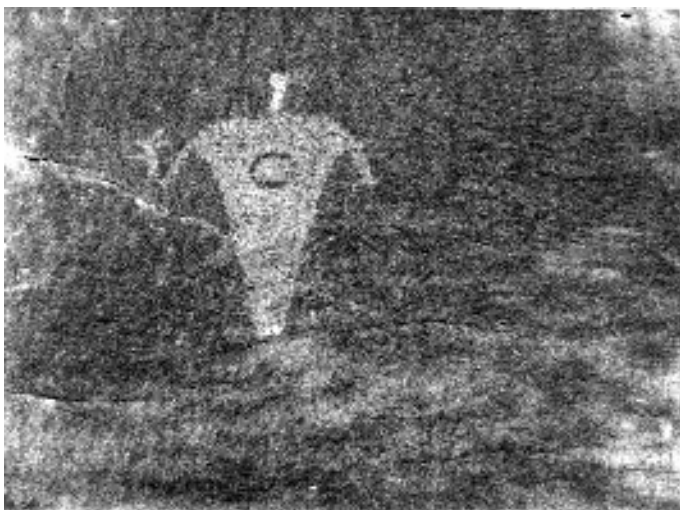


# CHASING GHOSTS

*An Analysis of  
Vandalism and Site Degradation in Range Creek Canyon,  
Utah*



*By Jerry D. Spangler, Shannon Arnold and Joel Boomgarden*

# Chasing Ghosts:

A GIS Analysis and Photographic Comparison of  
Vandalism and Site Degradation in Range Creek Canyon, Utah

by

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## Chapter 1

### Theoretical Perspectives and Working Hypotheses

The Range Creek drainage in eastern Utah has been universally hailed in popular publications around the world for its abundance of pristine prehistoric archaeological sites. Concurrently, the previous private land owners, who sold their interest in the ranching operations in 2001, have been lionized for their fierce protection of those resources during their five-decade stewardship of the area. On both counts, the praise is justifiable. The majority of the more than 300 archaeological sites within the protected boundaries of the ranching operation appear to be in good-to-excellent states of preservation, with little or no evidence of impacts precipitated by malicious human behavior. And that preservation can and should be attributed to the Wilcox family, which preserved the integrity of archaeological sites by disallowing public access to the area.

However, both the pristine nature of *all* sites and the absence of vandalism in the Range Creek drainage as a whole have clearly been overstated. Range Creek archaeological sites that are located outside of the Wilcox Ranch have been severely vandalized, and in some cases destroyed by looters searching for Pre-Columbian artifacts. Furthermore, trespassers repeatedly breached the Wilcox family's locked gates during their tenure there, damaging archaeological sites found along the road to a distance of about 3.2 kilometers inside the locked gates (Waldo Wilcox, personal communication 2005). Many other sites within the ranching complex have also been damaged, suggesting that some among the many different private landowners in Range Creek have engaged in looting activities over the past century. Other sites have been damaged by road construction, livestock and ranching activities, and firearms.

During the course of documenting 339 archaeological sites from 2002 to 2004, archaeologists with the University of Utah, the College of Eastern Utah, Salt Lake Community College and Uinta Research were immediately struck by the apparent distribution of vandalized sites. Most sites located within the controlled access points of the Wilcox ranching operation appeared to be in good or excellent states of preservation, whereas those outside appeared to have been severely vandalized. This perception led researchers to initiate more rigorous documentation of adverse impacts to cultural sites in an effort to better understand the variables that contribute to site vandalism and site protection, and to predict which sites would be susceptible to vandalism in the future. This report, which constitutes the results of the first phase of that study, focuses on two data sets: (1) observations reported from 2002 to 2004 on state site forms (IMACS) and analyzed using geographic information system software, and (2) current site condition as depicted in photographs and compared to conditions depicted in 1931 photographs by the Claflin Emerson Expedition from the Peabody Museum at Harvard University.

Indeed, the Range Creek drainage provides an exceptional laboratory for the study of vandalism. The Wilcox family, while owning only a small portion of the Range Creek drainage, controlled access to more than 50,000 acres of federal land from the

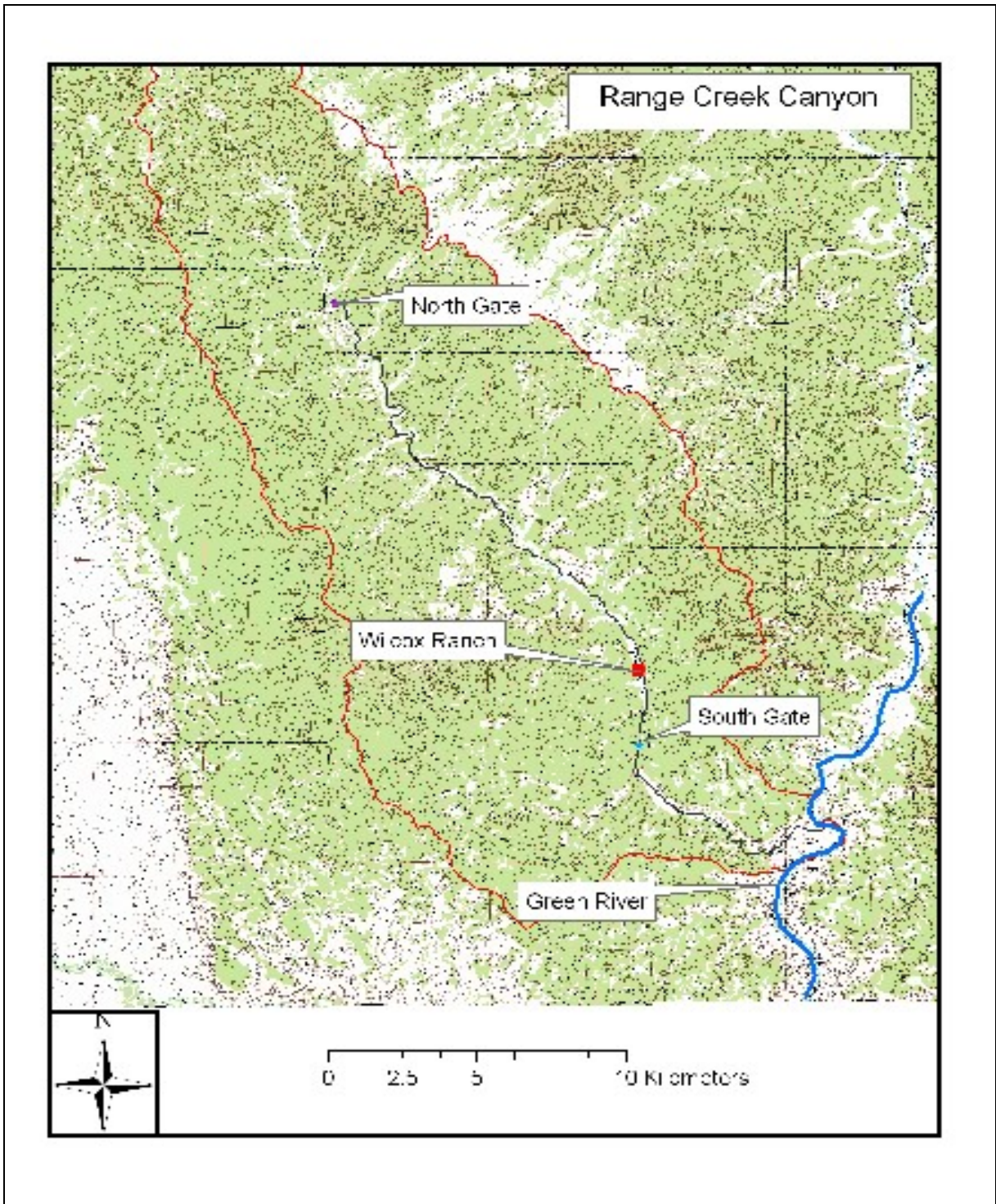
Little Horse Canyon confluence on the north to a fence line near the Turtle Canyon confluence on the south, a distance of about 24.2 kilometers (Figure 1.1). This access was controlled through a combination of locked metal gates and the public's perception that the Wilcox family would enforce their private property rights by any and all means (Waldo Wilcox, personal communication 2002). Yet vandalism has occurred in and around the periphery of the Wilcox Ranch and in unprotected areas to the south and north of the Wilcox's locked gates.

The transfer of the Wilcox properties to state ownership in 2004 has prompted considerable discussion among policymakers and land managers about public access to previously restricted lands (and archaeological sites) and the possibility that public access would precipitate vandalism. This discussion has focused on whether to continue or eliminate the restricted access initiated by the Wilcox family, whether to restrict access to equestrian and pedestrian visitation only, and whether to allow commercial vehicular tours of the canyon. The Utah Division of Wildlife Resources (DWR) in 2005 chose to limit access to the Wilcox Ranch to equestrian and pedestrian use through a permitting system, and tours were conducted by authorized supervisors, usually a permitted archaeologist. In 2006, the agency chose to allow commercial vehicle tours with the requirement that tour operators be accompanied by DWR staff. These restrictions did not affect public access to areas south of the Wilcox Ranch, which is accessible by means of an alternative unimproved dirt road through Turtle Canyon.

Researchers subsequently posed the question: Which sites are at highest risk of impact by visitors entering from the north gate now that the previously protected area is open to horse and foot traffic? Furthermore, do publicly accessible sites south of the south locked gate remain vulnerable to vandalism? The research focused on the following working hypotheses:

- Sites south of the Wilcox property boundary are more likely to be vandalized than sites inside the protected area.
- Vandalism will decrease with distance from the north gate because pedestrians will not walk a considerable distance.
- Sites close to the main road are more likely to be encountered and therefore more likely to be vandalized.
- Sites located near other sites or in close proximity to prominent land features are more likely to be vandalized.
- Sites clearly visible from the road are more likely to be vandalized regardless of distance from a locked gate.





**Figure 1.1: Range Creek Canyon Project Area.**

## Previous Research

The idea of quantifying vandalism or destruction of archaeological sites is not a new concept. Several other studies over the past 25 years have attempted, with varying degrees of success, to develop predictive models to illuminate which sites are most likely to be vandalized. The first such study to comprehensively examine vandalism in the Southwest was that by Nickens et al. (1981). Entitled *A Survey of Vandalism to Archaeological Resources in Southwestern Colorado*, the project area was located in Southwestern Colorado and dealt exclusively with Ancestral Puebloan sites. Their methods included a review of damaging activities, or what they referred to as “agents of cultural resource destruction,” an overview of cultural resource destruction within the project area, a compilation of known site data through the use of certain variables thought to be important to the problem, field checks to compare file data and interviews with known collectors to get first hand accounts of the most vulnerable sites.

Perhaps most important was the employment of easily discernable, site-related variables through the use of a standardized vandalism form. These variables included the age or cultural period of a site, general site type, distance to the nearest road, type of nearest road and the distance to the nearest town. Nickens et al. (1981) compiled a large sample size that included 1032 sites, 732 previously recorded sites and 300 from a class II survey they had just completed in the area. They also conducted field checks on 61 sites reported to be undamaged. They found that later period sites with masonry architecture located more than 20 miles from the nearest town and within 100 meters of dirt road were most likely to be vandalized. Interviews with known collectors supported their findings.

A similar study by Simms (1986), entitled: *Cultural Resource Investigations in Southeastern Utah to Aid in the Assessment of Archaeological Vandalism*, examined archaeological sites in the Manti La Sal National Forest west of Blanding. Interestingly, previous work in the area performed by Ray Matheny and Office of Public Archaeology at Brigham Young University in the early 1970’s suggested that at that time the area was in “pristine” condition (cited in Simms 1986). As with the Nickens et al. (1981) study, it dealt exclusively with Ancestral Puebloan sites. Simms, employing similar methods, developed a set of site-related variables or attributes that were designed to predict vandalism at certain sites. These variables included; cultural affiliation of the site, number of rooms, presence or absence of other features (i.e. kivas, storage structures, standing walls, rock alignments, rock art, middens etc.), and whether the site was located in the open or in an alcove. The sample size for this study totaled 74 sites, which was substantially smaller than that used by Nickens et al.

Simms (1986) suggested that sites within view of a traveled road were often less damaged than more remote sites. However, site specific access was a major factor. For example, remote sites that required a ladder or climbing gear to reach were less damaged than those closer to the road. Sites with easy access, or those less than 2 kilometers from a Jeep trail or rough two-wheel drive road but out of view of that road exhibited the most damage. Alcoves and rockshelters near roads had all been vandalized, whereas open sites

near roads exhibited the most recent damage. In short, Simms found that site accessibility, site visibility from the road and distance to the road were the primary factors for predicting vandalism.

In 1990, Kvamme conducted another study of vandalism entitled *San Juan County, Utah, Archaeological Vandalism: An Assessment of a Vandalism Model and Practice*. It focused on archaeological sites around the town of Blanding and again dealt only with Ancestral Puebloan cultural material. His methods also included the use of a standardized vandalism form that employed a set of site related variables to predict damage. However, his model only used two major criteria: access and site type. For these criteria, numerical values were assigned to each component, with values assigned for air distance from the nearest town, driving distance from the nearest town, walking distance and road type. Numerical values were also assigned to site type or “attractiveness.” This factor was thought to be a greater determining factor and was given three times the value weight as access. The sum of all values was considered to be an accurate measure of overall site vulnerability.

Using a geographic information system, Kvamme (1990) included data from 13,000 sites, of which 100 were to be field checked. Unfortunately, this study was not completed. According to one participant in the project, the data remains in storage at Weber State College. Despite never having been completed, initial results drawn from IMACS data found a strong correlation with their number scoring system and vandalism.

Another attempt to examine the vandalism of cultural resources resulted from a joint effort between the U.S. Forest Service and Bureau of Land Management (Ahlstrom et al. 1992). Entitled *Pothunting in Central Arizona: The Perry Mesa Archaeological Site Vandalism Study*, the project area included the Tonto National Forest in central Arizona and dealt exclusively with Ancestral Puebloan sites. Similar to the previously described efforts, Ahlstrom et al. identified site-related variables thought to be important to the problem and developed a vandalism form to standardize their data collection. Their variables included site size, site density, site visibility, site accessibility, site location on the mesa, amount of vandalism already present, whether a person on site is visible from off site and site types with distinctions between six different types that included small, medium and large residential, defensive, communication and probable habitation. Their sample size included 198 sites.

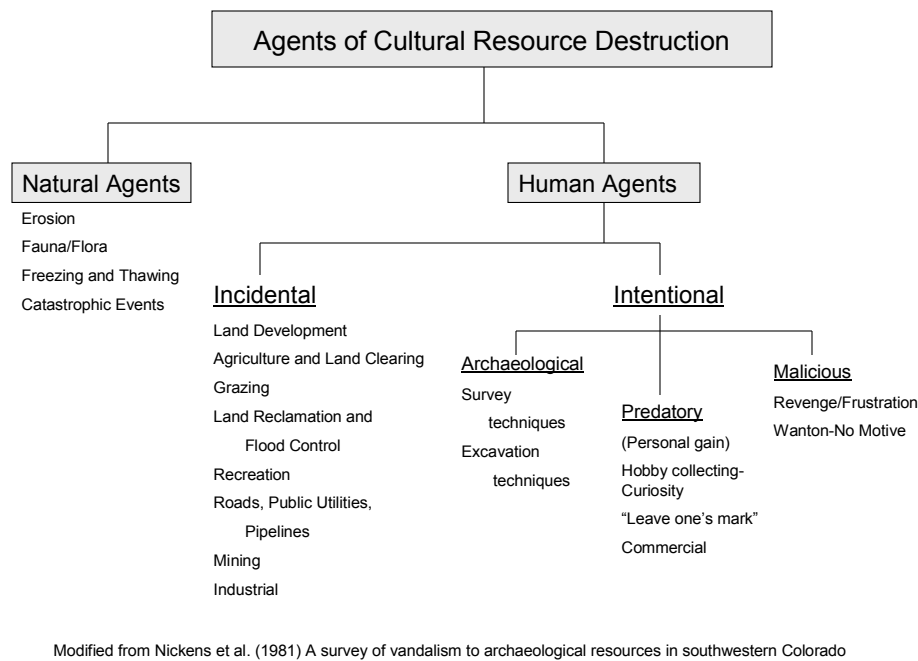
Ahlstrom et al. (1992) found that the size of the mesa itself was a major contributing factor to vandalism. Most of sites were within 600 meters of a road and almost any point on the mesa can be reached in less than three hours. In other words, the mesa was deemed “small” in relation to both the density of its road networks and to the time necessary to traverse it. In addition, they suggested that access to a particular site was not as much of a contributing factor as is site type. This suggested that sites that were “uninteresting” to pothunters may be disregarded despite easy access. Larger, more complex sites, (e.g., those with greater than 100 rooms) were found to be more likely to be damaged than smaller sites (e.g., those with 1-9 rooms).

Although several studies over the past 25 years have attempted to develop a comprehensive model to predict vandalism to cultural resources, all of these dealt exclusively with Anasazi/Puebloan cultural remains found in a relatively small study area. These sites are typically visually impressive and relatively easy to locate. Similar studies of larger geographic areas that dealt with smaller, more ephemeral sites, like those found through out the Fremont region in the Great Basin and northern Colorado Plateau, have not been previously attempted.

### **Definitions and Framework: The Range Creek Study**

Defining what constitutes “vandalism” is inherently fraught with interpretive and perceptual problems. By its narrowest dictionary definition, vandalism is the “malicious or ignorant destruction of public or private property” (Neufeldt and Guralnik 1991:1475). In turn, the definition of destroy is “to tear down or demolish, to break up or spoil completely; ruin” (1991:374). By these definitions, most “vandalism” of archaeological sites is not vandalism in that the sites have not been destroyed completely. The theft of artifacts, damage to sites by road cuts, erosion caused by pedestrian trails and ephemeral graffiti certainly do not meet the literal definition of vandalism, although each results in the loss of site integrity. It is also tenuous to label the “malicious or ignorant destruction of ... private property” by the owners of that private property as vandalism.

The term “vandalism” in archaeological contexts has been applied differently and more liberally to include most human-caused adverse impacts to the scientific and aesthetic integrity of cultural sites, although what constitutes vandalism varies from individual to individual. Nickens et al. (1981) clearly grappled with this paradox in their examination of vandalism in southwestern Colorado, referring instead to “agents of cultural resource destruction” and defining “human agents” within the context of “incidental” impacts and “intentional” impacts (Figure 1.2). The term “vandalism” is not expressly stated, although it is implied within their constructs for the terms “predatory” and “malicious.” For the purposes of this study, all activities included by Nickens et al. as “predatory” and “malicious” are collectively considered to be vandalism.



**Figure 1.2: Nickens et al. 1991 model for defining vandalism.**

That vandalism has occurred in Range Creek is indisputable. Sites in lower Range Creek often exhibit massive looters holes (Figure 1.3) and some sites in this area, initially described by the 1931 Claflin Emerson Expedition, have been devastated by illegal excavations. In 1950, Clarence Pillings, who at the time owned a ranch just north of the Wilcox Ranch, collected the now-famous cache of 11 figurines from a rockshelter site on federal land in Range Creek (Morss 1954). Gunnerson (1957) also made reference to local residents digging up human remains in the unnamed dry canyon just north of the Wilcox Ranch. The construction of a road into lower Range Creek in 1964 facilitated natural gas exploration, and that in turn resulted in considerable vandalism of sites in the area around the well head (Waldo Wilcox, personal communication 2005).

For the purposes of this study vandalism was determined to have occurred when (1) There is substantial physical evidence that a site's condition has been damaged or there is supporting evidence that it likely has been damaged, and (2) There is anecdotal evidence from local residents that specific sites have been vandalized in the past. Physical evidence includes unequivocal excavation of subsurface deposits, the removal of interior deposits, the presence of back-dirt piles and residual items from vandalism such as ladders (Figure 1.4) and ropes (Figure 1.5) to gain access to sites that were otherwise inaccessible. Anecdotal evidence comes primarily from Waldo Wilcox, a resident of the canyon for more than a half century who personally witnessed episodic vandalism or was personally aware of specific instances of vandalism. Wilcox indicated that trespassers would occasionally venture inside the locked gates 1.6 to 3.2 kilometers (usually on foot), looting or damaging sites visible from the road. Vandalism was also witnessed along the southern periphery of the Wilcox Ranch (Figure 1.6).





**Figure 1.3: Deep looters pits and back-dirt piles at 42Em3172, lower Range Creek Canyon.**

Where possible, this study also considers other adverse impacts to archaeological sites, including the illegal collection of artifacts, the stacking of artifacts into piles, the restacking of collapsed walls, camping on or near sites, pedestrian trails and garbage left on or near sites. It should also be noted that previous archaeological research has impacted the integrity of sites in the canyon. The 1931 Claflin Emerson Expedition conducted test excavations at numerous sites in the canyon, and traces of those pits are still evident (Figure 1.7). A later expedition (Leh 1937) also described dismantling a perfectly intact granary in order to examine interior deposits. Only traces of adobe remain on the ledge where the granary was situated.

This vandalism study incorporates IMACS data from 339 total sites recorded from 2002 to 2004. These data were initially collected without a specific focus on the impacts of vandalism or other adverse impacts. Consequently, the conclusions offered herein may be tempered by the collection of more specific data gathered in subsequent years. Additionally, a comparison of current site condition to that observed in 1931 photographs or field descriptions was possible at 29 sites, all of which are included in the total. Collectively, both data sets suggest that uncontrolled vehicular access was a major contributing factor to site vandalism in the past, and that controlled access contributes significantly to the long-term preservation and protection of archaeological sites. Most vandalism has occurred since the sites were first described by the Claflin Emerson Expedition in 1931, and most evidence suggests sites were seriously vandalized in the 1950s and 1960s. Most vandalized sites are in close proximity to the road, suggesting that individuals engaged in illegal or inappropriate behavior are using vehicles to facilitate their activities.



