Basin Curvilinear Style panel in Nine Mile Canyon. Lichens cover some of the figures.

As seen in Figures 6 and 7, the images consist almost entirely of curvilinear design elements, such as meandering lines, spirals, and circles that fill the entire surface of a boulder. Notice that the boulders do not contain any anthropomorphs or zoomorphs, which are features in nearly all Fremont panels in Nine Mile Canyon. The boulder pictured in Figure 7 also has images on the opposite side.

It can be argued that proving the existence of Archaic Great Basin Curvilinear Style panels in Nine Mile Canyon is problematic. The uncertainty exists because the types of images that define the Great Basin Curvilinear Style, i.e., meandering lines, circles, etc., are occasionally found in Fremont panels in Nine Mile Canyon, and even in some Ute panels. So it might be argued that even if Archaic Great Basin Curvilinear Style panels were found in Nine Mile Canyon, it is doubtful that it could be shown that they are actually Great Basin Curvilinear Style because they could be a few of the Fremont elements that happened to be placed alone; unless of course, repatination levels and superposition indicated otherwise.

Negating this argument is the observation that the Great Basin Curvilinear Style, unlike the Fremont panels, fill the entire surface of a boulder, or most of the surface, which is a defining characteristic of that Great Basin Style. Additionally, Fremont panels, wherever they are found, display an emphasis on anthropomorphs and mountain sheep, not on Great Basin types of abstract images and wavy and meandering lines. Furthermore, in Nine Mile Canyon the Fremont seem to have ignored boulders when creating their images. In the Great Basin, boulders seem to be nearly the preferred medium. It is apparent then, that these few panels in Nine Mile Canyon are definitely Great Basin Curvilinear Style panels. This suggests that a few people from the Great Basin traveled eastward as far as Nine Mile Canyon, a distance of at least 100 miles, which is not that far, except that the Great Basin is on the other side of the Wasatch Mountain Range, which would significantly increase the difficulty of reaching Nine Mile Canyon. This again demonstrates the importance of just one panel.

Chihuahuan Polychrome Abstract Style

Panels of Schaafsma's Chihuahuan Polychrome Abstract Style have not yet been found in Nine Mile Canyon. The farthest northward that these panels have been found as of this date is near Green River, Utah. Since Nine Mile Canyon is roughly 70 miles from the site, it is reasonable to expect that an image of this style might be discovered in Nine Mile Canyon.

THE FORMATIVE PERIOD

The Dinwoody Tradition

A type (or style or tradition) of rock art which may date to the Formative Period, or the time when agriculture was first adopted, was identified by Gebhard and Chan (1950) and defined as the Dinwoody tradition by Keyser and Klassen (2001:107–124) (see Part II). The rock art in Nine Mile Canyon demonstrates that images from the Dinwoody tradition exist in areas outside of the small area of Wyoming that includes the Wind River Valley and southern Bighorn Basin, which was suggested as the limiting boundaries by Gebhard and Chan and others. At least two panels exist in Nine Mile Canyon that are conclusively from the Dinwoody tradition.

The first site consists of a panel with five sections, each on an adjacent vertical section of a blocky cliff face. Figure 8 shows the right side of the panel. Compare the panel in Figure 8 with the panel shown in Figure 9, which is located northwest of Thermopolis, Wyoming, some 400 automobile miles north of Nine Mile Canyon. This panel is located at 48HO4, which is known as Legend Rock.

The most remarkable and obvious feature of the two panels is that they both contain a prominent anthropomorph that has nearly identical features. They are so similar that they could have been created by the same person. Additionally, not only are the large anthropomorphs nearly identical, so is the context of the panel, which is discussed below. Furthermore, the features of these panels are unlike those in any other panel found in Nine Mile Canyon to this date.

At both locations, the largest anthropomorph's bodies are rectangular and the opposing sides of the torso are both curved, seemingly depicting the body as if the person was doing some type of dance. The heads are an extension of the body—no neck is illustrated. This particular feature is especially *not* a characteristic of Fremont images. Both figures have a row of short vertical lines on top of their heads. At the top of both faces, there is a similar-shaped rectangular unpecked area. The arms of both images have rounded elbows and the arms extend outward from the sides of the body. Both hands and upper arms are in an upraised position. Fingers and toes are long and spindly and are spread wide. Both anthropomorphs may have had similar feet; however, since the image's feet are missing in the Legend Rock panel, this is unknown. The feet on the Nine Mile Canyon image are common in the Dinwoody area, so it is possible that they were the same.

Figure 8. Panel located in Nine Mile Canyon, Utah. The largest anthropomorph is a Dinwoody type figure. There is another one on the right.

Figure 9. A Dinwoody tradition panel from the Legend Rock Site,Wyoming, see also Hendry (1983:67).

There is one small detail that has some particular significance. This small detail is easily overlooked and it appears that no one has previously mentioned it, including Keyser and Klassen (2001). . The right arms of both figures have an upward curve going from the shoulder to the elbow. This detail was significant enough to the person (or persons) who created these images that it was a required part of the image, and thus an important part of the creator's ideology. So, it was depicted on both images, even though they are 400 miles apart. This seemingly insignificant (to us), yet identical detail is one of the characteristics that conclusively identifies this as a Dinwoody image.

There are actually two large Dinwoody type anthropomorphs in Figure 8. The second one is less noticeable. It is at the far right side of the panel and it is smaller than the prominent figure. It is sandwiched between a crack and the inside edge of the rock. The figure is not readily evident because it is mostly eroded and covered with lichens. The feet and the right hand are the most visible features of this image. The body is nearly the same as the other anthropomorph, as are other details such as the vertical lines on top of the head. The facial features are mostly eroded and obscured with lichens. This figure also has its arms upraised at right angles.

Another feature that the Nine Mile Canyon panel has in common with the Dinwoody tradition images are wavy lines. Keiser and Klassen describe wavy lines as a defining feature of Dinwoody tradition images (2001:107). To the left of the anthropomorph in the Nine Mile Canyon panel is a wavy line that partly surrounds a small abstract image.

Keyser and Klassen (2001:118) also note that one of the common features of the Dinwoody tradition images "…is seen in figures with a hand, foot, or body terminating in a major crack." Notice that the left hand of the anthropomorph on the right side of Figure 8 terminates in the major crack

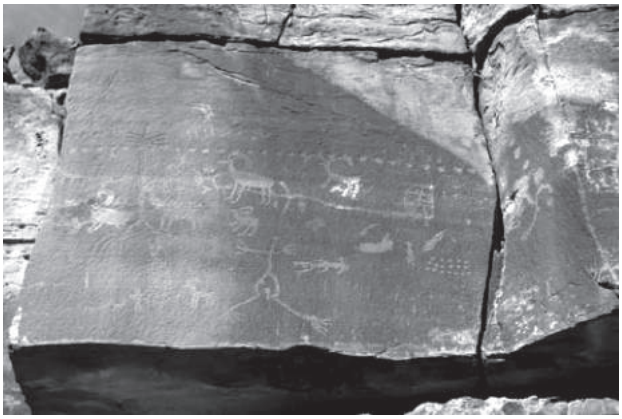

Figure 10. A section in the center of the panel contains two images common in the Dinwoody tradition. They are the figures that have long narrow bodies with what appear to be long toes. Fremont Mountain sheep and the horizontal row of dots are superimposed over the Dinwoody images, but they have the same level of repatination and lichen growth.

formed by the right-angle intersection of the blocks of the cliff.

The two sections to the left of the Nine Mile Canyon panel discussed above are shown in Figure 10. In this part of the panel, there are two narrow anthropomorphs. The one on the left is a tall narrow image with feet that have long narrow lines descending below them—a characteristic of Dinwoody tradition figures. On both sides of the body below the head are short horizontal lines. The second anthropomorph is in the lower center of the panel. These images are found in the Dinwoody tradition. Two similar anthropomorphs with elongated figures are in the Dinwoody panel shown in Figure 9. There are also other elongated Dinwoody tradition images at Legend Rock a short distance upstream from the panel shown in Figure 9 (Hendry 1983:67).

Further evidence that Dinwoody tradition panels exist in Nine Mile Canyon is demonstrated by another panel that is shown in Figure 11. The elements in this panel are also found in the Dinwoody tradition; compare with Figure 9. Notice the presence of small anthropomorphs in

Figure 11. A second site in Nine Mile Canyon containing characteristics of the Dinwoody tradition. The two parallel lines in the left of the panel continue around the corner of the rock and connect with an image similar to the two large figures.

relationship to the two large figures in both panels and that there is a small anthropomorph with horns and an outlined body with extended arms in both panels. The fringe at the bottom of one of the large figures is a characteristic of many Dinwoody anthropomorphs. The small anthropomorph on the lower right has its hand ending in a crack, or did until the small area spalled off the rock surface. Notice also the existence and emphasis on wavy lines in the panel. In addition, there is one single isolated footprint in both the panel in Nine Mile Canyon and the Dinwoody panel in Wyoming.

From these comparisons, it is evident that the panels at these two sites in Nine Mile Canyon contain images nearly identical in figure type and composition to the Dinwoody tradition panels. It would not be expected that the images in Nine Mile Canyon would be precisely identical to those in the Dinwoody area because they were made at different dates because of the time it took people to travel the distance between the panels. It is remarkable that the two large anthropomorphs in the different panels are so similar given that they are so far apart. It is difficult to imagine how a person could remember exactly what they had created many miles away and perhaps some years earlier, or later.

While it can be argued that the existence of nearly identical images located hundreds of miles apart in a completely different cultural area demonstrates that the images were created by the same person or a small group of people, the argument is not especially convincing because there is the possibility that the existence is just a coincidence. While the argument may be weak when considering one simple image, it is significantly more valid when the panel has complex imagery and many elements in common. This analogy can be taken a step farther. If two panels in widely separated areas share not only common complex elements, but also share common compositional arrangements or the consistent grouping of common elements, the possibility of them sharing a common origin is increased even more. It is evident that not only are the individual elements stylistically the same in the Nine Mile Canyon and Dinwoody panels, so are the compositional arrangements.

It is important that the compositional arrangements be considered because it is believed that the meaning and function of the images in a panel are determined by the individual elements and their composition or context. Since these two panels share many common features in the same context, the panel in Nine Mile Canyon must also share similar meanings with the panels in the Dinwoody tradition area. If it could be proven that both panels have the same meaning, and that they functioned in the same manner, it would certainly add definitive evidence that the panel in Nine Mile Canyon was created by a person, or people, from the Dinwoody area of Wyoming, and that someone from Nine Mile Canyon did not just go up to the Dinwoody area, view a panel and try to duplicate it back in Nine Mile Canyon. A hypothesis that explains the meaning of the images has been formulated and it is in the process of being tested. Information on the outcome will be given as the research progresses. As of this date, it appears that both panels have the same function and likely the same meaning.

The high density of the Dinwoody tradition panels in central northwestern Wyoming (greater than 200) and the low density in the Nine Mile Canyon area (only two?) indicate that the images in Nine Mile Canyon were made by people from the Dinwoody tradition area. Note that the relative density of images in these two areas also suggests that this visitation was a rare event. There is also no evidence of the development of the Dinwoody tradition figures in Nine Mile Canyon or anywhere in Utah, so they did not originate in Utah. Since there are only two panels, and they are located close together, it appears that the number of visitors was small and the duration of the visit was short. If a large group of people came to Nine Mile Canyon, there would probably be more panels in the canyon, because in the Dinwoody area these panels are as frequent as are Fremont panels in Nine Mile Canyon.

Figure 12. Anthropomorph with both Fremont and Dinwoody tradition characteristics that is located on the north side of the Wind River Mountains in northwestern Wyoming.

It appears then, that a person or a small group of people traveled from the Legend Rock area west of Thermopolis, Wyoming, to Nine Mile Canyon, Utah. This realization leads to two questions: why was this person, or a small group of people, from northeastern Wyoming in Nine Mile Canyon, and was there something that attracted them from so far away?

One small panel that I found on the north side of the Wind River Mountain range near Dubois, Wyoming, has interesting implications in this respect. The site is located on private property, and it is situated on the back wall of a low rock shelter containing a lot of black ashy soil. One of the images is unlike any others I have seen in northwestern Wyoming to this date. It has Fremont characteristics (Figure 12). It is not constructed in the typical carefully executed artistic method that the Fremont employed. The lines that form the head are not straight. It is as if someone from the Dinwoody area who had seen Fremont figures tried to copy them or incorporate them into their rock art. The image has the typical trapezoidal or inverted bucket head of Schaafsma's Classic vernal anthropomorphs that I have seen nowhere else in northwestern Wyoming. It has unerringly the same facial features as numerous Classic Vernal Style anthropomorphs along with what appears to be the distinctive large pendant necklace. The body and the arms, however, are like many of the Dinwoody images (Francis and Loendorf 2002). (There is another similar, but smaller figure to the right of this image [Childers 1984:Figure 8j.]) Could these images be the creation of the person, or one of the people, who had visited Nine Mile Canyon, or was it done by someone that came back with the visitors? The figure does not seem to have a happy face; notice the pecked areas below the eyes. There must be an interesting story behind this image.

Several images in the Nine Mile Canyon panel shown in Figure 8 have not been discussed. In addition to the Dinwoody images, there are also two well-executed and characteristic Fremont anthropomorphs in the panel. They are difficult to see because of the lichens. The figures are located between the two Dinwoody tradition images. One of the Fremont anthropomorph's arms is superimposed over the Dinwoody image. In addition, the left side of the panel (Figure 10)

contains mountain sheep and a row of dots that are indicative of the Fremont culture. In this panel, the mountain sheep and the horizontal rows of dots are also superimposed over the Dinwoody tradition image. It is evident that the Dinwoody tradition images were created first. The panel at the second site (Figure 11) also appears to contain Fremont images, which are the pattern of dots. Similar dot patterns are common throughout Nine Mile Canyon. The dots appear to have been placed to avoid the Dinwoody images, indicating that in this panel the Dinwoody images were also created before the Fremont images.

The exact period of time that elapsed between the creation of the Dinwoody images and the overlapping Fremont images is difficult to determine. It appears from the similar repatination levels, weathering, and lichen growth, that it was not very long—certainly not hundreds of years—perhaps only a few years.

When did the creators of the Dinwoody tradition images arrive in Nine Mile Canyon? Keiser and Klassen found that Dinwoody images are superimposed over what they believe are Archaic images and are in turn superimposed by late historic period images. Keiser and Klassen indicate that the Dinwoody tradition dates from 1000 B.C. to A.D. 1700 (2001:118–121). This is an extremely broad time span in terms of the Fremont Culture, which existed from about A.D. 250 to A.D. 1250. Clearly, these dates overlap.

The images in Nine Mile Canyon may define more closely the time span for the specific images of Keyser and Klassen's Dinwoody tradition, at least those of the type found in Nine Mile Canyon. If the people from Dinwoody visited Nine Mile Canyon only once, the images they created provide a "snapshot in time." If this date can be narrowed, this "snapshot" can date both groups of panels.

Radiocarbon dates from Fremont structural sites in Nine Mile Canyon cluster at about A.D. 900 to 1100 (Spangler and Spangler 2003). If the Dinwoody people were in Nine Mile Canyon at that time or perhaps somewhat earlier, which the superimposition and apparently the levels of repatination seem to confirm, then the particular Dinwoody tradition images of which these are examples, date to that period. Given the differences in the Dinwoody tradition images over time, it appears that following the creation of the panels in Nine Mile Canyon the Dinwoody tradition continued to evolve in their own area to create panels that are characteristic of the late Dinwoody tradition.

The presence of these Dinwoody tradition panels in Nine Mine Canyon provides another example of why the rock art in Nine Mile Canyon is significant and important. These panels provide information about human behavior. The Dinwoody tradition panels in Nine Mile Canyon show conclusively that a person or small group of people who lived in what some researchers consider a circumscribed area, were not restricted nor confined to that area. The person, or persons, were capable of leaving the Dinwoody region and they had the ability to travel the significant distance to Nine Mile Canyon where they created these images. In other words, people were free to move outside their normal habitat and were able to place their images indicative of their unique ideology, seemingly unhindered, on cliff faces in Nine Mile Canyon. It was, however, apparently not very long before the Fremont Indians created images on the same rock, which opens up an entirely new discussion about why Fremont images were placed in the same panel as the Dinwoody tradition images. The ability to determine the exact location where a specific prehistoric person or a small group of people lived or even visited is one of the major advantages that rock art has over other archaeological evidences.

It should be noted that the Dinwoody tradition images in Nine Mile Canyon are important to people living today. In Wyoming, the Dinwoody tradition images are considered as being part of

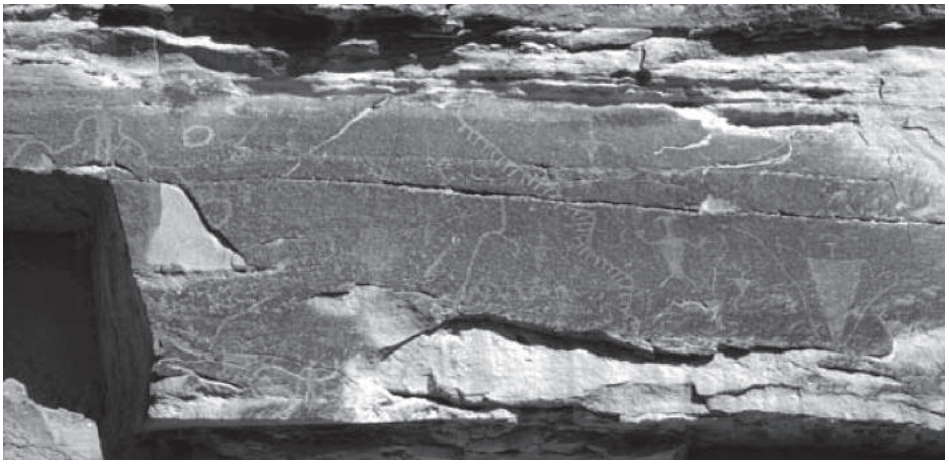

Figure 13. Basketmaker panel in Nine Mile Canyon.

Figure 14. Detail of a Basketmaker anthropomorph from Nine Mile Canyon.

the heritage of the Shoshone Indians. Thus, the Shoshone people have an interest in the images in Nine Mile Canyon.

In 1997, I placed a picture of the Dinwoody tradition anthropomorph in Figure 8 on the title page of Volume 17 of Utah Rock Art. This was done to see if anyone would recognize the significance of this image being in Utah. It has now been eight years. No one has ever commented about it.

Anasazi Basketmaker

The Basketmaker II–III period of the Anasazi Culture existed in the southwest from about 100 B.C. to A.D. 700 (Plog 1979). During this period, the Basketmaker people created a unique style of rock art. In Nine Mile Canyon there are several panels attributable to Basketmaker people. One of these is shown in Figures 13 and 14 (see also Spangler and Spangler 2003:177). The largest figure is characteristic of Basketmaker anthropomorphs and it apparently exists everywhere the Basketmaker people lived. Turner (1963, Figure 15) included several of these images in his Glen Canyon Style 4 horizon (shown here as Figure 15). The degree of repatination of the panel shown in Figures 13 and 14 is greater than the representative Fremont panels in Nine Mile Canyon, which indicates that the images predate the Fremont.

It is evident that the characteristics of the two anthropomorphs are nearly identical, except for the unpecked area in the body of the anthropomorph found in Glen Canyon. Basketmaker anthropomorphs of this type in all areas of occupation occasionally have an unpecked area in the chest. (A similar image with an unpecked area in the chest was found in Range Creek [Castleton 1978:107, Manning 2002], which is south of Nine Mile Canyon. It too was more repatinated than nearby Fremont images.) Notice that both figures have elongated triangular bodies, thin lines for arms and legs and the heads are small and attached to the body with long thin

Figure 15. Sketch of an anthropomorph from Glen Canyon, NA7166, after Turner (1963:50, Figure 14) Style 4.

lines. In both panels, a long thin line goes beneath both figures. There may have been a feature above the figure's head in the Glen Canyon panel but it is in the area of an eroded horizontal crack and it is indistinct.

The density of these types of images is highest north of the San Juan River (in the southeast corner of Utah) in and around San Juan County, Utah, and it decreases quickly north of the Colorado River. From this distribution, it is apparent that a person or a small group of people living in southeastern Utah during the Basketmaker period traveled to Nine Mile Canyon, which would not be too difficult, since it is about 100 miles from the high concentration of the Basketmaker images around Moab, Utah.

Fugitive Pigment Basketmaker Anthropomorphs

There is additional evidence that suggests that during the Basketmaker period an individual or a small group of people may have extended their stay in Nine Mile Canyon. This evidence comes from fugitive pigment anthropomorphs discovered by the author during an archaeological survey in southeastern Utah east of Canyonlands National Park (Manning 1983). In Indian Creek, there are two places where similar images were placed on opposite sides of the canyon (Figure 16). At that time, I categorized these images as abstract, not being aware that they were anthropomorphs that were originally created with fugitive pigments. After pigment was applied to form the body of these anthropomorphs, features were created by pecking and/or abrading away the pigment, which also removed the surface of the rock. Once the fugitive pigment weathered away, the only visible traces of the images remaining are the pecked-out features. The most notable characteristic of these images is the large pendant on the chest of the figures. As with other Basketmaker images in San Juan County, Utah, three lines were painted on the face of some of the figures.

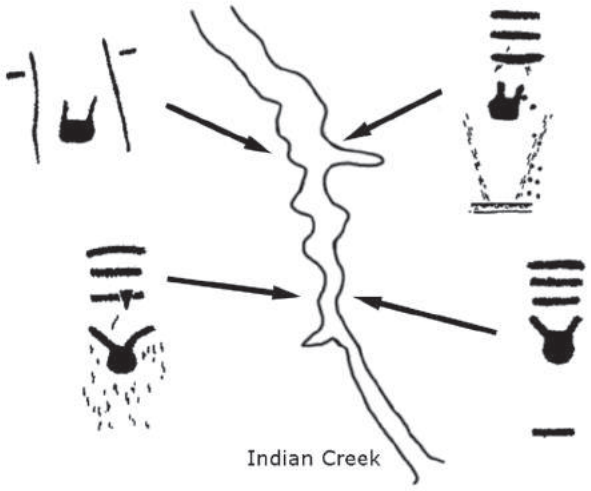

Figure 16. Fugitive pigment anthropomorphs on opposite sides of Indian Creek.

In Nine Mile Canyon, I discovered another set of similar images that were also positioned directly across the canyon from each other (Manning 2004:97–100, Figures 47 and 48). The distance between Indian Creek and Nine Mile Canyon is about 125 miles. These images are shown in Figures 17 and 18. Both of these panels feature anthropomorphs with the same large pendant

Figure 17. Fugitive pigment anthropomorph on the north side of Nine Mile Canyon.

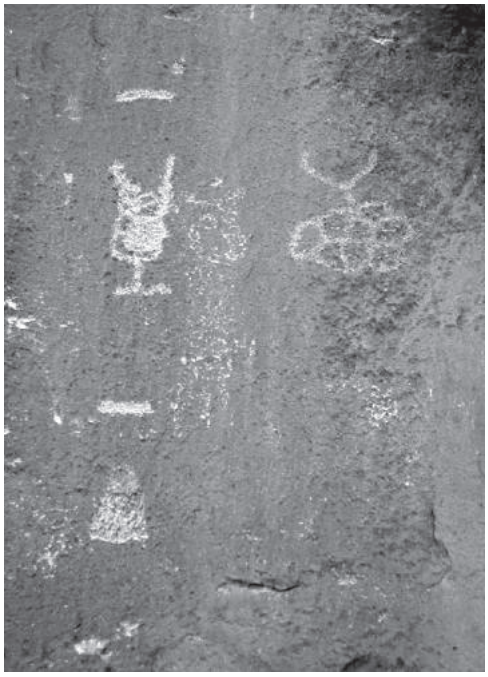

Figure 18. Fugitive pigment anthropomorph on the south side of Nine Mile Canyon.

necklace as those in Indian Creek. There are a few additional similar fugitive pigment images adjacent to Figure 17 that are not illustrated here. Unlike the panels in Indian Creek, the images in Nine Mile Canyon have been modified; for example, the "arms" on the anthropomorph in Figure 17 were added later, as were the diagonal lines on the pendant necklace of the second anthropomorph. Other features, some of them lightly pecked, were also added later.

One of the significant features of these images is that they provide conclusive evidence that a specific type of image was intentionally placed in a specific location, which, incidentally, again indicates that the creation of these images was not just a random act and that the images were not just random doodles. The specific placement indicates that the images possess an established meaning and function. If there were many of these images in Nine Mile Canyon, then it could easily be a coincidence that two would be across the canyon from each other, but as in Indian Creek these are the only panels, so it is not a coincidence that they were placed across from each other—it was intentional.

The rarity of the images in this position also suggests that the ideology that was responsible for their existence was invented by only one person or a small group. If this ideology was something that was commonly known to many people there would be many situations where the images were on opposite sides of a canyon, but there are not, so the pattern is unique to a very small part of the population.

Since there are two examples in Indian Creek and only one in Nine Mile Canyon the distribution suggests that the origin of the ideology was in Indian Creek, which further suggests that one individual or a small group of people from Indian Creek visited or resided for a time in Nine Mile Canyon. This is too small a number to be conclusive. There are, however, several considerations that support this conclusion. The first is that there are several instances in San Juan County where similar images exist, but they are not in locations across a canyon from each other. The farthest south is near the Utah-Arizona Border near Bluff, Utah, in a canyon that drains into the San Juan River where there are several groups of similar images. Second, is that near Moab there is another panel with a similar image on one side of a canyon and there could have been a second panel on the other side, but it is an area with a broken rocky cliff so if there was another image, it has broken off the cliff. The larger number of similar images in the south increases the density to the point where it is logical to assume that the origin was south of Nine Mile Canyon. It is apparently significant that all of these images, from the San Juan River to Nine Mile Canyon, follow a somewhat narrow route from north to south along the Colorado-Green River corridor.

The placement of these images across the canyon from each other seems to suggest that the images might have functioned as a boundary marker. This, of course, is speculative; however, if this were the situation, it would suggest that the people who made the images had intended to remain in Nine Mile Canyon, or were already living there, and

Figure 19. A Classic Vernal Style anthropomorph that is rare in Nine Mile Canyon.

may have been staking a claim to the canyon or to a portion of the canyon. The later modifications and additions to the panels in Nine Mile Canyon suggest that they were not alone in the canyon.

Barrier Canyon Style

No panels of Schaafsma's Barrier Canyon Style have been found to this date in Nine Mile Canyon. Schaafsma suggests that a pictograph panel in Sheep Canyon, a tributary of Nine Mile canyon, contains four anthropomorphs that have both characteristics of this style and Fremont figures (1971:79–82).

Classic Vernal Style (Uintah Fremont)

The principal images and defining characteristics of Schaafsma's Classic Vernal Style are almost entirely lacking in Nine Mile Canyon, which is extremely unusual given that Classic Vernal Style images are found only 50 miles to the northeast—only few days walking distance. The paucity of these images is another mystery of Nine Mile

Figure 20. A sketch of the pecked and abraded features of the Classic Vernal Style anthropomorph shown in Figure 19.

Canyon. One of the few and perhaps the best example located to date of the large, highly-decorated anthropomorphs that are the hallmark of the Classic Vernal Style, is the fugitive pigment image shown in Figure 19.

The left side and lower part of the panel have been completely obliterated by erosion. The panel is located where rainwater water now flows down over much of it. A sketch of what remains of this image is illustrated in Figure 20. Other features may exist, but they are extremely difficult to see. The image clearly exhibits the characteristic anthropomorphic features of the Classic Vernal Style. These are: a tapered body, facial features including tear streaks, a multi-faceted necklace, a small breastplate, and a round feature held in the figure's left hand. There is also a row of short vertical marks on top of the head that contain remnants of red pigment. The red pigment may have been added later because several other images in Nine Mile Canyon have red pigment over pecked marks. Remnants of chalk also are on the image. This must have once been an impressive image. The process of first painting the anthropomorph then pecking away the pigment to create features would have created a highly contrasting three-dimensional image.

Figure 21. A typical Fremont Northern San Rafael Style panel. A horizontal slice of this panel is currently featured on Utah automobile license plates.

Northern San Rafael Style

Schaafsma's Northern San Rafael Style was defined principally from sites in Nine Mile Canyon, so it is expected that the Fremont rock art in Nine Mile Canyon would be classified as the Northern San Rafael Style, and so it is. Schaafsma describes the Northern San Rafael Style panel designers as being less interested in the creation of pleasing visual patterns than were, for example, the authors of the Fremont Classic Vernal Style (Schaafsma 1971:29). Instead, she indicates that the panels are crowded and busy with a lot of small solidly-pecked images. This is demonstrated by the panel in Figure 21. Notice the characteristic dot patterns.

Schaafsma also felt that in addition to the overall feeling of the panels, there is a marked difference in the types of images in the Northern San Rafael Style of Nine Mile Canyon when compared to sites in surrounding areas, particularly those in the Uintah Basin of northern Utah (the Classic Vernal Style) discussed above. In the photographs that Schaafsma used in her study, she notes that abstract elements make up 39 percent of the images in the Northern San Rafael Style panels; anthropomorphic figures constitute 20 percent; quadrupeds 34 percent and other respective elements seven percent. The Classic Vernal Style in the Uintah Basin in comparison contains: abstract elements 24 percent; anthropomorphic figures 54 percent; quadrupeds 19 percent, and others three percent. There are, therefore, almost three times as many anthropomorphs in the Classic Vernal Style as there are in the Northern San Rafael Style in Nine Mile Canyon and there are nearly twice as many quadrupeds in the Northern San Rafael Style as there are in the nearby Classic Vernal Style in the Uintah Basin. This is a significant difference.

