

TUMPITUXWINAP
(STORIED ROCKS)

Version 2



Southern Paiute Consortium
Pipe Spring, Arizona
and
Bureau of Applied Research in Anthropology
University of Arizona
Tucson, Arizona

Report of work carried out under the Southern Paiute Consortium Cooperative Agreement
with the Bureau of Reclamation, #4-FC-40-15260

TUMPITUXWINAP (STORIED ROCKS):

***SOUTHERN PAIUTE ROCK ART IN THE
COLORADO RIVER CORRIDOR***

Version 2
(For Public Distribution)

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TABLE OF CONTENTS

List of Tables	vii
List of Figures	viii
Acknowledgements	xi
A Note on Transcriptional Practice	xiii
CHAPTER ONE	
INTRODUCTION	1
Tiering	2
Common Ground	2
Rock Art (<i>Tampituxwinap</i>) Terms	3
Approaches to Rock Art Studies	4
Impressionism	5
Science	5
Ethnoculture	6
GCES Rock Art Study	7
Interdisciplinarity	8
Multivocality	8
Key Study Findings	9
CHAPTER TWO	
OUR HOMELAND	11
CHAPTER THREE	
A SCIENTIST'S PERSPECTIVE	18
Grand Canyon Rock Art	19
Dating of Rock Art	20
Petroglyphs	20
Pictographs	21
Ethnography and Rock Art	22
The Relationship of Rock Art to Shamans in the Grand Canyon	23
Kanab Creek Site #4 as an Example	26
Rock Art Types or Styles and Chronology	29
Great Basin Abstract Styles	31
Glen Canyon Style V	32
Grand Canyon Polychrome Style	33
Tapering-body Human Figures	34
Western Anasazi and Fremont Rock Art	34
Cave Valley Style	35
Southern Paiute Pictographs	36
Conclusions and Recommendations	38

CHAPTER FOUR	
ETHNOGRAPHIC OVERVIEW	41
Cultural Landscapes	41
Holy Lands	45
Regional Landscapes	46
Ecoscapes	47
Storyscapes	47
Landmarks	48
Southern Paiute Cultural Landscapes	48
The Paiute Holy Land	49
Grand Canyon as a Paiute Regional Landscape	49
Kanab Creek as a Paiute Ecoscape	50
Trails and the Cry as Paiute Songscapes	52
Vulcan's Anvil as a Paiute Landmark	52
Boundaries and Joint Use	53
Interaction Patterns	55
Rock Art Rules	56
CHAPTER FIVE	
ROCK ART IN THE <i>COLORADO RIVER CORRIDOR</i>	58
Methods	58
Overview of Findings	60
Sacred Paint	60
Stories and Legends	61
Site-by-Site Interpretation	61
Site 1 - C:03:006	62
Southern Paiute Interpretation	62
Archaeologist's Commentary	64
Site 2 - C:02:038	65
Southern Paiute Interpretation	66
Archaeologist's Commentary	68
Site 3 - C:02:037	69
Southern Paiute Interpretation	69
Archaeologist's Commentary	71
Site 4 - C:02:013	73
Southern Paiute Interpretation	73
Archaeologist's Commentary	75
Site 5 - C:02:056	76
Southern Paiute Interpretation	76
Archaeologist's Commentary	78
Site 6 - C:02:104	79
Southern Paiute Interpretation	80
Archaeologist's Commentary	81

Site 7 - C:06:005	82
Southern Paiute Interpretation	83
Archaeologist's Commentary	84
Site 8 - C:05:001	85
Southern Paiute Interpretation	86
Archaeologist's Commentary	88
Site 9 - C:13:003	88
Southern Paiute Interpretation	89
Site 10 - C:13:132	89
Southern Paiute Interpretation	90
Archaeologist's Commentary	92
Site 11 - C:13:322	93
Southern Paiute Interpretation	93
Archaeologist's Commentary	95
Site 12 - Deer Creek Rock Art Site	96
Southern Paiute Interpretation	97
Archaeologist's Commentary	99
Site 14 - A:16:163	101
Southern Paiute Interpretation	102
Archaeologist's Commentary	104
Site 15 - A:16:181	105
Southern Paiute Interpretation	105
Archaeologist's Commentary	107
Site 16 - A:16:172	108
Southern Paiute Interpretation	108
Archaeologist's Commentary	110
Site 17 - A:16:179	111
Southern Paiute Interpretation	111
Archaeologist's Commentary	112
Site 18 - A:16:001	113
Southern Paiute Interpretation	115
Archaeologist's Commentary	117
Site 19 - A:16:159	117
Southern Paiute Interpretation	118
Archaeologist's Commentary	119
Site 20 - A:15:018	120
Southern Paiute Interpretation	121
Archaeologist's Commentary	121
Site 22 - A:15:005	122
Southern Paiute Interpretation	124
Archaeologist's Commentary	126
Site 23 - Spring Canyon Rock Art Site	126
Southern Paiute Interpretation	126
Archaeologist's Commentary	128

Site 24 - G:03:077	128
Southern Paiute Interpretation	130
Archaeologist's Commentary	131
Site 25 - G:03:080	131
Southern Paiute Interpretation	132
Archaeologist's Commentary	134
Patterns	135
Cultural Significance of Rock Art Panels for Southern Paiute People	136
Uses of Rock Art Panels	139
Past Uses of Panels	140
Current Uses of Rock Art Panels	143
Patterns of Response Based on Gender	145
Cultural Transmission	147
How Sites Are Interconnected	148
Discussion	150