**Figure 1.4: An abandoned ladder at 42Em2887 probably used to gain access to sites on ledges.**



**Figure 1.5: A dangling rope used to gain access to 42Em3057**





**Figure 1.6: An informant provided detailed information about a burial removed from 42Em3059.**



**Figure 1.7: Remnants of a Claflin-Emerson test pit at 42Em752.**



## Summary

The cultural resources of Range Creek are significant both in terms of their tremendous quantity within a limited spatial area and the quality of their preservation. The quantity of sites is likely the result of the Range Creek environment, which provided a rare (for the Tavaputs Plateau) opportunity for horticultural subsistence, as evidenced by the number of residential sites and storage facilities. The quality of the preservation of these sites is attributable to a greater or lesser degree to private landowners who in the past half century restricted access to a large portion, but not all of the canyon drainage. Therefore, the transfer of this property to public ownership brings opportunities for scholars to study prehistoric lifeways, as well as tremendous responsibility on the part of land managers to protect those resources for future generations.

The unique attributes of Range Creek generally and the Wilcox acquisition specifically present an unprecedented opportunity to examine the nature and extent of past human impacts to cultural sites, and to examine the various natural and man-made variables that may be associated with those impacts. This study area includes all of the middle and lower Range Creek drainage from the mouth of Little Horse Canyon to the Range Creek confluence with the Green River, a distance of about 30 kilometers. The entire area considered here features the same Upper Sonoran environment, a similar distribution and density of prehistoric archaeological sites, and similar types of sites. Furthermore, a road has historically traversed the bottom of the entire canyon to its confluence, thereby making the entire canyon bottom accessible to vehicles.

There is one important variable that makes the canyon conducive to a study of adverse human impacts. The spatial range considered here includes (1) an area of Range Creek between two gates (ca. 23 kilometers) that have historically impeded public access, and (2) an area of historically unrestricted public access below the south locked gate (ca. 9 kilometers). In fact, the only significant variable is that public access was restricted in one portion of the canyon, and unrestricted in another. In this regard, the cultural resources of Range Creek offer opportunities to examine the distribution of human impacts as it relates to controlled public access, and to examine that variable within the context of various factors considered by previous researchers (e.g., distance from the road, difficulty of access, site types).

This study approaches the problem from two different perspectives. The application of GIS software to analyze impacts to all recorded sites (339) in the canyon elicits broad patterns that may assist state and federal land managers in the identification of vulnerable sites and the development of strategies to protect them. And the utilization of historic photographs provides visual perspective to the problem and creates a baseline from which the degradation of sites, whether through natural erosion or man-caused events, can be measured. These efforts constitute the first phase of ongoing vandalism studies in Range Creek and throughout the Tavaputs Plateau region. Future research will examine these initial data with greater precision, and it will attempt to apply the predictive models to other areas at risk of vandalism.



## Chapter 2

### A GIS Approach

As discussed in Chapter 1, several working hypotheses were proposed based on assumptions that visible, accessible sites associated with road access are more at risk of vandalism than are sites obscured from public view or those in topographic settings where access is difficult. To test these hypotheses, all 339 IMACS site forms recorded in Range Creek Canyon between 2002 and 2004, as well as a small number from 2005, were individually examined to determine whether vandalism had been noted by field crews, as well as to note their distance from the locked gates, distance from the main road, co-occurrence with prominent land features (e.g., rockshelters), slope, aspect and elevation. Four additional yes-no questions were posed: (1) Is the site visible from the road, (2) Is the site easily accessible, (3) Is the site visible from another site, and (4) Is the site located inside or outside the protected area. Limited IMACS information precluded any determination of site visibility from the road or other sites that are within visual range of a site that is visible from the road. The location of the sites considered here appears to be fairly evenly distributed from northwest to southeast throughout the drainage (Figure 2.1).

These data were subsequently explored for spatial patterning using ARC GIS 9.1, with individual layers for topographic maps, land ownership, surveyed areas, road location, ranch location, project boundaries and the location of the north and south locked gates. Additional layers were created to determine the location of vandalized and non-vandalized sites. Vandalized sites were further layered by degree of vandalism, and a three-tiered ranking system was applied. Rank 3 included impacts such as looters' pits, features that had been destroyed (based on informants' information or from historic photographs) and other malicious impacts that seriously degraded the integrity of the site, as noted by field crews recording the site. Rank 2 included the disturbance and theft of artifacts, but not necessarily damage to structures. And Rank 1 included impacts such as bullet holes in a rock art panel, garbage at site, camping on or around a site, and historic writing on top of prehistoric images. The different layers and tools used in this study are indicated in Figure 2.2.

The ranking system applied to this study is a direct reflection of site type. Sites with Rank 1 impacts are primarily rock art sites. Rank 2 impacts are generally associated with non-architectural sites such as artifact concentrations and rock alignments of unknown function. And Rank 3 impacts are typically associated with residential sites and rockshelters. It should be noted that sites with higher ranked impacts may also have lower-ranked impacts evident at the same site.

An examination of the data set revealed a direct correlation between distance from controlled access points and the occurrence of vandalism. This was particularly evident on the north end of the study area. On the south end, the locked gate appears to have not been a determining factor inhibiting vandalism, but rather it was the location of the Wilcox Ranch complex about 3.2 kilometers further to the north that seemed to deter

vandalism. For the purposes of this study, the southern control point was shifted to the Wilcox Ranch rather than the southern locked gate. It should also be noted that lands between the Wilcox Ranch and the southern locked gate are privately owned, and those owners also have access to those properties.

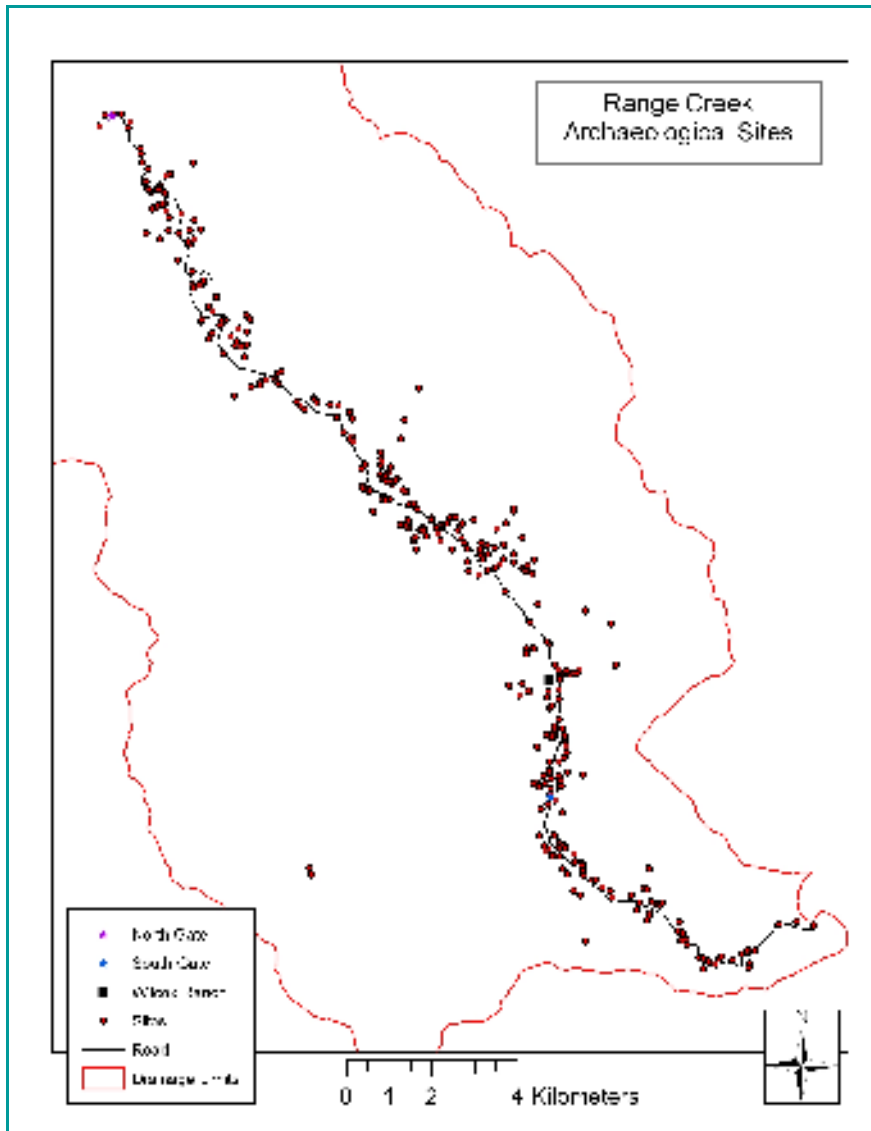


Figure 2.1: Distribution of sites recorded in Range Creek Canyon, 2002-2004.

About 76 percent of all sites considered in the GIS analysis exhibit no evidence of vandalism (Figure 2.3). However, these data also demonstrate that most vandalism is occurring outside of the protected area. Of the 80 vandalized sites, 65 percent are located outside the protected area (Figure 2.4), most at the south end of the study area. These vandalized sites extend to the mouth of Range Creek (the dirt road is now closed on the lower 2.5 miles, but once extended to the mouth). There also appears to be significant clusters of vandalized sites around the southern locked gates, suggesting vandals ventured into the protected area by foot but not a considerable distance, and around the Wilcox-

Pillings ranches, suggesting individuals associated with those families were engaged in destructive activities (Figure 2.5).

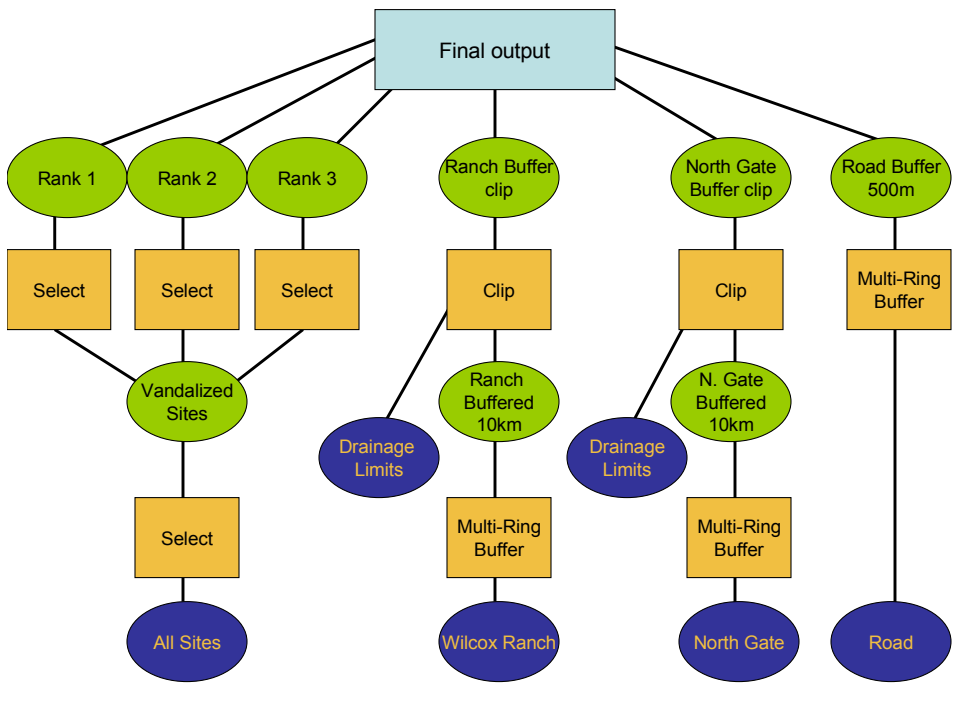


Figure 2.2: Dark blue circles are input layers, yellow squares are functions and green circles are derived layers as used in the Range Creek vandalism study.

A similar cluster of vandalized sites is located around the north locked gate, again suggesting that individuals would drive vehicles as far as the locked gates and then venture in on foot to engage in destructive activities. A small number of vandalized sites are located along the road for a distance of about 4 kilometers. When the distribution of vandalized and non-vandalized sites is plotted between the Wilcox Ranch and the north locked gate, a gradational pattern emerges, with the frequency of vandalized sites decreasing as distance from the two control points increased (Figure 2.6). The data were also examined to determine the types of vandalism that was observed. This also included sites damaged by bulldozers and road construction, although neither activity meets the definition of vandalism used here (Figure 2.7). Again, the frequency of vandalized sites was significantly greater outside of the controlled access points (Figure 2.8).

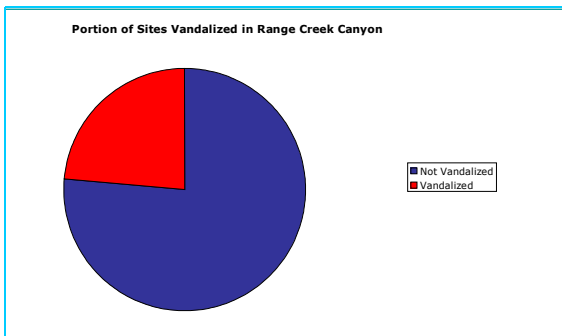


Figure 2.3: Portion of vandalized sites

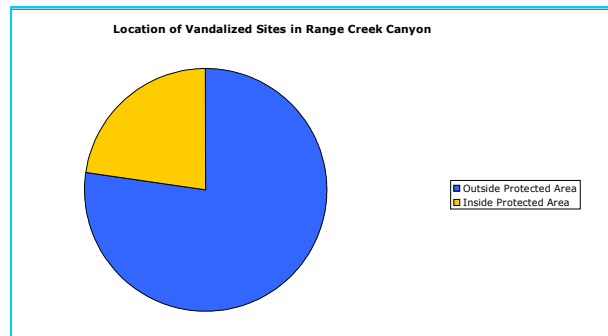


Figure 2.4: Location of vandalized sites

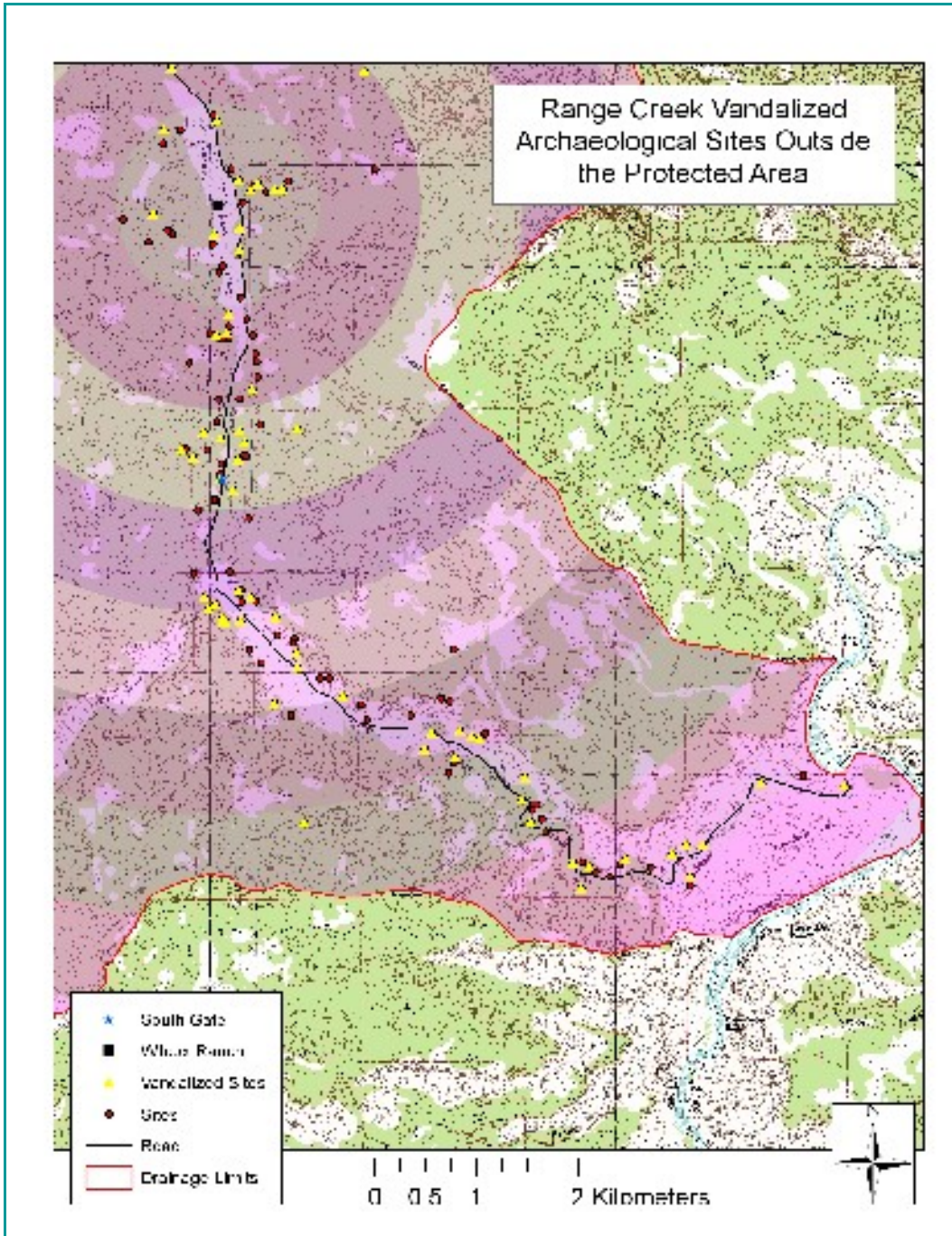


Figure 2.5: Distribution of vandalized sites, lower Range Creek (1 kilometer increments).

When the vandalized sites were examined by rank, the data revealed that most vandalism (78 percent) reflected high impact activities such as excavations and wanton destruction of sites (Rank 3). Moderate impacts (Rank 2) were observed at 8 percent of vandalized sites and low impacts (Rank 1) were observed at 15 percent of vandalized



sites (Figure 2.9). When sites are delineated spatially by rank, another significant pattern emerges. The vast majority of Rank 3 impacts have occurred at sites south of the

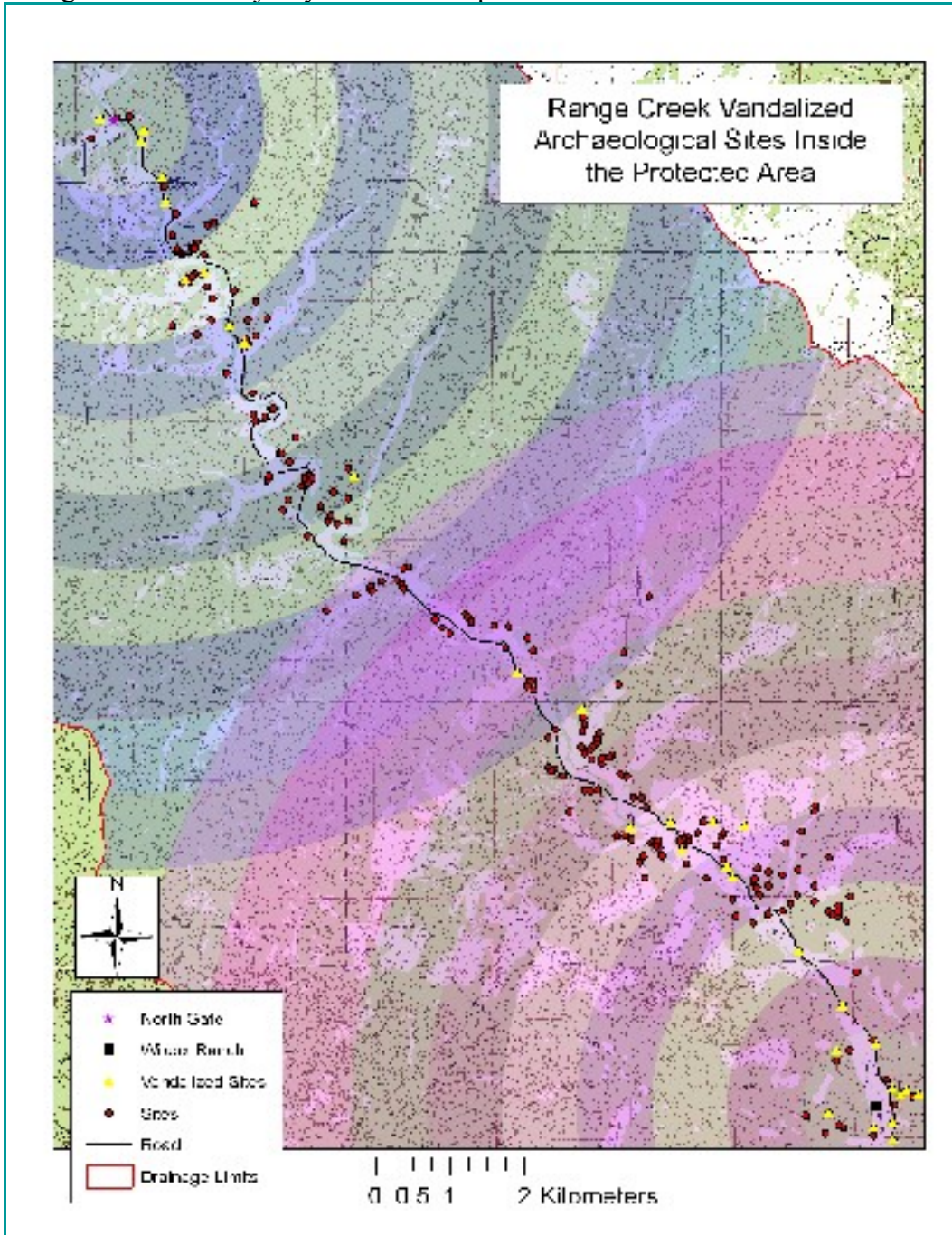


Figure 2.6: Gradational pattern of all vandalized sites, Range Creek Canyon

protected area that has been and remains accessible to the public. In this area, 88 percent of vandalized sites reflected Rank 3 impacts. A smaller cluster of Rank 3 vandalized sites is likewise located around the north control point, but very few are located along the corridor between the Wilcox Ranch and the north locked gate. Although vandalism is less pronounced in the northern portion of the study area, 57 percent of vandalized sites were

categorized as Rank 3 impacts. Of note, the frequency of Rank 1 and 2 impacts is relatively low outside of the protected area (Figure 2.10).