Another significant feature of the images in Nine Mile Canyon and which Schaafsma did not note, was that the period when the images were created corresponds to the time that Turner's Glen Canyon Style 4 was being constructed, which was A.D. 1050–1250 (Turner 1971) (see Part II). Turner noted that in Glen Canyon during this period, there was a great increase in the diversity of images. This increase apparently occurred over much of Utah and perhaps most of the southwest as well. The increase in diversity in the rock art in Nine Mile Canyon validates Schaafsma's time period proposal for the creation of the Northern San Rafael Style.

Figure 22. A panel including many scenes apparently involving combat. Scale in lower right is five inches.

It should be noted that Schaafsma's Northern San Rafael Style should only be applied to some of the rock art in Nine Mile Canyon, not to all of it. The rock art does not lend itself to a simple all-inclusive classification, such as the Northern San Rafael Style. Nine Mile Canyon rock art created during the Fremont period is much like the Fremont Culture itself—it is diverse. Nine Mile Canyon was occupied for many hundreds of years, during which time numerous people, for numerous reasons, created numerous images on the cliff surfaces. Some of the images were created by visitors from outside the region, some came into existence from outside influences, and some were developed locally, and they all changed over time. (Some researchers are of the opinion that Nine Mile Canyon may be the source of much of the Fremont rock art. This has yet to be proven.) The result is a great variation in image forms and contexts. The rock art is far too complex for one all-inclusive category.

Warrior Images

Several panels in Nine Mile Canyon appear to show human figures involved in combat. Some people refer to these as warriors. All of the images of this type found to this date are always small, note the scale (bottom right) in Figure 22. Interestingly, while images showing combat appear sparingly throughout most of the canyon, there is a concentration in one area, which is called Warrior Ridge. In this location, there are nearly 100 individual images portrayed in a position of conflict, i.e., holding spears, clubs, bows with arrows, and/or shields and facing what appears to be an opponent. These images are portrayed attacking one or more similarly armed persons.

Notice that the largest images in the panel shown in Figure 22 are mountain sheep. This appears to suggest that mountain sheep may have played a significant role in the conflict, since in historic Numic imagery the larger the image, the more important it is.

On the right side of the panel there is an unusual depiction of shields. Seven or eight figures are holding a shield that is depicted in profile view. Figures in profile view are extremely rare in Fremont rock art. It is not until after about the 1450s that profile views become common in rock art in the southwest, so this is unusual. This feature seems to suggest that the images date near the end of the Fremont Culture. Several of the combat scenes show both spears and bows and arrows

Figure 23. This combat scene shows both spears and bows and arrows being used.

being used (Figure 23), indicating that this panel dates to a later period than the introduction of the bow and arrow, which is about A.D. 500.

Figure 24, which is not at Warrior Ridge (see also Spangler and Spangler 2003:98) may also reveal something of the nature of the combat. (Notice the vandalism to this panel.) The two larger figures on the right have headdresses that have two vertical curving lines on top of their heads. The central figure in the small group of three, who seems to be fending off two attackers, also has a similar feature; however, the two attackers have only one curving line on top of their heads. This suggests that the conflict depicted here was symbolized by a difference that is represented by these features. Other panels, but not all, have similar differences in headdresses. The curving vertical lines on the heads may represent feathers, as photographs of Utes and other Indians of western America show long feathers in identical positions (Callaway et al. 1986:343).

Because of the existence of profile views in the panels, one of the most interesting questions concerning these small warrior figures that hold shields is their cultural affiliation. Are they

Figure 24. In this apparent combat scene, the figures have different headdresses.

Fremont or Ute? The relative size of the shields may hold a clue. At some point in time before the arrival of the horse, the Ute used large shields that covered much of their torso. One account by an early visitor to the west said that the Ute Indians in western Colorado were feared more by the Indians than any other tribe. The Ute Indians would form a circle holding large buffalo hide shields on the outside. Inside the circle would be other Utes with bows and arrows. When these moving fortresses would attack an Indian village without warning, they would always be victorious. Large buffalo hide shields have been dated to between A.D. 1420 to 1640 (Bauman 2002). The

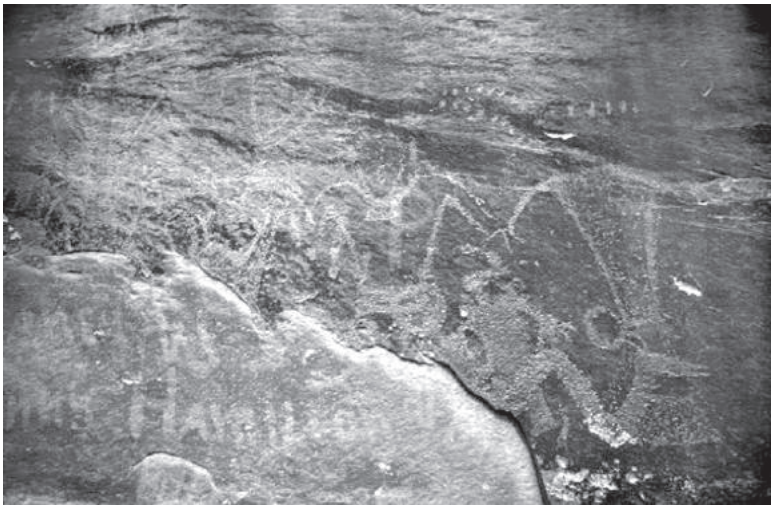

Figure 25. A panel in Nine Mile Canyon with anthropomorphic characteristics indicative of other regions of Utah. The lower part has been lost to exfoliation.

Figure 26. Sketch of the panel shown above.

presence of large shields depicted in rock art in the Uintah Basin confirms their use in prehistoric times.

Theoretically, when the Utes acquired the horse, they found that large shields were unwieldy on a horse; they required two hands to hold them. Their use was abandoned in favor of small shields, which could be held in one hand and easily moved to protect both horse and rider from arrows. Following this idea, the depiction of small shields in panels in Nine Mile Canyon, like those shown above, suggests that they were created by the Ute following the adoption of the horse; however, horses are not illustrated in the panels in Nine Mile Canyon that also depict figures holding small shields engaged in conflict. This suggests that despite the reasoning above, small shields might have been known and used in Nine Mile Canyon before the arrival of the horse. Thus, these panels do not provide a definitive answer for the problem of cultural affiliation. The panels could be late Fremont or Ute.

Fugitive Pigment Anthropomorphs

Adjacent to the main dirt road in Nine Mile Canyon, and covered with a coating of fine dust and streaked mud, is another important panel. Figure 25 is a photograph of the panel and Figure 26 is a sketch of the panel (see also Schaafsma 1994[1971]: Figure 31). The panel consists of four anthropomorphs in a horizontal row along with a smaller anthropomorph in profile view that is partly superimposed over a mountain sheep. There are also two circles, a horned serpent(?), a quadruped, a footprint, and other abstract images. The small footprint on the left side appears to be older than any of the other images and it may not be a part of the newer panel. The bottom of the panel has exfoliated from the cliff surface. Names and initials have been added, apparently in axle grease or paint, and they have left stains in the panel and below it. Note the P in the body of the second anthropomorph from the right side. The few images on the far left side of the panel are eroded and the sketch approximates what is there.

Three of the largest anthropomorphs in the panel are fugitive pigment anthropomorphs. They were created by first painting them, then features and outlining were adding by pecking. Each of the four large anthropomorphs is entirely different from the others and each has distinctive attributes. These attributes are found in different areas surrounding Nine Mile Canyon.

The third anthropomorph from the right has a headdress or a feature on its head that is found in the Uintah Basin of northeastern Utah and northwestern Colorado. I have found that it is concentrated almost exclusively in this area. Photographs of this feature have been published in nearly every book about Utah rock art (Pratt 1972, Uintah Basin, Utah; Cole 1990:Figure 74, Browns Park, Colorado; Castleton 1978:Figure 2.38, Steinaker Reservoir, Vernal, Utah; Muench 1995:49, Dry Fork, Utah; Manning 2003:Figure 9, Lucerne Valley, Manila; etc.). Both Castleton (1978:Figure 2.9) and Schaafsma (1971:Figure 8) identify this feature as one of the Classic Vernal Style headdress. It is evident that the headdress is indicative of anthropomorphs in the Uintah Basin area. This anthropomorph is also wearing a large pendant necklace and a covering of some type over or on its shoulders. There is also a U shaped feature, with both ends ending in a Y, on its chest.

To the right of this figure is an anthropomorph that, like the adjacent image, is wearing a pendant necklace. This figure's shoulders are hunched up. This feature is almost entirely absent in the Uintah Basin. It is, however, frequently found in central Utah in the Capitol Reef, Sevier River areas, for example see Castleton (1978:Figure 4.26, Fish Creek Cove) and Schaafsma (1971:Figure 44, Fremont River, Fruita, Utah—her Southern San Rafael Style area). There are also a few images around Moab. Schaafsma states; "Hunched shoulders…are characteristic of Fremont representations in this district" [i.e., the Fremont River District] (1971:46). Hunched shoulders are also a characteristic found on some of the Barrier Canyon Style images in this same area. The pecked areas on each side of the head, which presumably represent hair ties, or earrings (Schaafsma 1971:41) are also found in this area. Schaafsma notes that these features "…are found on many southern San Rafael anthropomorphs" (1971:41). This image also has a feature described by Schaafsma (1971:49) as a depiction of a low curved chin. She also notes: "This method of chin representation occurs sporadically among Fremont figures in the Southern San Rafael Zone" (1971:49). It is therefore evident that the features comprising this anthropomorph are indicative of images located in central Utah.

The anthropomorph on the far right only has a row of pecked areas on top of its head and a few random pecked dots on its face. The painted facial features were lost when the fugitive pigments eroded, so there are no facial attributes to associate it with a specific area. Beneath the body is a trapezoidal pecked area that appears to represent a kilt or skirt. A similar feature appears in Figure 17, and to a lesser extent in Figure 18, which are Basketmaker images in Nine Mile Canyon. I have seen anthropomorphs with bodies that are outlined and filled with stipple pecking in Indian Creek, where the Basketmaker images with pendant necklaces were also found. The features comprising this anthropomorph seem to be indicative of anthropomorphs in the southeastern corner of Utah.

The far left anthropomorph is an intriguing image. It appears to be an anthropomorph with a body and head that are entirely pecked; however, it might be part of a larger figure, or it might be superimposed over another image. Notice that on the left and right sides of the image are the same outlined inner body and lower arms as on the two figures on the right side, as if this represents the torso and upper arms of an anthropomorph. This second image appears to be a fugitive pigment anthropomorph. There also seems to be an extra line on each side of the head as if another headdress was behind this image. Because the panel is so badly covered in dust and mud it is not possible to determine if the fully pecked images are superimposed over a fugitive pigment anthropomorph or not.

The solid pecked anthropomorph has a unique head shape that is different from all the other images. I have seen this shape of head in other

locations; however, at this time, I have not been able to attribute it to only one specific region—more data is needed. Another intriguing feature are the arms and hands. The arms are short and stubby and the fingers are spread wide. The arms and hands of this figure are identical to those shown in Figure 12, which is in the Wind River Mountains of Wyoming. Notice that both images have four fingers. It is unlikely that the occurrence of this image in both panels is a coincidence. This section of the panel seems to suggest that a representation of a Dinwoody tradition image has been superimposed over another fugitive pigment anthropomorph. It is not clear what this would indicate.

The two figures in the center both have large pendant necklaces. They are also present on all of the anthropomorphs in the panels in Indian Creek that were on opposite sides of the canyon (Figure 16) and on figures on the opposite side of Nine Mile Canyon (Figure 17 and 18). Clearly, these large pendants have social, religious, or political importance. I have seen this feature in other panels that are associated with important events and it seems apparent that the large pendant is a symbol of status, position, authority, or power (Manning 1992).

Notice that the three fugitive pigment anthropomorphs do not have hands. Actually, they all have hands; the hands were lost when the fugitive pigment eroded. This is a common feature of fugitive pigment anthropomorphs in the Vernal area (Manning 2004). The position of the image's arms in this panel in Nine Mile Canyon indicates that the figures' hands are overlapping, thus they appear to be holding hands.

What could be represented by human beings holding hands? I suggest that if figures confronting each other with clubs, spears, and bows-and-arrows (Figures 22, 23, and 24) indicate conflict, then figures holding hands would represent the opposite attribute. People holding hands or touching each other in this fashion certainly does not seem to represent adversarial contact. Holding hands could certainly represent some agreement, like the resolution of a conflict to bring peace. Peace treaties have been almost a consistent feature of American civilization in the past 240 years; it may have been a feature of their civilization as well.

The meanings of the other images in the panel are not well understood. There are no conclusive explanations for two other significant images—the horned serpent and the anthropomorph behind it. Perhaps a more significant question is, what part did the anthropomorph with arms and hands, that are a characteristic feature of images in northeastern Wyoming, play in the acts depicted in this panel? Was this image added when people from the Dinwoody area came to Nine Mile Canyon or did the people from the Dinwoody play an active role in whatever was depicted in the panel? More information is needed to answer these and other questions.

Nearly all of the anthropomorphs in this panel, then, have attributes that associate them with specific areas in the broad region of Nine Mile Canyon. It appears evident that these attributes represent cultural features unique to each of these various areas respectively and thus functioned as symbols for the people living in these areas. These cultural features/symbols could represent social, political, or religious divisions or some other division unknown to us.

This panel is important, then, because it indicates that Fremont societies in Utah over 800 years ago differentiated themselves because of differences in cultural features. It is important to note that they possessed the knowledge to create symbols that were capable of representing the people occupying different areas. This is also significant because these divisions are not being imposed by archaeologists based on lists of cultural traits, like ceramics and projectile points (Madsen 1989:17–

27), but the differences were imposed by the Fremont people themselves.

The panel also suggests that certain individuals or organizations had authority to make decisions for the body of the people. Not only did these social, political, or religious organizations exist, but they also functioned, and they apparently functioned to the extent that representatives from outlying areas could meet to resolve conflicts. How important, for example, would a peace agreement have been for all the inhabitants of eastern Utah? Could this panel be a declaration of peace for a large region of Fremont people?

Another question is: Why was this panel located in Nine Mile Canyon? Is it because Nine Mile Canyon is situated midway between the Uintah Basin and central Utah, i.e., perhaps in the center of the apparent conflict? It appears to be significant that this panel is located directly across the canyon from Warrior Ridge—the location of nearly all of the scenes of warring conflict in Nine Mile Canyon.

The Fremont apparently did not have a written language so they have no writing or signatures on a piece of paper to mark the existence of any wide-scale agreement or resolution. Could this panel in Nine Mile Canyon be the symbolic equivalent of one of our important written documents, or even the "written document" itself?

The last time I was in Washington D.C., I waited in line for almost an hour so I could stand for five seconds in front of a thick U.V.-absorbing glass and steel case in a concrete building protected by armed guards to look at a piece of paper containing written words and signatures. It was the Declaration of Independence. If the panel in Nine Mile Canyon were a correspondingly significant declaration of agreement or resolution for a large region of people, would these people have come to Nine Mile Canyon to look at this important record? So how do we care for it? We write our names and initials over it and cover it with dirt.

Late Pueblo

The late Pueblo IV period existed from about A.D. 1300 to 1500 when the Spanish arrived in the Southwest. This was the period following the abandonment or great lessening of the population throughout all of the southwest in general. It is the period when cultural evidences of the Fremont and Anasazi are principally absent in Utah. Likely, somewhere in Nine Mile Canyon there are evidences of these people, because panels in the Uintah Basin show that Pueblo IV people were there around A.D. 1500 and apparently they entered into a land uninhabited by the Fremont. This is evident because they placed their own unique images directly over Fremont petroglyphs, apparently with impunity and total disregard for the Fremont images. Traveling from northern Arizona and New Mexico they passed by Nine Mile Canyon. As of this date, no images have been found that indicate the presence of Pueblo IV people in Nine Mile Canyon.

HISTORIC PERIOD

Ute

Ute images abound in Nine Mile Canyon. Early Historic Ute images are evident in the canyon, which date from the time the Utes acquired the horse, i.e., about 1640 to 1830 (Forbes 1959). There are also a few late Historic Ute images apparently dating from about 1830 to 1880 when the Utes were removed from the region and resettled on the Ute Indian Reservation in northeastern Utah on the east side of the Green River. These images are unmistakable because of the presence of included historic images and the use of metal implements to create the images. Nine Mile Canyon also contains a few Ute images that were apparently made in the late 1900s. These are evident because of the complete absence of repatination.

Questions about the Ute presence in eastern Utah have puzzled archaeologists for many years. The

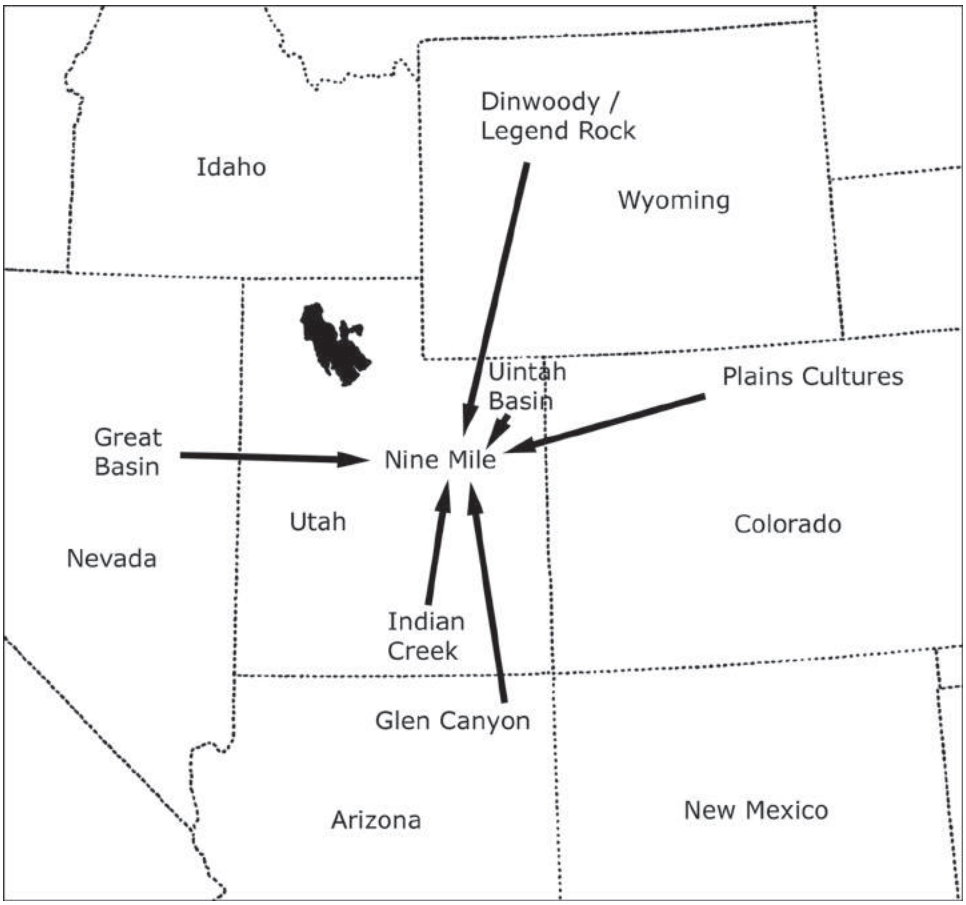

Figure 27. Map of the locations from which people of different cultures came into Nine Mile Canyon.

most frequently asked questions are: Are the Utes the descendants of the Fremont or did the Utes come into a land devoid of people? If the Utes came into Utah when the Fremont were still living here, did they displace or absorb the Fremont? Rock art, more than any other evidence of the past, likely holds the answers to these questions. The key lies in determining how to distinguish between late Fremont and early Ute rock art and in understanding the meaning and use of each. With this information, it will be possible to determine if the Ute learned the meaning of the symbols from the Fremont or if the Ute just copied Fremont symbols without knowing the meaning of them. Such a study is in its infancy. The meaning, purpose, and function of the Anasazi Basketmaker images that were placed across the canyon from each other, and the Dinwoody tradition images with their proposed function provide important clues to understanding the rock art in Nine Mile Canyon.

CONCLUSION

As discussed here, Nine Mile Canyon contains images from a large region where various other cultures existed. People from the Archaic Period to Ute came into Nine Mile Canyon. People came from the San Juan River area of southern Utah and Northern Arizona, from the Dinwoody area of Wyoming, from the Great Basin, from the Great Plains, and from the Uintah Basin. Figure 27 illustrates in summary the locations from which people from different areas came into Nine Mile Canyon.

The examples described above are not an exhaustive list. Not discussed here are images from the eastern side of the Great Plains that also occur in Nine Mile Canyon. They also appear to have the same function and meaning in both locations.

Figure 28. An anthropomorph from a Dinwoody tradition panel in southeastern Colorado.

As a side note, the consistency in these panels over such distant regions and different times shows that rock art is not random meaningless doodles, as some suggest. The images had a standardized specific meaning within the confines of time and culture, and some symbols crosscut cultures. Rock art is not art at all, but a language of symbols that played a well-organized, meaningful, and significant part in the lives of prehistoric people.

It is important to note that the Dinwoody travelers apparently ranged farther than Nine Mile Canyon. On the cover of the book *Petroglyphs of Southeast Colorado and the Oklahoma Panhandle*, there is a photograph of a large prominent Dinwoody anthropomorph, which is located in southeastern Colorado (McGlone et al. 1994). Figure 28 is a sketch of this figure. Portions of the legs are approximate because they are superimposed by parts of other figures. This anthropomorph, along with some others in the panel—several ages are present—are stylistically and compositionally the same as those in the Dinwoody area. Note that the large figure's body is rectangular and its sides are uneven. The head sits directly in the body. It has an unpecked area in its face. Its arms are both upraised and its fingers are spread wide. Notice that even the anthropomorph's left arm has an upward curve. There are also smaller figures with outlined bodies in the panel along with other Dinwoody type characteristics. This site unquestionably contains Dinwoody tradition images.

The presence of this panel in southeastern Colorado raises an interesting question. Were the images created by people traveling from the Dinwoody area of Wyoming, or are these images part of a broader cultural phenomena, such as a Plains Indians tradition, which has been mistakenly considered unique to the Dinwoody tradition? Certainly, additional research needs to be conducted to answer this question.

The existence of these various images in Nine Mile Canyon creates many topics for discussion. The existence of only a very few of the panels/images in Nine Mile Canyon that are so common in other areas suggests that the people who brought them visited only rarely. It is also evident that various groups of people from Nine Mile Canyon did not visit far off regions and then return home to create similar images. The fine details of the images in Nine Mile Canyon are too precise to be copies of far-off panels, and it appears evident in several instances that the meaning of the images is also consistent, which would be an improbability if people were just copying panels. It is obvious that people from various cultures were in Nine Mile Canyon. What is not obvious is why they were there. What it is about Nine-Mile Canyon that drew these people for thousands of years?

To understand and determine the significance of rock art in the western United States, Nine Mile Canyon's place in the region needs to be considered, understood, and placed in a known framework. The people in Nine Mile Canyon did not operate in a vacuum; they interacted with others in surrounding areas. They might have been influenced by people from outside Nine Mile Canyon, and they might have in turn influenced

people living outside of Nine Mile Canyon. Rock art can play a critical role in determining this interaction.

The location of Nine Mile Canyon adjacent to a major river corridor might have played a role with its being visited by a variety of prehistoric people from other regions. The Green River would certainly have been a curiosity to people living both upstream and downstream from Nine Mile Canyon. People would certainly have been curious about where the river came from or where it went. Exploring parties along the course of the river may have been the source of some of the images in Nine Mile Canyon.

It also appears that Nine Mile Canyon was the center of the creation of several different types of images. Thus, the ideologies from which these unique images sprang were also created in Nine Mile Canyon. Rock art can provide important information in the study of how and why these ideologies developed.

It has been repeatedly demonstrated here that a single panel of rock art in Nine Mile Canyon is extremely important because of what it can tell us about the events and travels of people to, or through, Nine Mile Canyon. Without each of these individual panels, we would probably never realize that people from the Dinwoody area of Wyoming, the Great Basin, the San Juan River, etc., ever visited Nine Mile Canyon.

The prehistoric images in Nine Mile Canyon, then, are extremely important because of what they can tell us about human behavior. We actually know very little about prehistoric human behavior. Moreover, and most significantly, what has been described here is only part of what is known about the importance of rock art in Nine Mile Canyon. Many questions have not even been asked yet. Numerous papers remain to be published. This is why the rock art in Nine Mile Canyon must be preserved and studied.

The images in Nine Mile Canyon may be the only records that some people have of their ancestors' existence. If we let these panels be damaged or destroyed we also let the history of these people, and their heritage, be damaged or destroyed. Each panel tells a story and it is analogous to a page in history or a page in someone's family history. Each panel is a page that has yet to be read and understood. Someday they will be read and understood—if they are still here and still readable. Future generations will either praise us for preserving it or hate us for destroying it—which will it be?

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Ray T. Matheny and Deanne G. Matheny

NINE MILE CANYON ROCK ART AND COMMUNAL HUNTING

> Descriptive analyses are those which utilise the figurative component of prehistoric art to directly extract information on prehistoric social activities, economy, material culture, ideology and environmental context, which is often not reflected in other types of archaeological evidence [Morwood and Smith 1996]

The above quote makes clear the potential use of rock art as a source of information about ancient societies and generally reflects our approach.[1] In this paper we focus on what might be learned about the societies whose members created the rock art rather than what may have motivated the ancient artists to create it or what meaning(s) it may have had for those who created it or who later viewed it.

Nine Mile Canyon, located in central eastern Utah (Figure 1), has long been known for its rich and extensive corpus of rock art. This paper is a development of certain concepts presented in two previous papers about Native American (largely Fremont) rock art found in Nine Mile Canyon. Those papers focused on the topics of animal behavior and ancient hunting strategies as revealed in the rock art (Matheny et al. 1997; Matheny et al. 2004). Our data come from the

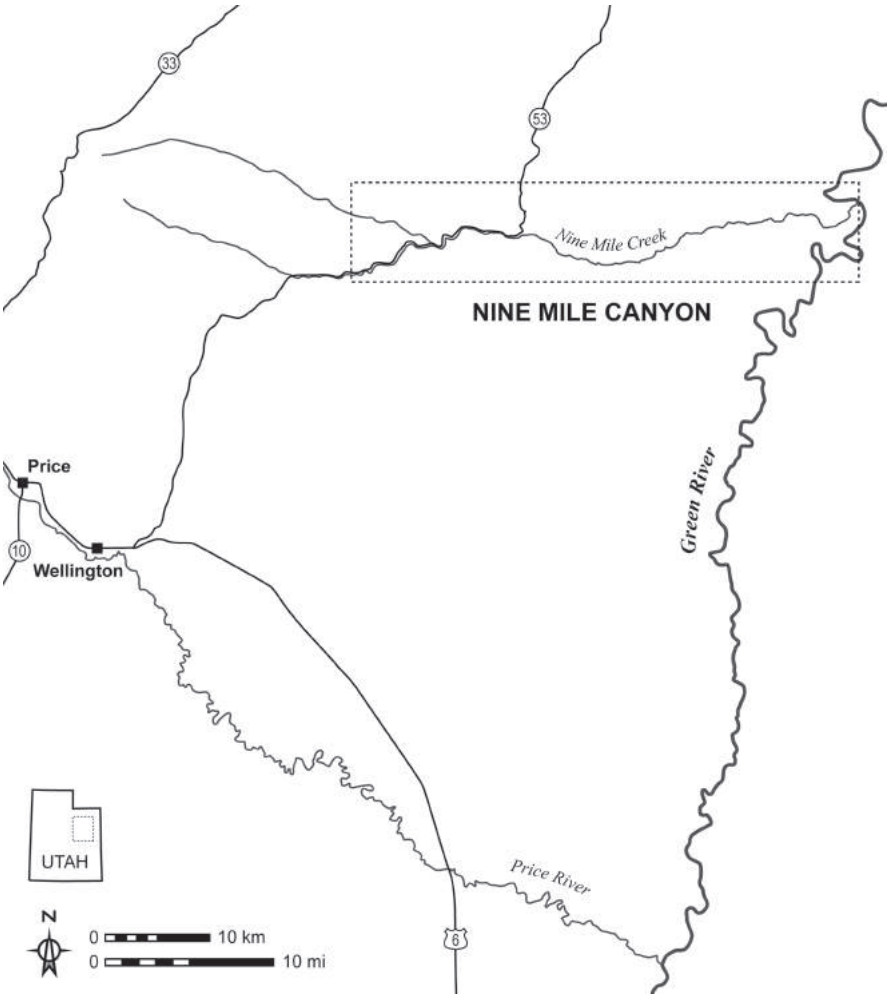

Figure 1. Map showing the location of Nine Mile Canyon and the research area.

results of a survey of the lower (eastern) portion of Nine Mile Canyon carried out by the Brigham Young University (BYU) Field School of Archaeology under the direction of Ray T. Matheny from 1989 through 1992 (reported in Spangler 1993) and survey work carried out with the Castle Valley Chapter of the Utah Statewide Archaeological Society beginning in 1989, as well as the survey of a portion of the canyon published by Hurst and Louthan (1979), excavations carried out in Nine Mile Canyon by the BYU Field School of Archaeology (reported in Thompson 1993), and, to a lesser degree, archaeological work in the canyon by other scholars. Although the inventory of rock art and other archaeological sites in the canyon is by no means complete, the surveys carried out thus far have given us some perspective on the distribution of sites and their content in a few important areas of the canyon.[2] Rock art depictions in the canyon span a long time frame (from at least the Archaic Period through modern times). Although rock art exists at many levels along the steep rock terraces, particularly in the mid and lower sections of Nine Mile Canyon, a number of the more complex renderings are easily visible from the canyon bottom, providing an enduring message to all who pass by them. In this paper, we concentrate on rock art themes (mainly found in Fremont and Ute/Numic period rock art) which suggest the repeated exploitation of local faunal resources by communal hunting. The rock art renditions of animals and anthropomorphs communicate information about an economic system involving the procurement of animal products which may reflect connections beyond Nine Mile Canyon.