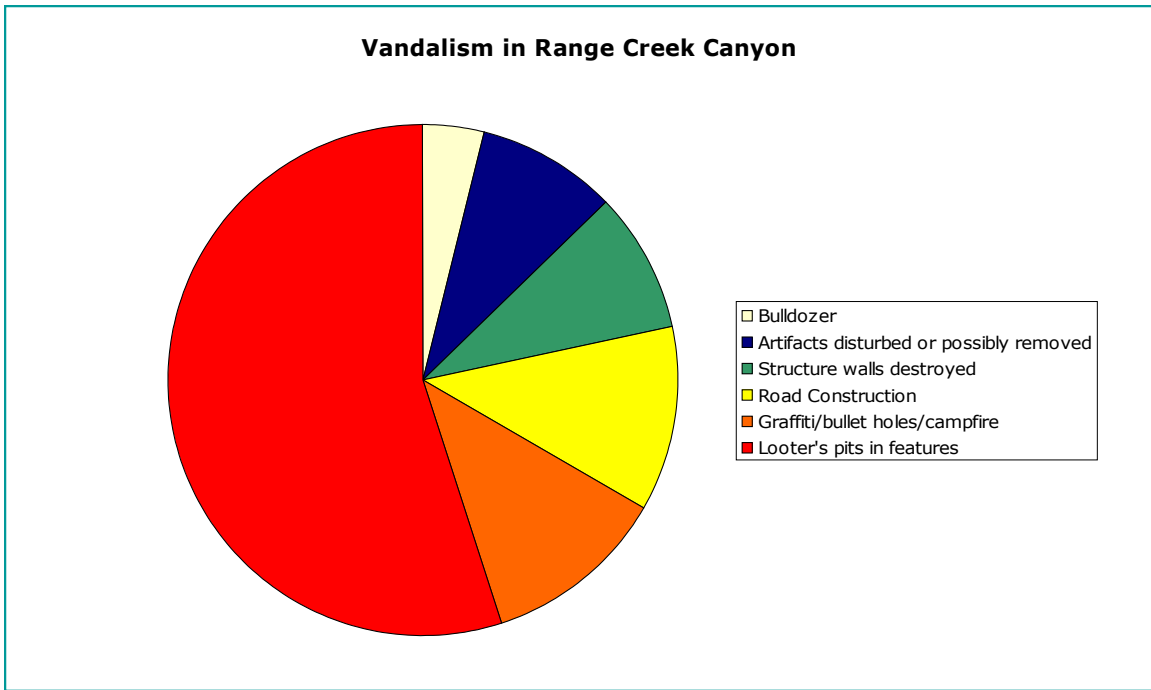


Figure 2.7: Damage to Range Creek sites (all human impacts).

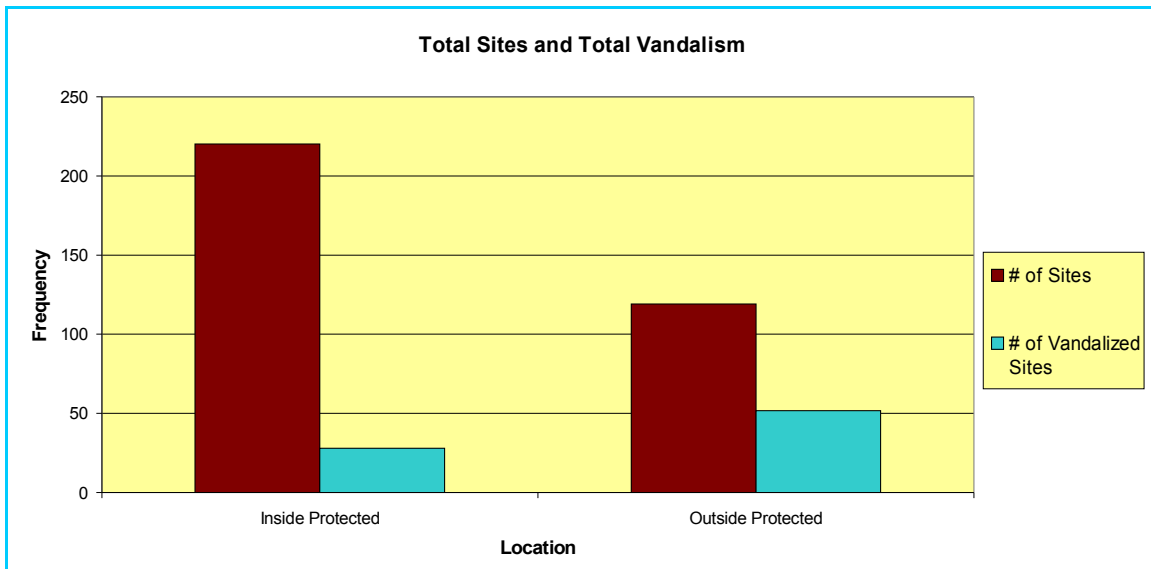
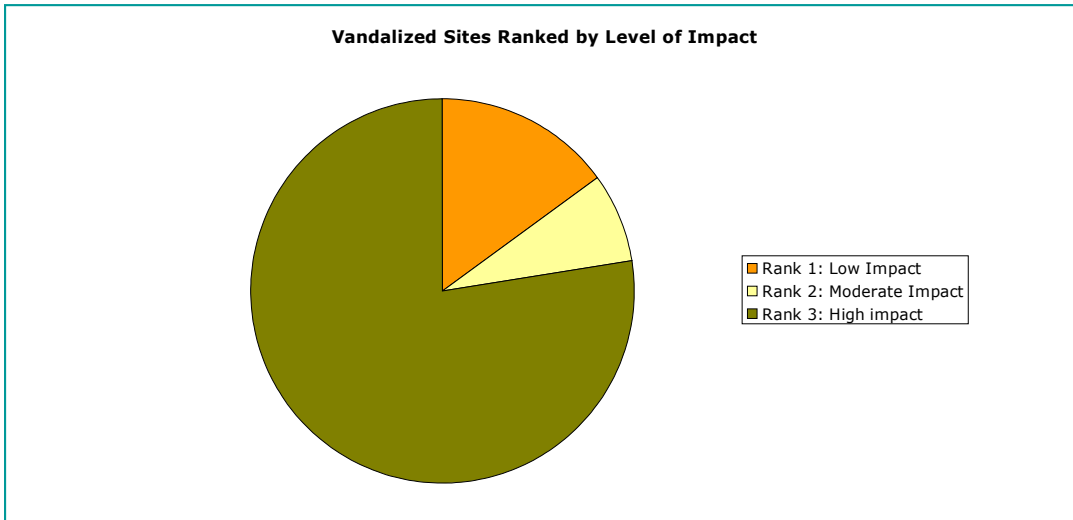


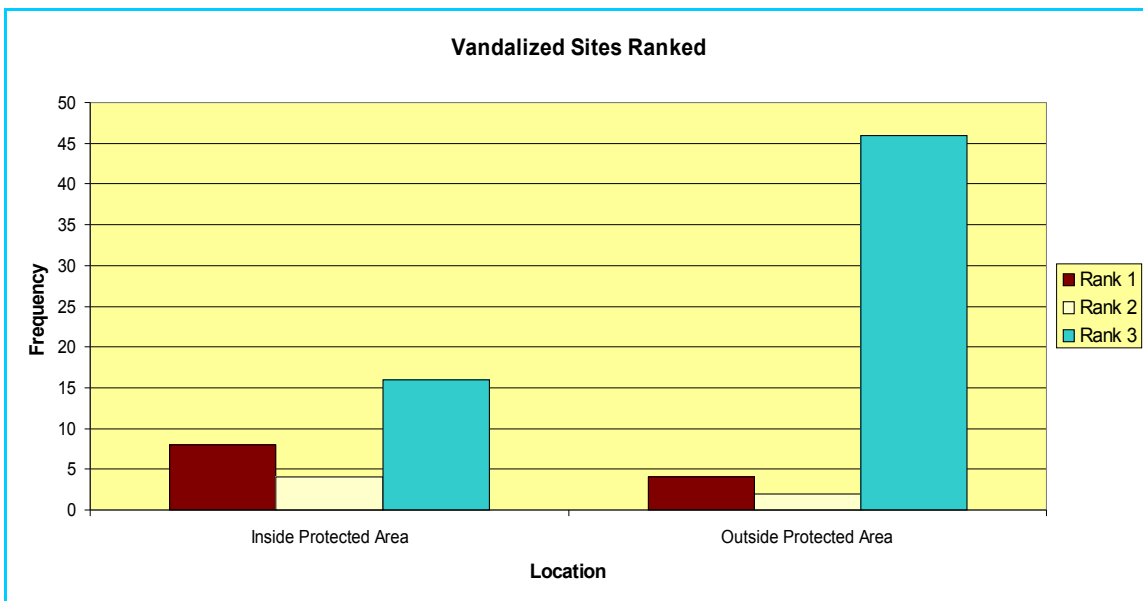
Figure 2.8: Frequency of vandalism inside and outside controlled access points.

When vandalized sites are considered within the context of all recorded sites, 18 percent (62 sites) of all sites reflected Rank 3 impacts, 2 percent (6 sites) reflected Rank 2 impacts and 4 percent reflected Rank 1 impacts. These data were further analyzed by implementing 1-kilometer increments from both the locked gate on the north and the Wilcox Ranch on the south. These data are indicated in Table 2.1.





**Figure 2.9: Adverse impacts by rank.**



**Figure 2.10: Distribution of vandalized sites by rank in relation to controlled access points.**

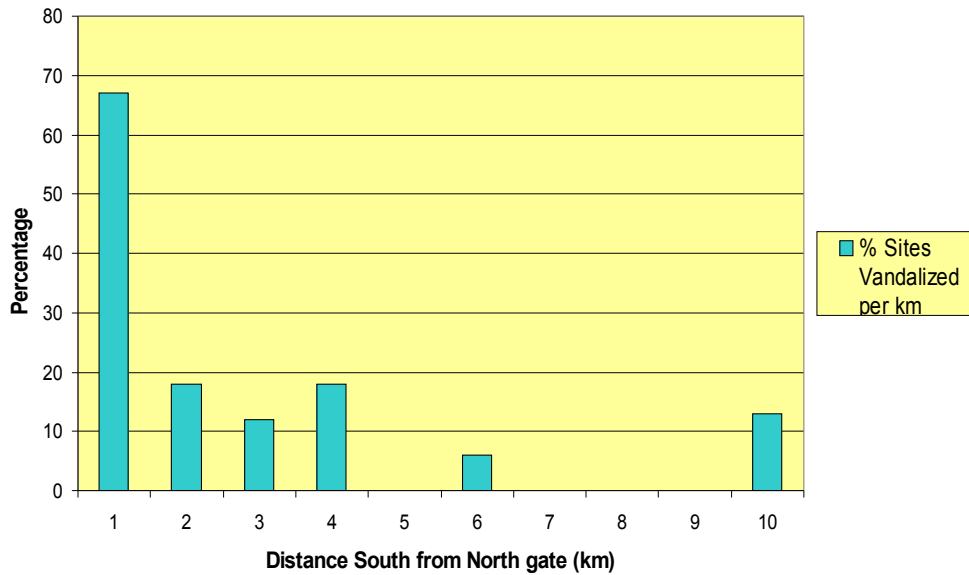
The GIS data demonstrate a direct inverse relationship between distance from controlled access points and the frequency of vandalized sites, although control points are not an absolute deterrent to vandalism. However, the percentage of vandalized sites per kilometer clearly diminishes as distance from control points increases. This is particularly evident as distance increases to the south from the north locked gate (Figure 2.11). The same pattern emerges as distance north of the Wilcox Ranch increases (Figure 2.12). However, the high percentage of vandalized sites within 2 kilometers of the Wilcox Ranch also suggests that individuals associated with ranching activities in that area have

engaged in vandalism sometime in the past. These activities could have preceded the Wilcox ownership of the property in 1951, or they could have resulted from family and guests to the ranch. The frequency of vandalized sites in this area is not considered coincidental or a statistical aberration.

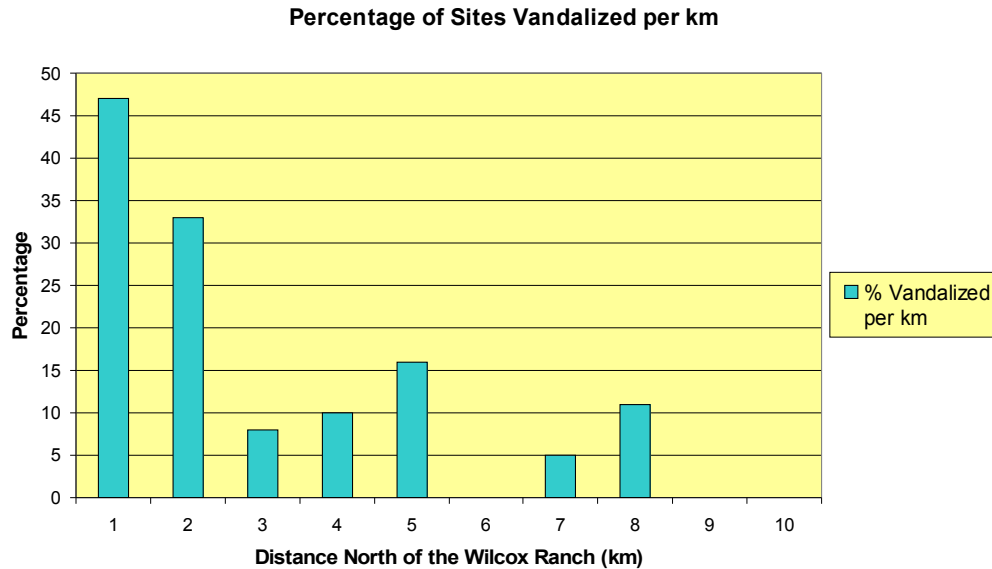
**Table 2.1: Frequency of vandalized sites by type and location**

	# of Sites	# of Vandalized Sites	% Vandalized	Rank 1 Sites	% Rank 1 Vandalized	Rank 2 Sites	% Rank 2 Vandalized	Rank 3 Sites	% Rank 3 Vandalized
Outside Protected Area	119	52	44	4	8	2	4	46	88
Inside Protected Area	220	28	13	8	29	4	14	16	57
Total	339	80	23	12	15	6	8	62	78
Not Vandalized	259								
Vandalized	80								
Rank 1	12								
Rank 2	6								
Rank 3	62								

**Percentage of Sites Vandalized per km**

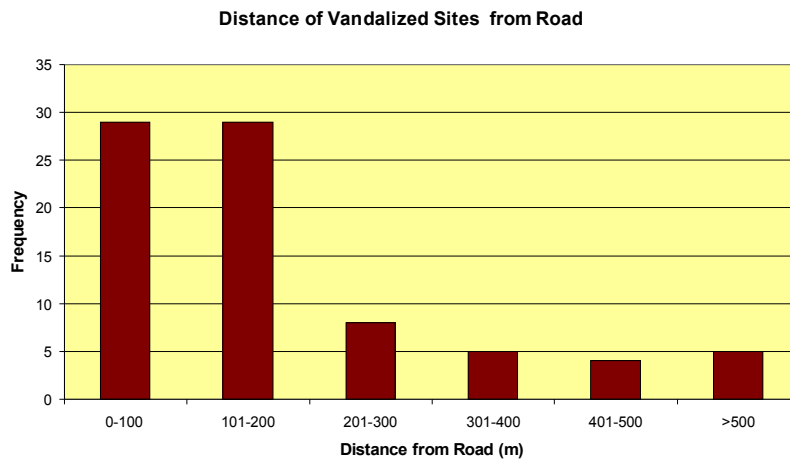


**Figure 2.11: Percentage of all sites that are vandalized north to south (1 kilometer increments).**



**Figure 2.12: Percentage of all sites that are vandalized south to north (1 kilometer increments).**

The GIS data also demonstrate a direct relationship between the Range Creek road and site vandalism. The vast majority of vandalized sites are located within 200 meters of the existing roadway (equally distributed between 0 to 100 meters from the road and 100 to 200 meters from the road). Beyond 200 meters, the frequency of vandalism drops dramatically, but nonetheless persists (Figure 2.13). These data suggest that individuals engaged in vandalism of archaeological sites rarely venture a significant distance from an existing road, and that road access is a determining factor in the occurrence of vandalism. This also suggests that even those individuals who walked into Range Creek from a controlled access point (north and south locked gates) rarely ventured a significant distance from the road. Site visibility from an existing road may well be a factor in site vandalism, but the IMACS data was unable to examine this variable and it remains a subject of future investigations.



**Figure 2.13: Frequency of vandalized sites as it relates to distance from the road.**

### **Summary**

The GIS analysis of 339 sites recorded in Range Creek canyon from 2002 to 2004 reinforce three assumptions (stated in the working hypotheses above) that sites south of the Wilcox property boundary are more likely to be vandalized than sites inside the protected area, that vandalism will decrease with increased distance from control points and that sites close to the road are more likely to be encountered and therefore are more likely to be vandalized. Related to the north locked gate, these findings are predicated on basic assumptions, supported by the GIS data, that pedestrians coming in to Range Creek from the north locked gate will rarely proceed more than 5 kilometers and that pedestrians will follow the road and visit sites visible from the road. Related to the south locked gate, vehicular access into lower Range Creek Canyon via the Turtle Canyon Road remains unrestricted and there is little law enforcement presence or visitor contact occurring in that area.

The GIS data suggest that sites within a spatial range of 5 kilometers from the north locked gate remain at risk to various impacts resulting from pedestrian visitation and consequently there is an increased potential for site degradation and vandalism. These sites will generally be located within 200 meters of the Range Creek road, although vandalism at more remote sites remains a significant possibility. The data also suggest that unrestricted access south of the south locked gate has resulted in much greater frequency of seriously vandalized sites (Rank 3) and that future vandalism of sites in this area will likely persist with continued unrestricted public access to this area. Indeed, two instances of vandalism appear to have occurred in this area since 2003, one at a site on private property just inside the south locked gate that has been seriously damaged (Figure 2.14 and Figure 2.15) and another just south of the south locked gate that experienced minor vandalism.



**Figure 2.14: Site 42Em753 as it appeared in 2003. Note the interior vegetation.**



**Figure 2.15: Site 42Em753 as it appeared in 2006. Note new looters pits and cleared vegetation.**

At 42Em753, crews observed in 2003 evidence that the interior had been looted sometime in the past, but the looters' holes had largely refilled through natural erosion and native plants were growing inside the looted area. When the site was revisited in 2006, much of the interior vegetation had been cleared and there were fresh piles of back-dirt located outside the structure walls. Based on the amount of back-dirt and the lack of any plant growing in the back-dirt piles, it is likely individuals using shovels vandalized



the site sometime between 2004 and 2006. At 42Em3056, interior rockshelter deposits were undisturbed in 2003 except for some rodent activity. When the site was revisited in 2006, ORV tracks led across the floodplain to the site, and there was evidence of minor digging inside the shelter (Figure 2.16). It should be noted there is no consistent law enforcement presence in this area of Range Creek.

The GIS data suggest that the removal of vehicular access restrictions that are currently implemented would likely result in expanded vandalism impacts into areas of the Wilcox acquisition where such evidence is now minimal. This would include all areas within 200 meters of the road between about the Bear Canyon confluence on the north to about the Dilly Canyon confluence on the south. These data also suggest that law enforcement efforts should be focused primarily but not exclusively on pedestrian visitation along the first 5 kilometers south of the north locked gate. It appears that current law enforcement efforts to contact all visitors to the canyon have created a greater public awareness as to the importance and sensitivity of the cultural remains. It is also possible that requirements that visitors first obtain permits to access the canyon and that they register their names and addresses have been a deterrence to vandalism (Mark Connelly, personal communication 2006).



**Figure 2.16: Small looters hole at 42Em3056 as observed in 2006.**

These data also suggest that uncontrolled vehicular traffic into the lower canyon area (south of the south locked gate) by way of the Turtle Canyon road has facilitated significant vandalism in the past, and that continued vehicle access will result in continued vandalism of sites. It should be noted that this area of Range Creek Canyon

also features a greater number of deep alcoves and sheltered residential occupations that are attractive to looters and artifact collectors. Archaeologically, it also remains among the least investigated areas in Range Creek Canyon and one that offers considerable potential to study the nature and distribution of vandalism as it relates to vehicular access.

In the past, vandalism of sites in the southern part of the study area appears to have been focused on areas around the Wilcox-Pillings ranches and in areas around and to the south of the south locked gates. The GIS data suggest that the frequency of vandalized sites drops significantly as distance increases to the north of the Wilcox Ranch complex. These data suggest (1) past vandalism around the Wilcox Ranch was precipitated by individuals associated with private ranch operations in that area, and (2) individuals who were not associated with the ranching activities focused their vandalism activities on easily accessible sites around the south locked gates and along the road to the south where vehicular access was not restricted.

It can also be inferred from these data that a continued permanent administrative presence at the Wilcox Ranch will be an effective deterrent to vandalism encroaching from the south locked gate, but that sites around the south locked gates within easy pedestrian access remain vulnerable to vandalism. As mentioned, sites in the area of unrestricted public access south of the south locked gate will likely continue to be subjected to vandalism, as evidenced by two recent incidents of looting in this area. It can also be inferred that vehicle restrictions in this area (e.g., closure of the Turtle Canyon Road) would significantly protect the abundant cultural resources in this area from future adverse human impacts.

Researchers posed two important assumptions that were not tested, both of which warrant additional investigation. One is that sites clearly visible from the road are more likely to be vandalized (regardless of distance from the road), and that other sites not visible from the road but in close proximity to sites that are visible would be more likely to be vandalized. The absence of such data on the IMACS site forms mandates that all sites be revisited and additional data collected. These efforts were begun in 2006 and will continue into the foreseeable future with the collection of finer-resolution data relevant to all adverse impacts (these findings will be the subject of subsequent reports).