Evidence from Nine Mile Canyon suggests that most of the Native American inhabitants who lived in the canyon and exploited its resources from the Archaic through the Historic Period were foragers (also called hunter-gatherers) and at least some, during the Fremont occupation, were farmers, although their horticultural activities may not have been associated with villages or other residences that were occupied year round. We are interested in trying to understand the context of communal hunting as it may have occurred in Nine Mile Canyon as practiced by foragers and/or horticulturalists and whether rock art can provide insights about this.

Hunting is a basic subsistence activity that has been practiced from the earliest times until today by societies with all types of sociopolitical organizations. In looking at communal hunts[3] as reflected in Nine Mile Canyon rock art, we adopt Driver's definition of communal hunting which includes the following:

> (a) Participation by more than two hunters (usually many more than this).
> (b) Active cooperation between hunters such that they work together, as opposed to passive cooperation in which hunters agree not to interfere with each other's activities.
> (c) A system of hunting that requires all hunters to participate in a previously conceived plan [Driver 1990:12].

Driver (1990) notes that it is difficult to document the presence of communal hunting in the archaeological record, however, we suggest that rock art can be helpful in this regard, showing both the kinds of large game targeted as well as hunting techniques used to obtain them.

In order for communal hunting to be a worthwhile economic activity, justifying the expenditure of the large amount of energy and other resources necessary to hunt, kill, and butcher the animals as well as transport the meat and other animal products, there must be an adequate return of animal products. To carry out a successful communal hunt, Driver (1990:13) notes that the target animals must exhibit certain characteristics, including that their location be predictable, that their behavior dictates particular hunting techniques and that their physiological conditions makes hunting them desirable. He also notes that large mammals have important seasonal variations in their "habitat, migration, population density, meat

quality, and social behavior" (Driver 1990:13). Meat quality is affected by seasonal changes experienced by animals and is linked to fat content which plies on both the nutritional value and the taste of the meat (Speth and Spielmann 1983). Seasonality, among other factors, can include migration. Reproductive behavior is often seasonal as well and results in animals being aggregated in greater numbers than at other times and in peak condition in terms of both meat and hides or coats. These factors are generally true for larger mammals living in arctic and temperate regions where animals are most often aggregated in the fall. Driver's review of ethnographic sources shows abundant data that hunting in higher latitudes during the fall and early winter supplied animal products for winter storage (Driver 1990:29). While referencing Winterhalder (1981) that "optimal foraging theory predicts that clumped, mobile resources are most efficiently exploited by aggregated foragers," Driver (1990:21–28) points out that this does not explain why communal hunting occurs and he explores that question using the following hypotheses:

> (a) The technology of communal hunting is more efficient (i.e., produces more meat per person or more energy per person per unit of energy expended) than the individual hunting of aggregated prey, under certain conditions;
> (b) Communal hunting produces a surplus during times of plenty, which is crucial for maintenance of human populations in "lean" periods following communal hunts; and
> (c) Communal hunting decreases search time, by concentration on dense aggregations of animals, and the decrease in search time compensates for any loss of efficiency [Driver 1990:22–23].

Our study is concerned primarily with the hunting of bighorn sheep (*Ovis canadensis and O. c. nelsoni)*, simply because they are overwhelmingly the most frequently depicted animal in the rock art of Nine Mile Canyon. Other species portrayed in hunting scenes in the canyon include elk/deer (usually these appear to be elk), bison, and rarely, birds. We do consider one example of an elk hunting scene in this paper. Although bighorn sheep are abundantly depicted in the rock art of Nine Mile Canyon and other areas occupied by Fremont and Ancestral Puebloan groups, their numbers were so greatly reduced during settlement by Euro-Americans that perhaps they do not come quickly to mind as a major game source. Estimates differ about the number of bighorn sheep that lived in North America in earlier times but a recent article gives an estimate of 1.5 million to 2 million two centuries ago and notes that only 28,000 remain today (Lomax 2008:22). Based on the criteria discussed above, bighorn sheep are particularly attractive hunting targets because they have highly predictable behavior on an annual basis. Their annual seasonal cycles include a segregation between ewe and ram herds for much of the year and the sheep aggregate in mixed herds of ewes, rams, and lambs born the previous spring only during the rut in the late fall or early winter at a time when the fat content of their meat is high and condition of their hides is generally at a premium (Geist 1993:125). A recent study of bighorn sheep in Glacier National Park using tracking collars which record the movements of the sheep has changed some former perspectives on bighorn behavior and confirmed others (Lomax 2008:22). The highly predictable nature of the bighorns' habits was confirmed, showing that they seldom explore new habitats and the herd travels on paths used for generations between their ranges used for purposes such as lambing, wintering, etc. Such predictability in behavior must have been a boon to hunters who understood it well and could predict the sheep's location from season to season.

The bighorn sheep were a high-ranked resource and, in addition to the meat and hides, they provided those who hunted them with a wealth of other resources. Bones were used for tools and bone grease was another important resource. The horns of the bighorns were used for a number of tools and weapons, including bows, sickles,

dippers and rattles. This brief discussion is merely illustrative of some of the uses of the bighorns.[4]

NINE MILE CANYON ROCK ART HUNTING SCENES[5]

Perhaps the general concept suggested by the rock art portrayals we have studied is that hunting of various animals has occurred in Nine Mile Canyon and its environs for a long period of time and it was likely carried out in both communal and individual (one to two individuals) hunts.[6] We do not suggest, however, that the rock art depictions portray any actual hunts.

Although bighorn sheep are the most frequently portrayed animal in Nine Mile Canyon rock art, by no means are all of these depictions a part of or related to hunting scenes and this applies to depictions of other animals as well. Some scenes show only animals and many of the rock art portrayals reflect the deep knowledge of the Native American artists about the ethology of the animals.[7]

Based on the sources of information mentioned above (surveys of Nine Mile Canyon), Matheny et al. (2004:162–163) have identified a current total 163 rock art scenes that depict or suggest hunting activity, and these include sites associated with both the Fremont culture and later Ute/Numic groups, as well as some that may be associated with the earlier Archaic period. We consider these scenes as hunting or hunting-related because they include

> …at least two of the following elements: anthropomorphs (who often wear a single-element headdress, a pair of bison-like horns or a headdress with fringed stick-like elements) bearing weapons (bow and arrow or atlatl) or with upraised arms, large animals (typically bighorn sheep and/or elk/deer, bison or birds (more rarely)) being confronted by anthropomorphs, nets or enclosures, dogs, and burden bearer figures [Matheny et al. 2004:162–163].

Some of these elements are specific to particular time periods or cultures (e.g. in Nine Mile Canyon, burden bearers seem to be only associated with Fremont rock art, but we realize that they have a much broader distributon culturally and geographically beyond Nine Mile). In historic period depictions, horses are often included.

Our analysis of hunting-related sites shows that they tend to cluster around the mouths of some of Nine Mile's tributary canyons. This is discussed in detail below in regard to Fremont hunting scenes.

UTE/NUMIC HUNTING AND COMMUNAL HUNTING SCENES

We will begin our discussion of Nine Mile Canyon rock art with historic period Ute/Numic hunting scenes but we should point out that issues exist in connecting these groups with past geographical areas and groups. How and if the Utes and other Numic speakers are related to earlier Fremont groups is unknown. By about A.D. 1300 the horticultural, more sedentary lifeway practiced by many Fremont groups had largely disappeared to be replaced by a foraging lifeway associated with those called Numic or Shoshonean speakers. For some years in the mid to late twentieth century there was general consensus among scholars regarding an expansion or migration of Numic-speakers eastward and northward from the southwest Great Basin beginning around A.D. 1000, gradually pushing into the eastern Great Basin and surrounding areas. Now, however, there is little consensus about this or many other questions regarding this time period.[8]

It is well documented that the Utes were hunters of mountain sheep but at the time many of the ethnographic studies were carried out this was no longer the case because the sheep had experienced a great demise. Mountain sheep hunting was largely a memory after the early 1900s; for example Smith (1974:57), writing about the

Northern Utes whom she studied in 1936 and 1937, states:

> "All bands of Utes hunted mountain sheep, usually by driving the sheep toward high rocks where a hunter was waiting. Sometimes mountain sheep were surrounded by men on horseback (Unc)[9]."

Smith (1974:54–57) in discussing communal hunts of bison, antelope and rabbits mentions that a "boss" or "chief," who had knowledge of hunting and the country, headed the cooperative hunts. It is possible that the same organizational process applied to communal bighorn hunts as well.

Although Smith does not mention specifics as to how bighorn were butchered and transported, her description of such regarding deer may apply to bighorns as well. The deer was butchered by making a cut under the throat and continued on through the belly and "When the deer was skinned, the four legs were tied together and the carcass was laid on the hide and packed on a horse" (Smith 1974:53).

Linguist James A. Goss, during an interview about the Utes and in discussing animals hunted by them, explained that although buffalo were important to the Utes, the buffalo hadn't entered their ceremonial life and the Utes didn't consider it sacred as did the Plains Indians (Goss 2000). He goes on to note:

> Undoubtedly the most important ritual animal for these hunting people was the big-horn sheep in the mountains of Colorado and Utah. But we've completely lost that because the big-horn sheep almost became extinct between the hunting pressure and the diseases that domesticated sheep brought in. So people don't think about the big-horn sheep, but all you have to do is look around at all of the prehistoric pictographs all over Colorado and Utah and one motif that comes up more often than elk or deer or buffalo or anything like that is the big-horn sheep. That was the spiritual chief, you might say, of the hunted animals [Goss 2000:44].

Describing fall activities among the Northern Utes, Clifford Duncan has noted:

> Fall was the time when seeds had to be stored, meat had to be dried, clothing had to be made and repaired, as did utensils such as pouches and bags, baskets and water jugs. This was also the time of the great large-game hunts, including some for buffalo. Many families would get together, feasting and preparing for the hunt. The hunters would ride out to find and bring back as much meat as they could carry. When the men returned, there was another gathering, with gambling, singing, and courting. These hunts were important socially [Duncan 2000:170–171].

That the Utes traded mountain sheep skins is recorded in sources such as that of Rufus B. Sage (1982:232) who traveled through the west in the 1840s and visited Roubideau's Fort located on the Uinta River in the Uinta Basin where he noted that trade was carried on with the Snake and Utah (Ute) Indians who lived in the area. He mentions that beaver, otter, deer, sheep, and elk skins were traded. He praised the quality of the skins, stating: "The Utahs and Snake afford some of the largest and best finished sheep and deer skins I ever beheld,-a single skin sometimes being amply sufficient for common sized pantaloons. These skins are dressed so neatly as frequently to attain a snowy whiteness, and possess the softness of velvet" (Sage 1982:232).[10]

Sage also noted that the skins were very abundantly produced, were obtained from the Native Americans by the traders for a trifling amount, and, when taken to Santa Fe and other towns, made a profit for the traders.

There are a number of rock art sites in Nine Mile Canyon which indicate the presence of Ute/Numic peoples in the area, reflecting several recognized styles of Ute rock art. In this article we will focus

Figure 2. The scene illustrates a mounted Ute/Numic hunting party surrounding four bighorn sheep. One horseman appears to carry a shield. The head of the lone figure may not be accurate as it is somewhat obscured. Site 42Dc639 Nine Mile Canyon.

Figure 3. Four mounted Ute/Numic hunters pursue six bighorn sheep that are being driven by a dog. Wolfe Ranch, Arches National Monument.

on two sites which we suggest show communal hunts. The first site (42DC639) (Figure 2) is found on the north side of Nine Mile Canyon, not far from the mouth of North Maxie Canyon and recorded during the BYU Field School survey. It was reported by Spangler (1993:226) and illustrated by Spangler and Spangler (2003:48) and Spangler (2004:131). This panel is likely an example of what Cole (1990:225–235) has called the Early Historic Ute Indian Style (A.D. 1600 to 1830). It is an impressive panel—a hunting scene, including six mounted anthropomorphs (what is likely a seventh has broken away leaving only the front of the quadruped) and at least four bighorn sheep, as well as a spiral element.[11] The mounted anthropomorph (hereafter termed "hunter") and its horse on the left side of the panel are

Figure 4. Four mounted Ute/Numic hunters with spare horses pursue elk in a fall hunt. Site 42Cb808 Nine Mile Canyon.

substantially larger than the other mounted hunters and horses and the large hunter wears a headdress with what appears to be two horns, like those of a bison. The larger mounted hunter faces the other mounted hunters and the bighorns. The smaller mounted hunters surround the bighorns. The hunting technique portrayed of surrounding bighorns with horses is the same as that referred to above which was reported by Smith (1974:57) and it may be that the larger mounted hunter is a portrayal of a hunt boss. The Wolfe Ranch hunting panel, located in Arches National Monument, depicts a similar scene of mounted hunters and bighorn sheep but also appears to include at least one canine (Figure 3)

The second Ute/Numic rock art example from Nine Mile Canyon that we will discuss is located on the north side of the canyon, near the mouth of Daddy Canyon where there is a clustering of rock art sites of several cultural affiliations, including some of Ute/Numic affiliation. Site 42Cb808 includes a rock art panel in the Late Historic Ute Indian Style (A.D. 1830 to 1880), which is a hunting scene, involving mounted hunters and elk (Figure 4). Although no weapons are shown, the animals are clearly being controlled by the hunters and their horses. This panel depicts four mounted hunters, at least two of which have tethered animals in trail that appear to be horses. The tethered animals may represent pack animals brought on the hunt to carry meat and other animal products. All of the hunters and quadrupeds face left. In the lead is the largest of the mounted hunters who also has the most developed features

including a trailing Plains-style headdress and feet visible beneath the torso of the horse. This figure may represent a hunt boss or other hunt authority figure. Behind the larger mounted hunter are three quadrupeds which appear to represent elk with large antlers. Two mounted hunters appear behind the elk. They also have trailing headdresses but they are not as detailed as that of the lead hunter. Another mounted hunter is depicted below the first elk. Several other quadrupeds are depicted in the lower area of the scene but they are difficult to identify. They could represent other animals in the elk herd, including females, although one of the quadrupeds appears to be a horse. Smith's (1974:54-55) informants reported hunting elk in the winter and that the hunters would surround yarded elk, frighten them and shoot them as they tried to escape.

The two examples above serve to illustrate that Native Americans, particularly Utes, hunted in Nine Mile Canyon after acquiring the horse, as well as earlier, and that the depictions are consistent with accounts of Ute hunting. Although we cannot say which Ute/Numic groups or bands were hunting in the canyon (and that could have varied over time), groups from the Uintah Basin and Utah Valley seem to be good possibilities. Clearly the acquisition of the horse provided an enhanced range of possibilities for hunting. For example, the Uintah Utes made buffalo hunting trips into Wyoming near what is now Rock Springs and Green River in times of peace with the Shoshones (Smith 1974:53). That the Utes had ongoing interest in the area of Nine Mile Canyon is apparent in the encounter that Byron Cummings of the University of Utah had with a party of Utes in the canyon in the summer of 1906 (Willey 1988:4; referenced in Spangler 1995:45). They insisted that Cummings leave the area immediately but he managed to stay the night and left the next morning.

Duncan's (2000:170–171) discussion of fall activities quoted above is important in pointing out not only the significance of communal hunting for the purposes of gaining meat and other animal products but also the social context of these hunts which brought groups together. While encounter or individual hunting was undoubtedly important and, in some instances, may have been more efficient than communal hunting, these larger hunts could have provided an occasion for groups to gather and affirm their relationships, which was likely not a part of individual hunts. The communal hunts gave some individuals the opportunity for a temporary leadership role as hunt boss or chief and others the opportunity to demonstrate their hunting prowess. This enhancement of personal prestige was likely further bolstered by celebrations once a successful hunting party returned to camp where the adventures of the hunt would be recounted for the entire group. Knowledge of the predictability of the bighorn sheep annual cycle with the aggregation of animals in conjunction with the rut in the late fall/early winter would have been valuable in reducing the risk factors for a successful hunt.

RECENT PERSPECTIVES ON FREMONT PREHISTORY

As an introduction to the Fremont communal hunting scenes, we present a brief background discussion about Fremont studies which will necessarily give inadequate attention to many important topics. A wealth of archaeological research about what is generally called the Fremont Culture has been accumulating since the early twentieth century. The Fremont peoples inhabited the eastern Great Basin and the northern Colorado Plateau from about A.D. 400 to 1300. There has not been a great deal of consensus among scholars about the Fremont culture or Fremont complex as some have recently suggested that it be designated (Madsen and Simms 1998). Janetski and Talbot (2000a:1) have summarized the history of shifting perspectives on the Fremont from the beginnings of research to current times and note that "if a single theoretical thread can be traced through this maze

of Fremont literature, it is the notion of variability and an associated concern with definition" (Ibid:4). Current perspectives tend to focus on the micro level of behavior which emphasizes "relationships among individuals and groups of individuals" (behavioral/economic perspectives) most often closely identified with subsistence studies or the macro level of behavior related to larger scale patterns (Ibid: 6).[12] Janetski and Talbot suggest that each perspective has its strengths and that each can be applied productively to different kinds of questions. Research objectives have moved away from defining Fremont culture and from understanding variability in terms of bounded area models. Madsen (1989:67) has suggested using the term Fremont as an "umbrella" which includes diverse human behavior. Studies focusing on subsistence strategies have argued that Fremont subsistence was not limited to horticulture; for example, Madsen and Simms (1998) propose that there were a "mosaic" of subsistence behaviors that included full-time farmers, part-time farmer-foragers, full-time foragers and that there could be switching between these options during the lifetime of individuals as they pursued a variety of adaptive strategies.

In recent years research has demonstrated the existence of large, more complex Fremont sites, in comparison with those studied earlier. A general understanding about Fremont sites had been that settlements were small, consisting of several pit houses and associated structures and work areas.[13] Extensive work at the Five Finger Ridge site (dating between A.D. 1000–1350), located in Clear Creek Canyon, resulted in the excavation of 81 structures (which included 37 pit houses and one surface house) and 33 activity areas, and it is clear that many of the households are contemporaneous during several time periods (Janetski and Talbot 2000b:251; Talbot and Janetski 2000:43; Talbot et al 2000:167). Based on their studies of social organization at the site Janetski and Talbot (2000:262) report that "a conservative conclusion here is that polities above the supra-family level existed in Fremont society," and they include Nawthis Village and Baker Village among other sites that may have patterns that reflect internal differentiation.[14]

Another important recent study by Coltrain and Leavitt (2002) reported the results of stable isotope and radiocarbon analysis of skeletal materials of the Great Salt Lake mortuary assemblage from the eastern shores of the Great Salt Lake. These results indicated that "diets varied within a single time period, over time, and by sex" . . . "suggesting that between A.D. 400-1150, populations in the Great Salt Lake Basin were faced with a fluid subsistence cost/benefit structure, consistent with the intrusion of summer moisture into an extensive wetlands bordered by grasslands suitable for farming" (Ibid: 479). There is some evidence for possible differential status in a portion of the male population who had a diet higher in maize. There is a change at about A.D. 1150 which sees an end to farming and a return to eating wild foods which, on the basis of climate studies, is suggested to have been caused by a drought or shift in the seasonality of moisture.

How does Nine Mile Canyon fit into the matrix of Fremont research? Despite its well-known reputation for archaeological remains, much of the canyon and its environs remains unknown archaeologically and there have been few excavations in the area. Spangler (2000b) has written an interesting paper which ably addresses a number of questions generated by archaeological surveys by the BYU Field School of Archaeology in lower Nine Mile Canyon, and some of the same questions could apply to the canyon generally. He (Ibid:25) suggests that there was a "Tavaputs adaptation" of Formative peoples after about A.D. 1000 including the following material culture correlates:

(1) the construction of energy-expensive semi subterranean residential masonry architecture in economically advantageous locations along stream terraces,

(2) the construction of elaborate surface masonry structures on pinnacles and rock outcrops hundreds of meters above the floodplain,
(3) the paucity of significant middens, implying short-term, perhaps seasonal occupations,
(4) the construction of large storage structures that would seem excessive for the small population suggested by the limited quantity of residential structures,
(5) the construction of elaborately camouflaged and remotely located subterranean storage chambers, which imply both abandonment and the possibility of human predation, and
(6) the near absence of a local ceramic tradition [Spangler 2000b:25].

Spangler is able to assign only a tenuous date for the Fremont occupation of the lower canyon of A.D. 1000 to 1300, due to the small amount of datable material recovered by the surveys and the same can be said for the middle and upper sections of the canyon as well. He lists the few available radiocarbon and tree ring dates from Nine Mile (Spangler2000b:35, 36). A few of the radiocarbon dates are earlier than A.D. 1000 but most are later.

In addition to completing a survey of the lower end of Nine Mile Canyon from the confluence of South Franks Canyon with Nine Mile down to the confluence of Nine Mile with the Green River, the BYU Field School excavated at sites 42Cb770, 42Dc618, and 42Dc619, which are all stream terrace sites of the type referred to by Spangler, For example, Site 42Cb770 included three pit houses, and an outdoor work area and yielded three radiocarbon dates including A.D. 1028, A.D. 1028 and A.D. 1176 – median calibration (from Spangler 2000b:35, Table 3.1). Site 42Dc619 had been damaged by modern house construction but still included one partially intact pit house which yielded a date of A.D. 1176 – median calibration (Ibid). Site 42Dc618 differs from the other two in that it was an outdoor use area with a few artifacts but no associated structures. These are the only stream terrace sites which have been excavated and they are characterized by shallow midden deposits containing few artifacts. Like other stream terrace sites they are located near access to water, arable land, and piñon-juniper resources.

There are a few other sites in mid-canyon that were excavated by Gillin (1955). Two of these, Sky House and Upper Sky House, are pinnacle sites similar to those described by Spangler for the lower canyon and the dendrochronological dates for these sites indicate they may have been constructed about A.D. 1100 and are of the same general time period as those from the stream terrace sites from the lower canyon (Spangler 2000b:29). A number of other habitation sites have been identified by surveys in various areas of the canyon but they have not been tested, and other habitation sites will likely be discovered. Spangler (Ibid) has proposed a hypothesis to account for the archaeology of the lower canyon as we now understand it, and parts of it could be extended to the other areas in the canyon as well. While future research may change some portions of the hypothesis (which is to be expected), it is an important step to understanding the past in Nine Mile Canyon.

Although rock art is abundant in Nine Mile Canyon only a few examples are found in association with architectural sites.[15] Based on stylistic grounds, much of the rock art is attributed to the Fremont but no direct dating of the rock art itself has been done.

FREMONT COMMUNAL HUNTING SCENES

Based on our preliminary review of the 163 hunting and hunting-related rock art sites of which we are currently aware in the area of Nine Mile Canyon, 103 can be considered as related to communal hunting. Of those sites 27 have burden bearer figures (discussed below) and 55 show weapons (mainly bow and arrow).

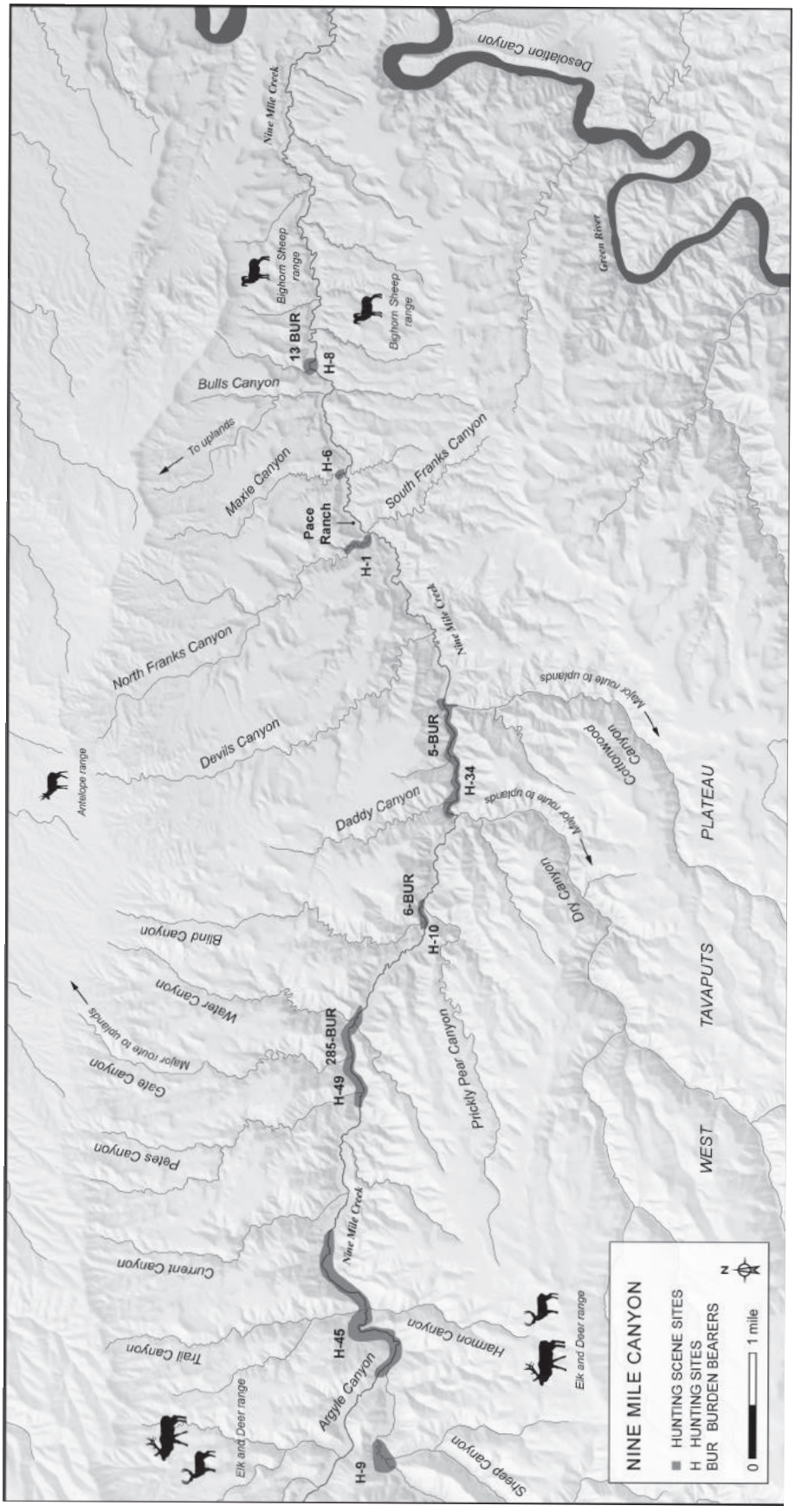

Figure 5. Map showing the incidence of hunting sites and associated images of burden bearers from Sheep Canyon to Bulls Canyon

Figure 6. The scene represents sheep being driven by drivers with outstretched arms. Drive lines to guide the sheep are shown as undulating and zigzag lines ending with the head of a bighorn. Three of the hunters are armed with bows and arrows and are directed by the larger figure. Site 42DC141 Nine Mile Canyon.

Figure 7. Bighorn sheep are being driven by a horned hunter with arms outstretched towards what may be an enclosure. The large horned figure may represent a hunt boss and five burden bearer figures are present. Site in Nine Mile Canyon.

Analysis of the location of hunting and hunting-related sites shows that they tend to occur in clusters at or near the mouths of several side canyons. In our discussion below of the site clusters we have included both communal and individual hunting sites. The map (Figure 5) showing the location of these clusters reads from left to right (west to east) as follows:

- nine hunting sites are located near the mouth of Sheep Canyon;
- from the mouth of Argyle Canyon to about 1/2 mile east of Trail Canyon there are 45 hunting sites;
- 49 hunting sites (with a total of 285 burden bearer images) are found at the mouths of and between Petes, Gate, and Water Canyons;
- ten hunting sites (with a total of six burden bearer figures) are found at the mouths of Blind and Prickly Canyons;
- there are 34 hunting sites (with a total of five burden bearer figures) at the mouths of and in the areas between Daddy, Dry, and Cottonwood Canyons;
- one hunting site is found at the mouth of North Franks Canyon;
- six hunting sites are located at the mouth of Maxie Canyon; and
- there are eight hunting sites (with a total of 13 burden bearer figures) at the mouth of Bulls Canyon.

Many rock art panels have been overdrawn in recent times or damaged to the extent that it was not possible to discern the entirety of the panel even though some elements associated with hunting scenes are present. It is very likely that many more hunting depictions exist in unsurveyed areas.

There is considerable variation among the portrayals of anthropomorphs in the hunting scenes. Some are shown awaiting or threatening animals with atlatls or bow and arrow (Figure 6). Others stand among the animals or confront them with raised arms (Figure 7). Another type of anthropomorph found in hunting scenes and associated with animals is the burden bearer or "backpacker" (Figure 8). The authors found that there were 360 burden bearer images depicted at bighorn hunting sites, and we have suggested elsewhere that they were part of a communal hunting group to transport meat and other animal products after a successful hunt (Matheny, et al. 2004:178–181). The burden bearers are rendered in various forms and some may represent those who had functions other than hunting and carrying

Figure 8. Seven burden bearers mingle with two bighorn sheep suggesting the association of their burdens with the sheep. Site 42Dc1106 Nine Mile Canyon.

Figure 9. A hunting party is ambushing six bighorn sheep that are being driven by a dog (last figure with a long tail). Five bowmen aim arrows at the sheep and two burden bearers accompany the hunting party. Site in Nine Mile Canyon.

animal products from the canyon (Schaafsma 1971:60). Most, however, are found in association with hunting-related sites.

Analysis of the panels by association with the animals hunted and the presence of burden bearers reveals the following: burden bearers are found in association with 416 bighorn sheep, 11 elk, six deer, 53 zoomorphs (unidentified or incomplete drawings), and five bison.[16] If the frequency of depictions is a guide, it is clear that the main hunting quest was for the bighorn sheep, however, elk, deer, and bison also were prized catches.

Burden bearer depictions usually occur in groups and the groups are often organized with a leader portrayed larger than burden bearers that follow. The leader sometimes wields a bow and arrow, drawn and ready for action while the followers stand some distance away (Matheny et al. 2004:Fig. 6.25.). This may indicate that hunting group members played multiple roles; that is, they were burden bearers at some stages of the hunt and hunters at another stage. Some burden bearers accompany an organized hunt where a canine helps drive the animals toward hunters with bows and arrows (Figure 9).

The individual features of the burden bearers are frequently vague, however, in some renditions the figures wear what appears to be a flat hat, whereas others appear to show a single element, perhaps a feather, on the head. Burden bearer bodies also vary but are generally triangular and some are shown with striding legs and with feet, while others are static without legs or arms depicted, but they all appear to carry a burden on their backs. There are many other locations in the Fremont area and the Southwest where burden bearer images occur but we are unaware of other areas where they occur in such numbers as they do in Nine Mile Canyon.

In an earlier paper (Matheny, et al. 2004) we devoted considerable attention to the hunting strategies portrayed in Fremont rock art and we will summarize those which likely apply to communal hunting. One of the most striking and best known rock art scenes, showing a surround or ambush of the sheep, is the so-called Cottonwood Panel or Great Hunt Panel (42Cb339) (Figure 10), located in Cottonwood Canyon, a short distance above its confluence with Nine Mile. This is what Cole (1990:188) refers to as a narrative panel where ". . . entire panels appear to be composed of intentionally grouped and thematically related elements" and that ". . . some panels have strong narrative qualities, particularly those with hunting and fertility scenes." We have previously discussed this panel in detail (Matheny

Figure 10. The Great Hunt or Cottonwood panel is located in Cottonwood Canyon a short distance upstream from its confluence with Nine Mile Canyon. This scene depicts a late fall or early winter scene of an organized ambush by hunters armed with bows and arrows. Site 42Cb339 Cottonwood Canyon.

Figure 11. This scene depicts ewes, lambs and yearlings confronted by five hunters armed with bows and arrows. Site 42Cb891 Nine Mile Canyon.

et al. 1997). It clearly shows a herd of bighorn sheep who are being confronted by hunters armed with bows and arrows. The scene reflects a late fall or early winter hunt because that is the only time, during the annual rut, when the herd of rams, ewes, and lambs range together. Rams and ewes move in separate herds during the rest of the year. This narrative scene is one of the great treasures of the Nine Mile area.

Another narrative panel portraying a confrontation with armed hunters surrounding bighorn sheep is found in Nine Mile Canyon less than a mile upstream from the confluence of Nine Mile and Cottonwood Canyons. The Sheep Hunter's House Panel (site 42Cb891) (Figure 11) is somewhat less complex that the Cottonwood Panel and it shows five hunters armed with bows and arrows confronting 17 bighorns. This appears to be another late fall/early winter scene where rams, ewes, and lambs are together.

Other strategies such as the winged drive are shown with drivers moving animals to the advantage of the armed hunters. There are also a number of portrayals showing nets assisting

Figure 12. This scene shows woven nets that were used to trap bighorn sheep and other animals (note the net ends with a bighorn head). Ten net scenes have been recorded in the research area and all are associated with bighorn sheep. Site in Nine Mile Canyon.

in sequestering animals for a controlled kill (Figure 12). All of these techniques are well known in the ethnographic literature from many areas. The discovery of a net made of juniper from the Absaroka Mountains in northwest Wyoming dating to 8860 ± 170 BP believed to have been used in hunting bighorn sheep reflects the antiquity of this hunting strategy for hunting bighorns (Frison et al. 1986).

If we accept the rock art hunting scenes as sources of information about Fremont hunting organization and practices, the communal hunts depicted show the organized, coordinated, and concerted effort of a number of individuals using various hunting strategies to kill bighorn sheep. Often one hunter is portrayed larger than the others in the scene, which may indicate that he held a temporary position such as hunt boss or leader. The number of hunters depicted varies from scene to scene and the number of burden bearers varies greatly when they are depicted. Of course, only representative rather than total numbers of hunters and burden bearers may have been shown. Such communal hunts of the sort depicted in the rock art would have required considerable organization for gathering and transportation of weapons and other tools to the hunting site, and feeding the hunting party during travel if necessary, as well as butchering and preparing the kill for transport.

DISCUSSION

Having reviewed information about Fremont communal hunting scenes, we now briefly consider several of the questions that have developed from our study of them. The first question is whether there is any evidence in addition to the rock art portrayals that bighorns were hunted in Nine Mile Canyon and its environs. If people who lived in the canyon were hunting and presumably eating bighorns, one would expect to find sheep bones in the middens at habitation sites. As noted above, however, very few excavations have been carried out in Nine Mile Canyon and, in the case of the stream terrace sites excavated by the BYU field school, the middens were minimal and produced no faunal remains (Thompson 1993). Gillin (1955:11, 13, 23) found some faunal remains in three excavations, including Valley Village (N.M. 17) House C, Beacon Ridge (N.M. 2), and Sky House (N.M. 13), but none were identified as bighorn sheep.[17] Two sites recorded during the USAS Castle Valley Chapter survey in Nine Mile Canyon did produce evidence of bighorn sheep hunting. The first was found at the mouth of Argyle Canyon where it joins with Nine Mile. Three bighorn crania from which the horn cores had been removed were found in the same cache in a rock crevice with 13 large black chert preforms. Also nearby was a cache of 43 phragmites canes, some of which were of a size to be used for arrow shafts. At another site, in a rock shelter, a cached piece of bighorn hide was found.[18] Though these remains have not been dated, they confirm the practice of hunting bighorn in the canyon.

In addition, habitation sites such as Cottonwood Village, which fall within the areas where concentrations of rock art hunting scenes occur, are still unknown in terms of dating and other matters, but they offer intriguing possibilities.

A more general and difficult to consider question is when communal hunting occurred in Nine Mile Canyon and whether the hunters were foragers, farmers, or somewhere on the continuum between those adaptive strategies. It is likely that both communal and individual hunting took place from at least Archaic through historic times and was practiced by those utilizing a variety of subsistence options. Of course communal hunting was clearly taking place in historic times as evidenced by the Ute/Numic hunting scenes but we are much less sure when communal hunting may have occurred during Fremont times. The major impediment to productive consideration of this question is our very incomplete knowledge of the history of occupation in Nine Mile Canyon, which provides us with a very limited perspective. Given these restrictions, for purposes of this paper we will utilize the correlates of Spangler's (2000b) proposed Tavaputs adaptation and the time period of A.D. 1000–1300 as a beginning point, although we realize that Fremont communal hunts such as those depicted in the rock art could have taken place before or after this time. Nonetheless, the best current evidence for Fremont occupation in Nine Mile Canyon is associated with this time period.

Of course it is most tempting to suppose that those participating in communal hunts were Fremont peoples living in the canyon contemporaneously with the hunts and this may have been the case. The scant evidence we currently have does not match well with that possibility for the time period of A.D. 1000–1300, however, given the lack of faunal remains of bighorns in the excavated sites as discussed above. Spangler (2000b) suggests for the lower canyon that there was a fairly small, perhaps seasonal horticultural population in the canyon that planted maize in the spring, left a small group to tend the fields, and then the larger group which had been gathering other resources (and perhaps hunting) elsewhere returned in the fall to harvest the crops before the group moved on to a winter occupation area. Where the group went to spend the winter may have depended upon their affiliations with other Fremont groups and Spangler has suggested they may have gone to villages such as Snake Rock, Turner-Look, Caldwell, or Whiterocks or in Nine Mile Canyon at Valley Village or Sunstone Village. It is possible they wintered in other sites in Nine Mile Canyon or in nearby areas of the Tavaputs Plateau that have not yet been identified. Spangler has pointed out the difficulties of trying to understand the possible affiliations of the Nine Mile groups, in that the Uinta Basin might appear to be a reasonable source for a horticultural population that moved into Nine Mile since the horticultural sites in the Uinta Basin may have been depopulated by about A.D. 1000 (Spangler 2000a). The architecture in Nine Mile is not like that in the Uinta Basin, however, and Uinta Gray pottery is much less frequently found in Nine Mile than is Emery Gray. Ties to the San Rafael area do not appear to be strong either.

Considering Fremont communal hunting in this context, if the population during the late Fremont period in Nine Mile was seasonal, highly mobile, and left the canyon in fall, they may not have been present for the prime opportunity to hunt bighorn sheep during the late fall/early winter rut. It seems likely, however, that they would have been aware of this valuable resource, if it were available, and that some of the group could have returned to take advantage of it.

In considering how large a resource the bighorn might have represented, we don't know how many herds of bighorn sheep might have included Nine Mile Canyon in their range but, given the large number of the sheep believed to have lived throughout the west, there could have been several herds. The concentration of hunting and burden bearer rock art sites near the mouth of and between certain tributaries of Nine Mile Canyon may indicate general areas where hunting regularly occurred. Janetski (1997) has written an important article about the results of his test of resource intensification models developed in California and for the American Southwest on data from Fremont archaeological sites. The results indicated that "Faunal assemblages from archeological sites show a slow decline in relative numbers of large game animals between A.D. 500 and 1300" (Ibid: 1085). Unless the bighorn sheep populations associated with Nine Mile Canyon were over-hunted and their numbers greatly reduced, they should have been an attractive resource for almost any group. It seems less likely that these sheep populations would be over-hunted because of their apparent distance from villages of any size or those that were populated year round. Also, communal hunting of bighorn may not have occurred annually in Nine Mile Canyon.

We have focused on communal hunting of bighorns that likely occurred in the late fall/early winter in conjunction with the rut because a number of the rock art scenes support this scenario and it makes sense in terms of the condition of the animals at that time. Certainly, however, the sheep must have been hunted at other times as well, particularly by individual hunters.

Following are several possibilities (that are not mutually exclusive) we consider regarding late fall/early winter communal hunting:

- Fremont groups, who lived in sparsely populated Nine Mile Canyon sites from spring through fall, may have returned to hunt sheep during the late fall/early winter rut. They likely transported the meat and other products to their winter habitation sites, wherever those might have been; however, they also may have traded some of the meat and other products at villages. The hunt might have occurred too late in the year for the hunters to trade preserved animal products at trade fairs/ festivals of the sort proposed by Janetski (2002) which may have been scheduled earlier in the fall. Items obtained from the hunt, such as hides and items made of horn, could be prepared over the winter and taken to the next year's trade fair/festival.
- Expeditions could have been organized by villagers to hunt bighorn sheep and other big game animals. This might have been not only to provide a supply of meat and other animal products but could have been linked with the prestige of successful hunting (Janetski 1997:1085). Given the more complex social organization and internal differentiation of some Fremont villages, such as Five Finger Ridge, sponsoring a successful hunting expedition could have been a prestige enhancing activity, especially where big game populations might have been reduced over time in the area surrounding the village. The burden bearer images in a number of rock art sites associated with hunting in Nine Mile Canyon could be seen as symbolizing participation in a recognized wider network that included hunting and trading.

In this paper we have not considered the important topic of transport costs regarding communal hunting of bighorn sheep although there are a number of important studies that provide models for transporting resources that are not consumed where they are found and must be transported to another location for processing and/or consumption.[19] There are several reasons why we have not considered this hunting-related topic. First, other than the rock art, we have no hunting-related sites as a starting point, with the probable exception of the cache site at the mouth of Argyle Canyon mentioned above which included the three bighorn crania, preforms, and phragmites canes. These could represent the remains of a hunt in that area with cached material left behind for future retrieval or a future hunt. Even if we knew where hunts occurred we don't know where the meat and other products were being transported to since we don't know if Fremont groups were wintering in Nine Mile Canyon or moved elsewhere.

As to the possibility of hunts organized by villages outside of Nine Mile Canyon, we would suggest that economics in transport was not a focus of communal hunting. This has been noted in other areas as well. For example, Knoll (2003) found that carrying game from high in the Uinta Mountains (from the area around Deadman Lake) where bighorn sheep were hunted did not produce a caloric return rate that was economically practical. In the case of a village organized hunt, with hunters sent out to procure bighorns, the prestige value of the hunt and the possession of the meat and other products of the hunt may have been emphasized over the time and effort required to acquire them. The risks of not finding animals for the hunt, and the resultant loss of prestige if the hunters returned home empty handed, may have been reduced by their knowledge of the predictability of bighorn behavior. This type of hunt may have been differentiated in many ways from individual hunting, particularly if there were ceremonies or gatherings to celebrate the return of a successful hunting party. Knoll (2003:31) notes that likelihood that there was a "prestige and/or mystical quality associated with the mountain sheep" and that bighorns meant more to prehistoric peoples than just "hide, horns, and meat" (Knoll:2003 referencing Grant 1980:32).

In this paper we have presented information about communal hunting scenes related to Ute/Numic and Fremont groups in Nine Mile Canyon. And, as proposed by Morwood and Smith (1996), we have also suggested information that we believe might be extracted from the rock art portrayals

about various aspects of the lifeways of the peoples who created them.

END NOTES

[1] We recognize both the problems and the value of this approach as set forth in Morwood and Smith 1996.

[2] A primary purpose of these surveys was documentation in aid of the nomination of Nine Mile Canyon to the National Register of Historic Places (NRHP). Both prehistoric and historic sites were recorded.

[3] There are also numerous rock art depictions of what can be considered individual hunts (those that include one or two hunters) in Nine Mile Canyon.

[4] These uses are discussed more extensively in Matheny et al. (1997:72-73)

[5] While we have chosen to concentrate on hunting scenes, we should point out that there are many non-hunting related rock art depictions in Nine Mile Canyon and its tributaries.

[6] The area is still used for deer and elk hunting. It is said that the last bighorn sheep died in the 1920s but they have been reintroduced to neighboring areas in recent years.

[7] For a fuller discussion of ethology of the sheep revealed in these depictions see Matheny et al. 1997,

[8] See Spangler 1995, Chapter 13, for an informative discussion of the issues relating to the "Shoshonean Stage: dated from about A.D. 1300 to historic times (A.D. 1640)."

[9] The "Unc" parenthetical indicates that this information was provided by an informant from the Uncompaghre band.

[10] William H. Ashley, who passed through the Uintah Basin in 1825, also commented on the fine clothing of the Utes who were dressed in mountain sheep skin and buffalo robes (Morgan 1964:20).

[11] The spiral element is heavily patinated, in contrast to the anthropomorphs and bighorn sheep which are not patinated, and is likely much earlier. Other elements found on the west (left hand) side of the panel include the name "John," a group of pecked dots, and the letter "J."

[12] See Janetski and Talbot 2000:2–7, for a discussion of shifting scholarly perspectives about the Fremont.

[13] See Sammons-Lohse 1981 for an example of this view.

[14] See Talbot 2000 for a discussion of other large Fremont sites, many of which have been largely destroyed by EuroAmerican settlement. Of particular interest is the very large site at Paragonah.

[15] See Spangler (2004:132–138) for a discussion of architectural associations with rock art in the lower canyon.

[16] There are also a total of 30 canines and 32 snake-like elements included in these panels.

[17] From an earlier context, a section of worked horn was found with the "Basketmaker-like" burial in Rasmussen Cave (Gunnerson 1969:102).

[18] The hide was determined to be from a bighorn sheep based on DNA analysis.

[19] See, for example, Jones and Madsen 1989; Madsen et al. 2000; and Zeanah 2000, for studies which are related to the Great Basin.

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Nina Bowen

ROCK ART STYLES OF THE GREAT SALT LAKE/UTAH LAKE AREA

Not too long ago, a few researchers were asked by a company based in Salt Lake City to write as much as we could find out about the rock art in the Salt Lake/Provo area. This was done as a part of a recording project. What we found was that information, aside from some generalizations, was lacking. There were some papers that were published in the 1930s as a part of a sweeping archaeological recording project taken on and reported by Steward (1936), and Reagan (1935). Fortunately their monographs have some photographs of rock art that was found. It is the only reference we can find that would allow us to compare what they photographed versus what we can find today. Not much research has been done since then. There is quite a bit that has been written dealing with the archaeological work in and near the Great Salt Lake area. It mostly concerns excavations from caves such as Danger Cave (Jennings 1957), Black Rock Cave (Madsen 1983) and Hogup Cave (Aikens 1970) in the Great Salt Lake and Wendover areas. These sites do not contain rock art.

There was a very good paper published recently in American Indian Rock Art Volume 25 titled *Regional Variation in Rock Art Styles in the Southern Great Basin: A view from the East Mohave* (Christensen et al. 1999). One of the points that the authors make is that "To more fully understand these styles, more complete documentation of rock art sites has to be done to create a more substantial database for comparative studies" (Christensen et al. 1999:77). This statement made me realize that in order to compare rock art traditions from all over the region, researchers need to know more about the lesser publicized sites that can be found here. Most rock art researchers will have a difficult time accessing State or BLM documents (IMACS forms). Many of the site forms before about 1975 do not have pictures attached, which makes doing research using these site forms nearly impossible. Practically the only way to conduct this type of research is going book by book, or finding and viewing sites independently. I would commend URARA for their efforts in making this type of information available to the public.

The main goal in writing this paper is to draw the interested researcher's attention to the rock art styles found in the Great Salt Lake/Utah Lake area, and specifically to what the author calls the Great Salt Lake variant of the Great Basin Representational Style of rock art found only in this area.

I will begin with the oldest styles of rock art and work forward to the most recent styles.

C. Melvin Aikens stated that all of the styles of rock art that can be found in the Great Basin represent a rock art tradition that spans perhaps 3,000 years (Aikens 1978:5). The Great Salt Lake/Utah Lake rock art tradition includes these styles: abstract (a combination of curvilinear and rectilinear), representational, and painted. Pit and groove style does not appear to be used here, nor is the scratched style. Based on association with artifacts from other areas, the abstract style was in use for the longest span of time, from roughly 1000 B.C. to A.D. 1500. The representational style was in use from roughly A.D. 1 to 1500, and the painted style was in use from A.D. 1000 to 1500 (author's best guess).

Figure 1. Great Basin Abstract Style, Scott Spring.

GREAT BASIN ABSTRACT

The Great Basin Abstract style of rock art (Figure 1) was made by Archaic peoples, and is the oldest style found in the study area. The style extends from the Owens Valley east to the Wasatch Range and Colorado River. This is the core area of the Western Archaic tradition. What strikes me is that this style is so universal and abundant. Predominantly abstract images are made by a variety of techniques, which include pecking, scratching, abrading, and painting.

In the Great Salt Lake/Utah Lake area the pecked line is often wide. It is commonly found on large boulders, which are mostly covered with pecking, and there is great similarity in the motifs used. These boulders are usually situated where there is a commanding view, but this view is not of a specific landmark or direction.

Individual stones are also used for Great Basin Abstract Style rock art. These can be as small as a few inches in diameter. Great Basin Abstract rock art can be found in the same areas as those containing later styles of rock art, which indicates repeated use of the same sites over time.

I would suggest that this type of rock art was used in the northern Utah area as a way to mark "ownership" of areas, or rights to use areas, or as sympathetic magic. There are very few animals depicted in the Great Basin Abstract rock art of this area, and the places that contain these boulders are not likely places that one would use in hunting, so I don't believe that this type of rock art was used as an aid in the hunt. Archaeological records show that there was an abundance and variety of animals available in the early Archaic period. Maybe there was no need to worry about their availability or picture them on the rocks to make them appear.

GREAT SALT LAKE VARIANT OF GREAT BASIN REPRESENTATIONAL (Figures 2 and 3)

This style of rock art is also very old and falls stylistically into two categories. The first category is composed of very detailed and realistic images of people, animals, tracks, and birds. The second category is abstract images that are also finely detailed and different in content from the Great Basin Abstract Style.

This is the dominant style of rock art found in the Utah Lake/Great Salt Lake area. In more than twenty years of research, I have found no other areas that contain this type of rock art except in the northern part of Utah. Further research needs to be done to substantiate this. The rock artists used this style on boulders and rock outcrops. Since it is the style that shows the most artistic form and is also the most portable, it is the most sought-after rock art for vandals. Much of what was described by early researchers is no longer found. It is often found in the same area as the Great Basin Curvilinear Style, but is not made on the same rock surfaces. In fact, superimposition is rare in the entire study area.

Albert Reagan's account of boulders recorded in the Utah Lake area in the 1930s describes many boulders with representations of "dancing" men, "juggling" men, and flying birds. He describes some of the men as wearing pendant fox tails. He also describes:

> …typical Basket Maker, both pictographic and petroglyphic, triangular-shaped drawings of

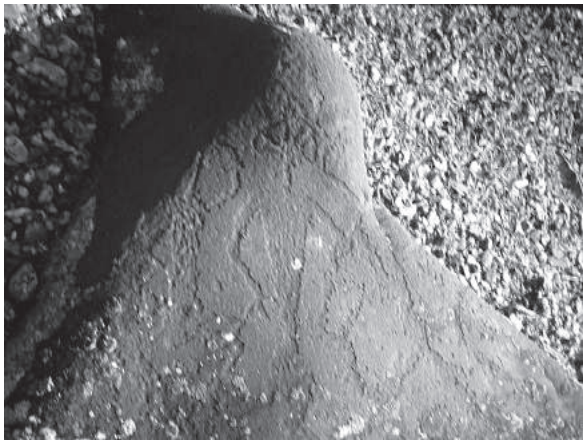

Figure 2. Great Salt Lake Variant, Great Basin Representational Style, Stansbury Island.

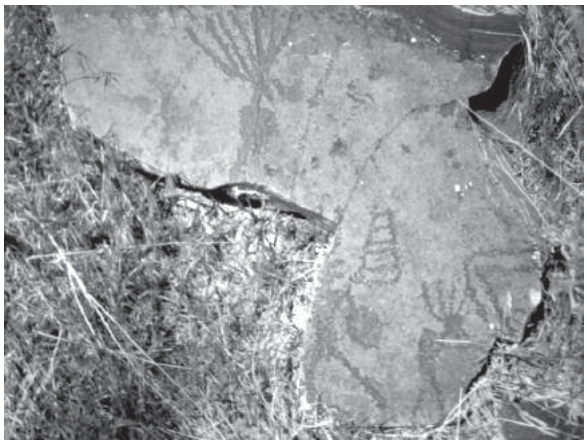

Figure 3. Great Basin Representational, Utah Lake, Great Salt Lake Variant.

> humans often even showing the characteristic side-locked hair, as the hair was worn by that people. While along with these drawings, are drawings of humans in dancing attire which seem to be just as old, drawings which are not drawn by the triangular-bodied pattern, but, instead, depict even strenuous action [Reagan NDAa].

In Reagan's day, the Fremont style of rock art had yet to be identified as such.

He also states in describing the rock art at Lincoln Beach:

> There were many drawings on this point and on the slopes about it originally, but as noted above, people have denuded the whole "promontory" front of most of the surface that contained drawings and have taken the "rock writings" to decorate their rock gardens, while some have also been taken to decorate the path to the Maeser building on the upper campus of Brigham Young University, so that only the poorest and most worn "rock writings" are left [Reagan NDAb]. (Figure 4)

Figure 4. Boulder on BYU Campus.

Since my inventory reflects only what is left after over 100 years of intensive collecting (which is still occurring at an alarming rate), it seems only natural that some of the images described by Reagan would no longer be found. I cannot find humans with their hair done in a side-locked fashion, nor can I find many images of birds, which he indicates are abundant in his time.

I have begun to wonder if fire has an effect on the progress of patination, since those boulders that are more exposed to the frequent fires at Utah Lake and Stansbury Island seem to also have the heaviest repatination. This would be a good research project for someone with the ability to prove scientifically whether or not fires accelerate the repatination process.

Because of the repatination of the boulders and a more carefully executed and therefore earlier style of glyphs, I believe that many of the images from this area were made at an early time in the prehistory of the area.

Figure 5. Fremont Style, Stansbury Island.

Figure 6. Site near Tremonton with view of marsh.

FREMONT

This type of rock art is not as old, as evidenced by the noticeably lesser amount of repatination on the figures. Fremont occupation of this area in the archaeology dates from about A.D. 300 (Jennings 1978).

Fremont Style rock art in this area is not as common. This is a northern adaptation of the classic style, with triangular body shapes, quadrupeds, and abstract images being predominant. The images are not as carefully made as with the earlier styles, and their placement on the rock appears to be more random. Fremont Style rock art is the most common style found on Stansbury Island in the Great Salt Lake (Figure 5). In many instances, when groups of images are found together, they seem to depict a story, which is not a common trait to other styles of rock art in this area.

Most rock art sites that are attributable to the Fremont Style have a hunting theme, and can be found in areas that are favorable for hunting of game. At Stansbury Island, these sites are situated near springs. Jameson places a date of approximately A.D. 1400 for the rock art of Stansbury Island, based on associated archaeology at one site there (Jameson 1958:38).

Near Tremonton, sites are situated on benches overlooking marshy areas (Figure 6).

One site in the Oquirrh Mountains contains several Fremont Style panels. It is not near water and might preclude solar interactions, but has been used through time. Glyphs are situated near hunting blinds and even a present-day shrine.

The Fremont Style is differentiated from the Great Basin Representational Style by the degree of repatination, the pecking style, and the subject matter of the panels. Earlier rock art shows considerably more repatination and a much finer style of pecking. The finer detail and artistic effort in the older glyphs suggest that more time and effort was used in their execution.

WESTERN UTAH PAINTED STYLE

Campbell Grant (1983) describes the Western Utah Painted Style of rock art as: “Painting usually in red. In the Salt Lake area there are typical Great Basin Curvilinear motifs that are painted. Style includes Fremont anthropomorphs, often horned” (Grant 1983:24).

Painted glyphs can often be found inside caves. In the foothills of the Wasatch Front, painted sites are found on relatively large outcrops, but the glyphs

Figure 7. Western Utah Painted Style, Jordanelle Dam.

themselves tend to be quite small. The painted images are often badly weathered and faint. These painted sites do not contain petroglyphs.

The painted tradition is depicted in literature to be quite old, but in this area it does not appear to be.

One site near the Jordanelle Dam shows images in a variety of colors, which is unusual for the area. It is in a large overhang, and was probably used for seasonal hunting (Figure 7).

RECENT ROCK ART

Recent attempts at production of rock art seem to range from making images that replicate the rock art to brands and names. Some of the figures that seem to look like rock art images could easily be cattle brands from the ranchers who have grazed animals in the area. Names of cowboys who herd sheep can be found in the Utah Lake area. When the railroad was built from Fairfield to the west, the people who worked on the railroad left behind their signatures and dates in the same area as the rock art. Stansbury Island used to be a popular place to have a picnic, especially at Easter time, according to a woman whose father grazed cows on the east side of the island. During the Easter outings, it was common for people to carve their

Figure 8. Recent "rock art" created by visitors to Stansbury Island. Placed over petroglyphs.

Figure 9. Vandalized panel at Utah Lake.

names on the boulders, with no regard given to the rock art that was already there (Figure 8).

Vandalism continues to be the major threat to the rock art of the Great Salt Lake/Utah Lake area. Unlike many other rock art sites in Utah, these sites are in close proximity to the most densely populated part of the state. Utah Lake sites are near at least eight target-shooting areas. Some of the rock art sites sit within feet of these target-shooting areas. Many people end up shooting at these sites without even knowing they are there, damaging the glyphs that they contain. Efforts are underway to encourage these shooters to practice elsewhere, but there is a great demand for these practice ranges that are so close to home. Landowners are not cooperative either, preferring to take matters into their own hands by using a variety of signs, as shown in Figure 9.

CONCLUSION

The rock art of the Great Salt Lake/Utah Lake area is in many ways like that found throughout the Great Basin. Great Basin Abstract, Representational, Fremont, and Western Utah Painted Style rock art is common here. One unique style is found, and having found no other reference for it, I have named it the Great Salt Lake Variation of Great Basin Representational Style. Its unique properties include minute detail in the execution and subject matter, placement on boulders rather than cliff faces, and total repatination of panels. It appears that early researchers called it "Basket-Maker" style, but it does not fit into that category. By exposing the public to the rock art of this area, which is underexposed in the literature, I hope to make their research into rock art styles easier.