## Chapter 3

### Historical Comparisons: The Claflin Emerson Photo Collection

#### *Historical Overview*

Aside from nearby Nine Mile Canyon, the archaeological resources of the greater West Tavaputs Plateau remained *terra incognita* until the summer of 1931 with the arrival of the Claflin-Emerson Expedition at the Pace Ranch in lower Nine Mile Canyon. This expedition, sponsored by the Peabody Museum at Harvard University, split into three exploration parties. One was dispatched to investigate the resources of Nine Mile Canyon, another to investigate upper Nine Mile Canyon and Argyle Canyon, and the third to investigate unexplored plateau drainages to the south of Nine Mile Canyon, including Range Creek (Scott 1931).

Range Creek, a north-to-south drainage with permanent water, had remained largely unknown to archaeologists prior to 1931. A handful of ranchers and homesteaders had lived in the canyon since the late 1800s, but the drainage was inaccessible by road and the terrain was forbidding. No reports of archaeological observations in this drainage have been identified that date prior to the arrival of the Claflin-Emerson Expedition in 1931, the final year of a reconnaissance begun in 1928 of little-known areas north of the Colorado River.

The 1931 field season of the Claflin-Emerson Expedition started from Green River, Utah, in early July 1931 under the direction of Donald Scott and proceeded north up the east bank of the Green River and across the East Tavaputs Plateau through Grand and Uintah counties. The expedition crossed the Green River on the Muse Ferry just north of Nine Mile Creek and proceeded to the Pace Ranch (Scott 1931:6). Scott split the group into three parties. One group consisted of William Bowers, James Dennison, Waldo Forbes and an unidentified wrangler, who departed the Pace Ranch on Aug. 2, 1931, on horseback, proceeding up Cottonwood Canyon to Willow Springs and then into Range Creek Canyon (Scott 1931:10), probably down Gooseberry Canyon (Bowers 1931:17).

Over a two-week period of time, the party explored Range Creek to its mouth, and then proceeded north up the west bank of the Green River, exploring Bear, Snap, Calf and Rock Creek canyons. They turned west up Steer Ridge Canyon to the headwaters of Flat Canyon, then down Jack Canyon and back to the Pace Ranch through Rock House Canyon. “This reconnaissance revealed a continuation of the same types of pictographs as found in the main canyon of Nine Mile. Very few...open sites were encountered, but a large number of stone and adobe granaries with pole roofs are to be found here” (Scott 1931:10). Twenty sites were described in Range Creek Canyon specifically, and a number of additional rock art sites were photographed and sketched, and occasionally they were described in field notes. These field descriptions were subsequently synthesized by Gunnerson (1969), but the edited expedition field notes are far more detailed and are used here and are cited as Scott (1931).

The significance of the Claflin-Emerson Expedition to the history of archaeological research in Utah cannot be understated. It was the first expedition to investigate the cultural resources north of the Colorado River with scientific intent; it described resources prior to their wanton vandalism and looting; and its research effectively defined the Fremont culture (Morss 1931), a definition that remains largely intact today. Unfortunately, the majority of the expedition research remained unpublished until Gunnerson (1969) synthesized the notes. Of more importance to this study, the expedition appears to have been the first to photographically catalog some of the cultural resources of Range Creek. Those photographs now provide a critical baseline for an assessment of site degradation in Range Creek Canyon over the past 75 years.

### *The Photo Collection*

From May 23, 2006, through May 25, 2006, on-site research of the photo archives and field notes was conducted at the Peabody Museum of Archaeology and Ethnology at Harvard. With the enthusiastic support of museum staff, all photographs taken by the Claflin-Emerson Expedition in Range Creek Canyon in 1931 were digitally copied, and field notes related to the entire 1931 expedition were copied to assist in on-the-ground assessments. These field notes often contain detailed observations and sketches not available in Gunnerson (1969), including observations on the geography and botany of the area. These photos and notes provide the database for a comparison of site conditions observed in 1931 to those observed today.

This research was conducted with the same working hypotheses as stated in Chapter 1, but within the context that a comparison of modern photographs to historical photographs has the potential to reveal damage to sites (natural and human-caused) that has occurred over the past 75 years. Where photographic data was not available or inconclusive, the original field notes were consulted. This current effort is intended to assess the level of damage to sites that has occurred sometime in the past 75 years, but it does not serve as an effective predictive model as to which sites may be damaged in the future. It does, however, provide land managers with important baseline data to measure the rate of site degradation over time, and to monitor ongoing damage through natural erosion and human impacts. This assessment also includes recommendations for future management of sites in potential areas of impact.

This research mandated a concerted effort to relocate all sites identified in 1931 (Figure 3.1). A few of the 20 Claflin-Emerson sites in Range Creek Canyon were accidentally discovered during the first field season (2002) of the Range Creek Archaeological Project, and the remainder were relocated and documented in 2003 and 2004. This documentation was done without the assistance of historical photographs. Nonetheless, the exceptional descriptions in the field notes allowed identification of these sites to an extremely high level of confidence. Many of these identifications were verified in 2006 through an examination of 1931 photographs and sketches. It should also be noted that the field journal of the three expedition members contain considerable descriptions not included in the edited versions of those journals.

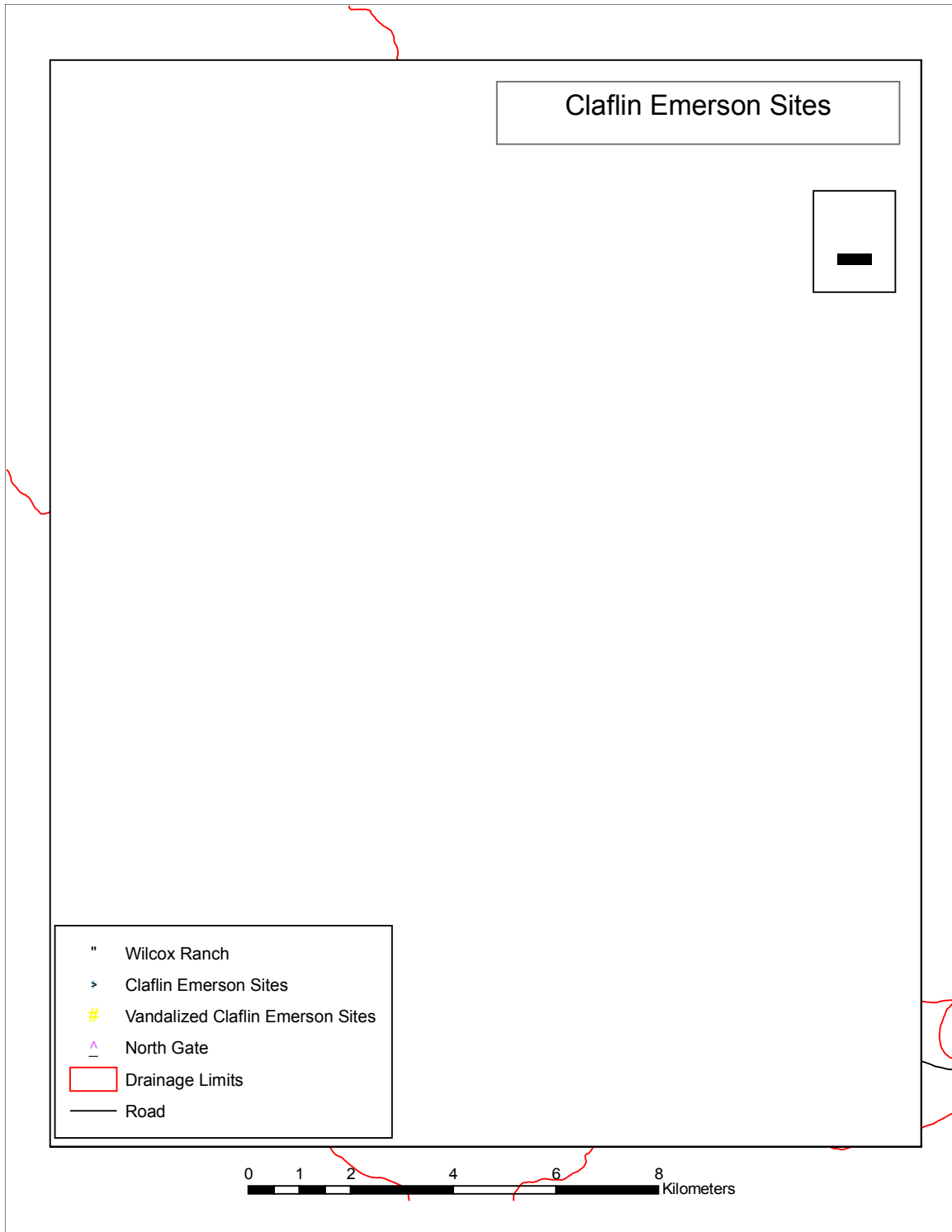


Figure 3.1: General location of all sites identified by the Clafin Emerson Expedition in 1931.

For the purposes of this study, all Range Creek sites photographed, illustrated and described by Clafin Emerson Expedition participants are described from north to south as they were encountered in 1931. The 1931 descriptions are repeated as they appear in an edited, type-written transcript of the notes and are cited collectively as Scott (1931).

Where the hand-written journal notes offer additional insight, the journal of the relevant participant is cited by individual name. This study offers an analysis of current site condition based on observations made at the time the site was recorded or revisited. Where possible, 1931 and modern photographs are offered for comparison. These photographs are offered for research purposes only, and any subsequent use of these photographs is not permitted without the written permission of the Peabody Museum.

#### **42Cb1704**

The first site apparently encountered, but not mentioned in the field notes, was 42Cb1704, a rock art panel [REDACTED] that continues to receive considerable public visitation, as evidenced by numerous pedestrian trails to the site. The panel was not described or assigned a temporary number in 1931, but it was photographed (Figure 3.2). A comparison to a 2002 photograph (Figure 3.3) indicates the site is in essentially the same condition as observed in 1931. The site is located several meters above present ground surface and is not easily accessible or susceptible to vandalism. Given the absence of associated artifacts that could be subject to surface collection and the location of the panel on a cliff face above human reach this site is appropriate for public visitation and interpretation.

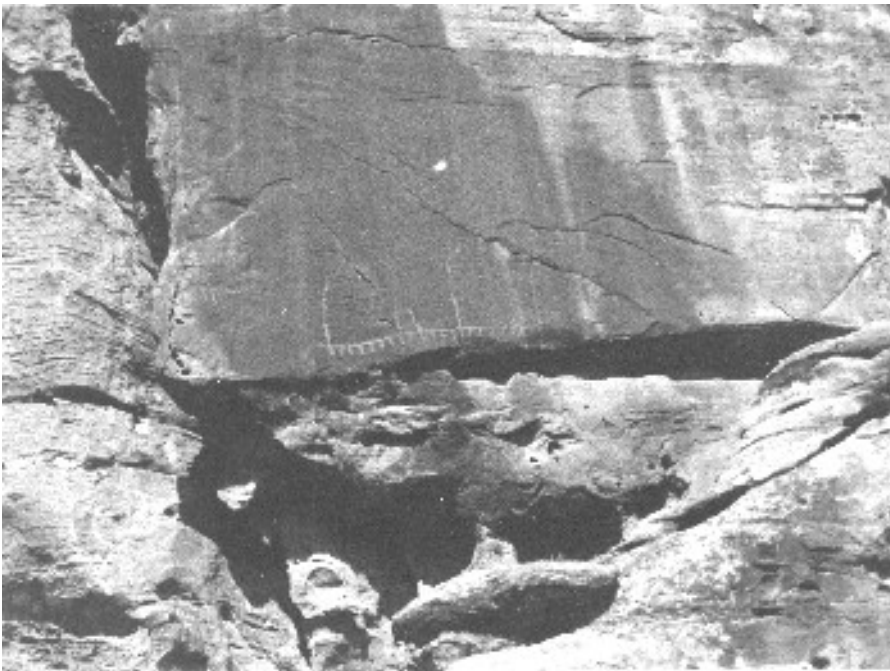


Figure 3.2: View of 42Cb1704 as observed in 1931 (Peabody Museum U-31-81).



Figure 3.3: View of 42Cb1904 as observed in 2002 (J.D. Spangler).

#### 42Em2825

This site, documented in 2002, consists of a large rockshelter [REDACTED] that features traces of red and white pigment on the back of the shelter. A large petroglyph panel is situated on a cliff face. The Claflin Emerson Expedition offered sketches (Figure 3.4) and a limited site description, but no temporary number was assigned. Dennison described the site as:

*A cave 20 yards long on the east side of Range Creek, 20 feet above the canyon floor [REDACTED] West exposure, easy approach. The front (is) hidden by oaks. (It is) gray-brown sandstone (with an) overhang 20 feet. (Unreadable) dark red ochre (unreadable) pictographs. Both (are) evidently of this shape, probably men but so (?) that hard to make out. One has fingers on one hand visible. Both (are) about 10 cm high. One lighter red snake about 1 cm wide. Two white paintings about 2 cm wide. Other (figure) indeterminate, about 10 cm high, about 3 cm wide. Cave recently occupied and dirt, rock floor approx. 1 foot or more deep. All pictographs about 40 cm above dirt floor on back wall of the cave. On sandstone wall at northwest end of cave beyond overhang, facing south, (are) 17 or 18 pecked pictographs about 30 feet above canyon floor. Nearly all are like this (sheep), av. size 10 centimeters, legs longer than shown, tailless, one has straight horns. One or two seem to have pronged horns. One large sparsely pecked figure, a horned snake with a halo?[Dennison 1931:24].*

Dennison's field notes indicate that a photograph was taken (U-31-93), but this was not located during a search of the Peabody Museum archives. The 1931 notes indicate the cave was "recently" occupied, and in 2002 evidence was observed that individuals had sought shelter there in historic or modern times. There is no evidence the shelter has been looted, and most of the shelter images apparent to Dennison in 1931 are still evident (Figure 3.5), although some appear to be more eroded. The painted images on the interior of the shelter have continued to suffer natural erosion that makes them mostly indiscernible. The petroglyph panel on the northwest has likewise eroded with the horned snake figure largely indiscernible (Figure 3.6). This site is not visible from the road and likely has escaped notice by most canyon visitors. Given the potential for subsurface cultural deposits, visitation to this site should be discouraged.



Figure 3.4: Rock art images (shelter left figures, cliff right figures) as sketched by Dennison (1931:23).

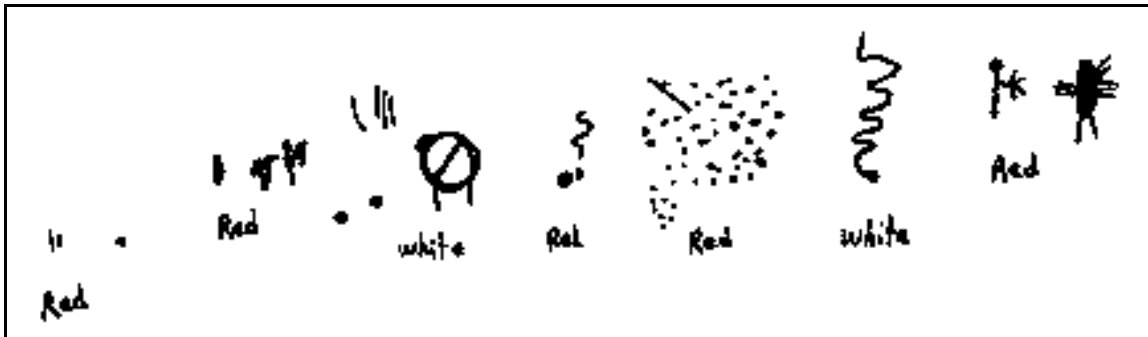


Figure 3.5: Rock art images inside the shelter at 42Em2825, as sketched in 2002 (D.K. Spangler).



Figure 3.6: View of petroglyphs north of shelter at 42Em2825 as seen in 2002 (J.D. Spangler)

#### 42Em2827 (PR12-1)

This site consists of a sheltered area (Figure 3.7) with cultural deposits and rock art, and remnants of a small granary located in a natural sheltered area in the cliff face above, all documented in 2002. [REDACTED]

[REDACTED] This site was described in 1931 by Forbes as:

*On the north wall of Range Creek is a granary on a small ledge on a point of a sandstone cliff about 30 feet above the canyon floor. The east face of the cliff forms the back wall. The only remaining construction is part of the side wall nearest the rear at each side. These remaining walls are about 50 centimeters high and are 80 centimeters apart. The masonry is of alternative lumps of adobe and small stones. Both the lumps and the stones average 12 by 8 by 6 centimeters in size. The masonry is irregularly coursed. The only trace of woodwork is a stick, 60 centimeters long by 4 centimeters in diameter, in a vertical position next to the outside of the south wall. Below the granary and 1.6 meters above the base of the cliff are a group of pecked pictographs with some red and white paint also used. See Forbes' book page 51 for sketches of these pictographs. On the same level with and adjacent to the northernmost of the pictographs is a cave 6 meters long and 9 meters deep and apparently dry. Near the back wall is a flat stone 40 by 35 centimeters with a rubbed area 25 by 10 by 1.5 centimeters deep. Troweling revealed no definite floor level. Traces of charcoal were found down to 50 centimeters where there is an abundance of it [Scott 1931:77].*





Figure 3.7: Sheltered area at 42Em2827, as observed in 2002 (J.D. Spangler).

No photograph was taken of the granary feature in 1931, but it appears to be in the same condition as that described in 1931. The estimates of wall size appear to be about the same, and the vertical pole noted in 1931 remains in a vertical position (Figure 3.8). However, local informant Waldo Wilcox indicated this feature was once much more intact, and that it was damaged by trespassers. Based on visual references from the ground below (access is extremely difficult), any damage to the site by humans appears to have been minimal.





Figure 3.8: View of granary at 42Em2827 as observed in 2006. Note vertical pole described in 1931.

The rockshelter below the granary has been severely impacted by livestock utilizing the large dry area as a shelter from the elements. In 1931, a groundstone tool was observed near the back wall of the shelter, but this artifact is no longer evident at the site. Also in 1931, test excavations revealed charcoal to a depth of 50 centimeters where they encountered abundant charcoal. There is no evidence of any surface charcoal, and the surface deposits are heavily disturbed, probably by livestock. An assessment of the rock art panels is more problematic. The field notes suggest the presence of red and white pictographs outside the rockshelter, but these are no longer evident. Inside the shelter are indistinct scratching and peck marks, as well as two white anthropomorphs, a white undulating line and remnants of red pigment. These figures appear to correspond to images observed and sketched in 1931 (Figure 3.9), suggesting the panel described in 1931 was located inside the shelter rather than outside.

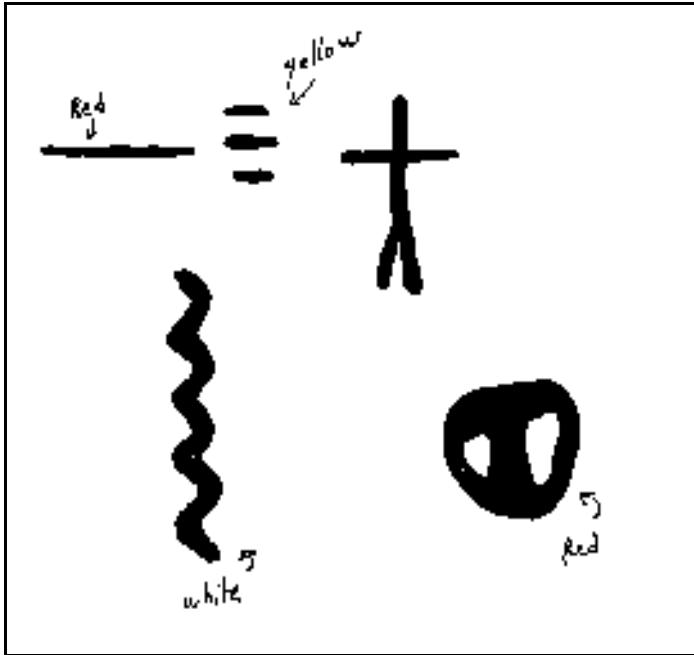


Figure 3.9: Rock art images as sketched in 1931 (Forbes 1931:51).

A comparison of the 1931 sketch to the 2002 sketch (Figure 3.10) reveals the same images are present today but at least one red circular figure has severely eroded over the past 75 years. It appears the only artifact observed in 1931 has been removed from the site. This site continues to receive heavy public visitation given its proximity to the road and the north locked gate. Since the site was revisited in 2002, significant pedestrian paths have developed around the site, and garbage has been left on the ground and stuffed into cracks inside the shelter. Given the paucity of artifacts that could be subjected to surface collecting and the inaccessibility of the architectural feature above the shelter, this site is appropriate for public visitation, interpretation and education outreach efforts, including proper site etiquette. However, the presence of subsurface deposits warrants continual monitoring of this site to ensure against illegal excavations, camping and other adverse impacts.

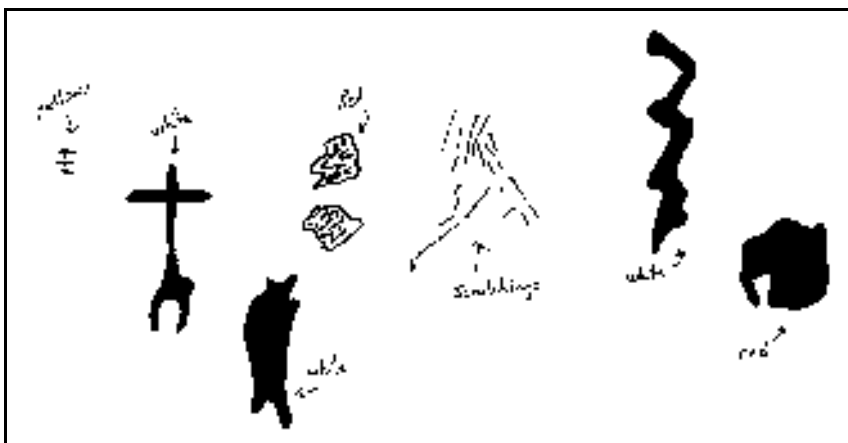


Figure 3.10: Rock art as sketched in 2002 (D.K. Spangler).