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Ben Everitt

THE MUSIC PANEL, GRAND GULCH

Among the rock art panels of Grand Gulch is an enigmatic little sketch that I have called the "music panel." It is obviously not prehistoric, yet does not fit the pattern of modern graffiti.

SETTING

Grand Gulch is the major drainage of Cedar Mesa. The overhanging walls of its canyon preserve many prehistoric ruins, pictographs, and petroglyphs. It is famous for its impressions of birds and bird-headed anthropomorphic figures. The music panel is centrally located on a long wall known for its rows of ring-necked ducks with oval bodies and missing or inconspicuous feet (Figure 1).

HISTORY

The discovery of the archaeological significance of Grand Gulch is attributed to Charles McLoyd and C. C. Graham in 1891 (Blackburn and Williamson, 1996:27). Systematic archaeological recording and collecting began in the winter 1893–1894 with an expedition for the American Museum of Natural History, financed by the Hyde brothers and led by Richard Wetherill (Blackburn and Williamson 1996:47). The Wetherills continued an interest in the Gulch in the 1890s and 1990s until Richard's death in 1910. Subsequently the Gulch remained the domain of cattlemen and pot-hunters, relatively unknown

Figure 1. *Ducks and duck-headed anthropomorphs in red and white paint.*

Figure 2. *The music panel.*

Figure 3. *Sheep hunt panel, Escalante River. The bisected spiral and deer(?) track are in an indentation indicating action in another dimension (or past tense). Then the story line climbs to the present rock surface and passes beneath the sheep.*

to the outside world until completion of State Highway 95 in the 1970s.

DESCRIPTION

Three Elements

The "music panel" drawing is composed of three elements: a treble clef, a doublet of 16th notes in descending scale, and a pair of odd looking deformed notes (Figure 2). It is carefully and artistically drawn in black paint, probably a mixture of cooking grease and charcoal, which was the standard medium of pioneer painters. The artist has simply but profoundly expressed the mystery of the place using some of the conventions of the ancient artists, including transformation or shape-changing, to convey the idea of a spiritual journey to a time beyond present time.

The Treble Clef

The student of ancient languages will recognize this glyph as a spiral bisected by a straight line. Locally this symbol appears to signify a journey: perhaps a physical journey, spiritual journey, or migration story (Figure 3). In modern musical notation the treble clef means the beginning of a musical journey which will pass through a number of bars or stanzas and end somewhere else, but it can also indicate a spiritual journey (Figure 4).

Figure 4. *The treble clef sometimes signifies a spiritual journey.*

The Notes

The second element is a couplet of sixteenth notes in descending scale, standard twentieth century musical notation. I don't know birds from barnacles, but this little two-note song can be heard in many parts of Utah in the spring.

The Transformation

In the third element, the two notes are advancing from the wall, and are becoming singing birds. Their legless oval bodies mimic the Anasazi ducks; their beaks are raised in song.

Note that the three elements of the drawing are read in a clockwise spiral (an analogy with the spiral of the treble clef) and thus the painting itself is a metaphor of transformation. The painting becomes a window through the hard surface of the present and the viewer is swept away to the time of the ancestors—to a canyon of singing birds, barking dogs, laughing children, the smell of dew on dusty juniper, and morning light streaming through the smoke of cooking fires.

WHO WAS THE ARTIST?

Below the music panel are two scrubbed spots. It may be that the artist signed the work and his or her name has since been erased. I'll bet someone out there knows who he/she was.

CODA

The rock art of Grand Gulch was created and modified over centuries by generations of people who lived there or traveled through. Here we see that additions have continued up to the modern era. Who decides whether it is appropriate to paint on the canyon walls? Does one need to be a certified shaman? And who decides what is art and what is graffiti?

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Rock Art and Conflict in the Prehistoric Southwest

Farrel Lytle:
Petroglyph Solar Interactions at Winter and Summer Solstice

Steve Hansen:
The Present and Future of Nine Mile Canyon

Craig Harmon:
Quitchupah Road Update

Donna Turnipseed:
Moab's Wall Street Rock Art District

Layne Miller:
Temple Wash, Increased Visitation and Vandalism

Kevin Jones:
Range Creek, Where Are We Headed?

Dr. Ray Matheny:
The Fremont and Nine Mile Canyon

Steve Manning:
The Importance of Rock Art in Nine Mile Canyon: A Different Perspective.

Carol Patterson and Clifford Duncan:
Ceremonies and Concepts of Spirit in the Prehistoric Mind: The depiction of ceremonies in rock paintings

Dave Maxwell:
Water Glyph Update: GIS and GPS technology utilization

Julie Francis:
Rock Art, Social Boundaries, and Ancient History of the Bighorn and Wind River Basins, Wyoming

Nina Bowen:
Great Salt Lake Area Rock Art Research

David Sucec:
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Jesse Warner:
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David Urmann:
Climate Records and Climate Change at 1280 A.D.

Ben Everett:
The Music Panel

A. Carter

A. Carter

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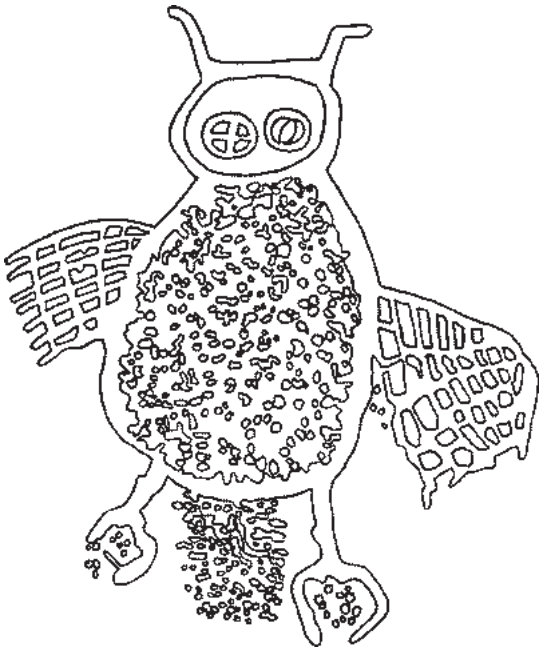

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J. D. Keyser

James D. Keyser

TWO UTE PORTRAITS: LATE ROCK ART ON THE COLORADO PLATEAU

True portraiture of real people (as opposed to recognizable images of specific deities, spirit figures, or Katchinas, which are relatively common in several areas[1]) is rare in North American rock art, except in the latest Biographic rock art that occurs across the Northwestern Plains and in the adjacent Colorado Plateau (Cole 1990:244–251; Keyser and Klassen 2001; Keyser and Poetschat 2005; Schaafsma 1975). In these Biographic compositions specific humans are recognizable by a combination of clothing and facial features drawn with such precision and detail that it is obvious that many if not all members of the subject's group would have readily been able to identify them. Although such recognition is often (but not always[2]) lost to the modern observer—either native or scholar, due to a combination of factors including relocation of the artist's tribal group to a distant reservation and interruption of cultural histories and traditions during the reservation period—we know that such portraits were originally easily recognizable because similar drawings were used on robes and in ledgers to indicate specific people and these were readily identified by persons (other than the artist) who viewed the art (e.g., Wildschut 1926). Although some of these ledger art identifications were aided by the use of name glyphs, many such portraits were and still are identifiable without these (McCoy 2003:71; Powell 2002).

Rock art portraits have previously been recognized at the Joliet site, 24CB402 (Keyser and Klassen 2001; McCleary 2008), La Barge Bluffs, 48LN1640 (Keyser and Poetschat 2005), Mancos Canyon, Colorado (Cole 1990:246–248), and some Navajo Reservation sites (Schaafsma 1975:51–60). While the earliest of these depictions clearly derive from artistic traditions extending back into the Late Prehistoric and early Historic periods where individuals would have been identified by the actions they were undertaking or the specific design of their shield in combination with other accoutrements (Keyser 1987; Kaiser and Keyser 2008), they are qualitatively different in that they have been personalized and are often presented such that recognition does not depend solely on these things, but rather on the combination of them with facial features. Thus, the top-hat-wearing man in the dance lineup at La Barge Bluffs or the woman being presented to this group (Keyser and Poetschat 2005)[3] or the portraits of several figures at Joliet (Keyser and Klassen 2001:22, 230, 237, 242; McCleary 2008) approach the quality of modern portraiture (Figure 1). Clearly these were influenced by the use of portraiture and photographs by Euro-American artists and historians, who began doing portraits as early as the 1830s–1850s (Catlin 1973; Ewers 1948, 1982; Taylor 1994:54; Thomas and Ronnefeldt 1976) and photographs by the late 1850s (Steward 1939;

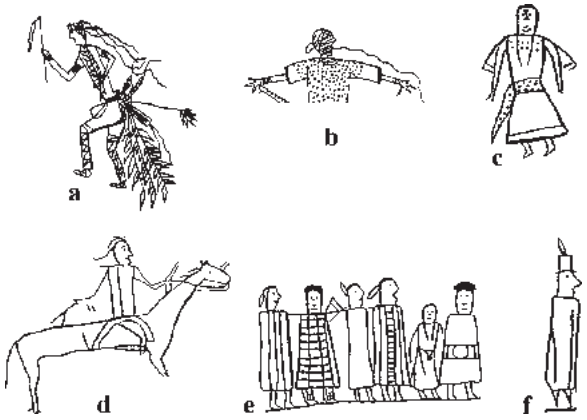

Figure 1. Portraits in late Historic period Northwestern Plains rock art. a b, Joliet; c–f, La Barge Bluffs. Note careful illustration of facial features in combination with characteristic weaponry and dress. Women include b, c, and shortest figure in e.

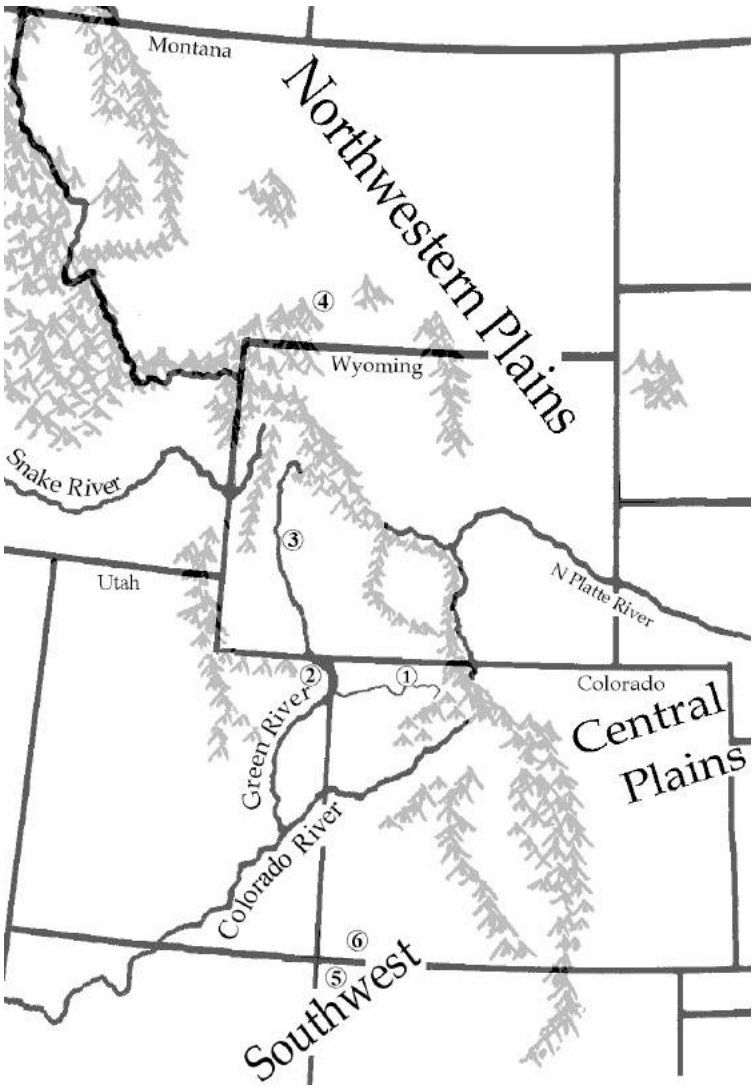

Figure 2. Location of rock art portraits in Northwestern Plains, Colorado Plateau, and Southwest. 1, Craig, Colorado; 2, McKee Spring, Utah; 3, La Barge Bluffs, Wyoming; 4, Joliet, Montana; 5, Navajo Reservation, New Mexico; 6, Mancos Canyon, Colorado.

Taylor 1994:74, 218–225), so it is almost certain that such images are very late in the chronological sequence wherever they occur.

THE PORTRAITS

Two sites on the northern Colorado Plateau contain portraits almost certainly made by Ute (or possibly Shoshone) artists in the last decades of the 1800s. One is a detailed rendering of a warrior posed carrying a tomahawk and a fringed bag at the McKee Spring site in Dinosaur National Monument, Utah; the other is a woman wearing a decorated dress at the Craig Sandrocks site, 5MF4306, in northwestern Colorado (Figure 2).

McKee Spring

The McKee Spring warrior is a badly defaced, lightly scratched petroglyph drawn low on a south-facing cliff just above the interpretive trail that runs between the several groups of spectacular Fremont style images for which the site is best known. Near, but not obviously associated with this portrait are two simple horses, also drawn as scratched petroglyphs. The warrior was originally very clearly scratched on the dark reddish-brown sandstone cliff to show intricate detail of personal costume and accoutrements. Probably originally scratched with a metal tool (e.g., knife, awl, nail)—or less likely a chert flake—someone later badly defaced the image by abrading across it with a stone (Figure 3, left). It is possible that this was done by a later Indian artist, as a sort of "rubout" done to denote conquest of an enemy (e.g., Keyser and Klassen 2003:12–13), but I think this is unlikely. Instead, it appears that some recent twentieth-century visitor, mistaking this drawing for historic graffiti, attempted to obliterate it. Although I have been unable to find any published photograph of this image, possibly historic photographic documentation could be found to indicate whether this abrasion predates or postdates modern, twentieth-century development and use of the site.

Using a photograph taken by Bill Lawrence on the 2006 Utah Rock Art Research Association (URARA) field trip to McKee Spring, I digitally removed the abraded marks superimposed on

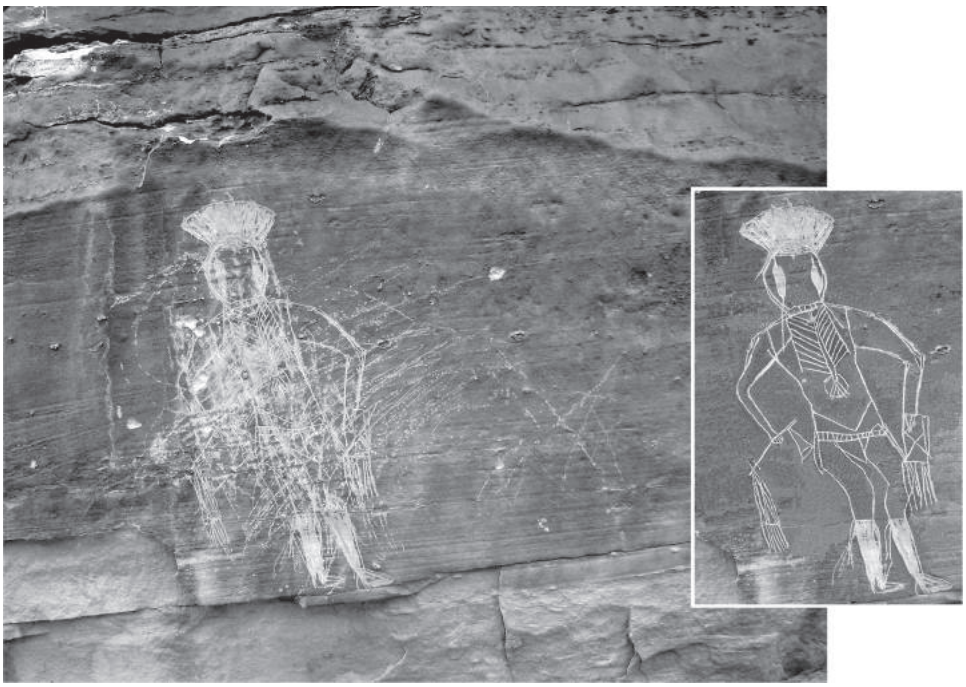

Figure 3. McKee Spring warrior. Large photograph shows position of figure on cliff and damage caused by scratches over the figure. Inset is warrior image with overlying scratches removed.

the warrior's portrait to return it to its original appearance (Figures 3 [inset], 4). I did not lighten any of the original lines, but I did "extrapolate" a short section of the central vertical lines of the warrior's breastplate and the upper left circumference of the suspended circular element (a shell or metal gorget), both of which had been entirely obliterated by the abrading.

Likewise, despite the apparent presence of a "nose" and possibly other crude facial features, close examination in person and using the digital photograph showed these to be abraded damage. It is possible that a few lines removed as abraded marks (e.g., lines associated with the feathers attached to the hightop moccasins and a long scratch to the right of the warrior and above his elbow) were originally part of the figure, but close attention to the digital image suggested that these were, in fact, part of the abraded damage.

The portrait is a front view of a warrior decked out in some sort of vest, hightop moccasins, and a breechclout and belt. He wears a standup forelock pompadour hairdo, commonly worn by Ute and Shoshone warriors as shown in Historic photographs (Steward 1939:14, Plates 26–29;

Figure 4. Close up view of McKee Spring warrior showing details of costume and weaponry.

Trenholm and Carley 1964). He has two hairlocks, one each which descend from the right and left sides of the upswept forelock pompadour and fall across his cheeks. The thin line on each one just above the "bloused" central segment indicates that the hairlock was either tightly wrapped or, more likely, run through a bone tube. The thin line pendant below each bloused segment could be another bone tube or some sort of ribbon streamer. Similar hairlocks worn in just this fashion are shown in photographs of Ute men and boys (Steward 1939:14, Plates 26–27, 31). The hightop moccasins, with a trailing feather or ribbon of some sort, are very similar to footgear worn by a mounted Ute boy in the Uintah Basin (Steward 1939:Plate 30). Around his neck the warrior wears a segmented choker, probably of dentalium or short hairpipes, and suspended across his breast is a hairpipe breastplate with a pendant circular gorget, probably of shell or metal. Identical regalia is worn by young Ute warriors in many historic photographs from the late 1800s (Cole 1990:250; Steward 1939:Plates 26–29). He also wears a belt segmented in the same manner as the choker.

The warrior also carries a tomahawk in his right hand and a narrow, rectangular fringed bag in his left. The tomahawk is a "Missouri war hatchet" type (Taylor 2001:24–27) with a large triangular blade and a fringed triangular tab pendant from the bottom of its handle. Vertical lines on the triangular body of the tab suggest that it was beaded or otherwise decorated in some fashion, as such tabs frequently were (Barbeau 1960:148, 170, 171; Taylor 1994:77, 200, 2001:8). The rectangular bag is nearly square and has long fringe hanging from the bottom. Its front is decorated with an X design.

This drawing is typical of such portraits occasionally made by Indian artists in Plains ledger drawings during the period from 1870 to 1890 (Barbeau 1960:148, 150, 164–172; Berlo 1996:76–77, 2000:36, 60–70; Greene 2006; Thompson 2000:75). The structure of these—full front-view portraits with the person clearly dressed in their finest clothes and usually posed with a weapon or a pipe—suggests that the artists were intimately familiar with photographic portraits, and drew these to serve specifically as native-drawn portraits of important warriors, ceremonial leaders, or band headmen. This image indicates that Ute artists made similar drawings.

Craig Sandrocks

The portrait at Craig Sandrocks (Figure 5) is located near the eastern end of the site, just above and to the east (right) of a trail that accesses the site from a parking lot below. In 2007, while attending the Colorado Rock Art Association

Figure 5. Woman's portrait at Craig Sandrocks site. Note 1935 date that superimposes the figure. Also note numerous bullet scars.

meetings in Craig, I traced this image, along with about a dozen other horses and images associated with them (e.g., Keyser 2008). When I first noted this image I suspected it might possibly be historic graffiti, but Mavis Greer pointed out that the head was superimposed by a date of 1935 associated with the initials J B. This time depth, coupled with the clear "Indian" style of the drawing, is strong evidence that it, too, is a late period native portrait. Unfortunately, the entire figure is badly defaced by a series of seven large bullet scars and four smaller scars (possibly 22 caliber or buckshot) impacted on the upper torso. Two of the large bullet scars have nearly obliterated the face, destroying any facial features that may once have existed.

The figure wears a woman's dress, belted at the waist, and flaring at the bottom. It cannot be determined if the figure's short arms (which simply come to a point without hands indicated) are intended to represent sleeves or if these are the person's arms (as indicated on a portrait at La Barge Bluffs [Figure 1c]) and the dress is thus sleeveless. No selvage line occurs above the hem, so I cannot determine whether this is a cloth or leather garment. The belt has central vertical divider that may indicate some sort of buckle.

Covering the bodice is a cluster of more than 40 small shallowly drilled dots, two of which actually are on the belt. Four small bullet scars may have effaced a few other of these dots. The dots do not occur in a regular pattern, in contrast to the more or less regular patterns of similar dots on portraits at Joliet and La Barge Bluffs (Keyser and Poetschat 2005:45, 109; Keyser et al. 2006:60, 62, see also Figure 1b, c). Such dots are used in other Biographic style portraiture to indicate elk teeth, brass buttons, beads, or shells, all of which were commonly used to decorate women's dresses (Keyser et al. 2006). In addition to the dots a finely incised line extends obliquely from the figure's left shoulder to just above the waist on her right side.[4] This line is considerably narrower than those used to outline the figure, but of the same width as the vertical line in the belt, and its clear confinement within the bodice area implies that it is part of the original figure. It may represent some sort of sash or other decoration, but no definite identification is possible.

The figure has short triangular legs that extend downward from the hem of the dress and end in solid triangular right pointing feet. Possibly the solid nature of the feet indicates the figure is wearing moccasins, but this cannot be verified. Neither hands nor hair are drawn, and if any facial features once existed they have been destroyed by gunshots and graffiti. There is a crude face drawn near this figure, but the extensive graffiti in this area of the site precluded the possibility of determining whether it was associated.

This dress-wearing figure is almost certainly a woman, though without some sort of identifying hairstyle or associated knife sheath or awl case the possibility that it represents a man or a transvestite cannot be ruled out. In general form it is quite similar to several women's portraits (Figure 1c, e) drawn between A.D. 1868 and 1877 at La Barge Bluffs, about 300 kilometers (200 miles) northwest in the Green River Basin (Keyser and Poetschat 2005:35). Similarities include shape of the legs, feet, and arms, use of drilled dots for decoration, belt and vertical "buckle" line, and absence of hands—but the figure at Craig Sandrocks is more than twice as tall as the largest at La Barge Bluffs. It is also somewhat similar to a woman's portrait painted in Mancos Canyon in far southwestern Colorado (Cole 1990:248).

The reason that an Indian artist drew this portrait at Craig Sandrocks cannot be determined. It may have been part of a couple (if the associated face was of Indian origin) or it might have represented a war captive, as do several other women drawn in rock art (Greer and Keyser 2008; Keyser et al. 2006). On the other hand it may simply be portraiture, much like that at McKee Spring, possibly done by a woman artist.

SUMMARY AND CONCLUSIONS

Both of these figures would fit comfortably in Cole's Ute Representational Style, which she dates to the period between 1880 and 1950 (Cole 1990:244–251). She notes that subject matter in this art style is strongly associated with themes of traditional dress and ceremonies. Based on the known ages of other rock art and ledger art figures, the type of portraiture represented by these figures came into vogue about A.D. 1870 and was done for a few decades, possibly as late as the early 1900s.

The McKee Spring warrior figure is almost certainly Ute, since every element of dress and hairstyle can be duplicated in photographs of Ute men in the last decades of the 1800s, and many of these photographs specifically show "Uintah Utes" whose homeland was this very area of Northeastern Utah (Steward 1939). The Craig Sandrocks woman's portrait is another matter. In general, the dress is too simply drawn to be identifiable with any tribal group, although the use of dots to indicate decorative elk teeth, buttons, or shells resembles Plains art. The presence of both Utes and northern Shoshones living in and traveling through this area of northwestern Colorado during the last decades of the 1800s makes it possible that an artist from either tribe was responsible for the figure.

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The Utah Rock Art Research Association paid my way to the 2006 URARA meeting in Vernal. Bill Lawrence happily shared his picture of the McKee Spring warrior, which was taken on the URARA field trip, and provided the site form for Craig Sandrocks. The Colorado Rock Art Association paid my way to their 2007 meeting in Craig where John and Mavis Greer and Terry and Sharon Murphy assisted me in finding and recording the woman's portrait at the Craig Sandrocks site.

END NOTES

[1] On the lower Columbia River spirit figures including Cannibal Woman, Tsagiglalal, Swallowing Monster, Spedis Owl and others can be readily recognized at multiple sites (Keyser et al. 2008). Across the Southwest numerous Katchinas and various deities such as Tlaloc can be likewise recognized (Schaafsma 1975:32–41, 1980:203–211), and Boyd (2003) has made a strong case for recognizing Kauyum*àri* (or a predecessor) in Pecos rock art.

[2] Crow petroglyph portraits of James Cooper and Clarence Stevens, two World War I doughboys at the Joliet site, can still be identified (McCleary 2008). The same is true of some of Jack House's portraits in the Four Corners region of southern Colorado (Cole 1990:244–248).

[3] In fact, there are several other drawings at this site that show similar portraiture (Keyser and Poetschat 2005:28, 32–39, 42, 44–46, 51).

[4] This identification of left and right is from the perspective of the front-facing figure, rather than that of the viewer.

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James Farmer

THUNDERSTORM ICONOGRAPHY AND SITE LOCATIONS IN THE BARRIER CANYON STYLE

Despite an increasing catalog of Barrier Canyon Style (BCS) sites, and intensified research into the content and subject matter of Archaic rock art imagery in recent years, two fundamental questions regarding the Archaic Barrier Canyon Style persist: how were site locations determined, and what do BCS scenes depict? This paper offers an interpretive approach to BCS iconography that suggests partial answers to both of these questions. Investigation of this topic was fueled by a personal experience at the famous Great Gallery panel in the Horseshoe Canyon Annex of Canyonlands National Park in September, 2005. However, interest in these questions has long driven scholarly research on BCS and other ancient rock art sites throughout the Southwest, primarily because most sites lack clear archaeological context and direct historic cultural affiliations. In this regard, the ideas offered in this paper are presented only as conjectural hypotheses for further consideration, rather than definitive conclusions.

In her 2002 Master's thesis, Kelly Daniels Burrow of Virginia Commonwealth University discussed apparent formal similarities between BCS serpent imagery and historic Puebloan motifs (Burrow 2002). Her observations suggest that some degree of continuity in artistic meaning may have persisted into the historic period from the ancient Archaic past. Indeed, many BCS panels do bear signs, motifs, and related subjects that can easily be interpreted through modern Puebloan eyes. A well-known BCS panel from Seven Mile Canyon near Moab is a prime example of this process (Figure 1). This panel depicts two frontal red anthropomorphs in typical BCS form, the (viewer's) left figure smaller than the right one. The left figure has a serpent floating above its head, and the larger right figure holds a standing, anthropomorphic bird in its outstretched left hand. The face of this figure stares at the viewer with glaring eyes, and a most distinctive feature of this panel is the green wavy serpent depicted in the open mouth of this figure (Figure 2). Serpents are common in BCS art, but the depiction in the mouth appears to be unique (For a detailed discussion of the BCS style and its associated motifs, see Schaafsma [1980:61–72] and [Farmer 2001]). Three parallel lines separate the two figures, and another vertical wavy serpent ascends the rock wall immediately to the right of the larger figure. Above the two figures floats a large horizontal band with vertical pendant lines.

Figure 1. BCS panel from Seven Mile Canyon near Moab, Utah. (Photo by James Farmer, 2008, all rights reserved)

Figure 2. Detail of Figure 1. (Photo by James Farmer, 2008, all rights reserved)

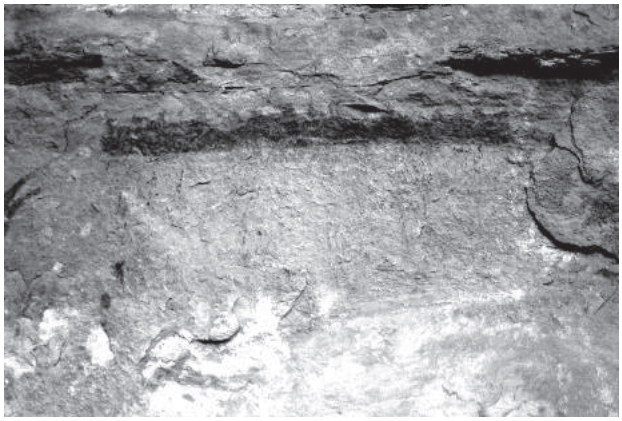

Figure 3. BCS bar-pendant/dot motif, Range Creek, Glen Canyon Recreation Area, Utah. (Photo by James Farmer, 2008, all rights reserved)

Several years ago, I was struck by how closely the imagery of this panel seemed to reflect certain historic Puebloan rituals, but I initially dismissed this similarity as mere coincidence. If one applies a modern Puebloan interpretation to this scene, then clear similarities are apparent between this scene and the famous Hopi Snake Ceremony, a fertility and initiation ceremony traditionally conducted in August of alternating years on the Hopi mesas. Hopi priests collect quantities of snakes and perform dances in which they often hold the snakes aloft, or carry one in their mouths (Frigout 1979:572). The Snake Dance is in part a seasonal prayer for the impending late-summer thunderstorms required for late season harvest. One of the most ubiquitous motifs in historic Puebloan iconography throughout the Southwest is a horizontal band with vertical pendant lines or dots, such as occurs in the Seven Mile Canyon panel. This abstracted motif consistently represents falling rain to historic Puebloans, and would therefore be consistent with this reading of the Seven Mile Canyon scene. Variations of this bar-pendant motif, sometimes referred to as a "rake" or "comb," date well back into ancient Southwestern rock art, and are typically associated with water or water sources. The motif is not frequent in BCS panels, but other similar versions are documented (Figure 3). The idea that BCS panels predating the historic Puebloan images by 5,000 years or more might in fact reflect the artistic roots of that much later tradition seemed at first highly unlikely, yet a reconsideration of many BCS panels suggests that seasonal rainfall may actually have played a role in BCS site location as well as subject matter.