## 42Em2828

This spectacular rock art site is located in a very large natural alcove above the first cliff level and above 42Em2827. [REDACTED]

[REDACTED] This site was mentioned in the 1931 field notes, but at least three photos offer good comparisons of present site condition to that observed in 1931. This site was documented in 2002 (Figure 3.11) and, based on a comparison with the 1931 site photograph (Figure 3.12), it was found to be in essentially the same condition. However, there appears to be some evidence of natural erosion. A close-up view of a red-and-white zigzag design taken in 1931 (Figure 3.13) reveals what appears to be greater amounts of pigment and interior designs than are evident today. The colors also appear to be more vivid and detailed in the 1931 photograph, although this may be a photographic misperception. Access to this site is moderately difficult, involving backtracking up canyon more than 100 meters, ascending a steep slope and walking along on a narrow, eroding ledge. This access is likely a deterrent to significant public visitation (visitors typically view the panel with binoculars from the valley floor). Given the public safety risk of the narrow ledge and the sensitive qualities of pictograph pigments, public visitation to this site should be discouraged.

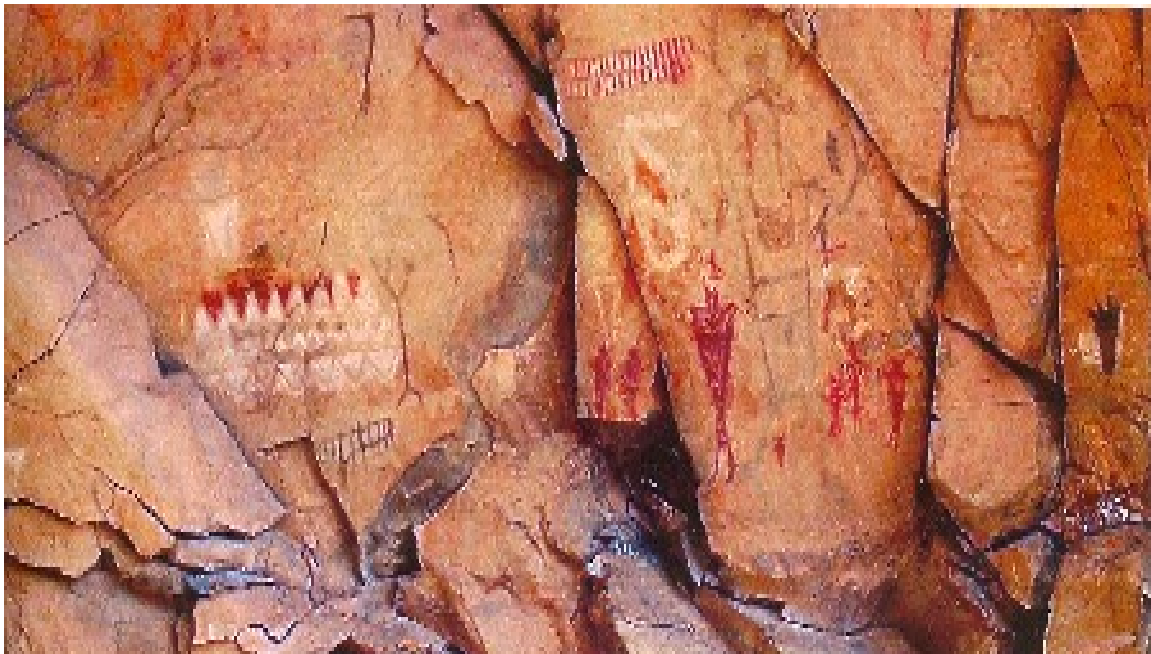


Figure 3.11: View of rock art panel at 42Em2828, as observed in 2003 (Utah Museum of Natural History).



Figure 3.12: View of rock art panel at 42Em2828, as observed in 1931 (Peabody Museum U-31-164).

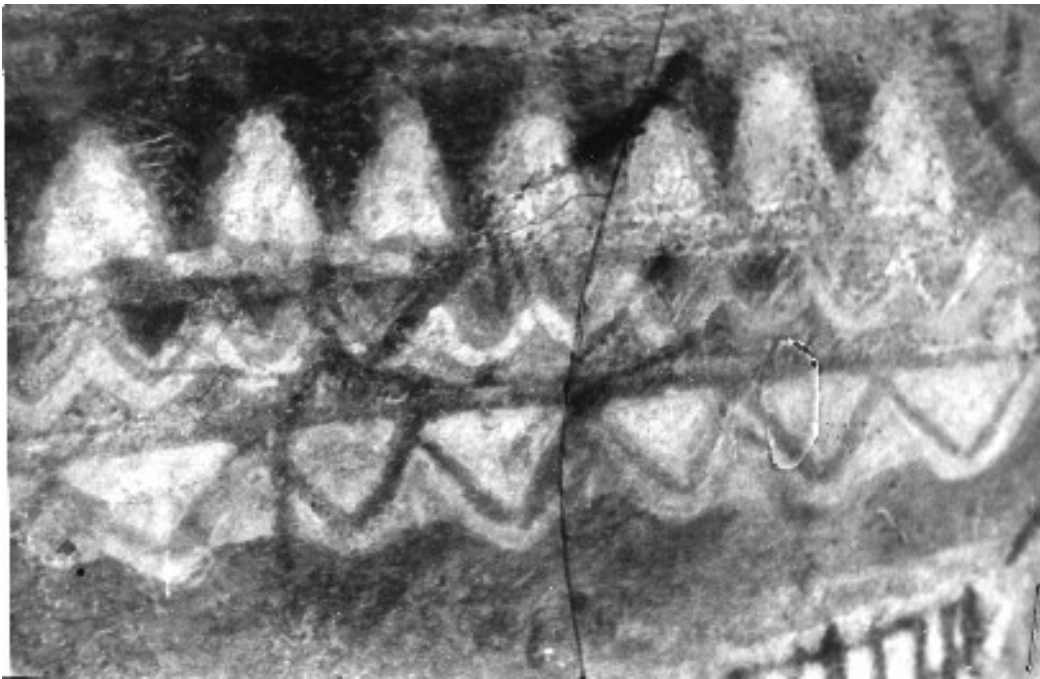


Figure 3.13: Close-up view of pigments at 42Em2828, as observed in 1931 (Peabody Museum U-31-162).

### **42Em2835 (PR12-2)**

This site consists of a platform granary and an elaborate rock art panel, including a large shield figure pecked and painted in blue, [REDACTED]. This site was initially described by Bowers as:

*Two granaries on Range Creek, 75 feet above valley floor, [REDACTED] [REDACTED]. Talus slope 50 feet up, hard climb up cliff face 25 feet. Pictographs at top of slope; goats and serpents with goat front parts. One globular-bodied man, one rainbow-like affair, all pictured.. Slightly away from photograph, one spiked spiral and two other figures. Granary A. On a ledge, no overhang, conforms to the triangular form of ledge. Possible stone wall in front, now gone, irregular stones, mostly adobe. Dimensions: front is 1.6 meters, back 2 meters, side 1.5 meters. The ledge forms the back wall and part of the side. One side of front is a large crack filled by a log 20 centimeters in diameter, adobe, rocks, sticks piled irregularly for leveling. At intersection of open side and cliff back are five pine or cedar poles set vertically about 3 centimeters long, lodged behind the back log extending 2 meters and looking as it had been part of structure to hold roof and part of front wall. In the crack between the side and back (are) walls logs 15-20 centimeters in diameter, one to two meters long possibly for filling, most likely for roof or wall structure. Fragments of poles were found on the floor. Floor is of rock except where filled. (It is) now covered to a depth of 40 centimeters with sticks or poles, adobe and small rocks. No corncobs visible. Not excavated. At foot of cliff at the top of talus, sherds and flint fragments were found, and lying below that sherds. Granary B (is) inaccessible 30 feet above talus on ledge with slight overhang. Structure (is) of adobe with few rocks. Some smallish poles 5 to 7 centimeters in diameter, 60 centimeters wide, 60 centimeters long [Scott 1931:78].*

The 1931 photograph (Figure 3.14) depicts only the rock art panel, which was found in 2002 to be in essentially the same condition as that observed in 1931 (Figure 3.15). The granary structures were not accessible in 2002, and detailed observations were not possible from the slope below. This site is within the spatial range of pedestrian visitation in upper Range Creek, but it is not readily visible from the road and likely receives minimal visitation at the current time. An abundance of potsherds and lithics were observed on the slope below during a site revisit in 2004, which could be subjected to surface collection. The structural feature above the rock art panel is difficult to access without climbing gear and likely will be protected by its inaccessibility. The rock art panel is one of the more aesthetically impressive sites in the canyon, and the site will undoubtedly become the focus of considerable visitation if its location is revealed. It is recommended that public visitation to this site be discouraged. However, if the location of this site should become public knowledge, a more comprehensive investigation and data recovery should be initiated.





Figure 3.14: Rock art panel at 42Em2835 as observed in 1931 (Peabody Museum U-31-161).



Figure 3.15: Rock art panel at 42Em2835 as observed in 2002 (J.D. Spangler).

**42Em3210 (PR12-3)**

This rockshelter with possible collapsed roof detritus is located in an alcove above and west of 42Em2835 (Figure 3.16).

This site was initially described by Dennison as:

*The cave runs east and west under a 5 meter overhang and is about 15 meters long. The floor is level and sandy, scattered with many sandstone chunks mostly from the ceiling. The back walls slope up rather gradually for 20 feet to horizontal overhang. 15 centimeters below the level of blown sand was found an old floor. Just above this floor, three gray, undecorated, very crude potsherds were found. A greasewood digging stick was also discovered; it was only partly covered by sand, 56 centimeters long with the crossbar at the top 14 centimeters long. It had evidently been carefully trimmed leaving pock marks over it [Scott 1931:79].*



Figure 3.16: Sheltered area at site 42Em3210, as observed in 2004 (J.D. Spangler).

No photographs were taken of the site in 1931, but it appears to be in the same condition. Based on observations in 2004, there is no evidence the site has been visited

since the Claflin Emerson Expedition. It appears to contain abundant subsurface deposits that have been exposed through natural erosion. The Claflin Emerson test pit southeast of the cultural deposits is still visible, although deflated. Access to this site is steep and circuitous, and it is likely the site rarely receives any visitation. Furthermore, the cultural deposits are not easily recognizable, and would likely escape detection by most individuals. Given the potential for undisturbed deposits with significant potential to contribute to an understanding of prehistoric lifeways, visitation to this site should be discouraged.

#### 42Em2841 (PR12-4)

This site consists of a series of storage facilities on an inaccessible ledge [REDACTED]. The site was documented in 2002 from the floodplain below. Bowers apparently viewed the site in 1931 by climbing a tree to obtain a lateral view into the structures. He observed:

*On the south side of Range Creek [REDACTED] are a series of granaries on horizontal ledges under a good overhang. Granary A. Granary A is the tripartite granary about 8 meters above the valley floor with a northern exposure. This granary is inaccessible. The east room is about 1 meter deep and 75 centimeters wide. The lower part of the east wall is made of two slabs set vertically, one above the other; 1.5 meters long, 20 centimeters high, 5 centimeters thick. Between the two is a joint of red adobe 4 centimeters high and smooth on the inside. Above these two are smaller stones, 20 by 10 by 5 centimeters, probably coursed but heavily plastered with adobe concealing them on the inside and thereby making a smooth wall. The total height of the east wall is 60 centimeters. There is evidence of a front wall remaining. The front is the bare ledge rock sloping slightly outward. The only remaining suggestion of a roof is one slender pole, 6 centimeters in diameter at the back running along the wall 50 centimeters above the floor. At the east end it is imbedded in adobe and at the west end rests on the partitioned wall between Granary A and central granary. 50 centimeters above the pole there is a little adobe plaster adhering to the rear wall.*

*Granary B, central granary. This granary is 1.3 meters wide, 1.2 meters deep (inside measurements). It is squarish with at least one (the outer east) rounded corner. The east wall is of smallish flat rock, 20 by 15 by 8 centimeters laid flat in courses with more adobe than rock used. The height of this wall is 70 centimeters and the adobe is pebbly. The front wall is apparently of the same construction but has been battered down. The floor is 30 centimeters deep with adobe, etc. Traces of the roof are recognizable in the adobe lumps at the back wall. Near the cliff in the center of the granary are vertical small sticks protruding 20 centimeters from the mud of the floor. These sticks are 2 centimeters in diameter, quite smooth and they may be in a semicircle 50 centimeters in diameter around a niche*

*in the cliff wall. In the front center are three pieces of rock, comprising three fifths an apparently shaped circular stone 50 centimeters in diameter and 6 centimeters thick. The edge is rounded and this may possibly be the cover of the granary. Some small poles 5 centimeters in diameter and 7 to 40 centimeters long are lying on the floor as if they had fallen from the roof. The west wall is of red adobe only, apparently, smooth on part of the inside. It is 12 centimeters thick and 60 centimeters high.*

*Granary C, the west granary. This granary is 1.30 meters long and 80 centimeters deep. The west wall has been mostly washed away but a section of it is still left. It is similar to the east wall, 30 by 30 centimeters. Two poles lie on the floor, probably fallen from roof. 50 centimeters above the back wall and parallel to it is a pole 8 centimeters in diameter and 1.6 meters long. The east end is imbedded in the partition wall between Granaries B and C and the west end is lying on a ledge. Directly to the east and 10 feet high up the cliff is another structure. Several poles are present and the partial remains of masonry of one granary, 1.25 meters wide, 1 meter deep and 40 centimeters high. The wall seems to be made of rectangular chunks of adobe with smooth rectangular stones 15 by 12 by 7 centimeters set on top. Observation of all these granaries presented some difficulty as they were taken from a tree at considerable distance. Also, two large beams 1.2 meters long, 12 centimeters in diameter, lying perpendicular to the cliff face and projecting 30 centimeters over the edge of the ledge. These poles are apparently the bases for other walls. Near and about 3 meters above these granaries are two poles 10 centimeters in diameter and 2 meters long. They are parallel and adjacent to the cliff face and were possibly installed to be of assistance in climbing to high ledges [Scott 1931:80-81].*

At least three images were taken in 1931, all depicting the interior of three different storage facilities (Figure 3.17, Figure 3.18, Figure 3.19). The 2002 documentation was unable to obtain the same images, and a comparison of site condition was not possible at that time. Climbing crews later gained access to the site, but the angle of their photographs does not allow a comparison of site condition to a high level of confidence. Based on photographic images from 2005 (Figure 3.20 and Figure 3.21), it appears the structural features may have eroded. It is unlikely that the structural deterioration is attributable to vandalism or other human impacts. Based on the detailed descriptions offered in 1831, it appears this site generally remains in the same condition as described in 1931, down to and including the detail of the location of adobe and roof superstructure detritus. There are still two large poles lying perpendicular to the cliff face and projecting over the cliff edge about 30 centimeters (Figure 3.22). The site documentation conducted in 2005 revealed numerous features not observed or mentioned by the 1931 expedition.

The site is within the range of pedestrian access, but it is unlikely that visitors would gain access to this site without specialized climbing gear. It is also likely that observation of the storage facilities from the floodplain below would result in no adverse



impacts to this site. However, access should be limited to only 42Em2841 inasmuch as other easily accessible sites with abundant surface artifacts that could be subjected to illegal collecting are located in the same general area.



Figure 3.17: View of storage feature at 42Em2841 as observed in 1931 (Peabody Museum U-31-160)



Figure 3.18: View of storage feature at 42Em2841 as observed in 1931 (Peabody Museum U-31-309).





Figure 3.19: View into the interior of 42Em2841, as observed in 1931 (Peabody Museum U-31-310).



Figure 3.20: Lateral view of storage chambers at 42Em2841 (K.R. Barlow, courtesy of National Geographic Committee for Research and Exploration)



Figure 3.21: Lateral view of storage chambers at 42Em2441 (K.R. Barlow, courtesy of National Geographic Committee for Research and Exploration)



Figure 3.22: Poles extending from ledge identical to 1931 description, as observed in 2002 (J.D. Spangler).

#### 42Em3110 (PR12-5)

As observed in 2003, this site, [REDACTED] consists of a long vertical pole wedged into a crack in the cliff face, with possible additional wood detritus on a small ledge above the vertical pole. It appeared at the time to be the remains of a small structure that had collapsed (Figure 3.23). Bowers described the site in 1931 as:

[REDACTED] *Approach moderately difficult up a chimney, no wall, southern exposure; the structure consists of platform in chimney with foundation of timbers, 2 parallel and about 10 whose outer ends rest on these two while the inner ends rest on rock. The smallest ones are 20 to 30 centimeters in diameter and 1 to 2 centimeters (sic) long. Irregular rocks are piled on these; rocks are probably broken from cliff face [Scott 1931:82].*



Figure 3.23: View of collapsed construction materials at 42Em3110, as observed in 2003 (J.D. Spangler)



Two photographs taken in 1931 (Figure 3.24 and Figure 3.25) reveal this site to be in remarkably better condition at that time, and that it has suffered significantly from natural erosion or vandalism. The platform was clearly intact in 1931 with wooden cross beams spanning the crevice. The photographs also demonstrate that the site was accessible, suggesting that its dilapidated condition today could be the result of human efforts to access the site sometime in the past. There remains potential for cultural deposits on the ledge associated with the original structure, and public access to the structure location should be discouraged. The current condition of this site (little remains of it) would unlikely result in significant public visitation, and it is likely it would escape detection by most visitors. This site is located on the periphery of pedestrian access, and there is minimal risk of additional site degradation due to human impacts.

Of note, Forbes' field notes describe and illustrate (Figure 3.26) an elaborate red and white anthropomorph "about 40 meters northwest of granary" (Forbes 1931:53). The anthropomorphic figure was described as 35 centimeters tall with a white head and horns, and alternating lines of red and white. Similar figures are found at other sites in Range Creek, but this figure has not been relocated in the area described.



Figure 3.24: Site 42Em3110 as observed in 1931 with intact cross beams (Peabody Museum U-31-165).

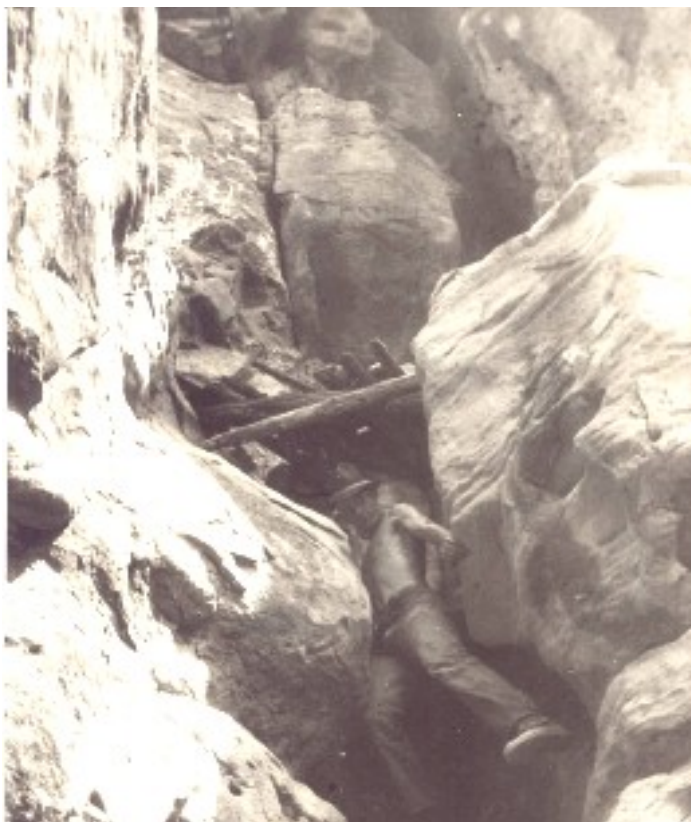


Figure 3.25: Photograph depicting accessibility of 42Em3110 in 1931 (Peabody Museum U-31-311).

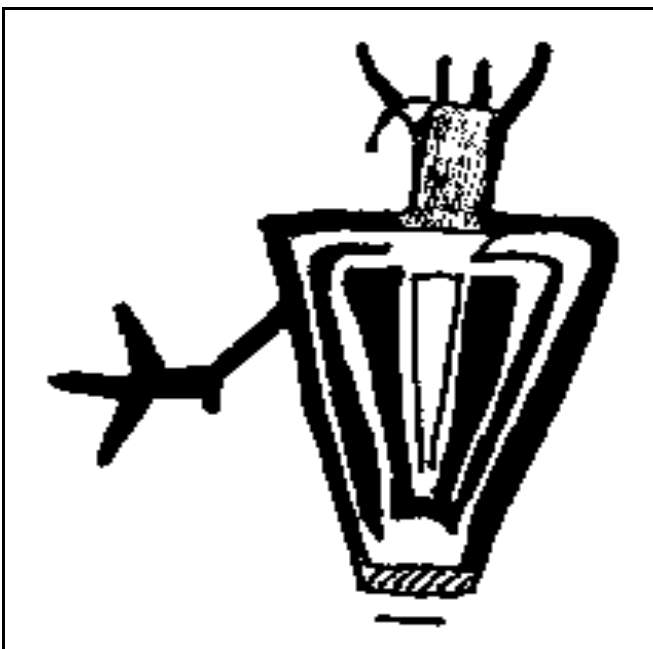


Figure 3.26: Rock art at 42Em3110 observed in 1931 (Forbes 1931:53). Figure not relocated.



## 42Em741 (PR12-6)

This site consists of a multi-chambered and well preserved storage facility [REDACTED] (Figure 3.27) that is easily visible, but is no longer of easy access inasmuch as the ledge accessing the site has eroded. This site was accessible in 1931 and at least for a short time thereafter (Leh 1937). It is unknown when the ledge eroded, blocking access to the site. This site, [REDACTED] remains one of the most popular among canyon visitors who are allowed vehicular access, but these universally view the site with binoculars from the road below. The site is likely beyond the range of most pedestrian visitation.