Many BCS panels, including the Seven Mile Canyon panel, include another artistic "element" that is often overlooked or dismissed, because at first glance it would not appear to be part of the original painted image. I refer to the frequent large water streaks, stains, and patinated desert varnish flows that often occur adjacent to or over BCS figures. Two such large white streaks bracket the Seven Mile Canyon scene, and other similar

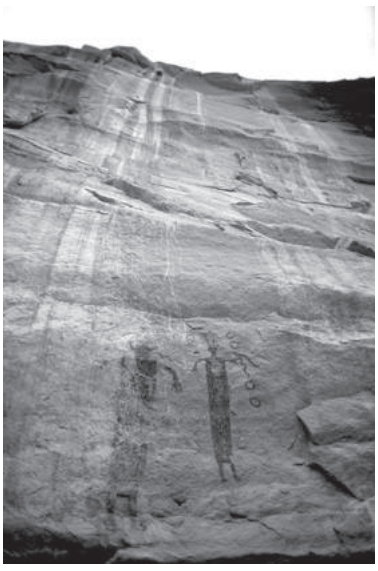

Figure 4. BCS panels with associated water stains. Left, near Arches National Park; right, Head of Sinbad. (Photos by James Farmer, 2008, all rights reserved)

occurrences are illustrated in Figure 4. Of course, one would be hard pressed to find a canyon wall in the Four Corners region that does not bear such stains, so their appearance in rock art panels is not surprising, and we really have no definitive way to determine with any certainty whether BCS artists consciously viewed the stains as compositional or aesthetic elements. Scenes with overlapping stains, such as the Seven Mile Canyon panel, were clearly painted prior to the stain formation, but because these stains occur in unpredictable fashion, it is difficult to believe that BCS artists could anticipate their appearance. On the surface this would all seem coincidental and a natural symptom of the environment which BCS artists had to accept. Yet BCS paintings are some of the most technically sophisticated rock art images ever produced in the Southwest (I would argue in the world), and BCS subject matter, though difficult to interpret with any precision, does reflect an equally sophisticated worldview or belief system, populated by an infinite variety of static and narrative beings, worldly and supernatural, involved in all manner of narrative activities. This sophistication is unparalleled in other rock art traditions from the region, and more to the point, reflects advanced skill and expertise on the part of the painters, who must surely have been highly trained specialists. The idea, then, that such sophisticated artists would either not have noticed or cared about the obvious visual impact of these stains on their panels, or were somehow incapable of making the necessary artistic adjustments to avoid the stains (i.e. a *different* location for the painting!), has never felt right. I now believe that, in many instances, BCS artists intended the water stains to be understood as an integral symbolic element of the associated painted scenes. I would suggest that many BCS sites were selected because they were locations of dramatic and ephemeral natural water events, specifically phenomena such as flash floods, waterfalls, and eroding pour-offs, which were the products of powerful seasonal thunderstorms.

In a previous presentation at the 2003 URARA Symposium, I suggested that two figures that appear frequently in BCS art, anthropomorphs with prominent "goggle-eyes" and horned or crested serpents, are clearly similar to representations of divine spirits or "gods" from both later Puebloan cultures, as well as Mesoamerican cultures from Mexico, which are dated contemporary with BCS rock art and later (Farmer 2001). Similar Mesoamerican Goggle-Eyed figures are typically identified by their sixteenth century Aztec name, "Tlaloc," a fertility and war god of rain and thunderstorms. Polly Schaafsma has done extensive work documenting and interpreting the appearance of this very same entity in Puebloan culture of the late prehistoric and early historic period (Schaafsma 1980). Likewise, the horned serpent of Mesoamerica is best known as the Aztec god "Quetzalcoatl," the feathered serpent associated with warfare, human sacrifice, and wind. Similar horned serpents appear in nearly all later Native North American traditions, including the Zuni "Avanyu" and the Hopi "Kolowisi," and are typically associated with rain, thunder, and (most interestingly) waterways (Schaafsma 2001). Given the broad distribution and popularity of both of these figures in native cultures of the late prehistoric period and historic period, it does not seem too exaggerated to suggest that versions of these figures have been revered by native peoples in the region for a very long time, as far back as the creators of the BCS scenes.

On Saturday, September 3, 2005 (Labor Day weekend), three companions and I, including a National Park Service ranger, hiked down the Deadman's Trail, the southern access trail into the Horseshoe Canyon Annex. The purpose of my visit was to photograph the famous Great Gallery BCS panels. I arrived at the Great Gallery at about 11a.m. in the morning, on a brilliant, cloudless, sunny day. The creek bed in this section of Horseshoe Canyon, well-known to many, was typically dry and dusty, with virtually no evidence of ground water. Within two hours, however, by

Figure 5. The Great Gallery alcove with thunderstorm waterfall, looking north, September 3, 2005. (Photo by James Farmer, 2008, all rights reserved)

Figure 6. The Great Gallery alcove with thunderstorm waterfall, looking south, September 3, 2005. (Photo by James Farmer, 2008, all rights reserved)

Figure 7. Barrier Creek flash flood, September 3, 2005 (Great Gallery panels are behind trees at far left). (Photo by James Farmer, 2008, all rights reserved)

Figure 8. Author in Barrier Creek, September 3, 2005. (Photo by David Sucec, 2008, all rights reserved)

about 1 p.m., a series of dramatic thunderstorms sprang up in the region, and by 1:30 p.m., a powerful thunderstorm was pelting torrential rain and lightning on the Great Gallery. While this is certainly a most common occurrence in the region, to actually witness this event in person is a most extraordinary experience. By 2 p.m., the effects of the thunderstorm were dramatically apparent in the canyon (Figures 5–9). Looking from the Great Gallery alcove, no less than eight separate waterfalls could be seen cascading down from high canyon pour-offs to the canyon floor, including two such waterfalls directly above the Great Gallery itself. By about 4 p.m., the normally bone-dry creek bed directly in front of the Great

Figure 9. Thunderstorm waterfall directly across Horseshoe Canyon from the Great Gallery, September 3, 2005. (Photo by James Farmer, 2008, all rights reserved)

Gallery was inundated by a flash flood some 30 feet wide and 4 feet deep at its most powerful, which continued unabated until well into the late evening.

The visual impact of this event is easily appreciated, as would be expected, and in itself, my own personal experience would be of little interest or relevance to the topic at hand. Certain unexpected, specific aspects of this experience, however, ultimately motivated me to revisit the two issues under consideration here—BCS site locations and iconography. The corrosive effects of flash floods need little reiteration, but what I also noticed for the first time was the true transformative power of the waterfalls. As agents of erosion, the waterfalls will gradually cut and scour the sandstone cliffs over extended periods of time. This process is generally undetectable to the human eye as it occurs, with only the after-effects of the scouring visible in the sandstone. However, two additional effects of these waterfalls *are* most apparent, and shockingly powerful. The cascading water delivers a constant series of rocks and boulders from the mesa top to the canyon floor. Boulders as large as four feet in diameter were witnessed plummeting hundreds of feet to the enlarging talus slopes at the bottom of the waterfalls. What was most impressive about these boulders was the shocking sound they made when

landing, an incredibly loud, booming thud, as if a large modern-day explosive had been detonated. The sound reverberated up and down the canyon, no doubt audible for hundreds of yards, perhaps miles, in either direction. At the same time, the very same water stains discussed above could be seen forming from lesser pour-offs along the canyon walls, and although the actual staining process is difficult to perceive, the paths and profiles of future stain streaks were clearly evident. My purpose here is not to simply narrate a powerful event of nature which is already well studied and documented. My point is that it seems inconceivable to me that any ancient archaic hunter-gatherers witnessing a similar event would not have been just as astonished as me, and would have naturally invested the location with divine, supernatural powers. Indeed, the unavoidable impression is that one is witnessing (or experiencing!) the most profound act of creation within the canyon environment itself, which technically, is in fact exactly what is transpiring. Creation and transformation of the very earth itself apparently originates from powerful thunderstorms.

Perhaps this then is the genesis of the imagery in the related BCS panels, and the later rituals, such as the Snake Dance. Perhaps the BCS panels and figures were intentionally situated in direct association with streaks of desert varnish and calcified deposits because the subject matter of the panels is the metaphorical perpetuation or reenactment of the very cosmic event that the streaks reflect. Reverence for rain gods among early human societies is commonly associated with the development of intensive agriculture and sedentary communities. Cultivated crops require reliable rain, hence the necessity for divine guidance and associated rituals to insure such rain. Lacking intensive agriculture and permanent communities, what purpose would rain gods have served archaic hunter-gathers? Yet, archaic BCS imagery is replete with numerous motifs that seem to reflect high concern for rain, water, and associated phenomena, including the goggle-eyed figures, the possible early model for later rain deities. I would suggest that early peoples developed a reverence for the creative and transformative power of thunderstorms and their aftermath long before the adoption of agriculture, based not on the economic benefit of rain, but rather its supernatural, spiritual power.

To this end, one additional motif deserves consideration. Along with the other related iconographic elements, arcs typically described as rainbows occur frequently in BCS panels. Perhaps the best known example is a large petroglyph version at the well-known Rochester Creek panel, but several painted versions occur in other BCS panels as well. Rainbows and serpents are the most immediate and apparent products of rain and thunderstorms, so their appearance in BCS panels might now be understood as parts of a cohesive iconographic program related to thunderstorms and creation. Instead of a collection of diverse motifs appearing independently in BCS art simply for their own sake (serpents, rain clouds, rainbows, goggle-eyed figures, etc.), the motifs are but individual parts of a unified symbolic artistic message and associated belief system. This approach to Barrier Canyon Style images and iconography seems to me to more accurately reflect the technical and formal sophistication apparent in this style.

One of the best BCS panels to see all aspects of this program in place is the great panel at Buckhorn Wash. Prominent desert varnish stains streak the great canyon wall, occasionally directly intermingling with large BCS figures (Figure 10). At least two figures appear beneath rainbow arcs, and several of the anthropomorphs have outstretched arms consisting not of human appendages, but rather the bar-pendant rain motif, as if the figures are to be understood not as mere humans, but as rain or waterfall makers (Figure 11) or waterfall sprits given human form. Wavy serpents appear across the panels, adjacent to or sometimes in the grasp of the "waterfall makers." Buckhorn Wash is over 50 miles from the Great Gallery, and over 100 miles from the Seven Mile

Figure 10. Buckhorn Wash, Utah. (Photo by James Farmer, 2008, all rights reserved)

Figure 11. BCS anthropomorphs (waterfall makers?), Buckhorn Wash, Utah. (Photo by James Farmer, 2008, all rights reserved)

Canyon panel, attesting to the geographic distribution and frequency of this program in BCS art.

BCS panel loctions were probably determined by a number of complex, interrelated reasons. At least nine different specific reasons have long been bandied about to explain why BCS artists placed panels where they did, and each reason is probably justified to some extent. I offer herein only a summary of these reasons as an extended analysis of these reasons is not warranted in this presentation, and I wish only to consider the issues in this preentation in relation to site location.

1) *Established trails:* Most panels occur along primary trails and access routes (stream bottoms, etc.), probably serving as archaic "billboards" and traffic controls.
2) *Natural Resources:* Many panels probably served to indicate the location of valuable natural resources, be they water sources, game-hunting, or valuable plant life.
3) *Meeting or Campsite Locations:* Larger, more complex BCS panels, such as the Great Gallery and Buckhorn Wash, probably indicate repeated use of sites over extended periods of time as preferred campsites or meeting places for seasonal ceremonies.
4) *Tradition (prior use):* The larger, multi-figure panels may also be the result of repeated use simply as a preference for creating new images at sites already established with previous panels. Like modern graffiti, once a canyon wall was initially used as a canvas, the tendency was probably to reuse that same wall for additional imagery, adhering to tradition, rather than seek out an unused surface.
5) *Territorial Markers:* Some panels may have designated territorial boundaries of distinct social groups (bands, families, clans, etc.) within the greater archaic cultural matrix.
6) *Accessibility:* On a practical note, the accessibility and availability of appropriate walls and surfaces for panel production would have influenced the locations. Boulders or shelves for access, and some minimal degree of protection from the elements would be required.
7) *Visual Properties (aesthetics):* The dramatic visual power of the panels juxtaposed against the large, water streaked canyon walls and deep alcoves no doubt impressed archaic BCS artists just as much as modern viewers, and many panels probably occur where they do simply because they looked "cool."
8) *Sonic Properties:* A substantial amount of recent scholarship has verified the role that acoustics may have played in site locations, particularly the work of Steven Waller on rock art sites world wide (Scarre and Lawson 2006). The alcoves and canyon walls amplify sound and echoes (and

exploding waterfall boulders!) throughout the canyons, investing the panel locations with a heightened spiritual power.

9) *Magical or "Sacred" Qualities:* Panels may have been intended to reflect sacred or supernatural properties invested in the specific site location, or sacred events transpiring at the specific sites. This aspect is related to item #8, the sonic properties, and is most relevant to the issues in this presentation.

Each of these reasons has merit, yet ironically, the issue regarding BCS site location becomes most intriguing because each of these qualities can be applied to most of the canyon walls and alcoves in the region. The nagging question most often asked about BCS site location is not "why is the art work here?" but rather "why *isn't* there a BCS panel on *this* wall?" referring to the infinite number of perfectly good and available rock surfaces and alcoves in the region that does not contain imagery. Visitors and specialists alike are often perplexed as to why BCS artists did not exploit seemingly obvious locations for artistic purposes. The sacred properties of certain sites, considered herein, in part addresses this very issue, for the natural phenomena (thunderstorms, waterfalls, flash floods, etc.) that may have inspired the specific imagery are time sensitive; they require the participant/viewer to be in the proverbial "right place at the right time," as I was in 2005. The first eight criteria listed above can be experienced under any circumstances at any time, but not number 9, the sacred event; it is powerful, ephemeral, and supernatural in its effect.

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Byron Loosle

THE LAND BETWEEN

PREHISTORY

The South Unit of the Ashley National Forest is an upland area located between Nine Mile Canyon and the Uinta Basin, two of the West's most famous rock art locales (Figure 1). Although rock art is sparse in this particular area, abundant archaeological features help us understand the people who once lived in the region. The section has a very diverse range of vegetation ranging from pinyon-juniper at lower elevations to mixed conifer and sagebrush steppe in its higher reaches. This corner of the Tavaputs Plateau has deeply incised canyons trending toward the northeast. Although there is limited permanent water, an incredible array of wildlife lives on the unit. For years, we thought the first people to visit the South Unit occurred 3,000 to 4,000 years ago. However, in the summer of 2007, we discovered a series of late Paleoindian sites (9,000 to 8,000 years old) at the highest elevations of the unit. Today, sagebrush steppe with scattered aspen groves

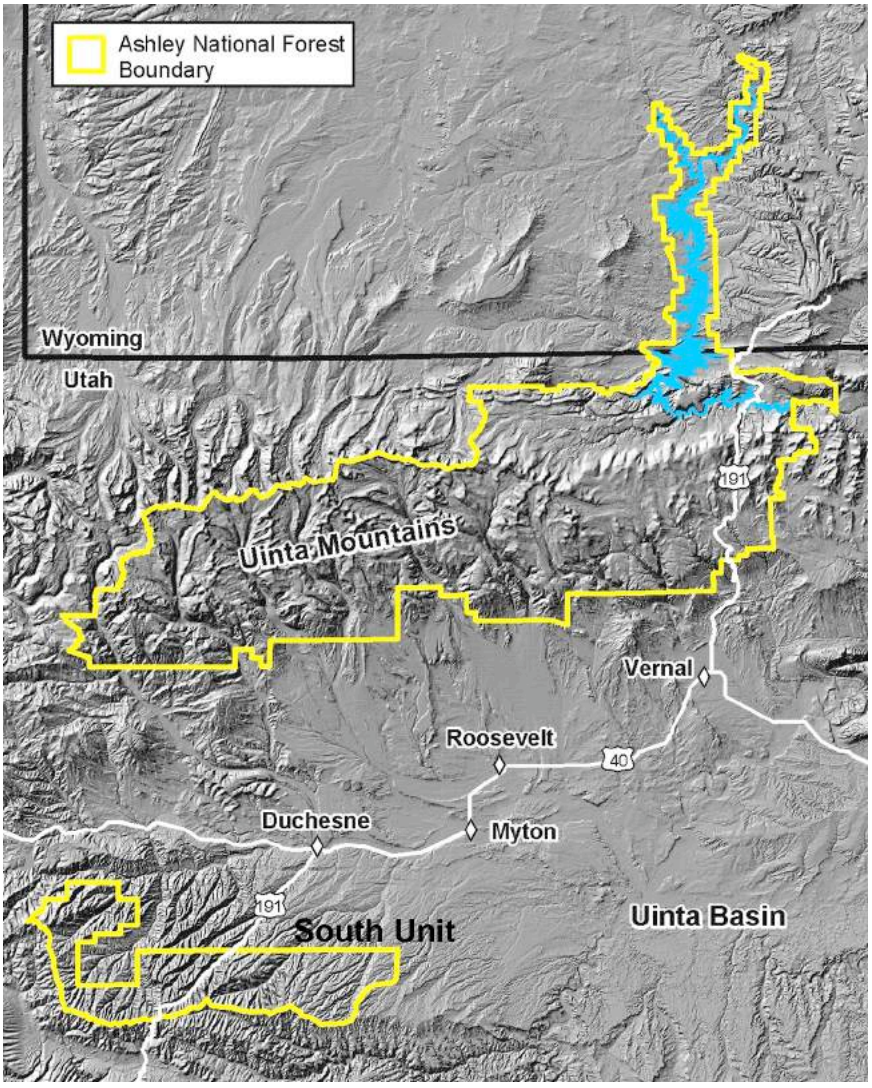

Figure 1. South Unit and Nine Mile Canyon are located in lower left of map.

covers this area, although in the past this area was probably a grassland or tundra with abundant game, perhaps only seasonally during the summer. These recently discovered sites may force a rethinking of how the Colorado Plateau was occupied during the Paleoindian period.

A small number of projectile points from the period between 8,000 to 3,000 years ago have also been found. Archaeologists refer to this era as the Archaic Period. The people who visited the area still mostly hunted game. These hunters probably did not stay long in the area and there may have been long periods when no one visited the region.

This pattern of occupation changed 2,500 years ago as more people were in the area. They used rock shelters as temporary camps; unfortunately later occupation stirred and mixed the remains from the first camps. One intact hearth, from 2,400 years ago, indicates they hunted large game (elk and deer) and ate plants like prickly pear cactus, grasses, and cheno-ams (a variety of weedy plants like lambs quarter and goosefoot). Surprisingly, they also appear to have had maize, although this is very early for its occurrence.

During the Fremont Period (2,000 to 800 years ago), the area was heavily populated especially in the pinyon-juniper zone. People liked the resources and rocks available in this locale. Large boulders provided shelter and erosional catch basins collected water for drinking.

Because of its upland location, we hypothesized the South Unit would display the same Fremont logistical pattern as the Uinta Mountains. Instead, the excavated sites to date exhibit a markedly different occupation pattern. 42Dc1424, the Anthro Mountain site, is an open site in sagebrush steppe near aspen groves at 8800 feet in elevation. Evidence of a prepared clay floor and storage cists suggest this was a residential site where people lived for extended periods. A wide array of tools and a mix of floral and faunal resources recovered at the site support this notion (Estes and Loosle 2004). The other sites that have been excavated are all rockshelters with very brief occupations. Stays were short, maybe just overnight, and the mix of cheno-ams, pinyon nuts, lagomorphs, and other game all suggest limited gathering for immediate consumption. South Unit sites have the first unequivocal evidence from northeastern Utah that pinyon nuts were gathered for consumption. In at least two sites, two kinds of cheno-am seeds were gathered and processed together (Loosle 2005; Stertz and Loosle 2006). While the Anthro Mountain site appears to represent a warm season residential site, the other sites had briefly-occupied camps. (Residential sites are where people built more durable structures and lived for weeks or months. Camps may have only been occupied overnight or for a few days.) The presence of maize and Uinta quartzite indicates the occupants were closely tied to the lowlands. The gathering of cheno-am and pinyon nuts suggests the rockshelter sites were occupied in the fall, like the Uinta Mountain sites, possibly after the maize harvest in the lowlands. The majority of Fremont prehistoric sites are in the eastern end of the South Unit. Adjacent to these ridges is the early historic route through Gate Canyon. Perhaps the sites represent a prehistoric travel route between Nine Mile and the Uinta Basin.

Ceremonial use is another possibility for visits to the area. A number of unusual rock outlines or features along the South Unit's southern crest may mark vision quest locations. The spectacular view from the heights seems like an appropriate location for this type of activity. Perhaps the travelers were moving to these locations to participate in religious activities. During a vision quest, a support group (usually members of the individual's family) would accompany the person and set up camp near the vision quest location to wait for the initiate's return (Clifford Duncan, personal communication, 1996). The Anthro Mountain site is in a suitable location for such an encampment, however, it was a residential site occupied longer than would be expected for

a vision quest camp. (The rock art on the South Unit is not particularly helpful in assigning cultural affiliation.)

Only a few panels have been discovered to date, over half of which are Ute. The large anthropomorph at 42Dc1245 seems typical Classic Vernal Style. However, the geometric and zoomorphic figures at 42Dc2278, another South Unit rock art panel, do not fit neatly into any recognized style (Clay Johnson, personal communication, 2007).

Although physically closer to Nine Mile Canyon, South Unit sites have dominant ties to the Uinta Basin. Numerous pieces of Uinta quartzite groundstone (Figure 2), even metates, and lithic material from north of the Uintas (Tiger chert [Figure 3], Sheep Creek quartzite) illustrate this connection. South Unit Fremont pottery is all Uinta gray, including a sherd from the Anthro Mountain site that has identical paste and temper to a sherd found near Flaming Gorge Dam over 70 km away (Estes and Loosle 2004). Nine Mile Canyon does not have particularly distinctive cultural attributes or material culture, except for architecture and rock art. Because the South Unit has no architecture and little rock art, it is not clear how influence from Nine Mile would be manifest in the South Unit. There is very little data for the time between the Fremont and the beginning of the historic era.

Figure 2. Uinta quartzite two-handed mano.

Figure 3. Tiger chert scraper.

HISTORICAL ARCHAEOLOGY

The Ute were the Native American group living in the area when the Spanish first visited. However, after extensive research, we have encountered essentially no historical documentation the Ute visited the South Unit. The absence of written documentation necessitates that we rely on the archaeological evidence that has been gathered from the area. In spite of the paucity of historical documents, Ashley personnel have documented several sites with diagnostic Ute artifacts (Desert side-notch and metal arrowheads and Intermountain brownware pottery), Ute style rock art, culturally modified tree, and brush drivelines. Once we identified sites that appear to represent Ute activity, we attempted to understand what activities and purposes the sites may represent. Accomplishing this undertaking has turned into a formidable challenge and is still a work in progress. One of the difficulties is that there has been surprisingly little historical archaeological research on the Ute.

There are a few rock art panels in the South Unit depicting horses or individuals riding horses. These figures are so scarce that it is impossible

Figure 4. Horse petroglyph found near a brush driveline and corral complex at 42Dc1609.

to draw any conclusions about typical position, location, style, setting, or execution. Primarily, these panels show the Ute were in the area during the historic period. A Ute style rock art horse near the corral at 42Dc1609 may imply the purpose and group responsible for construction of the feature (Figure 4). Although hunting and gathering may have been common activities on the South Unit, the two dominant archaeological site types we have documented are culturally modified trees and brush drivelines and corrals. Many cultural resource specialists are not familiar with these two features. For instance, a recently developed oil pad on Indian land destroyed a portion of a brush drive-line. These two types of features are often not recognized, even by professional archaeologists.

Pine Trees

Ponderosa pine has a restricted distribution across the South Unit and only occurs in a few patchy locations, generally along canyon bottoms. Yet, a number of culturally modified Ponderosa pine trees (CMTs) have been documented in Sowers and Timber Canyons. There are a few accounts of pine bark eating in the literature. "Small strips of the inner bark of the pine were tied into bundles and later eaten with salt" (Smith 1974:65). Warren A. Ferris (1983:345) offered an account of Indians in central Utah, "From the mountains, they bring the nuts which are found in the cores of the pine, acorns from the dwarf oaks, as well as the different kinds of berries, and the inner bark of the pine, which has a sweet acid taste, not unlike lemon syrup." Not just pine, but "sap from quaking aspen trees was considered a great delicacy by all Utes. It was usually collected in June" (Smith 1974:66).

> Leo Thorne, a Vernal photographer and collector, asked members of the Ute tribe about the peeled trees. He was told they were peeled to get the inner bark and pine gum for healing purposes. His family generally referred to the trees as "medicine trees" as a result and the term is still used in Vernal. Clifford Duncan, a Ute elder, said in some areas a medicine man would place the person against the scarred portion of a tree as part of a healing or exorcism ritual.
>
> Bertha Cuch, another Ute elder, remembers her grandmother peeled trees and rolled the inner bark into balls that she gave the children as treats. This is similar to an account from a woman who remembers her grandmother collecting the sap to use as a sweetener. Ute elder, Jonas Grant feels the sap was used to waterproof moccasins. The sap may have also been used as a glue to help repair moccasin soles, as a waterproof basket lining (although I think pinyon was the preferred "pine" for this use), and in healing [DeVed and Loosle 2001:6].

Ponderosa pine sap was collected in vats attached to the trees with rawhide. The Ute especially wanted the light foamy part. The foamy part was scraped off with knives. This was done in May or June as the sap began to rise. They would add the sap to foods as sweetener (Clifford Duncan, personal communication, 1998), such as elderberry wine. Another informant said they used the inner bark as chewing gum.

Ashley crews have only noted cultural scars on Ponderosa trees (Loosle 2003). The scars on CMTs are usually rectangular shaped and start a

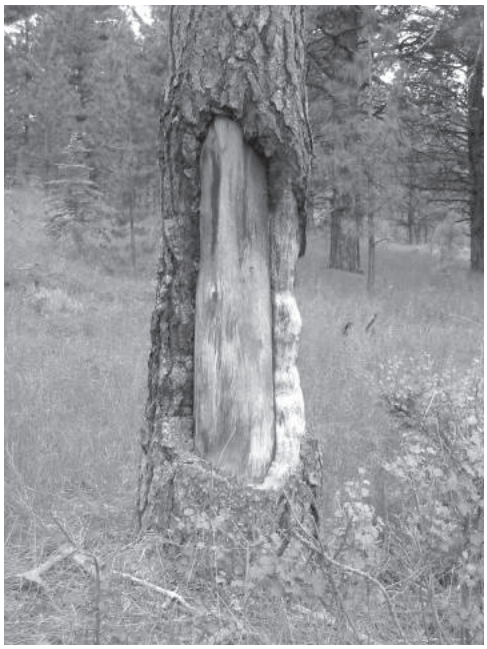

Figure 5. Culturally modified tree.

Figure 6. Fire scarred, cat face.

foot or two off the ground and extend for about four feet (Figure 5). Cat faces, another common scar, are caused by fires (Figure 6). They are usually triangular shaped, start at ground level, and usually fire blackened. Cat faces are caused by burning material resting against the tree for an extended period of time. Martorano (1989) cored 40 culturally peeled trees from three different areas of Colorado and found the majority of trees were peeled between 1815 and 1875. In contrast to the Colorado examples, scarring on Ashley trees before 1900 is rare (DeVed and Loosle 2001:7, Table 1). This pattern roughly coincides with the removal of Colorado Utes to the Ouray Reservation in the Uinta Basin. We suspect the best explanation for this dating pattern is that the Ute in southern Colorado commonly stripped the bark from ponderosa trees. When they were forced from Colorado in 1882 the practice ceased there, but began on trees near the reservation in Utah (DeVed and Loosle 2001). Martorano's idea that Ponderosa was a starvation food does not seem valid in Utah. We would expect many more trees with large haphazard scars if the peeling was done for survival. Instead, the peeling seems more consistent with occasional use as a sealant, glue, medicine, or sweetener as local Ute informants have asserted. Martorano (1989) also noted a tremendous number of scarred trees. Until recently, many of our CMTs were isolated and clusters of three to six trees were the maximum density. However, during a recent prescribed burn survey in the Yellowstone drainage of the Uinta Mountains, dozens of scarred trees were noted. In 2006, Heritage crews documented 16 CMTs in Sowers Canyon. At Birch Spring (42Dc2279), we found the first evidence of a camp site associated with CMTs. DeVed (1998) obtained dates between 1931 and 1961 for the tree scarring at this site. The surface trash noted corresponds with this dating (e.g. 1955 trademark on bottle). It would be insightful to investigate this camp more rigorously.