Figure 3.27: View of 42Em741 as observed in 2002 (J.D. Spangler).

Dennison's detailed descriptions of the site offer perspectives not initially visible to crews when they documented the site in 2002.

*On the west wall of Range Creek about 2.5 miles above Nutter's first ranch situated on a ledge 130 feet above the floor of a canyon. On a point of sandstone formation made by the creek changing course, east to west, are three large, very exceptionally complete granaries and traces of a fourth smaller one. The canyon floor is wide at this point with the creek running along the east side. The approach to the ledge on which the granaries stand is up a steep, pebbly slope with several rock climbs necessary. It is the third large ledge above the canyon floor, the exposure being slightly south of west. The ledge averages 5 feet in width, is narrower at ends and over 6*

meters in length. The back wall slopes gently up to a 4 meter overhang from the ledge floor. The walls of the granaries are made generally of flat pieces of sandstone, none very large (not over 45 centimeters long) and some quite small. The outside is very generally plastered with adobe and at some places of the inside walls the adobe completely covers the rocks. The walls present a fairly smooth exterior and interior though the adobe is mixed with small pebbly stones. The slabs of the wall average 3-5 centimeters in thickness and are 14-18 centimeters wide. There is between 3-6 centimeters of adobe between the layers of slabs.

*Granary A.* The largest granary is at the south end, nearly semicircular in shape. At the south side of Granary A is a small lower section of wall, (the latter (x), the break (y), then a high, very well built wall (z). See the sketch. Wall (x) is 95 centimeters long, 16-30 centimeters thick, averages 2-3 centimeters in height. What remains of the top edge is gently rounded out with adobe. Next to this is a break in the wall 75 centimeters wide with one slab sticking out for 30 centimeters from the end of the wall (y). Wall (y) is 1.65 centimeters, straight across from end to end; about 2 meters in actual length. It averages 84 centimeters in height except near the break where it falls off to 52 centimeters. These measurements are taken from the present interior floor. On the outside, towards the east where the wall is built up from the sloping ledge floor, it reaches a height of 1.2 meters. The walls keep an average of 24 centimeters throughout and the top is very smoothly rounded off with adobe. The only traces of roof structure remaining are two large ... (4 centimeters in diameter) in the top wall and numerous pieces of adobe on the floor along with charred sticks and roof weaving material. Sufficient charcoal and wood is found beneath the hard crusty surface to indicate the burning of the roof. Along the back wall, the granary measures 1.56 meters, inside measurement; 1.27 meters the greatest width from front to back. The ledge floor slopes down from the back to the front, so that the measurements vary exceedingly. Excavation near the front wall revealed the following stratification:

2 cm loose surface sand

2 cm grass, charcoal and sand

2 cm loose earth, ashes and sand

14 cm containing burnt and unburnt corncobs, flint chips, sticks and withes

*Granary B* is next to the north and is the most complete of the three. The north wall of A forms the south wall of B. It is a beautiful, smooth circular wall completely adobied on the outside with no rocks visible. It is 60 centimeters high near the back wall and 1.15 meters in the front. 1.16 meters of it forms the south wall of B. The front and north sections of the wall of B are somewhat broken at the top but average 72-80 centimeters high, 16-23 centimeters wide and 1.17 centimeters high on the outside. Section Z (see sketch) is 1.6 centimeters long. The opening facing north has obviously been made by comparatively recent visitors. The section west of

granary is 1 meter in length making the total measurement of the room walls, including the opening and that part of the wall of A which is involved, 4.46 meters. The granary is 70 centimeters along the back wall, north to south, 1.45 meters at the front wall and the greatest width from front to back is 1.65 meters. The columnar section is practically the same as in Granary A but there is no charcoal and ashes and the corncobs are unburnt. The grassy floor (second layer down) has longer grass than A. The roof starting at the underside and looking upwards consists of two logs, one still present and one gone, with their ends placed in the masonry of the side wall and extending 1.2 meters, north to south. These are probably cottonwood, 3-6 cm in diameter. The extending log is 40 centimeters from the back wall; the other was 40 centimeters, the greatest distance from the front wall. Also similarly placed 20 centimeters from the back wall but not sticking into the side wall are two small sticks coursed together 1.5 centimeters in diameter.

Resting on top of these supports are eight more poles, four with their ends sticking in masonry of the back wall and six with the east ends in the masonry front wall (with small ends forward). They are 3-8 centimeters in diameter. Six average 1.05 meters in length while the other two are 74 centimeters long. They are all straight and trimmed. Possibly there were two more similar ones attached to the front wall, leaving a hole in the center which was probably covered with round, flat, smooth stone found on top of the roof; diameter of this stone is 60-63 centimeters. It is 5 centimeters thick but very smooth on both sides with edges rounded. These eight poles vary from 6-20 centimeters apart. They are lashed onto cross-withes average 0.4 centimeters in diameter. On top of these eight poles is a matting of sticks laid north and south though with the ends not sticking in south-side wall masonry. The sticks are from 1-2 centimeters in diameter, from 60 cm-1.15 meters long and laid little less than two centimeters apart, interwoven with withes 0.8 centimeters in diameter. These withes go across the sticks at intervals of 8 to 10 centimeters. At one place, near the south end, there is a double layer of this matting. On top of this matting is a layer of adobe covering the whole thing, 2-5 centimeters thick. More sticks are laid east-west, some within and some outside of this adobe, same size as sticks in matting but have no tying or regular positions. The roof very probably covered the whole structure. The remaining part measures 1.36 meters north and south and 50-80 centimeters east to west. Another flat, roughly circular sandstone slab was found outside. It is smaller and less regular than cover found on the roof probably used as cover for one of the smaller granaries.

Granary C is northwards from and adjacent to B. It has the same wall construction but has no roof remaining. Granary D, which blocks the way to the other granaries, is much smaller and almost entirely destroyed [Scott 1931:83-85].

At least 10 photographs were taken of the interior of the structures, all showing a level of construction detail no longer apparent. Among these are depictions of two contiguous structures with the roof superstructure largely intact (Figure 3.28), a close-up view of the lid stone (Figure 3.29), a close-up view intact adobe wall construction (Figure 3.30) and a profile view of a perfectly intact upper wall and adjacent roof beams (Figure 3.31). The rich descriptions also included various sketches, including depictions of the rock art images not visible from the canyon bottom (Figure 3.32). Of note, 2002 field crews did not observe pictographs associated with this site. These were described and illustrated in 1931, and mention was made of one photograph that was not located in the Peabody Museum archives.



Figure 3.28: View of storage chambers at 42Em741 as observed in 1931 (Peabody Museum U-31-72).



Figure 3.29: View of stone lid at 42Em741, as observed in 1931 (Peabody Museum U-31-77).



Figure 3.30: Close-up view of wall matrix at 42Em741, as observed in 1931 (Peabody Museum U-31-78).





Figure 3.31: View of roof beams at 42Em741 as observed in 1931 (Peabody Museum U-31-79).

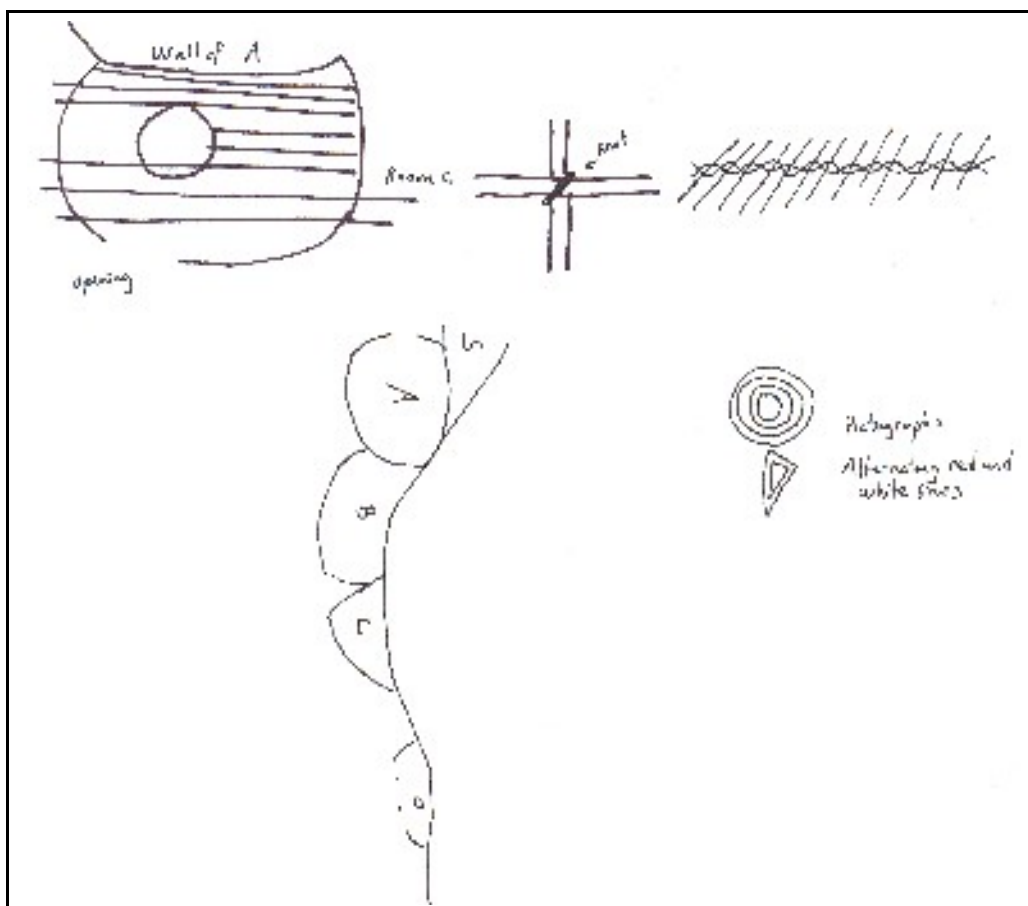


Figure 3.32: Examples of sketches from 42Em741 (Dennison 1931:28-29).

Despite its current inaccessibility, this site appears to have suffered extensively from erosion and/or vandalism. The roof superstructure has collapsed (Figure 3.33), the integrity of the walls is no longer in the pristine condition observed in 1931, and the stone



lid is no longer evident overlying the superstructure. The structures were accessed in 2005 by climbing crews, who observed cultural deposits on the interior, and remnants of vegetal binding was still present on some construction beams (Figure 3.34). The site is currently protected by its inaccessibility (the access ledge has eroded away), but it is likely that repeated visitation in the past has severely impacted the integrity of the site. Because of its visibility from the road, this site will continue to be a popular stopping point for visitors to Range Creek. Viewing the site with binoculars poses no risk to the site. However, access to the site itself should be prohibited, given the safety risks involved and the potential for subsurface deposits that could contribute significant insights into prehistoric adaptations in the area.



Figure 3.33: View of remnants of collapsed roof superstructure, as observed in 2005 (K.R. Barlow, courtesy of National Geographic Society Committee for Research and Exploration).



Figure 3.34: View of wall construction with vegetal binding, as observed in 2005 (K.R. Barlow, courtesy of National Geographic Society Committee for Research and Exploration).

#### 42Em2844 and 42Em2845

These two adjacent sites consist of elaborate petroglyph panels [REDACTED]. The panels feature a variety of spirals, abstract figures and anthropomorphs. Bowers described the panels as:

[REDACTED] (There are a) considerable number for 25 feet along. Spirals, humans, animals, snakes, indeterminate. Some deeply etched, others not. Several scattered groups [Bowers 1931:27].

Bowers is clearly referring to two separate clusters of petroglyphs, one located next to the road and illustrated in a 1931 photograph (Figure 3.35) and the others located about 40 meters away and at the top of a talus slope about 10 meters above the valley floor. During site documentation in 2002, these were assigned two separate site numbers (42Em2844 for the panel next to the road and 42Em2845 for the higher panel). Although the quality of the photograph is not great, it appears the site is in the same condition today (Figure 3.36) as that observed in 1931. Original site records indicate a second photograph

was taken at this site (U-31-292) but this image was not located during a search of the Peabody Museum archives.



Figure 3.35: Petroglyph panel at 42Em2844 as observed in 1931 (Peabody Museum U-31-293).




Figure 3.36: View of petroglyph panel at 42Em2844, as observed in 2002 (J.D. Spangler).

These sites remain popular destinations for canyon visitors with motorized access. In the absence of evidence for subsurface deposits, public visitation to the panels should be allowed, but they should also be monitored for future site degradation, including vandalism and graffiti. This site would also be appropriate for cultural resource interpretation and education outreach.

#### **42Em3215 (PR12-7)**

This site, documented in 2004, consists of an open, drylaid structure on top of a stone outcrop about 15 meters above and overlooking the floodplain (Figure 3.37). An associated rubble mound and residential detritus suggest additional structures were once part of the site, or that the surface structure was once much larger and has since collapsed. The site was described by Bowers as:

, 6 meters above the valley bottom is an easily accessible “fort” on a little promontory. It has a very much broken down wall of roundish rocks. The highest point is about 60 centimeters. The masonry is very poor with no courses visible and very large open spaces between stones. The structure following the outline at the top of the promontory is ovalish, 2.5 by 4 meters [Scott 1931:86].


No photographs were taken of the site in 1931, and the description offered is minimal and not conducive to a comparison of current site condition to that observed in 1931. Generally, it appears the site is in the same condition with no obvious evidence of human impacts or visitation. This site,  is beyond the range of pedestrian visitation and likely will not be impacted further. The presence of residential detritus (potsherds, lithic flakes) suggests the potential for subsurface deposits, and visitation to this site and others nearby that also have surface artifacts should be discouraged. Regular monitoring of this site is also recommended.





Figure 3.37: View of wall remnants at 42Em3215, as observed in 2004 (J.D. Spangler).

#### **42Em2875 (Joe Wing Cabin)**

The Claflin Emerson Expedition participants did not describe additional sites until they reached the cabin originally constructed by 19<sup>th</sup> century rancher Joe Wing (they apparently bypassed the Nutter Ranch operations without comment). The cabin, [REDACTED] at that time was occupied by John Darioli, a homesteader. No descriptions were offered of the cabin, but a photographic image (Figure 3.38) offers a good comparison to current site condition (Figure 3.39). This site has been impacted by natural erosion, including a cottonwood tree that has fallen over the roof. This ranch complex has likely been surface collected for historic artifacts in the past. Because it is located on private property and contains many historic artifacts, it is recommended that public visitation not be allowed beyond pass-through vehicular access.





Figure 3.38: View of John Darioli/Joe Wing Cabin (42Em2875) in 1931 (Peabody Museum U-31-624)

Remnants of historical ranching operations are an important component of the cultural resources found throughout Range Creek. These date from the late nineteenth century and include cabins, corrals, cellars and a hay derrick. Most of these remnants are located on private property, and public visitation to these sites, while likely inevitable, has the potential to precipitate negative responses from the current landowners. The presence of private in-holdings within the Wilcox Ranch acquisition also presents many challenges for land managers, including uncertainty as to their ability to protect cultural resources elsewhere in the canyon by limiting access. The acquisition of these in-holdings by a governmental or conservation entity would facilitate the protection of not only the historic structures but prehistoric sites found throughout the southern part of the Wilcox Ranch management area.



Figure 3.39: View of John Darioli/Joe Wing Cabin (42Em2875), as observed in 2002 (J.D. Spangler).

#### **42Em3323 (PR12-8)**

This site consists of a typical open residential structure constructed of unmodified sandstone slabs situated on the edge of a ridge overlooking the valley floor (Figure 3.40).

This structure, [REDACTED], appears to be in good condition, but with few surface artifacts. This site was described by Bowers as:

[REDACTED] is a stone circle. It is 3.75 to 4 meters in diameter, very crude with all sizes of rocks of irregular shapes, no courses or mortar. The rocks vary in size from 9 by 5 by 2.5 centimeters to 15 by 10 by 10 centimeters. The wall now stands about 30 centimeters high. There was apparently a doorway of some sort facing eastward. This site compares closely with PR 12-7 [Scott 1931:86].

No photographs were taken of this site in 1931, and given the sparse description that was offered, it is not possible to compare site condition today versus that observed in 1931. Given the proximity of this site to historic ranching operations in lower Range Creek, the site has likely been visited repeatedly over the years, and surface artifacts have undoubtedly been collected. The site appears to be in good condition, with no evidence of looters holes or toppled walls. This site is within the spatial range of pedestrian visitation from the south gate, and visitation could likely be accommodated without substantial impact to the resource. However, because the most direct access to this site is by crossing



private land, it is recommended that public access not be allowed without clearly designated pedestrian routes that traverse only public lands.



Figure 3.40: View of 42Em3323, as observed in 2004 (J.D. Spangler).

### 42Em2879

This pictograph panel is located [REDACTED] [REDACTED]. It consists of an anthropomorph in red and white, and a long thin quadruped, also in red and white (Figure 3.41). This site was described as:

[REDACTED], 12 feet above the creed bed, west exposure. One human man, red ochre paint, white arms, about 50 centimeters tall. One animal, yellow red tail, white outline 30 centimeters long.... 20 yards south of above, a dim red figure and one pecked" [Dennison 1931:31].

Dennison indicated photograph U-31-83 was taken at this site, but this photograph was not located in the Peabody Museum archives. The sketches in Dennison's journal (Figure 3.42) leave no doubt this is the site he is referring to, but the absence of a photograph or detailed notes makes a site condition assessment difficult. Of note, Dennison mentioned yellow pigment on the tail of the quadruped which was not observed when the site was documented in 2002. This suggests that erosion is an ongoing problem at this panel. There is nothing evident here to suggest adverse human impacts. This site is visible from the road and within the range of pedestrian access from the south locked

gate, and therefore likely receives some visitation. However, the site is located on private property and public visitation should be discouraged.



Figure 3.41: Pictograph panel at 42Em2879 as observed in 2006 (J.D. Spangler).

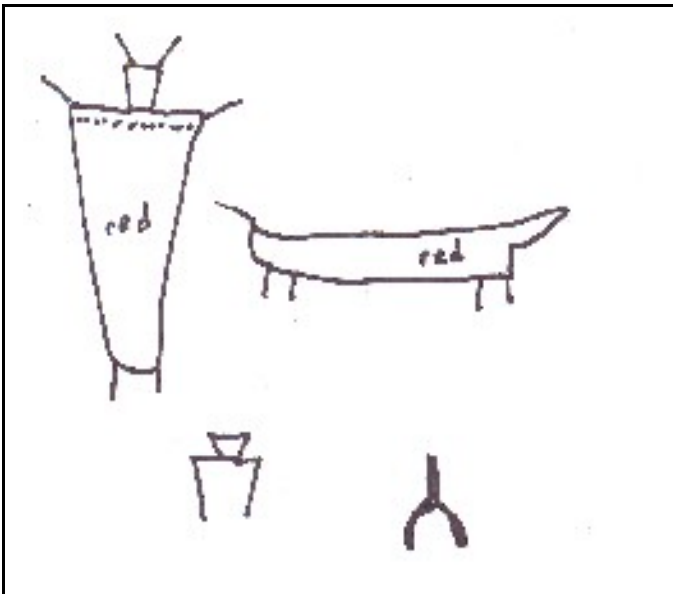


Figure 3.42: Rock art sketches reproduced from Dennison (1931:31).

### 42Em752 (PR12-9)

This site consists of a rockshelter with sparse artifacts and associated rock art images (petroglyphs and pictographs) on the shelter wall (Figure 3.43). The site was first





Figure 3.44: Sketch of rock art images at 42Em752 (Bowers 1931:37).

### 42Em753 (PR12-10)

This site consists of two contiguous open residential structures located on a ridge line with a commanding view of the valley floor [REDACTED] (Figure 3.45). This site has been looted in the past, and it also appears to have been vandalized since its re-documentation in 2003. When the site was revisited in 2005, fresh back-piles of dirt from the interior of the primary residential structure were observed outside the structure walls. This site was described only briefly by Bowers as:

*Almost opposite PR 12-9 on a point of the mesa about 13 meters above the valley floor of easy access is a rock circle very much like PR 12-7 and 8 [Scott 1931:86].*

The site was not photographed in 1931, and the minimal description makes it impossible to determine if the site had been impacted by humans at that time. Because this site has abundant surface artifacts and is located on private land, public visitation to this site should not be allowed, and regular law enforcement monitoring is recommended.



Figure 3.45: View of 42Em753, open residential site as observed in 2003 (J.D. Spangler).

### 42Em2881 (PR12-11)

This site consists of an elaborate but faded polychrome pictograph panel (Figure 3.46) and remnants of storage cists located within a sheltered area located [REDACTED].



Figure 3.46: View of polychrome pictographs at 42Em2881, as observed in 2002 (J.D. Spangler).

This site was initially described by Bowers as:

[REDACTED] is a granary on a ledge associated with possible remains of another and some remarkable pictographs. The ledge is about 13 meters above the valley floor and of easy access with a good overhang. The bottom ledge is not flat but slopes out and retains little earth. (Note: no ledges yet seen in Range Creek present good excavating, probably for this reason). Granary A. Granary A is very much fallen in, (and) is squarish, about 1.5 meters on the side. The walls now stand 45 to 75 centimeters high for they are made of natural slabs piled on their flat sides for three sides of the structure; the other side being made of two very rough, large slabs 1.2 meters by 45 by 60 centimeters, one standing on end and one on side. There is no coursing, chinking of adobe visible in any of the walls nor any sign of a roof. On troweling 15 centimeters down to bedrock, nothing was found. This structure does not compare with slab structure PR 12-4. The wall is much inferior. There is no smoke blackening on the roof of the overhang. Structure B. This structure to the east of A is so fragmentary that nothing can be told of it in detail. On troweling beneath the surface, some charcoal and burnt earth in or beside the structure was found. Some straw and two very fragmentary corncobs

*were found on the surface. Pictographs. A group of six human figures 60 to 85 centimeters high. These are colored as follows. Left to right 1-all red and white trace; 2-white and brownish clay; 3-green, blue and possibly a white head; 4- red head, white middle, red pelvic region; 5-green, blue with red belt; 6-white [Scott 1931:87].*

This site was documented in 2002 and found to be in essentially the same condition as that observed in 1931. The 1931 photograph at this site (Figure 3.47) suggests that the figures may have been somewhat more vivid in 1931, given the clarity of the images despite primitive camera equipment. The storage cists below the rock art were vandalized sometime in the past, but the Claflin Emerson field notes suggest this damage was present in 1931, and that excavations at that time may have further damaged the structures. This site, located an easy walk from the south locked gate, remains among the most visited of any in lower Range Creek. Given that this site is located on private land, public access should not be allowed. However, it will likely be difficult to deter public visitation (it is well known). It is recommended that the BLM negotiate a pedestrian right of way for public visitation that will alleviate trespassing concerns. Given the abundance of other archaeological sites in the immediate area that have not been vandalized, it is also recommended that public access be limited to the pictograph panel at 42Em2881.



Figure 3.47: View of pictographs at 42Em2881 in 1931 (Peabody Museum U-31-251).

**42Em2882**



This petroglyph site consists of a distinct triangular anthropomorph and quadruped pecked onto a cliff surface next to the road (Figure 3.48). It was briefly mentioned and illustrated by Dennison (see also figure 3.49), who described it only as:

[REDACTED], 25  
*feet above floor on southwest wall Range Creek. Pecked figure on dark brown rust-colored sandstone. Circle made by leaving it unpecked [Dennison 1931:35].*

When the site was formally documented in 2002, crews noted the quadruped exhibited a different, less precise pecking style compared to the adjacent human figure. But at that time there was no reason to doubt that it was of aboriginal derivation. However, the 1931 photograph (Figure 3.50) revealed that the quadruped was not present at that time, and that it is an addition by local residents or visitors to the canyon sometime over the past 75 years.

[REDACTED] It is outside the area of restricted public access and consequently receives considerable public visitation. This site would be appropriate for public education as to the impacts of graffiti. It should also be monitored for future adverse impacts.



Figure 3.48: Site 42Em2882 as observed in 2002 with crude quadruped (J.D. Spangler).

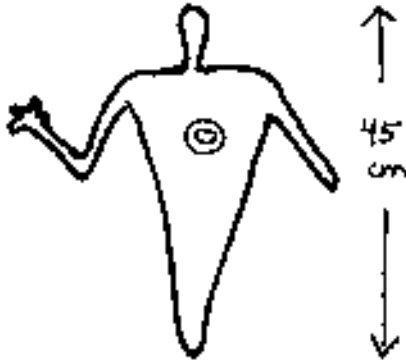


Figure 3.49: Feature sketch reproduced from Dennison (1931:35).

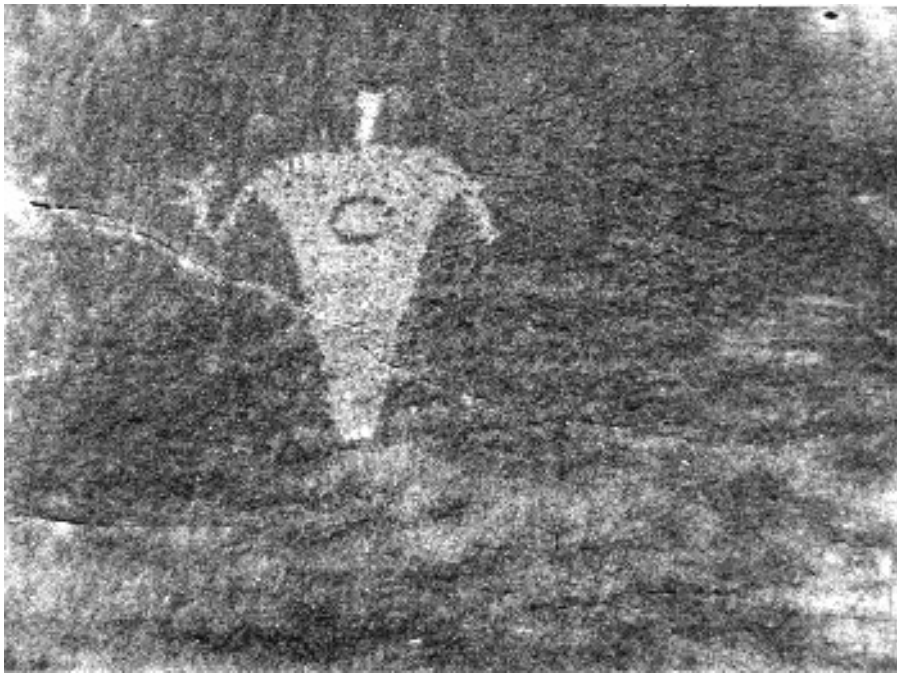


Figure 3.50: Rock art panel at 42Em2882 as observed in 1931 (Peabody Museum U-31-89).

### 42Em2883

The site, documented in 2002, consists of large Barrier Canyon style pictographs within a sheltered area (Figure 3.51) in an area of Range Creek without public access restrictions.

In 1931, the figures were photographed (Figure 3.52) and sketched (Figure 3.53). This site was briefly described in 1931 as:

*100 yards below (42Em2882) on the same side, 45 feet above creek level (with a) north exposure. A yellow-brown sandstone wall under an overhang. Two very large horned men, one medium ... one small horned man, one deer. Painted in red ochre. Also some short white lines, a white handprint and some (?) white smudges on the ceiling of the overhang. On a small wall*



*just 10 yards northwest (?) a plumed man first done in red ochre then covered over with white clay or something (Dennison 1931:35-36).*



Figure 3.51: Rock art panel at 42Em2883 as observed in 2002 (J.D. Spangler).

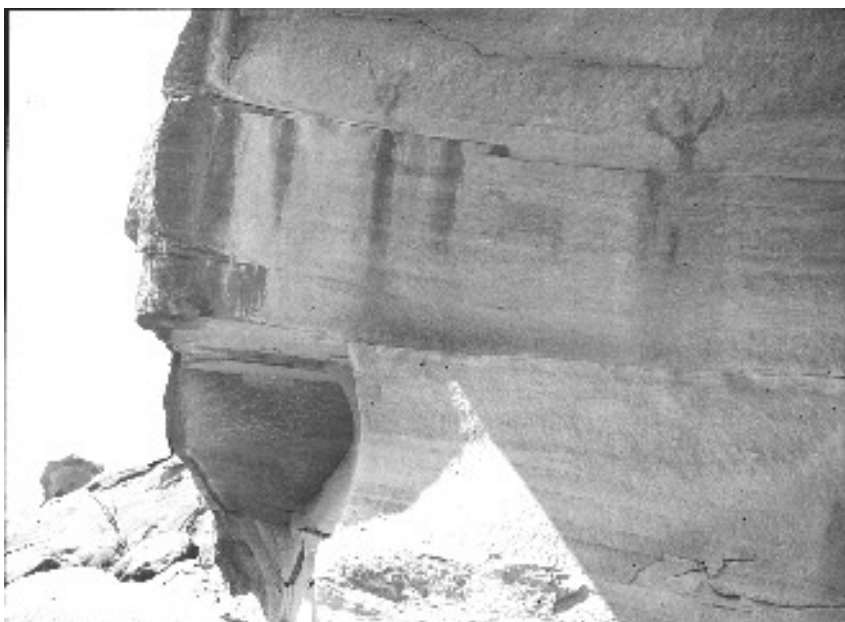


Figure 3.52: Rock art panel at 42Em2883 as observed in 1931 (Peabody Museum U-31-90).

The main rock art panel appears to be in essentially the same condition as that observed in 1931. However, the overall site has suffered extensively from adverse

impacts. Looters holes are evident in the deposits below the main rock art panel, and historic or modern images and initials have been scratched on the cliff face adjacent to the panel. Because this site remains among the most visited of any in the canyon, the resulting pedestrian traffic has resulted in a spider web of pedestrian trails lead up the talus slope to the site. These trails likely traverse extensive midden deposits. Two biface tools were observed on these trails during a 2005 site revisit, and lithic artifacts were eroding almost to the base of the slope. This site is located outside the south gate where public access is not restricted. It is recommended that this site be continually monitored for future adverse impacts, and that the land owner (BLM) establish a preferred pedestrian route to avoid potential damage to subsurface deposits or surface collection of eroding artifacts.

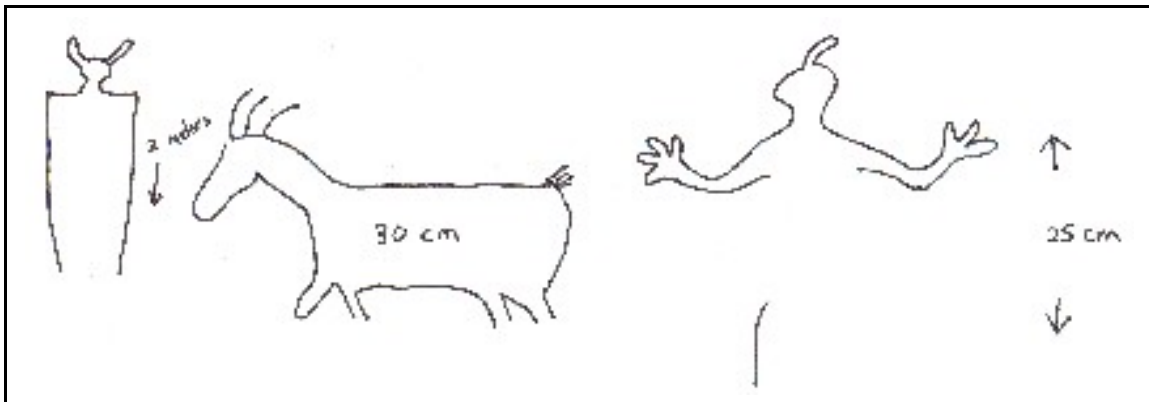


Figure 3.53: Rock art sketches at 42Em2883 (Dennison 1931:35-36).

#### 42Em754 (PR12-12)

This site consists of an open residential structure constructed on a steep slope but with relatively intact drylaid stone walls (Figure 3.54).

The site was initially described by Forbes as:

*On [redacted] is an oval fort, with a long axis parallel to the slope. It is 60 feet above the canyon floor and approached up a medium steep slope of gravel. Boulders and some brush. The structure is about 5 meters, long diameter; 4 meters short diameter. The wall is 50 to 60 centimeters high in what is apparently a doorway to the southwest. The stones are of various shapes and sizes, mostly flattish, averaging 45 by 35 by 10 centimeters, and very roughly coursed. No traces of adobe are present. The floor is of sand and small stones with some vegetation [Scott 1931:88].*

No photographic image was obtained from this site in 1931, and the written description was minimal. However, a close comparison of current site condition to the field notes indicates this site has been severely looted since that time. The interior deposits, described in 1931 as sandy with small stones and vegetation, has been removed by looters to a depth of 0.5 to 1 meter. It appears that wall stones have been restacked

(loosely) and the southwest doorway is no longer clearly delineated. Local informant Waldo Wilcox indicated this site, located adjacent to a natural gas well head, was vandalized in the mid-1960s by natural gas drilling crews stationed near there. It remains possible that small portions of the interior deposits remain intact, despite the extensive vandalism. The paucity of artifacts observed when the site was documented in 2002 was also observed upon its initial recording in 1931, and it is likely that few artifacts were ever present at this site. It is recommended that the BLM conduct consistent monitoring of this site for future adverse impacts.



Figure 3.54: Site 42Em754 as observed during 2006 site revisit (J.D. Spangler).

#### **42Em2891 (PR12-13)**

This site, documented in 2002, consists of remnants of a storage structure with a long, horizontal beam defining the base of a sheltered area above a short talus slope (Figure 3.55).

Access to this site was not possible, but observations from the slope below indicated the site has been severely damaged and that construction beams had been discarded over the edge. The site was initially described by Forbes as:

*is a granary in a cave. Half the approach is up a gradual slope; then there is a 30-foot cliff. The cave is reached from the northwest by means of a ledge. The bedrock floor of the cave is apparently irregular but a level surface of sand is on top of this. The level surface is 70 centimeters below the surface of the sand. The log is*



*about 4 meters long by 20 centimeters diameter and imbedded at each end in sand or adobe and rocks. It has been burned in places. The cave is about 2 meters deep from the back wall to this retaining well. A vertical log 15 centimeters in diameter touching the inside of the horizontal log is braced with the lower end against the ledge 30 centimeters below the horizontal long. The upper end measures 1.8 meters to the roof of the cave. 65 centimeters above the horizontal log a branch extends inward from the vertical log. This of course has been cut off but on the fork this formed there rests a diagonal log 10 centimeters in diameter. The other end of this log rests on the ledge to the northwest. Another horizontal long 8 to 15 centimeters in diameter lies along the ledge 4 meters to the northwest. Against the first three logs rocks are piled loosely. To the southwest there are other smaller logs lying about partly buried also there is a pole 5 centimeters in diameter and at least 1 meter long, wedged in a crevice extending up in the back roof of the cave. There is a rock pile at the base of the cliff, apparently fallen from the cave. Three plain potsherds were found therein [Scott 1931:88].*

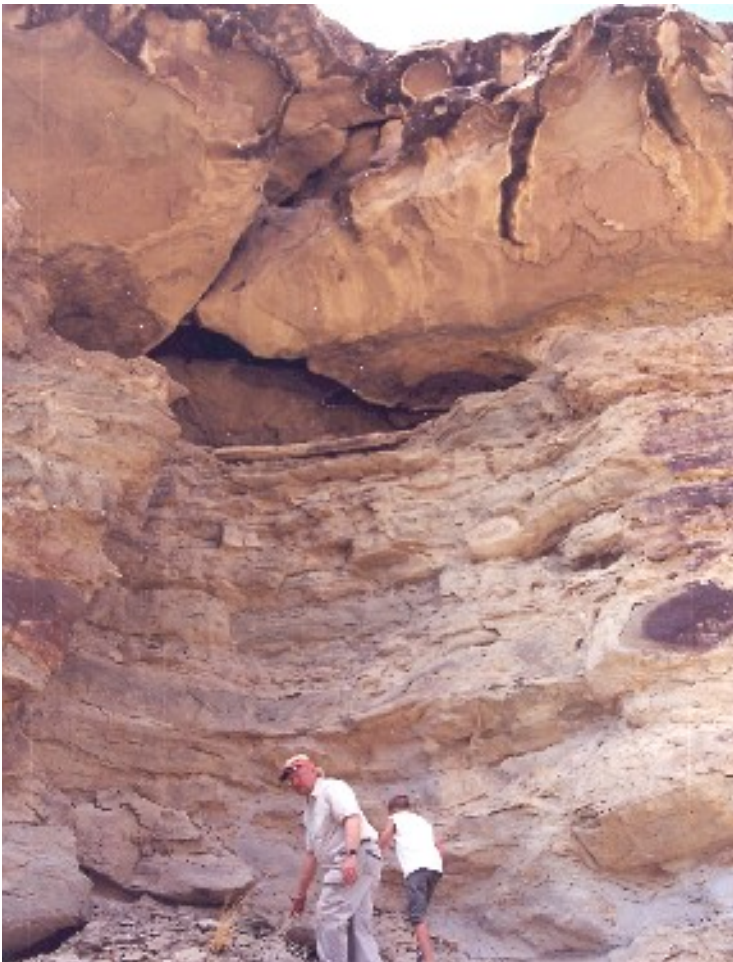


Figure 3.55: View of 42Em2891 from slope below (J.D. Spangler).



The 1931 photograph taken from the slope below (Figure 3.56) illustrates that additional construction poles were once part of the matrix. Furthermore, the description supports the existence of considerable building materials no longer visible inside the shelter. A recent side view into the sheltered area (Figure 3.57) reveals a paucity of structural materials remaining on the ledge, suggesting that destruction of this site since 1931 has been significant. Local informant Waldo Wilcox indicated this site, located near the natural gas well head, was vandalized by gas workers in the mid 1960s. Attempts to access this shelter from the northwest ledge, as described by Forbes, was not possible, suggesting the ledge providing access in the past has since eroded away. This site should be monitored for future adverse impacts, although the absence of easy access likely provides some level of protection. Given that cultural materials have been discarded from the shelter interior to the slope below where they are exposed to natural erosion, it is also recommended that data recovery be initiated in the slope area.



Figure 3.56: Site 42Em2891 as observed in 1931 (Peabody Museum U-31-745).



Figure 3.57: Side view into the interior of 42Em2891, as observed in 2006 (L. Coats)

#### 42Em755 (PR12-14)

This site consists of a V-shaped storage structure in a niche in the cliff face (Figure 3.58) that was not accessible when the site was re-documented in 2004.

Forbes initially described the site as:

*is a granary. The approach is rather difficult up a 20-foot ledge and irregularly surfaced cliff. The granary is on a triangular ledge in an angle formed by the cliff wall. The ledge is about 2 meters from the inside of the corner to the edge. The granary is pie-shaped with the side wall being the straight cliff face on each side and the front wall being an arc of masonry. Dimensions: northeast side, 1.3 meters, south side 1.5 meters; length of arc, 1.6 meters, height of arc wall, 80-90 centimeters. This wall has an unusual construction being a combination of upright slabs and stone and adobe. The base of the wall is composed of three flat stones set on end with pointed tops about 50 centimeters high. These stones are 40 centimeters at the base and 8 centimeters thick and chinked with adobe. Above them is horizontal, coursed masonry of alternating stone and adobe. The stones have 3-4 centimeters of adobe between them. The stones project beyond the adobe on both outside and inside of the wall. Most of the roof has disappeared. What is left consists of two crude poles about 1.5 meters long and 5-10 centimeters in diameter running near to and parallel to the south face with their ends resting on the wall and in the corner respectively. The end large room at the corner was burnt, which suggests the probable fate of the rest of the roof. Along the other face (see sketch) there are four*

*poles about 1 meter long and 5 centimeter thick similarly braced. Resting on the south pole are some sticks 1 centimeter thick and 1.2 meters long lying side by side, some with twigs on inward ends. About 90 centimeters from the corner, they are tied by withes woven through them this. Resting on these sticks is adobe, plastered about 5 centimeters thick. The small sticks were also apparently supported by transverse ones about 2 centimeters thick resting on large poles. The floor was a bare ledge and is now covered with 10 centimeters of chunks of adobe and small sticks from the roof [Scott 1931:89].*



Figure 3.58: Site 42Em755 as observed in 2004 (J.D. Spangler).

An examination of the 1931 photograph (Figure 3.59) at this site does not reveal enough detail to allow an analysis. However, what is apparent is that a Claflin Emerson crew member was able to access the site, and that the front wall appears to have been intact at that time. This is further evidenced by Forbes's sketches of the interior of the feature (Figure 3.60). It is not known how the Claflin-Emerson crew obtained access to the site for the detailed descriptions. It appears the site has been damaged since 1931, with a portion of the front wall now missing. The 1931 sketches indicate these were intact at that time. It is possible this site has been vandalized despite its difficult access. Local informant Waldo Wilcox indicated that two "squatters" once set up a trailer house in that locality and remained there for two years, vandalizing sites and searching for artifacts. It is unknown to what extent interior deposits and features have been damaged. The extremely difficult access to this site, located on state lands, likely provides some level of protection from adverse human impacts in the future. It is recommended that SITLA monitor this site for future impacts.





Figure 3.59: View of 42Em755 from the valley floor in 1931 (Peabody Museum U-31-87a).

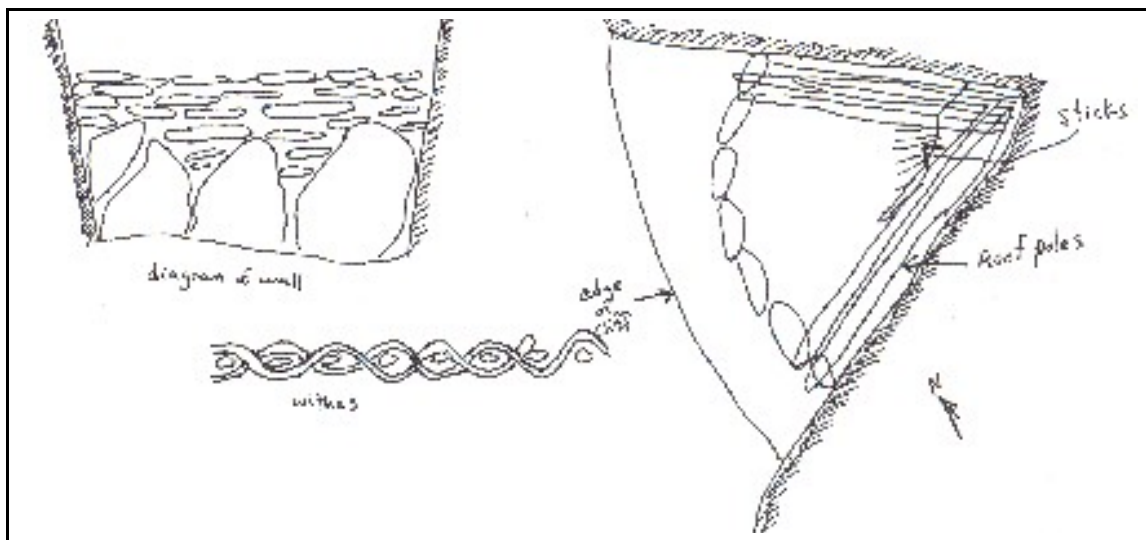


Figure 3.60: Sketches of granary feature at 42Em755 (Forbes 1931:61-63).