The Ute also used pinyon pine pitch for a variety of things. Most commonly it was as a liner for water baskets. The pitch for baskets comes from pinyon trees and was gathered in the spring. The person would heat up the pitch then throw it in a basket. They would then put a rock in the basket and roll the rock around. The rock pushed the pitch around and helped seal crevices (Clifford Duncan, personal communication, 1998). Some Ute informants do not make a clear distinction

between pinyon and Ponderosa pine, they just reference pine. Stewart (1942:252) noted that all Ute bands reported chewing pinyon pine pitch as gum. Tree scars are very common near the base of pinyon trees, but these are usually attributed to porcupines and other animals. Although a few pinyon trees could be old enough to have 100 to 200 year old scars, we do not know what the culturally created scars would look like, or where on the tree they would be located.

Horse Corrals

Sites or features associated with the management of livestock are common on the South Unit with three site types the most obvious: camps, corrals, and drivelines. Camps have an abundance of tin cans, glass, wire, utensils, coffee pots, and other items that typically date to the early twentieth century. The majority of camps are in canyon bottoms and probably result from Anglo cattle ranching after 1905 when the Ute Reservation was opened to homesteading. Brush corrals and drivelines, however, tend to be on ridge tops and generally have few associated artifacts. We believe most of the brush corrals and drivelines are older and related to Ute horse management. The horse was a critical part of Ute society in Utah by the 1800s. More about Ute horse culture will be discussed later.

Corral Sites

Several driveline sites have been recorded by Ashley Heritage crews. Some of the sites appear to have been reused with later or reconstructed corrals and drivelines. This reuse has created a sometimes bewildering array of features at the sites. Firewood collecting has further complicated the deciphering of the arrangement and organization of the features. 42Dc1609 is the simplest and most straightforward of the corral complexes because it contains a single pair of drivelines and corral. This site layout helps us understand the organization of the other sites. The two wing walls were made primarily of juniper branches and limbs that have been metal ax cut.

Figure 7. Branches laid against a tree.

Figure 8. Branches forming an X.

Often entire small trees or large uncut branches were integrated into the walls. The walls were placed between living trees and incorporated the living branches into the matrix of the wall (Figure 7). There did not seem to be any pattern to the arrangement of the branches. Sometimes the limbs were all laid diagonally in the same direction between trees and in other spots they formed more of an X pattern (Figure 8). It appears that the walls were originally three to four feet in height.

The corral and driveline are at the north end of Figure 9. The north driveline wall extends for approximately 275 meters (900 feet). It starts in a sagebrush opening, but after a few meters enters the pinyon-juniper woodland. The driveline generally trends uphill and ends in a saddle

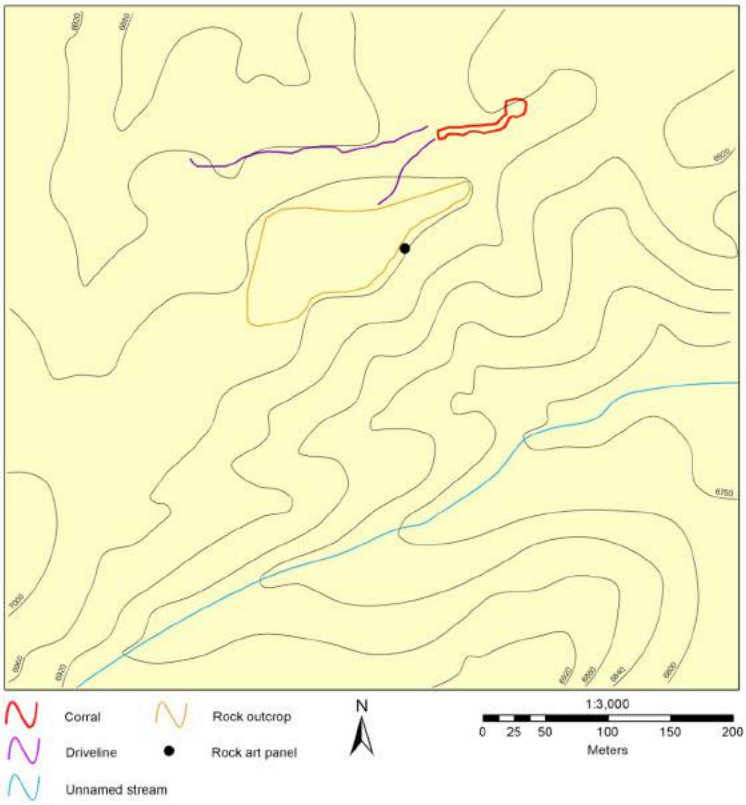

Figure 9. Corral at 42Dc1609.

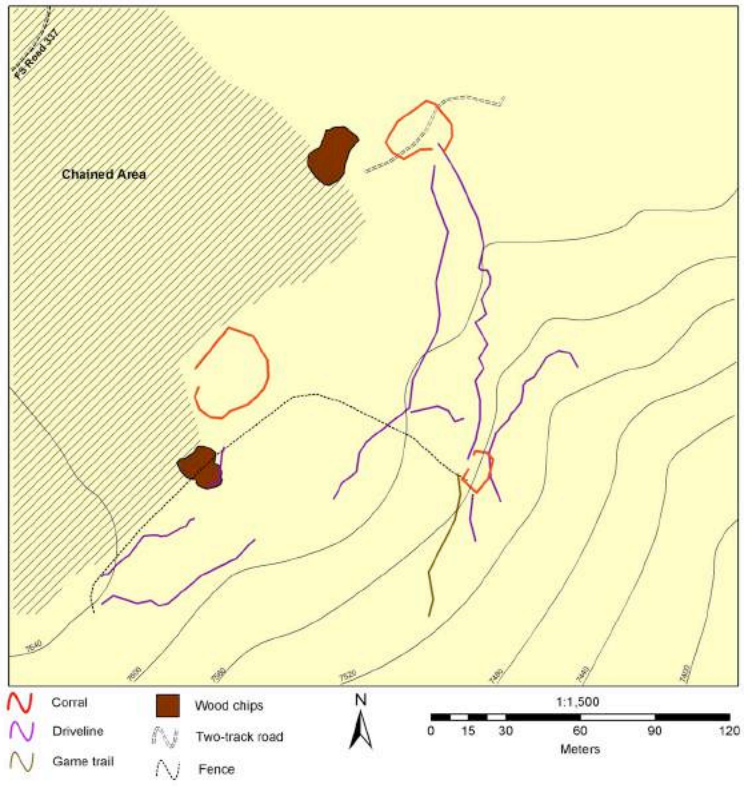

Figure 10. Plan map of 42Dc236 showing multple drivelines and corrals.

between two knolls. The southern wing wall begins at the base of a short cliff and trends to the northeast for about 135 meters (440 feet). The wing-walls are quite close together for the last 60 meters (200 feet). After the horses were driven into the corral, a portion of the northern wing wall was taken down and moved to close off the narrow portion of the wing walls to contain the horses in the corral. The narrow portion of the driveline is about three meters across. The corral is a circular shaped area, 16 x 15 meters (52 x 49 feet) in size. The corral walls are much higher and more substantial than the drivelines. Some of the walls were still nearly two meters (6.5 feet) in height when the site was recorded.

Other sites have a much more confusing array of drivelines and corrals (Figure 10). The features have been impacted by a modern fence, firewood cutting, and reuse. The myriad of brush walls at these sites begs the question, why would drivelines be reconstructed or moved over and over again when serviceable barriers still existed? Anglo informants told our crew that horses will only follow a driveline into a trap once. The herd's old lead mare would not get caught the same way twice (John Barton, personal communication, 2006). For corrals to be used more than once, the driveline configurations had to be changed with each use. This probably explains why some sites have multiple drivelines. This practice can clearly be seen at the Allen Corral site (Figure 11). The first drivelines at the site were oriented to the east. These lines were tied to the edges of the ridge top. At some later time, sections of the drivelines that connected to the corral were removed and two new drivelines

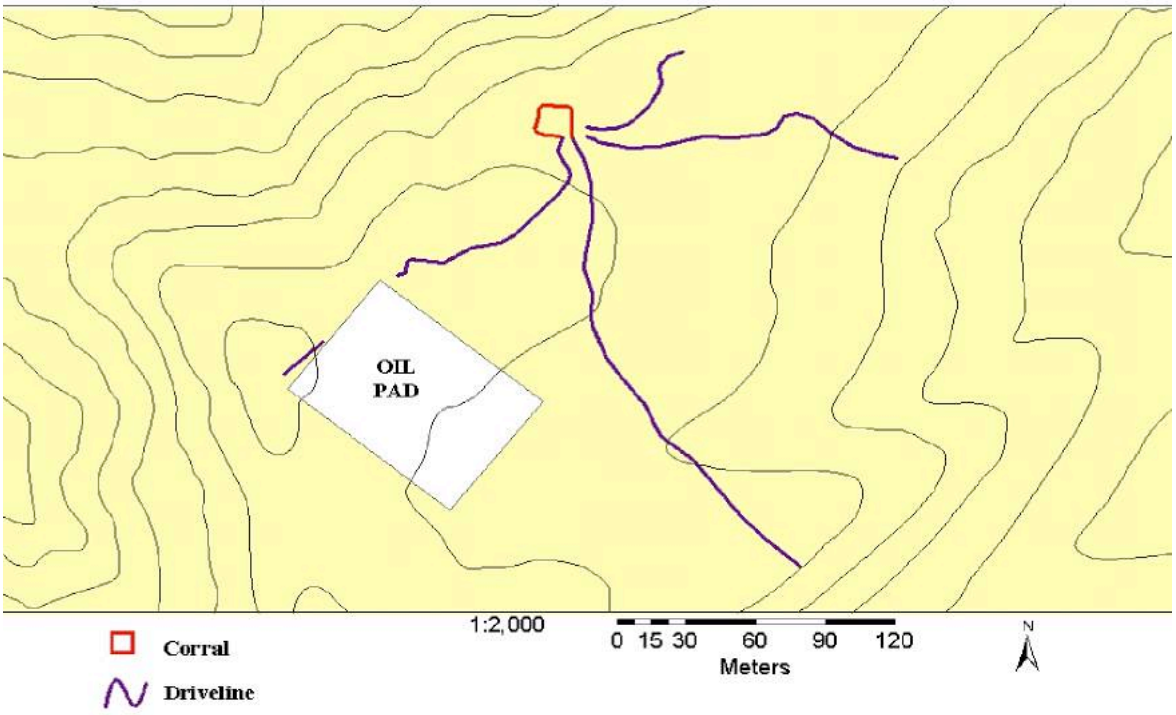

Figure 11. Allen's Corral site showing two sets of drivelines.

were built into the corral leading from the west. These drivelines still lead into the corral. These two later drivelines also tie off to the edges of the ridge top.

When first documented we assumed the corrals were for mustang gathering. Additional research seems to confirm this initial hypothesis. As outlined in the subsequent section, Ute informants have identified these features as horse corrals. Arkush (1995) has studied numerous game and mustang drivelines and corrals in the Great Basin. He (Arkush 1995:13) distinguishes between pronghorn and mustang features. "Without exception, mustang traps are much more substantial than pronghorn traps. The drift fences of mustang traps are usually still standing and are at least four feet tall; the corrals are relatively small (often encompassing less than a quarter acre), and typically are constructed of long, thick wooden beams." On the other hand, pronghorn corrals are very large, 10 to 50 acres in size. Drive-lines often begin sporadically of light material (i.e. stacked sagebrush) and only become more substantial as they draw near the corral.

Ethnic Affiliation of the Corrals

I believe these corrals were built between 1870 and 1905 by the Ute continuing a centuries old tradition of using brush drivelines and corrals for a variety of purposes. There is abundant evidence the Ute built drivelines and corrals in this manner (Jorgensen 1964:11; Smith 1974:55). In the summer of 2005, Ashley Heritage crew members Cristiana Bailey and Gilbert Burkman were taken to a brush driveline complex on tribal land north of Roosevelt. Constructed by a Ute informant's grandfather, this complex is very similar to the one at 42Dc1609 described earlier.

Ute elder, Clifford Duncan, accompanied me to 42Dc236 in 1998. Mr. Duncan said in earlier days, horses were semi-wild and roamed unrestricted. From time to time, the owner would need a new saddle horse or wanted to sell or give a horse away so they would need to gather their livestock together to select the appropriate ones. His father would build a trap in a forested area along a trail used by the horses. The wings would start wide and then narrow until they got to the corral. The opening would be small and designed so the

horses would not see it and not know they had entered a corral as they circled around the enclosure.

The average size corral was about 15 meters (50 feet) in size. Clifford's father would place poles between trees to form the frame of the corral. He would then place willows upright to form the fence. They would be about six to eight feet high. The wings were made of stacked wood, branches, and other things. Mr. Duncan felt the corrals and wings we showed him (42Dc236) were unmistakably a wild horse trap like the one his father described to him.

Corrals at early Anglo homesteads and ranches were constructed very differently from the loose branch construction of the South Unit drivelines. In addition, Anglo informants mention other fence construction methods. Anglo-constructed corrals tend to be more formal and substantial with multiple poles anchored in the ground and connecting poles that are either horizontal or vertical (Figure 12). Preston Nutter and other cattlemen commonly used "wire net" fencing for holding corrals, even transporting the material a considerable distance (over 15 miles) (Barton 1972:31, 33). Barbed wire fences with juniper poles were also common. William Barton (1972:25, 31), a local homesteader and cattleman, only mentions building short "brush fences" to keep cattle from leaving switchback trails and to block possible escape routes while cows were being encouraged to leave snowbound pockets. These short brush barriers have commonly been used by Anglos. Clay Johnson (personal communication, 2007) remembers casual conversations in the 1960s with Anglos who had chased wild horses as a largely recreational pursuit. He was told that at times they constructed dead wood and brush corrals or wings as part of their activities. These folks were not "cowboys" in the strict sense that they worked on ranches or rounded up livestock for a living, but horse owners who chased and caught wild horses for fun in a variety of ways. Johnson noted that private pursuit of wild horses ended when it was federally prohibited in the 1960s or early 1970s. In northeastern Utah, where sedimentary deposits have created numerous deep canyons with countless short ledges, short sections of poles and brush closing off gaps in the ledges to block livestock are ubiquitous. Ashley Heritage crews have documented these throughout the Red Canyon area, especially near Swett Ranch and the nearby homesteads. They are also common on the South Unit and in Nine Mile Canyon. These brush and log constructions only augment natural ledges and cliffs and rarely exceed 10 meters (35 feet) in length, unlike the long drivelines described earlier.

Figure 12. Corral at Allen homestead patented in 1919, located in Sowers Canyon, 42Dc2276.

There is another type of fence commonly encountered on the South Unit. One Anglo informant said they would tie strips of cloth to a wire that had been strung through the woods. The fluttering cloth would scare the horses away from the wire. This technique is still practiced on fields in the Uinta Basin. Bundles of wire are common at camp sites on the South Unit and validate the informant's comments. We have also noticed lines of wire still in the trees, most notably several yards of wire a couple hundred meters (650 feet) south of 42Dc1609. This wire may correspond to a nearby incised name, "Bill Hadden 2/15/41." The wire on the driveline at 42Dc236 may indicate reuse of the site by later Anglo cattlemen. Wire offers a significant advantage over brush

drivelines. Because drivelines could only be used once before horses became familiar with their direction and purpose, wire allowed the rancher to easily move and rebuild lines. Wire would have been a significant improvement over the labor intensive brush drivelines.

The Importance of the Horse

There was also a significant difference between the Ute and Anglo views of these semi-wild Indian ponies.

> Perhaps the most important single possession of the Ute was his horse. The Utes had been for a long time the intermediaries between the Spaniards to the south and many of the Plains Indians to the north and east in the distribution and spread of the horse. As a result they were raided often by their northern and eastern neighbors while the Utes, in turn, raided the Spanish settlements to the south [Lang 1953:8].

A number of cultural practices show the value of the horse in Ute society. "Adultery was punished by beating the wife and, according to an old Uintah informant, the injured husband would shoot the adulterer's best horse. But according to several other informants, if the husband only shot the adulterer's horse and ignored the woman, it was a sign the adulterer could have the woman" (Lang 1953:9). "A deserted wife might ride up to her former husband and stick her spear (the one she carried to balance herself with if her saddle slipped) in her husband's horse. This gives him away. Or she might kill the horse belonging to her successful rival" (Smith 1974:134). One informant told Smith (1974:140) that a new father (after a baby's birth) could not ride his good horses for 10 days after the baby was born. He had to ride ones he was not proud of. It was common to kill horses when individuals died. "A man's horses were killed at the graveside. If they saved one horse, they would cut his tail and mane short and make him look like a mourner" (Smith 1974:150-151). Horse racing was a favorite pastime of the Ute, and ultimately was the principal factor in the friction at the White River Agency leading to a revolt which resulted in Nathan Meeker and other agency employees' deaths near Meeker, Colorado.

Although important to the Ute, Anglos viewed the Indian ponies as small and worthless. A Vernal Express article in 1929 claimed that some of the horses that the county had paid Earnest Eaton to destroy were the size of sheep (Vernal Express 1929). Barton (1972:34, 51) had a particular disdain for the wild horses and shot a number of them throughout his life. Barton was not the only rancher that killed wild horses. "We decided to make a run for a wild band of horses that ranged around the Avintiquin rim and were a nuisance on the range because they chased the cattle back from the springs; pawed the water and made it muddy so the cattle wouldn't drink it and those fifteen head of horses ate about the same amount of feed as twenty five cattle" (Pope 1972). Beginning in about 1928, regional newspapers tell the story of herds and bands of hundreds of wild horses eliminated by order of the Farm Bureau, Indian Services, Cattlemen's Associations, BLM, and County commissioners because they were a nuisance. Preston Nutter and Indian agents brought in stallions in an attempt to improve the bloodlines of the local horses (Barton 1972:37).

In addition to killing the nuisance animals, Anglo cowboys rounded them up for whatever reason they felt they could produce a profit; meat, money, or rides (John Barton, personal communication, 2006). During the early twentieth century, horse roundups were very common all over the Basin, including on Diamond and Blue Mountains, all along the Green River south, along the Colorado/Wyoming border north, and on the South Unit. A US Indian Service permit was issued in February of 1912 to "trap wild horses." A notice in local newspapers in 1932 advertised the government's need to purchase remounts for the cavalry. It is unknown how many local mustangs were appropriated for the government. In the winter, weak feral horses were usually gathered individually by cowboys with well fed horses.

Anglo horse round-ups used a variety of materials to construct corrals besides the wires and poles mentioned earlier. In central Nevada, Anglo cowboys usually used some combination of poles, wire, sagebrush, natural features, and even a special canvas and pole corral and driveline to gather horses (Russell 2006). The absence of poles, and especially wire, at all of the South Unit brush drivelines except 42Dc236, argues against their construction by Anglos. Anglos were undoubtedly in the area and may have reused some of these features. However, evidence suggests these trap complexes were primarily created by Ute for their horses. Although wild horses still roam the area, (a heritage crew noted a herd in Sowers Canyon in 2006) these corral complexes have not been used for several decades. Indian herds suffered a dramatic decline in numbers at the beginning of the twentieth century, so these drivelines have probably not been used since the 1920s or 1930s.

CONCLUSION

The Ashley National Forest's South Unit is a remote and rugged part of Utah. However, the remains of the human past on this plateau provide an incredible window on the past. The South Unit is located between two of Utah's most intriguing and rich cultural areas and may eventually help us understand the prehistoric land use patterns of these regions. Although physically closer to Nine Mile Canyon, the Fremont era residents of the South Unit appear to be more closely tied to the Uinta Basin. The later Ute occupation was centered on livestock management and plant procurement. The corrals, drivelines, and scarred trees from this period have not been extensively documented in other locations. This makes the region a fascinating laboratory for additional research and discovery.

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Galal R. Gough

SACRED LANDSCAPE AND NATIVE AMERICAN ROCK ART

A sacred landscape, for the Native American, is not only a place of spectacular beauty or compelling uniqueness, but also a place deemed holy by the people who created the legends and rock art which reveal how special the site had become to them. The *Smithsonian*, in an article entitled "Below the Rim," told of how humans had lived in the Grand Canyon for more than 8,000 years. The last site treated was the "Shaman's Gallery," with a spectacular rock art panel of humanlike figures which stretches for some sixty feet. Rock art researcher Polly Schaafsma, who named the Shaman's Gallery, believed the pictographs were painted before 1000 B.C. "The rock shelter where the artists recorded their visions, she believes, must have been a sacred site." (Roberts, 2006a:65) The impressive canyon setting of the shelter, and the equally astounding paintings, certainly elicit a sense of the holy for those in this present day who visit the site.

This paper, while dealing with a number of representative sites, will also of necessity point out that Indian sacred places are endangered. Those who study these fantastic sites must inevitably become involved in efforts to protect them. On January 25, 2006, the front page in the B Section of the *Riverside Press-Enterprise* (2006) in California carried an article about the call of tribal elders, "To Save Sacred Sites, Unite." The subheading read "WORKSHOP: Indians want to open a dialogue with developers to protect what they treasure." All persons interested in saving the sacred places were invited to share in the proceedings. "Whether they be Soboba, Pechanga, San Manuel or Cahuilla, American Indian Tribes must unite to protect and preserve historic and culturally important sites." They called for all who would to join them, for "We can't stop development, but we can be instrumental in how they develop." This paper will seek to point out efforts or problems in protecting sites as sacred places are discussed.

When I began a serious investigation of rock art in 1978, Aikens Arch in the Eastern Mojave was a site I first became convinced was sacred. Other sacred sites in what is now the Mojave National Preserve, like Counsel Rocks, Rock Springs, Landfair Butte, and Piute Springs, have attributes treated in my previous papers. One of the most impressive pictures I have taken of Aikens Arch was an aerial photo (Figure 1). While guiding a couple on a flight to see the the intaglios—giant desert figures—along the Colorado River, we flew along north of the prehistoric Mojave Trail, and looking down I saw the remains of the collapsed lava tube which formed Aikens Arch. When viewed from the ground level (Figure 2), the opening is illuminated from above by sunlight.

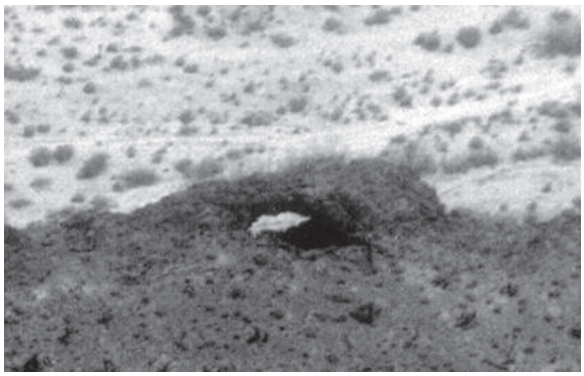

Figure 1. Aerial view of Aikens Arch.

Figure 2. Entrance to Aikens Arch illuminated from above.

Figure 3. Aikens Arch petroglyphs.(Arrow points to "Sky Coyote.")

Figure 4. Old Woman site monolith.

Figure 5. Old Woman painted cave.

Inside the arch are pictograph power symbols, and on the outside, impressive petroglyphs, including the prominent symbol which Isaac Eastvold (personal communication, 1978) identified as "Sky Coyote" (Figure 3). When Ike, associated in more recent years with preservation efforts on behalf of the Petroglyph National Monument on the Albuquerque west bank escarpment, took us to Aikens Arch, we started near the Plumed Serpent petroglyph and photographed rock art for almost a half mile down wash to Aikens Arch.

The Painted Cave is in the Old Woman Mountains, and is described by Little in an essay titled "The Price of the Sacred" (Little 2001:117–121). I first visited the site in 1988. The previous year I had found the Big Wash site in the Old Woman Mountains, listed in *Indian Rock Art of Southern California* by Smith and Turner (1975:139–140), but I did not go far enough to see the huge monolith which marks the Painted Cave sacred site. So the next year I went still further, and knew, as soon as I saw the monolith (Figure 4), that the area was very special. On the ridge high to the west was the rock formation that looked like an old woman. Clusters of petroglyphs were located intermittently at the base of the monolith and around to the southeast. Looking up beyond the narrow gap east of the monolith, I saw pictographs on the outer surfaces of a cave (Figure 5). I climbed up the cliff to the cave, and saw within the cave awesome concentrations of red pictographs. There was also a rear entrance, which I used to climb down more safely from the Shaman's Cave. Still thinking the site was on BLM lands, I took my Annual Rock Art Caravan there in 1989. Ten years later a Presbyterian minister, who had accompanied me on hikes to find rock art in Joshua Tree National Park, invited me to go back to the Old Woman Mountain site, as a guest of Chemehuevis from the Twentynine Palms Band of Mission Indians. We went in their van, and drove to the site from the eastern side. They told of their struggle to gain ownership of a 2,500 acre ranch, where the site was located at the extreme end, and of their plans to build a Cultural Center near the site, to be staffed by a Chemehuevi couple.

Figure 6. Corn Springs palm oasis.

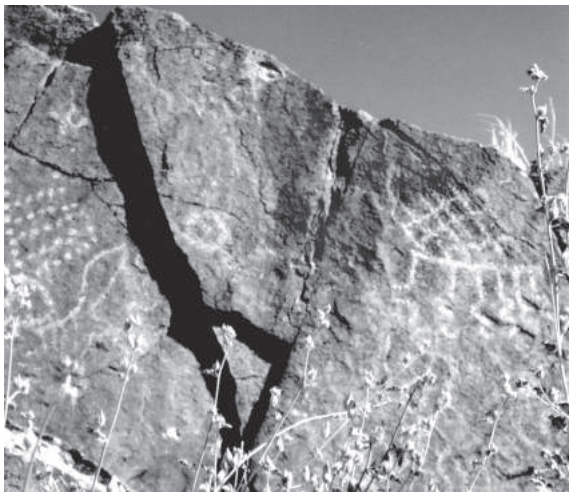

Figure 7. Corn Springs rain fringe.

The next sacred site to be treated is Corn Springs, located along the major prehistoric trail from the Palo Verde crossing of the Colorado River to the ocean. Corn Springs is a palm oasis which gave shade, rest, and refreshing water after a long, hot expanse of desert (Figure 6). Among the numerous petroglyphs at Corn Springs is a rain fringe symbol, with power cross-hatching above the horizontal bar (Figure 7). Desert springs were sacred to the Native American desert dwellers. Corn Springs is threatened, not only by a fire started by careless campers and by some graffiti, for which a Site Steward program is now in place, but also by global warming and drought lowering the water table to the danger level for palm survival.

Figure 8. Shaman's shelter above Andreas Canyon.

Another sacred site is Andreas Canyon, a side canyon located in the large Palm Canyon which is south of present-day Palm Springs. It is part of the Agua Caliente Indian Reservation. Anthony Andreas, a tribal member, was asked how long his family had been in Andreas Canyon. "Since the beginning of time," he answered. "They are the original lineage from that canyon and that surrounding area" (Dozier 1998:53). Another Tribal Elder, Katherine Saubel, commented: "And this land, to us, the Indian people, just doesn't mean a piece of land. This is a sacred area. This was given to us by our Creator, to take care of it, to live here in harmony with it, and that's why we were put here—to protect it" (Dozier 1998:55). In Andreas Canyon there are bedrock mortars, smoke darkened rock shelters, and high above, a Shaman's Shelter (Figure 8) with red and black pictographs on the ceiling, a cupule boulder, and at the east base of the shelter, petroglyphs including a pipette design. Though David Whitley gives directions to the site in his rock art guide (Whitley 1996:94–96), the tribe has since closed the site to visitation to better preserve the too-often touched and deteriorating pictographs.

The waterfall from the Rancho Bernardo site cascades down into a southwest finger of Lake Hodges (Figure 9). The small creek above creates a pool, with the pictographs on the surfaces of rock formations to the north and bedrock mortars

Figure 9. Rancho Bernardo waterfall.

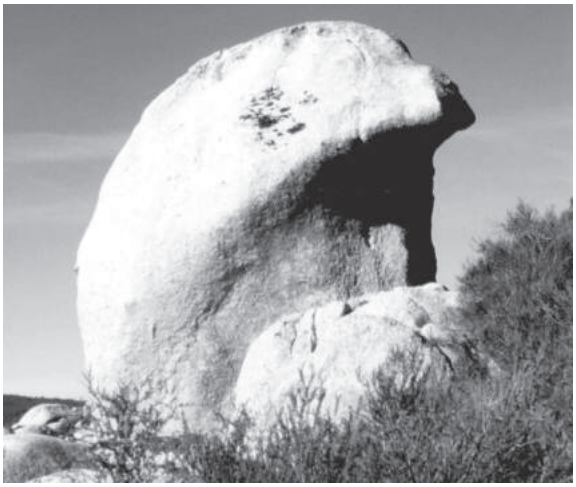

Figure 11. Oak Springs Eagle Head.

Figure 10. Rancho Bernardo maze.

Figure 12. Climb holes on Eagle Head.

on the flat surfaces to the south. The most dramatic pictographs are in what is called the Rancho Bernardo Maze Style (Figure 10), and that terminology has become descriptive for similar maze pictographs in the Southern California area.

The Oak Springs Site, in the Reid Valley between Sage and Anza, has bedrock mortars and faded red pictographs, which appear to be Girl's Puberty Rite symbols, on the boulders up the slope on the west ridge above the stream. But the dominating feature, clearly visible from a great distance, is a large boulder with the appearance of an eagle's head, on the ridge above (Figure 11). That the Eagle Head boulder had ceremonial significance is indicated by the foot and hand holds carved into the west side of the boulder (Figure 12). Remains of an Indian village, with many bedrock mortars, are located downstream from the Eagle Head Rock in Reid Valley, but how the boulder might have figured in ceremony and legacy was lost long ago.

The Old Penny Ranch site near Perris, south of Riverside, is located by a spring and has a series of boulders with red pictographs. But one boulder towers above the others and "is, perhaps, the best remaining example of a pictograph relating to the Luiseno girl's puberty ceremony. The Indian girls participated in an elaborate ceremony which included instruction in being a woman. Ground paintings served as teaching aids, and the rock

Figure 13. Luiseno pictograph panel.

Figure 14. Pictograph panel in Painted Cave.

paintings made by the girls were reminders of the ceremony" (Smith and Turner 1975:iv–v). The pictograph panel (Figure 13) is more complex than most Girls Puberty rock paintings, but in such ceremonies each girl chooses her own symbolic design to commemorate the milestone experience. The site has been donated and is now called the Motte Rimrock Preserve, administered through the University of California Preserve System.

A number of Chumash pictograph sites were certainly sacred to this California tribe, and merit our respect and awe. Perhaps the best known site is Painted Cave, located near San Marcos Pass in the mountains above Santa Barbara, and it is protected by metal grates and a gate at the

Figure 15. Carrizo Painted Rock site.

entrance. Among the pictographs, painted with red, white, and black pigments, are what appear to be sun symbols, encircled crosses, red zigzag snake-like designs enclosed with red and white parallel lines, and a centipede with surrounding short legs (Figure 14).

Great sites are also on the Vandenberg Air Force Base near Lompoc, which raises an issue of concern for the Chumash people. Access to sacred ceremonial sites on the Vandenberg Base, the gated community at Point Conception, and the lands owned by the Pacific Gas and Electric Company for the Diablo Canyon Nuclear Power Plant, is limited and entrance is possible only by permission, though the security provisions do protect the rock art from vandalism.

Without such protections, the Carrizo Plain Painted Rock site further to the northeast suffered grievous vandalism, beginning almost a century ago. Nevertheless, the impressive U-shaped outcrop provided a spectacular setting for a sacred site (Figure 15). Some archaeologists have suggested that the formation has the shape of a vulva, and a number of human figures appear to be involved in ceremonial dances (Figure 16). There are rattlesnake and turtle motifs, as well as human figures in relation to holes or depressions in the sandstone. Despite the degradation, enough of the extensive pictographs are still there to

Figure 16. Red pictograph figure at Carrizo Painted Rock.

suggest how awesome the site once was. This site is now protected by the Bureau of Land Management.

Certainly the Coso Range has a multitude of sacred rock art sites, which, by virtue of being in the province of the Naval Air Weapons Station, are recipients of careful preservation and protection efforts. My first visit to view the Coso rock art was in April of 1978 through a University of California at Riverside extension course taught by Isaac Eastvold, who made arrangements with the Maturango Museum for a two day tour. We went first to the Darwin Wash site, and then to the Carricut Lake sites. At Junction Ranch we photographed house rings, metates, and adjoining petroglyphs, with bighorn designs being most common. The next morning we went to Little Petroglyph Canyon, and spent most of the day there, taking hundreds of pictures. Among the thousands of petroglyphs, the most famous is the Coso Rain Shaman (Figure 17). The ritual headdress has the topknot quail feathers, and the cloak has the vertical lines which come down to end with what appears to be a rain fringe. In other papers I have pictured Coso medicine bags, a processional panel and impressive bighorns. But for me the elaborate human figures, especially the panel of shaman figures (Figure 18), most typify Little Petroglyph Canyon.

Figure 17. Coso Rain Shaman glyph.

Figure 18. Coso Shaman panel.

Black Canyon, Ceremonial Point and Inscription Canyon, located northwest of Barstow in the Central Mojave Desert, certainly must be included in any survey of sacred sites. In 1977 Wilson G. Turner launched the Black Canyon recording project, and soon realized he had underestimated the number of petroglyphs and the time necessary for his teams to complete the task. After two seasons they had recorded over four thousand glyphs, and the final total five years later was over ten thousand (Turner and Trupe 1983). High up on the east side of Black Canyon is a petroglyph of a cougar with padded feet and a lightning bolt tail, with bullet holes made, fortunately, by a poor marksman. Inscription Canyon is much smaller, with fewer petroglyphs, but they are concentrated and accessible. The patterned body bighorn panels (Figure 19), to the right of the entrance, are splendid.

Figure 19. Patterned body bighorn.

Figure 20. Saline Valley bird glyph.

In the Saline Canyon, made part of Death Valley National Park when the California Desert Protection Act was passed, there is a well preserved village site along Hunter Creek, though the related rock art has suffered damage. Several miles east of the hot springs is Pink Tuff Canyon, where huge bird glyphs have wing spans of three and four feet (Figure 20), and the setting is truly sacred. In Death Valley, Greenwater Canyon has magnificent petroglyphs, and the Klare Spring boulder glyphs and the trail glyphs southwest of Mesquite Springs are well worth while. Marble Canyon has a sequence of sites, with the petroglyphs on each side of a dike, with even more even more farther up canyon, making this prehistoric trail passage unique. In the main high walled narrows, there is a shelf far up on the right. When I took my caravan there in 1992,

Figure 21. High Marble Canyon glyphs.

only a few dared to climb up on the shelf to photograph the large rock art panel (Figure 21).

Moving into the tip of Southern Nevada, a complex of rock art sites attest to the sacredness of Spirit Mountain—Hiko Springs, Bridge Canyon, Sacatone Canyon, and to the north, Nap (Knapp) Canyon. The most accessible, and most sacred, is Grapevine Canyon, which is the major site as the Xam Kwatcan Trail draws near to Avikwaame, the Mojave name for Spirit Mountain. The trail begins at Pilot Knob, called Avikwalal, across the Colorado River from Yuma. There are numerous trail shrines, intaglios, and dancing circles along the almost 200 mile pilgrimage trail north to Spirit Mountain. The bighorn panel at Grapevine Canyon, shown here in part (Figure 22), is distinctive. Shrines along

Figure 22. Grapevine Canyon bighorns.

Figure 23. Grapevine Canyon figure.

Figure 24. The "Pahranagat Man."

the Xam Kwatcan Trail have intaglio representations of Kumastamho, the Creation diety, and powerful figures at Grapevine Canyon (Figure 23) may also be tributes to Spirit Mountain as the "Mountain of Creation."

Grapevine Canyon is also sacred because of a spring, and rain diety and other rain symbols at the entrance to the canyon were treated in my paper on "Springs, Water Basins and Tanks in Native American Rock Art" (Gough 2005). There are also rain and spring images at Keyhole Canyon north of Searchlight, and Brownstone Canyon west of Las Vegas. There are many rain fringes, along with water tanks, at Atlatl Rock and Mouse's Tank in the Valley of Fire and by the water tanks at the Whitney-Hartman "Falling Man" site east of where the Virgin River empties into Lake Mead. These sites all serve to emphasize how springs and water sources in desert lands were viewed as sacred.

Upper Pahranagat Lake is located northeast of Las Vegas, along Highway 93, the Great Basin Highway. In the spring of 1978 I was driving to Caliente, and as we approached the passage through the lava flows which had formed the dam to create the lake, I said to my wife, "I bet there are petroglyphs on those cliffs." There were, and I photographed several, including one that I later found out was the famous "Pahranagat Man"

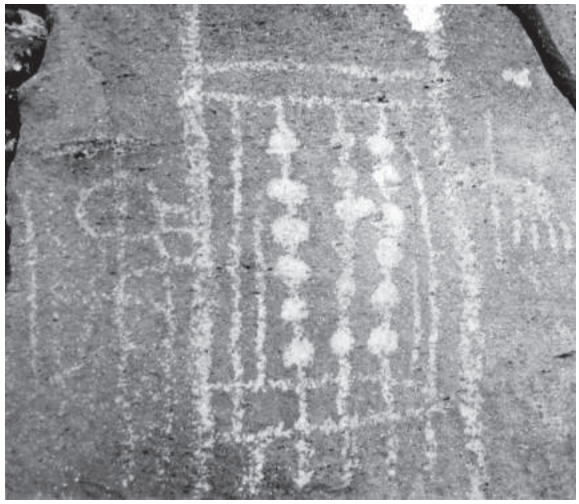

Figure 25. Blanket-Like petroglyph.

(Figure 24). Later, exploring that Pahranagat ridge at the northern end, I saw rock-lined shelter areas on an elevation, and blanket-like designs, which could also include rain symbolism (Figure 25). Many more petroglyph panels were on the basaltic ridge across open space to the east, with blanket-like motifs among them. The whole complex seemed surely to comprise a sacred landscape, with protection afforded by being in the Pahranagat National Wildlife Refuge.

Farther north are a number of sites, including Alamo Paint, Ash Springs, Crystal Wash, and Petro Village, but especially noteworthy and sacred is the cluster of sites at White River

Figure 26. White River Narrows glyphs.

Figure 28. Kohta Circus zoomorphs.

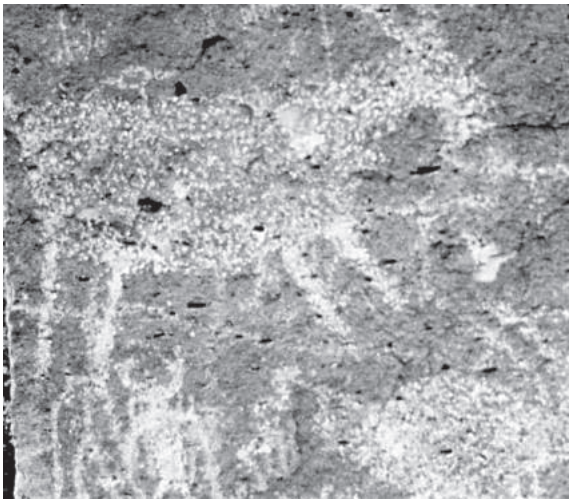

Figure 27. Mt. Irish sheep and horned human figures.

Figure 29. High Katsina mask panel at Kohta Circus.

Narrows. On a dirt side road north of the bend are amazingly complex panels, with bighorn, human, rain fringe and abstract designs (Figure 26). A series of cliffs with complex designs, a fertility site, and a spider glyph site are among the petroglyphs located south of the bend and east of Highway 318. Then to the south, west of Hiko, is another sacred complex of sites leading up to Mt. Irish. On the hogback cliffs to the left are the first petroglyph panels, with bighorn sheep and horned human figures (Figure 27). Another site follows on the right, and then the main concentration of petroglyphs with panel after panel, leads on to another "Pahranagat Man."

The hike into the Kohta Circus site, located southwest of Mesquite between the Virgin Mountains and where the Virgin River empties into Lake Mead, is a splendid preparation for the moment when the large, deep sloping arena appears. The long circus panel is in the gallery on the left, and the high katsina mask panel is on the right. The site was named for the 75 foot panel with so many zoomorphs (Figure 28). Even more awesome is the high panel, with the finely chiseled glyphs made dramatic by the dark patinated surface (Figure 29). Green and Holmes (1999:31–40), in their paper "Katsinas Come to Kohta Circus" focused on the cone-shaped headdresses, and the ceremonies associated with the katsina

Figure 30. View from Land's End site.

Figure 31. Parowan Gap zipper glyph.

cult. On the way up to the katsina mask panel are twin crooks, which, as I developed in my paper on "The Shaman's Crook in Native American Rock Art," are instruments of shamanic power (Gough 1996:Section 14,1–18). For me, the total site is awesome, and is certainly a sacred landscape.

On a field trip led by Boma Johnson, we headed west of St. George in Southwestern Utah to the Gunlock site, to sites in Santa Clara Canyon, and then to the Land's End site, high over the Santa Clara River drainage. We parked by the rock-outlined shelters of a small village site, and walked to the edge of the overlook. Land's End seemed a fitting title, though I heard others call the site Land's Hill. The view from the cliffs looking down on the valley below was majestic (Figure 30). There were petroglyphs by the hundreds at the top edge of the cliffs, with the bighorn glyphs being characteristic of the carefully executed skill so apparent in the rock art. When I took my caravan there two weeks after Spring Equinox, light and shadows on a sun-like petroglyph design suggested that observations at key junctures of the solar calendar might be profitable. All in all, Land's End fits the Sacred Landscape description extremely well.

Even the approach to Parowan Gap, which for me was from the west side, signaled sacred landscape, with an impressive petroglyph panel on the left adding emphasis. The plaque on the pedestal in front of the Zipper Glyph confirmed the sacred with the caption, "God's Own House." While many rock art surfaces clamored for attention, the "zipper" glyph (Figure 31) was most compelling. I had made a copy of the interpretive drawing of this glyph by Nal Morris in his paper on the "Manifestations of the Fremont Calendar" (Morris 1996:Section 15,1–20), and held it while noting his explanation of each glyph mark culminating with the designation for Summer Solstice. He also described his discovery of the summer solstice cairns, pointing in the sunset direction. He found cairns indicating the sunsets for the equinoxes and winter solstice as well. Hundreds of people gather at Parawan Gap for the Summer Solstice, and watch the sun set in the V-shaped gap as Nal Morris, who is regularly invited, explains the importance this sacred site and the solar interactions had for the prehistoric peoples.

At the convergence of Rochester Creek and Muddy Creek, there is a high promontory, crowned with huge rock formations (Figure 32). The Rochester Creek site has a number of panels with rock art, with themes of procreation and life forms in keeping with the thrust of the huge main surface dominated by a rainbow. Within the rainbow in this petroglyphic panel masterpiece

Figure 32. View of Rochester Creek petroglyph site.

Figure 33. Rochester Creek panel.

are a variety of animals and anthropomorphic figures, as well as a conception and birthing scene (Figure 33). The female figure has been created around a natural womb-like depression in the rock surface, which emphasizes the life-affirming, creation-minded panorama of bighorn sheep, deer with antlers and other zoomorphic creatures in this complex panel. The scene faces east, and there are solar calendar interactions. A video presentation of the site, produced by Chuck and Charles Bailey, and with Jesse Warner interviewed on camera, performs an important service by showing seasonal changes where sunlight, shadows, and petroglyph images interact (Bailey and Warner 1999). What appears to be the shadow of a pregnant woman moving across the panel and intersecting with the birthing scene is impressive, and enables those who cannot come often to the site to sense the awesome majesty of the site. Outside the rainbow are many other creatures, including owls and other birds, human figures, snakes and fantastic creatures, and ferocious ones, along with what seems to be a time-line or line of ascent. Thought to be at least 2,000 years old, it must reflect an elaborate creation mythology with solar involvements.

Presenters at the Price URARA Symposium in 2005 were invited to participate in a field trip to Range Creek. Waldo Wilcox had stayed on the Utah ranch, which his father had home-steaded, for fifty years, and had protected the archaeological treasures. Now owned by the state of Utah, Kevin Jones, the state archaeologist, was committed to preserving the rich treasure of rock art, artifacts, high cliff granaries and other features. I was one of his passengers and as he drove his pickup up into the high Range Creek Canyon, he spoke of all he had seen, and he felt that there was so much more. The cliffs, pinnacles, and buttresses alone made the canyon sacred (Figure 34). But then Kevin pointed out the granaries high up the cliffs, some with nearby rock art. One upside-down figure suggested that some may have fallen from those heights. One series of very large panels had an impressive horned

Figure 34. Range Creek high cliffs.

Figure 35. Three Shaman figures at Range Creek.

Figure 36. Nine Mile Canyon view.

serpent petroglyph. Painted human figures high up on a cliff face looked out over the valley. I was particularly impressed by the three human figures (Figure 35), with the largest wearing a shaman's neck medicine pouch. Because all three were connected, I believe they represented a progression of shamanic heritage and power in Range Creek. In the August 2006 issue, National Geographic carried an article on Range Creek, describing Waldo Wilcox as "Guardian of a Ghost World" (Roberts 2006b), and certainly he was the protector of a sacred landscape.

Nine Mile Canyon, which is located northeast of Price, Utah, is really a forty-mile-long art gallery, with many thousands of awesome petroglyphs and some pictographs as well. My first visit back in the late nineties was like a spiritual pilgrimage—going from site to site, with some panels high above the canyon (Figure 36) and the panoramic view—convincing me that Nine Mile Canyon was truly sacred. Then I came a second time, on October 4, 2006, in the late afternoon, facing heavy traffic with semis with two tanks apiece, and workers in company vehicles heading for home. We parked at the mouth of Big Daddy Canyon as a semi with tanks passed by, sending clouds of dust into Rasmussen Cave. When we visited the cave, the petroglyph boulders at the floor level were covered with a quarter inch of dust. The nearby industrial buildings and pump

Figure 37. Fallen boulder by road in Nine Mile Canyon.

station were degrading to the sacred landscape of Nine Mile Canyon, and the results of dust accumulation, the impact of dust suppressing magnesium chloride, and the vibration caused by heavy industrial traffic, threatened the hundreds of recorded Native American cultural sites.

Because of the late hour, we went on to the URARA events and meetings at Vernal, in the dust of a convoy of heavy trucks going north. But we came back to Nine Mile Canyon on a Field Trip the following Monday. A room-size boulder had broken off the cliffs and fallen down to the road (Figure 37). It had not been there five days before, and dramatized for us the damage the vibration

and pounding from the heavy truck traffic, with approximately 100 industrial vehicles passing by in a twenty-four hour period, could do to the surrounding cliffs and their rock art. Because the first drilling of some 35 natural gas wells was north of Cottonwood Canyon, with the industrial traffic going by the Great Hunt panel, concern was raised to curtail traffic by this famous panel. Some heavy traffic still goes by the panel, but the greater concern is for the whole stretch of Nine Mile Canyon, if the project of 700 gas wells is continued, including the additional construction of industrial facilities and cumulative heavy traffic, without regard to the archaeology and rock art of Nine Mile Canyon.

Twice in this paper, I have noted preservation efforts at sites treated in *Sacred Lands in Indian America* (Little 2001). My daughter in Olympia, Washington, has the Sacred Lands book in her library. She has many Indian friends, and had gone to Seattle for a book signing and fund raiser for the Snoqualmie Tribe. Christopher Peters, of the Native American Seventh Generation Fund, was the main speaker. He is quoted in *Sacred Lands in Indian America*, as follows: "In the native belief system sacred places are not sacred because native people believe they are sacred. They have sacredness in and of themselves. Even if we all die off, they will continue to be sacred" (Page 2001:131). When he autographed my daughter's book, by the quote above, he wrote: "*Keep Fighting for the Sacred. Christopher."* In concluding my presentation at the URARA Symposium, I asked those present to let me be a cheerleader, and all of us together to shout out

KEEP FIGHTING FOR THE SACRED!

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Abstracts for the Twenty-Sixth Annual Symposium of the Utah Rock Art Research Association in Vernal, Utah, October 6–9, 2006

Clifford Duncan is a Tribal Elder of the Northern Ute tribe, author of many articles and publications including: "A History of Utah's American Indians" The Northern Utes of Utah."

Introduction to Ute and Plains Indian Rock Art

"For us, Spirit is there, through the symbols. It is an important part of their world. It is important to know the environment and how things were to them in their world. With the circle and stone circles, there are many ways to interpret them. There are higher levels of interpretation of spirit. One must develop an eye to use in visitations to petroglyph sites, the spiritual eye. Learn how to look at these sights in a spiritual sense."

Jim Keyser, Oregon Forest Service archeologist, is a well-known Plains Indian rock art expert and author.

Bear Gulch: the Origins of Narrative Art

Bear Gulch in central Montana, studied in 2005, has the largest concentration of shield bearing warriors in North America, with more than 750 recorded examples. Medicine bundles, feather bustles, wolf headdresses, and distinctive shield designs associated with these figures all point to a single group having made the art at this site over a period of 300–400 years just before A.D. 1700. These shield bearing warriors enable us to study characteristic shield heraldry, weaponry and associated military equipment, and the development of narrative Biographic art in the few centuries immediately preceding Historic period.

Layne Miller has studied and photographed historic Ute rock art for many years.

Ute Style Rock Art

The Ute Indians inhabited much of the West at one time and left their petroglyphs and pictographs over much of the Four Corners, including Nine Mile Canyon. Nine Mile is a terrific place to study Ute rock art, because there are numerous examples left behind and because it can be studied in relation to Fremont examples and other style in the canyon. Ute rock art can also be used to trace the monumental changes that took place to the traditional Ute lifestyle of hunting and gathering, once they obtained the horse in the late 1600s and early 1700s.

Byron Loosle Ph.D is the Heritage Program Leader for Ashley National Forest

The No-Man's Land South of the Uintah Basin

Spaniards, trappers, soldiers, cattleman, Mormons, and Ute Indians all left accounts of their activities in the Uinta Basin. However, the uplands between the Uinta Basin and Nine Mile Canyon are scarcely mentioned in any historical records. Yet, on the ground there is a rich archaeological record dating back thousands of years. Although the Ashley National Forest's "South Unit" may help unlock crucial understanding of Utah's prehistoric past, this presentation will focus on historical sites like corrals and culturally modified trees that help understand the more recent history of the area.

Mark D. Mitchell, Department of Anthropology, University of Colorado

Ute Rock Art in the Arkansas River Basin, Southeastern Colorado

During the eighteenth and nineteenth centuries, various Ute bands roamed across the Southern Rocky Mountains as well as the neighboring Plains and Plateau regions. Rock imagery created by Ute artists can be found throughout western Colorado and eastern Utah, where its distinctive style and content distinguish it from earlier abstract imagery as well as from contemporaneous Ceremonial and Biographic tradition imagery. Recent research conducted on the Purgatoire River, a major tributary of the Arkansas, has documented rock art elements exhibiting these same distinctive technological and formal attributes. Superposition sequences and historical data suggest that these images likely were created during the first half of the nineteenth century.

Nancy Bostick-Ebbert is a free lance writer, song writer and passionate voice for environmental issues.

Our Threatened Cultural Heritage

Nancy Bostick-Ebbert, writer, artist and conservation activist, will offer ideas on how to best protect our disappearing cultural legacy. A no-nonsense approach that emphasizes the importance of º education, her solutions are both simple and practical.

º"If you want another to adopt your beliefs, you must first become someone they wish to emulate..." ~nancy bostick-ebbert~

James Farmer, Department Chair of the Department of Art History, Virginia Commonwealth University, is a specialist in the art and architecture of Precolumbian America, the North American Indians and Mexican art of the twentieth century.

Thunderstorm Iconography and Rock Art Site Locations, or "Don't Rain on My Anthropology!"

Why many Archaic period rock art panels, such as those in the Barrier Canyon Anthropomorphic Style, were located where they are remains an open-ended question. This presentation suggests that, in addition to previously offered theories including accessibility, route marking, territorial boundary, and sound and light qualities, many BCA sites were located in spots where the effects of seasonal rains and thunderstorms, such as flash floods and waterfalls, were most dramatically experienced. Certain BCA images reflect motifs similar to later Puebloan rain motifs, and certain BCA-style figures reflect features such as large, goggle-eyes similar to contemporary rain deities from neighboring and later ancient American cultures. The implied symbolic reverence for rain and thunderstorms in a non-agricultural, Archaic hunter-gatherer society contradicts traditional anthropological assumptions that the importance of rain was directly linked to dependence on agriculture.

David Sucec, Barrier Canyon Style Project, is an art historian, curator and rock art researcher.

Floating Figures: The Holy Ghost In Space And Its Place At The Great Gallery

With more than 80 painted Spirit Figures, the Great Gallery is one of the most impressive prehistoric rock art sites on the Colorado Plateau and, its central composition, the Holy Ghost Group, unquestionably unique—even when considered on the global scale. The figures of the Holy Ghost Group appear to represent a three-dimensional, or cubic, space. There is no question that the composition is three-dimensional but there is some question whether this unique grouping reflects the work of only one individual.

This presentation will discuss the extraordinary spatial dynamics of the Holy Ghost Group, its execution, and the suggestion that "visiting artists" may have came to the Great Gallery to make images in the Horseshoe variant style consistent to the site.

Eve Ewing and Jesse Warner are Utah Rock Art Researchers, with in-depth field work.

Sheep and Rain I and II

Part I: In the Great Mural Art style of Baja California, Mexico, some images of desert mountain sheep—(Borregos) and the fauna associated them suggest a place in water hydrology beliefs similar to one known for the Western Shoshone. Further examples may be found for the Pima and Desert Papago of Arizona. Clearly this possible association of sheep and rain will be further illuminated in Part II, a discussion of southwestern rock art.

Alice Tratebas Ph.D. is a BLM archeologist in Laramie, Wyoming.

Rock Art Depictions of Ancient Religious Concepts

Rock art in North America shows links to Eurasian rock art in shared themes that derive from ancient beliefs. Because religious concepts can have great stability and longevity, we may be able to link concepts in ethnographies and oral histories to depictions in ancient rock art. One such theme is the emergence of animals from the underworld to populate the earth, depicted either by oblique placement of animals on the rock face or animals positioned as if emerging from bedrock cracks. Selection of animals to depict reflects their use as symbols, rather than indicating which animals were hunted or eaten.

Art Cloutier is a retired National Park Service interpreter. His current interest is researching and interpreting the Paria Canyon rock art.

Revolving Female in Rock Art

This is a contextual approach for establishing meaning of the "W" frequently used in rock art. Presenter will begin by describing the celestial context of the constellation, Cassiopeia. Next the Native American appellation, Revolving Female, will be established. There will be many photos of Revolving Female: the supporting context will be described in detail with many variations in the use of these symbols. Hopefully, the viewer will find the accumulation of contextual clues sufficiently credible to continue building further on another occasion when there is more time.

Nowell (Nal) Morris took an early retirement from Unisys Corporation to pursue his interests in positional astronomy and ancient petroglyphic inscriptions.

Venus Studies at Archeo Sites in Utah, Nevada and Arizona

Nal uses computer simulation models to develop an interactive computer program SHAMOS (Sky & Horizon Astronomical Model Ordinate Simulator) with companion field techniques. These are used to determine any functional coupling of the cultural remains to a local site's solar, lunar, topographical and ecological environment. The rapid access of this data from the present to ages past reveals how ancient peoples used petroglyphic inscriptions to help them conceptualize the year and how the seasons fitted into their subsistence patterns. .Nal has uncovered many interesting sites of calendrical and astronomical significance.

Susan Bradford is a member of the Taos Archaeological Society and Archaeological Society of New Mexico.

The Eyewitnesses: Halley's Comet, Sun-Grazing Comets, Taurid Debris, and SNRs

Ancient astronomists in my area of study: the Taos/upper Rio Grande area, the Mimbres Valley/Pony Hills area, and locations in southeast Utah left notations as petroglyphs on basalt and sandstone and as designs on fired clay concerning and memorializing important celestial happenings they observed aloft: the sky on clay and stone.

Dale Gray is a member of the Vernal Archeological Organization.

Video Studies of Uintah Basin Solar Panels

Evelyn Billo and Bob Mark, Rupestrian CyberServices, do extensive rock art recording, research and documentary photography.

Panoramas of Desert View Watchtower Murals: Grand Canyon National Park

Desert View Watchtower, a three-story building—open in the center—was designed by Mary Jane Colter and dedicated in 1933. Murals painted by Hopi artists Fred Kabotie and Chester Dennis and Euro-American artist Fred Geary include rock art and pottery designs. Interpretations of some of the images will be discussed. In order to photograph the murals to create five panoramas, a special T-shaped rig was built and a laser plumb used to orient our remote controlled camera in the center of each level. To our knowledge this was the first complete photographic record of the deteriorating murals.

Reverend Galal Gough has pursued rock art research for many years, contributing many papers to URARA symposiums.

Sacred Landscape and Native American Rock Art

Everything is sacred, and every site where Native American Rock Art is found has special significance. But some settings are so scenically unique and spectacular as not only to be enhanced by those peoples who were drawn to them in the first place, but also to have been hallowed and deemed "sacred" by those people. Such sites seem to have become places for religious ceremonies or pilgrimage, and often have direct relationships with Native American creation epics or solar calendars. Some of the most compelling sites in California, Nevada, Utah, Arizona, New Mexico, and Texas will be investigated in this presentation from the perspective of "Sacred Landscape."

Part I: Representative sacred places with Native American rock art in Southern California, Southern Nevada, and Land's End, Parawan Gap, Rochester Creek, Range Creek, and Nine Mile Canyon in Utah are treated in this first installment.

Ben Everitt is a geologist who brings poetry to our final presentation.

Art as a Window to Farther Reality

The goal of the artist is to catch the attention of the viewer and make him see the world with new eyes, view reality from a different perspective, and perhaps help him glimpse the ultimate reality beneath the surface of the world we live in. With this theme in mind, I would like to explore a couple of my favorite sites: Flag Point and Sears Point. At both places artists explore and interpret apparitions which could be considered as spirits or messengers from another dimension.