### 42Em756 (PR12-15)

Site consists of a sheltered area with remnants of a granary (Figure 3.61), rock art and a sheltered residential structure. Documented in 2004, this site is located [REDACTED]. It was described by Dennison as:

[REDACTED] on the right wall of a ledge in a dark sandstone formation 65 feet above the floor is a granary. The



ledge is 6 to 7 meters long, east to west, and almost 2 meters wide. The granary is against the back wall, near NW end, NW exposure under a low overhang 4 meters long. The ledge is approached by a rock climb down from top. The structure is practically square, the four walls being made of reddish-brownish sandstone slabs placed on their long edges with pinkish adobe chinking. One slab lay horizontally on top, jutted a bit in over the edge of the north wall slab. A rock pile rises next to the south wall. The tops of the other walls are made level by pink adobe. There are remains of layers of white adobe on top of this pink layer near the back wall. The roof was probably formed by another slab laid across the tops of the walls. The wall slabs average 2-5 centimeters thick and 25-45 centimeters wide. The perpendicular height of the granaries is 55 centimeters. The length along the back wall is 60 centimeters, front 70 centimeters and side walls are 50 centimeters. The present floor is of sand, dirt and refuse. Nothing otherwise. The layer of white adobe above is 13 centimeters thick [Scott 1931:90].



Figure 3.61: View of remnants of a granary feature at 42Em756, as observed in 2004 (J.D. Spangler).

The field notes indicate a photograph was taken (U31-88), but this photo was not identified in the Peabody Museum archives. Most of what the 1931 expedition described has been badly vandalized and little remains intact to offer a comparison to earlier observations. Two features described in 1931 are still evident: a granary tucked against the rear wall of the shelter and a pile of stones near the south wall of the structure. Looting also exposed additional features not evident in 1931. As with nearby 42Em755, local informant Waldo Wilcox indicated that two “squatters” once set up a trailer house in this area and remained there for two years, vandalizing sites. This site, located on lands managed by SITLA, is located about 5 kilometers south of the south locked gate in an

area of unrestricted public access, and the relatively easy access makes it susceptible to future vandalism. It is recommended that SITLA not disclose this site location and that it monitor the site for future impacts.

#### 42Em757 (PR12-16)

This site, relocated and documented in 2004, consists of a rockshelter with a drylaid stone wall (Figure 3.62). [REDACTED]

[REDACTED] This site was initially described by Dennison as:

*On the south wall of a ledge of Range Creek, [REDACTED] on the top of a dark sandstone formation is a cave and fort. Approach is easy from the top of the ledge. On the east end of the ledge and on the south ledge along the front are fragments of large rock walls. 0.1 meter above the ledge is a low overhang presenting a SE exposure. Extending along the west end of the ledge for about 1 meter is a nicely built rock slab wall. The rocks average 65 by 40 by 12 centimeters placed horizontally on top of each other with regularity. The holes are filled with smaller rocks. No adobe present [Scott 1931:90].*



Figure 3.62: View of 42Em757 from the valley floor, as observed in 2004 (R. Boren).

The Claffin Emerson Expedition obtained no photographic image of this site, which appears to be in essentially the same condition as that reported in 1931. No artifacts were observed in 1931 or in 2004. Access to the site involves backtracking up

canyon and coming in over the top. The absence of easy access and the paucity of cultural remains will likely contribute to the site's future preservation. It is recommended that SITLA monitor this site for future adverse impacts.

#### 42Em758 (PR12-17)

This site consists of remnants of a series of structural remains along a narrow ledge that is extremely difficult to access (Figure 3.63) [REDACTED]

[REDACTED]. Given the precarious access to the ledge, no attempt was made in 2004 to reach this site, and the documentation at that time was based on the limited remains that were visible from the valley floor. It appears this site was accessible in 1931 given the more detailed descriptions offered at that time. This site was described by Forbes as:

[REDACTED] *The ledge is about 5 meters long and 1.5 to 2 meters wide. At the west end of the ledge there is a wall 60 centimeters high, starting at 50 centimeters from the rear cliff wall, extending out about 60 centimeters toward the edge of the ledge, then making a 60 degree turn and extending for 1 meter along the front. The base of the wall is of large stone blocks about 30 by 30 by 40 centimeters with smaller stones, some flat, laid horizontally and carefully but without traces of adobe. At the east end of the ledge running about 2.5 meters along the front is an irregularly laid wall about 80 centimeters high filled in behind with loose adobe and sand as if a retaining wall for the level floor. The floor of the west end is solid rock with about 15-20 centimeters of loose sand inside the west wall. There are numerous sticks from 1 to 6 centimeters in diameter and from 10 centimeters to 3 meters long. These are possibly part of the roof structure. The overhang is 2.3 meters high and extends about the same distance out beyond the edge of the ledge [Scott 1931:91].*

No photographic images were obtained of this site in 1931. Given the inaccessibility of the site it is impossible to determine the nature or extent of adverse human impacts to this site. The difficult access to this site likely provides some level of protection against future impacts. It is recommended that SITLA monitor this site for future adverse human impacts.





Figure 3.63: View from valley floor of ledge with structural remains (42Em758) in 2004 (J.D. Spangler).

#### **42Em759 (PR12-18)**

This site consists of a rockshelter with drylaid stone wall and some residential detritus (Figure 3.64) [REDACTED]

[REDACTED]. Stone slabs and blocks have been roughly stacked into a drylaid masonry wall along the west side of the shelter, inhibiting access to the shelter. The wall measures 4 meters long and up to 87 centimeters high. Evidence of a looters pit was identified in the center of the shelter with back-piles displaced to the front of the shelter. It was initially described by Forbes as:

[REDACTED]. *This cave has a southeast exposure. It is approximately 3-5 meters with an 8 meter overhang. A cleft in side wall is crudely walled up and a wall 30-60 centimeters high has been built of large stones with no abode present. Seems to have been sort of fort though the cave is livable [Scott 1931:92].*





Figure 3.64: Drylaid stone wall at 42Em759, as observed in 2004 (J.D. Spangler).

The site was relocated and documented in 2004 and was found to be in good condition despite the vandalism. A large corrugated potsherd was collected in 2004 that was not mentioned in the 1931 notes, suggesting the potential for subsurface deposits that may not have been disturbed by the vandalism. This site is easily accessible from the Range Creek road and likely receives some visitation. It is recommended that SITLA monitor this site for future adverse human impacts.

#### **42Em760 (PR12-19)**

This site consists of a complex sheltered residential site that has been badly looted, with many features obliterated beyond recognition (Figure 3.65).

[REDACTED]

This looting appears to have occurred over a long period of time and involved the systematic destruction of most (but not all) of the large structures at this site. However, significant cultural evidence was observed in crevices and in looters back-piles.



Figure 3.65: View of vandalism along base of cliff, as observed in 2004 (J.D. Spangler).

The site was initially described by Bowers as:

[REDACTED]. Low talus 25 feet above valley bottom. On this are three walled structures 100 feet apart, semicircular. Masonry is of rectangular blocks, typical size 45 by 30 by 20 centimeters, which occur on the site. Stones are laid in regular courses with adobe mortar, smooth on the inside, 3 to 5 centimeters thick. Average size of structure (is) 6 meters across the back, 3 meters deep. Standing walls 30 centimeters to 1 meter high. Structure A or farthest up stream. One fire-drill hearth was on the surface. Structure C, farthest downstream was excavated. Found walls resting on debris about 60 centimeters thick which had three living surfaces or at least three straw levels. Walls had adobe floor 3 to 5 centimeters thick attached. On this was about 5 to 15 centimeters of debris consisting of grass stems at bottom, then small rods 1 to 2 centimeters in diameter, then 5 centimeters of adobe, then dust, rocks, etc. The adobe was completely burned to a near brick texture in places. Excavated about one-quarter of this floor, found several potsherds, animal bones, beam (?), corncobs. The rods and adobe were evidently part of the roof but the nature of the construction could not be distinguished in the short time available. It is supposed that longer beams held the rods and the grass stems were on the floor. Excavated a little in bone debris at door. Found very sterile only one potsherd, corncobs, red

*ochre, bark of various kinds and two pieces of string. This site would be fair for excavating, I think, but not rich enough to justify staying longer this trip. The masonry of the other two structures is not as good as the one described. Irregular courses laid 2 to 3 centimeters in adobe. In each case was found adobe from the roof, rod and twig marks in it. In Structure A were two small pictographs; sheep or goats with long curling horns 10 to 12 centimeters long, done in red ochre. The door of C was about 30-45 centimeters wide, a little to the right of the middle. The walls of the other structures were too ruined so I could not be sure about the doorways [Scott 1931:93].*

Very little of what the Claflin Emerson Expedition described is still evident at this site. Artifacts (a digging stick, lithics, potsherds, red ochre and corncobs) were still present in 2004, but the walls of the structures have been toppled and massive looters holes are located along the base of the cliff. Only one structure has retained any structural integrity (Figure 3.66). This may be the same structure in a 1931 photograph of wall construction at the site (Figure 3.67). An additional 1931 photograph depicts a test pit at the base of the wall (Figure 3.68). These photographs contribute little to an understanding of original site condition. The rock art images described in 1931 were not observed on the cliff walls. It is unknown how much of the damage observed in 2004 is attributable to excavations conducted in 1931.



Figure 3.66: View of looted structure at 42Em760 as observed in 2004 (J.D. Spangler).



Despite the severe vandalism at this site, the abundance of artifacts suggests that there are still significant subsurface deposits. This site remains vulnerable to future vandalism, despite BLM efforts to close the road to vehicular traffic at a point upstream from this site. ATV tracks observed in 2004 indicate that some have violated the closure. It is recommended that the BLM enforce its closure of the road and that this site be monitored for future vandalism. This site also appears to have considerable material culture evidence remaining and would be appropriate for data recovery efforts.



Figure 3.67: View of rock wall at 42Em760 as observed in 1931 (Peabody Museum U-31-298).

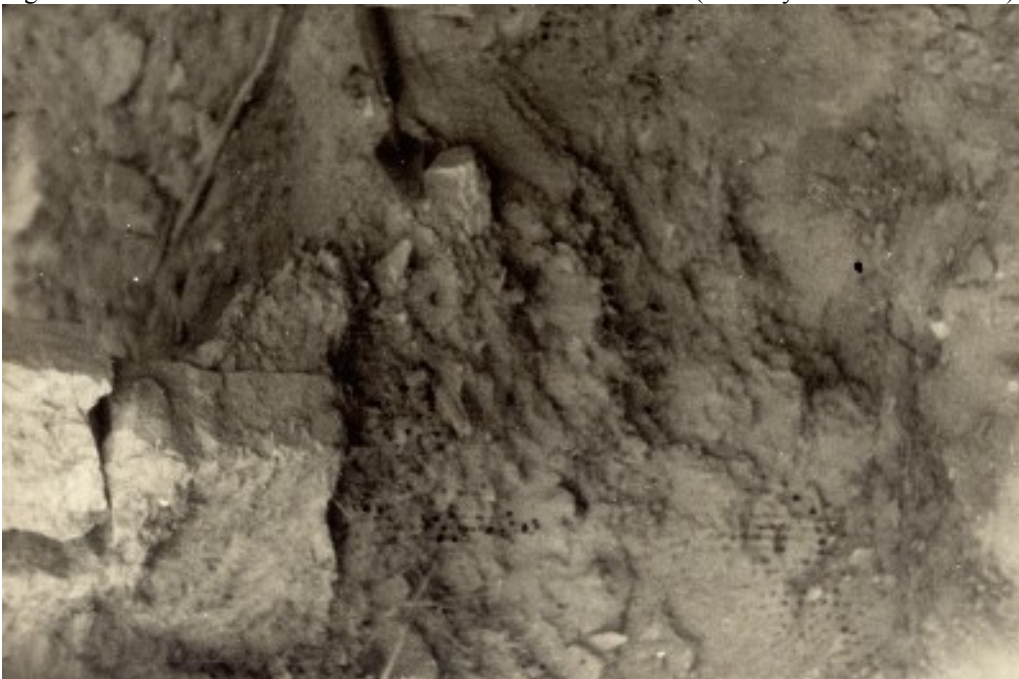


Figure 3.68: View of 1931 test pit at 42Em760 (Peabody Museum U-31-299)



## 42Em761 (PR12-20)

This site consists of a well preserved storage structure on an inaccessible cliff ledge and a concealed but more accessible storage structure on a lower level that was filled with wild rye seeds. [REDACTED]

The lower accessible structure was relocated in 2004 and was found to be partially collapsed but still containing seeds. The lower storage unit was initially described by Dennison as:

*Lower granary.* [REDACTED]  
[REDACTED] there is a granary on a ledge 100 feet above the valley floor. Accessible with some difficulty up a chimney. The granary is a sort of cistern with round manhole under a small overhang. Cistern is oval, 1.3 by 0.8 meters, cover approximately in center; 35 centimeters in diameter. Slab cover almost circular, 3 centimeters thick and 45 centimeters in diameter. Cist about 75 centimeters deep. One third filled with grass-like seed or grain. Wall of generally flattish rock, of which many are now lying about the ledge, set in adobe in rough courses. There is considerable adobe present and evidence of rough plastering. Roof of several longish logs 3 to 9 centimeters in diameter, laid perpendicular to back wall; smaller rods are laid across these. The whole is intertwined with withes; the round rim of the opening is made of a large withe, 5 centimeters, tied in circle and bound with smaller withes. The whole is covered with adobe 2 to 8 centimeters thick. The rim is depressed around the circumference of the hole to hold the cover. All the beams are tied to one another by a system of cross-withes. The outside is heaped up with large rough rocks perhaps as sort of camouflage, although the cist is not visible except from a distance of 100 yards or across the canyon. This granary or cist is on a ledge below upper granaries and about 200 feet away [Scott 1931:94].

The Claflin-Emerson field notes indicate four photographs were taken of this lower granary, but perhaps only two appear to be applicable to this feature. One photograph (Figure 3.69) is a lateral view of the camouflaged storage unit with an intact superstructure, and the other photograph is a close-up view of a superstructure with vegetal bindings in place (Figure 3.70). These bindings are also illustrated by Bowers (1931:29). These photographs graphically illustrate the pristine condition of the feature. Given the current condition (Figure 3.71), it appears the lower granary has been partially dismantled and construction materials removed from the front of the structure.

Access to the upper, well preserved granaries was not possible in 2004 and descriptions were made from the ledge below. In fact, the granaries were not accessible in 1931 until expedition crew members constructed a long single-pole ladder (Figure 3.72)

that resulted in detailed descriptions not possible to verify in 2004. These features were subsequently accessed by climbing crews in 2006.



Figure 3.69: View of lower granary at 42Em761, as observed in 1931 (Peabody Museum U-31-297).



Figure 3.70: Close-up view of vegetal bindings, as observed in 1931 (Peabody Museum U-31-296).



Figure 3.71: View of lower granary in 2006 (K.R. Barlow, courtesy of the National Geographic Society Committee for Research and Exploration).

The upper granaries were described by Dennison as:

*Upper Granaries.*

are two adjacent granaries of difficult ascent, necessitating to rough scaling. The ledge has a southwest exposure, is irregular and extends on the average of over a meter from the back wall. 8 meters above the ledge is an uneven overhang about 3 meters wide. The ledge is 6 meters long, north to south. On this ledge is a rectangular structure which has a slight recession in front wall and a partition divides into two rectangular. The masonry of the front wall and side walls and partition is of gray-red-brown sandstone slab and adobe. Some of the adobe layers look as if they were at first turtle-backs and then molded around the edge of the slabs. Finger marks are visible. A large box elder pole, 12 centimeters in diameter, runs along the base of the floor wall. This log is charred. The slabs of which the walls are composed are irregularly shaped, over 35 centimeters long and 6 centimeters thick. The front wall is 14-20 centimeters thick and 80 centimeters to 1.1 meters high. The south wall of structure B (the right hand structure) is 75 centimeters long. Front wall of B is 1.2 meters long; the front wall of A is 90 centimeters long. The north side wall of A is 50 centimeters long. The partition between the two granaries is 85 centimeters long and the log which runs over the front wall of both is 2

*meters long. The adobe layers are 4-8 centimeters thick with definite length divisions. The floor is of sand. In Granary A it is 16 centimeters deep, in B averaging 10 centimeters. There is no roof remaining in A except two long poles 3.2 meters extending from north wall of A to south wall of B. Part of the roof in B is broken in. The remainder covers about 3 square meters long the ledge wall and south wall. Besides two long poles 5 centimeters in diameter there is one other near the back wall but going only to the partition between the granaries. Across these, running east to west, lies two others about the same size, from the back wall to the middle, about 40 centimeters long. Single withes are twisted around these two. Also lying east and west, a matting made of sticks 1 centimeter in diameter extends from back wall to the front except near the middle of roof where there is a round hole left for slab cover. This is roughly circular, 40 centimeters in diameter, 2-3 centimeters thick and smooth on one side. The matting is made up of sticks of 2-3 centimeters apart, woven together by 3 or 4 strands of withes, 10 to 20 centimeters apart. A layer of adobe over 5-7 centimeters thick is laid over the matting and in between the sticks of which it is composed. Two black potsherds were found on the surface outside the granaries and one found inside just below the surface. Corn was found outside the granaries (Specimen U-130 black potsherds) (Photograph U 31-84, 85, 294 and 295). Remains of two old forts made of big rocks 30 feet below and 20-50 yards downstream on this ledge [Scott 1931:94-95].*





Figure 3.72: Access to 42Em761 in 1931 by way of pole ladder (Peabody Museum U-31-295).

The upper granaries, when observed from the valley floor in 2004, appeared to be in pristine condition (Figure 3.73). The 1931 photographs depict the exceptional exterior wall construction (Figure 3.74), and of the roof matrix that included a round stone lid (Figure 3.75). Upon revisiting this site in 2006, it was determined that the site has been impacted, probably from human visitation despite its difficult access. The stone lid is no longer evidence at the site, and the vegetal matrix is not as evident now as it was in 1931 (Figure 3.76). However, the exterior wall condition appears to intact and unchanged from that depicted in the 1931 photograph (Figure 3.77). The difficult access to these structures has likely contributed to their good structural integrity and may have preserved interior deposits. Given that individuals have found a way to access this site in the past, it is recommended the BLM monitor this site for future impacts.



Figure 3.72: View of upper granaries at 42Em761, as observed in 2004 from valley floor (J.D. Spangler).



Figure 3.73: Exterior wall construction at 42Em761, as observed in 1931 (Peabody Museum U-31-84).





Figure 3.74: Roof of upper granaries at 42Em761, as observed in 1931 (Peabody Museum U-31-294).



Figure 3.75: Plan view of upper granary; compare to Figure 3.74. (K.R. Barlow, courtesy of National Geographic Committee for Research and Exploration.



Figure 3.76: Profile view of upper granary; compare to Figure 3.73. (K.R. Barlow courtesy of National Geographic Committee for Research and Exploration)

### Summary

The Claflin Emerson Expedition photographs provide an important baseline from which the degradation of sites over the past 75 years can be determined. These data, obtained prior to the construction of a road in the bottom of the canyon, also offer important insights into the types of vandalism that have occurred in the past, which can assist land managers with future management strategies to better protect cultural resources in the Range Creek area. The historic photographs and field notes demonstrate that sites were largely in pristine condition in 1931, with only two sites exhibiting evidence of adverse human impacts at that time. At site 42Em2825, expedition participants mentioned a modern human occupation of the shelter, and at 42Em2881 they mentioned that storage facilities had been damaged prior to their arrival. Adverse impacts were mentioned at none of the other 27 sites visited, despite the fact these sites were well known to local ranchers and cowboys.

Based on historic inscriptions found at sites throughout the canyon, it is likely that ranchers and cowboys affiliated with the Range Valley Cattle Company in the late nineteenth century and the Nutter Ranch in the early twentieth century engaged in activities that had degrading effects on the integrity of archaeological sites. However,



these effects appear to have been minimal prior to 1931. It also appears there was a general lack of recognition among local cowboys as to the nature and extent of archaeological sites found in the middle portion of the canyon, or that they deliberately misled the Claflin Emerson Expedition. According to Bowers (1931:36), "I was told by one of Nutter's men that he (knew) the area very well indeed and that there was nothing at all there (except for) a number of quite small concealed granaries etc."

If it can be assumed that most archaeological sites were in pristine condition in 1931, then it can be posited that most vandalism occurred between that time and the present. A subsequent archaeological reconnaissance in 1934 (Leh 1937) mentioned no site vandalism at that time. A University of Utah reconnaissance in 1954 observed that site vandalism was occurring then (Gunnerson 1957). This would suggest that the initial phase of vandalism occurred between 1934, prior to the construction of a road into the canyon, and 1954, when vehicular access had been firmly established. A second phase of vandalism occurred in the mid-1960s with the construction of a secondary access road into the lower canyon by way of Turtle Canyon.

Based on the historic photographs, rock art sites appear to have suffered the least degradation, with only one of nine sites having been vandalized, whereas large and impressive structural sites are most likely to have been vandalized. While this is most evident south of the south locked gate (e.g., 42Em2891, 42Em754, 42Em755, 42Em756, 42Em760 and 42Em761), extensive human impacts have also occurred at 42Em741, 42Em753 and 42Em2881. The latter two are located just inside the south locked gates within easy pedestrian access. Two other sites, 42Em3110 and 42Em2841, have suffered significant site degradation, but it is unknown if this was precipitated by human activities or through natural erosion.

The historic photographs also demonstrate that some large, visually impressive architectural sites have been targeted by vandals despite their difficult access. At 42Em741, a large granary at the mouth of Nelson Canyon, it appears that much of the roof superstructure has been degraded through repeated visitation to the site (easy access is no longer possible at this site). And artifacts present in 1931 have been removed. And at 42Em755, the front wall has been broken out of a granary on a ledge with no obvious means of access remaining today. Also noteworthy, rockshelter sites south of the south locked gate have all been vandalized except one that had no interior deposits, whereas rockshelter sites north of the south locked gates have not been vandalized.

Collectively, the historic photographs reinforce the GIS data (see Chapter 2) that controlled vehicular access has been a significant factor in site preservation in the past, and that sites located outside of controlled access points have been more vulnerable. It is also likely sites north and south of the locked gates will remain at risk in the future without aggressive management strategies by the relevant land owners (BLM, SITLA and DWR) to limit vehicular access and to bolster their law enforcement presence there.

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