CHAPTER SIX

<i>KANAV 'UIPI (WILLOW CANYON) ECOSCAPE STUDY</i>	152
Defining the Ecoscape	152
Physical Parameters	153
Cultural Parameters	153
Region of Refuge	155
The Ghost Dance	157
Methods	161
Archaeologist's Commentary	161
Numbering System	162
<i>Kanav 'Uipi</i> Rock Art Sites	163
Kanab Creek Site # 1	163
Southern Paiute Interpretations	163
Archaeologist's Commentary	165
Kanab Creek Site # 2	166
Southern Paiute Interpretations	167
Archaeologist's Commentary	167
Kanab Creek Site # 3	169
Southern Paiute Interpretations	170
Archaeologist's Commentary	171
Ethnographic Commentary	171
Kanab Creek Site # 4	171
Southern Paiute Interpretations	172
Archaeologist's Commentary	175
Kanab Creek Site # 5 -- (Forest Service Site # AR-03-07-03-1019)	175
Southern Paiute Interpretations	176
Archaeologist's Commentary	179

Kanab Creek Site # 6 -- (Forest Service Site # AR-03-07-03-1252)	182
Southern Paiute Interpretations	183
Archaeologist's Commentary	185
Kanab Creek Site # 7 -- (Forest Service Site # AR-03-07-03-1264)	186
Southern Paiute Interpretations	187
Archaeologist's Commentary	188
Kanab Creek Site # 8 -- (Forest Service Site # AR-03-07-03-1267)	189
Southern Paiute Interpretations	192
Archaeologist's Commentary	193
Ethnographic Commentary	195
Additional Site Interpretations	195
Forest Service Site # AR-03-07-03-1265	195
Southern Paiute Interpretations	196
Archaeologist's Commentary	196
Forest Service Site # AR-03-07-03-1256	197
Southern Paiute Interpretations	197
Archaeologist's Commentary	197
Forest Service Site # AR-03-07-03-1258	199
Southern Paiute Interpretations	200
Archaeologist's Commentary	200
Forest Service Site # AR 03-07-03-1284	200
Southern Paiute Interpretations	201
Archaeologist's Commentary	201

CHAPTER SEVEN

TRADITIONAL CULTURAL PROPERTIES	203
Defining Traditional Cultural Properties	203
Southern Paiute TCPs in the <i>Colorado River Corridor</i> : Landmarks and Ecoscapes	205
Salt Cave Landmark	205
Southern Paiute Interpretations	205
Ethnographic Commentary	206
Vulcan's Anvil Landmark	207
Southern Paiute Interpretations	207
Ethnographic Commentary	209
The Vulcan's Anvil-Lava Falls Complex: An Ecoscape TCP?	210
Ompi (Hematite) Cave	212
Southern Paiute Interpretations	213
Ethnographic Commentary	213
Pumpkin Spring Landmark	214
Southern Paiute Interpretations	214
Ethnographic Commentary	215
Deer Creek Valley and Falls Ecoscape	216
Southern Paiute Interpretations	216

Ethnographic Commentary	219
Granite Park Ecoscape	221
Southern Paiute Interpretations	221
Ethnographic Commentary	221
Summary	222
The National Register of Historic Places	222
Eligibility for Nomination to the National Register	223
The Current State of TCP Research and Protection	224
Historic, Cultural, and Ethnographic Landscapes	225
Conclusion	225
 CHAPTER EIGHT	
MANAGEMENT RECOMMENDATIONS	227
Laws for Protecting Cultural Resources	228
National Historic Preservation Act	229
American Indian Religious Freedom Act	230
Individual Paiute Recommendations	230
Perceived Impacts	230
Impacts from Natural Elements	231
Impacts from Human Activities	233
Southern Paiute Consortium Recommendations for Protecting and Managing Cultural Resources in the <i>Colorado River Corridor</i>	237
References Cited	239
Appendices	252
Appendix A	
Ethnoarchaeology - Rock Art Interview Form	253
Appendix B	
Terms That Indicate Frequency of Southern Paiute Responses	262
Appendix C	
Relationship Between Rating of Rock Art Panels and Other Variables	263
Appendix D	
Southern Paiute Responses to Rock Art Panels Based on Gender	264

LIST OF TABLES

Table 5.1. Perceived Importance of Rock Art Panels and Sites	136
Table 5.2. Relationship Between Importance of Rock Art Panel and Site	137
Table 5.3. Relationship Between Kind of Rock Art Panels and their Perceived Significance	137
Table 5.4. Relationship Between Perception that Rock Art Panels are Affected by Natural Elements and Their Significance	138
Table 5.5. Relationship Between Perception that Rock Art Panels are Affected by Human Activities and Their Significance	138
Table 5.6. Southern Paiute Past and Present Use of Rock Art Panels Visited on River Trips (Proportion of Representatives who Visited or Used the Panels)	140
Table 5.7. Southern Paiute Past and Present Use of Rock Art Panels <i>Like Those</i> Visited on River Trips (Proportion of Representatives who Visited or Used the Panels)	141
Table 5.8. Purposes for Which Southern Paiutes Made, Visited, or Used the Rock Art Panels	142
Table 5.9. Past Family Visitation or Use of Rock Art Panels	143
Table 5.10. Current Southern Paiute Visitation or Use of Rock Art Panels	144
Table 5.11. Current Family Visitation or Use of Rock Art Panels	145
Table 5.12. Past and Current Use of Site By Gender	146
Table 5.13. Gender-based Perceptions of Use of Panels for Ceremonial Purposes	147
Table 5.14. Cultural Transmission of Information About Rock Art Panels Based on Gender	148
Table 5.15. Who is Being Taught About Rock Art Panels	148
Table 5.16. Interconnectedness of Sites	149
Table 8.1. Perceived Natural Impacts to Rock Art Panels	232
Table 8.2. Perceived Human Impacts to Rock Art Panels	235

LIST OF FIGURES

Figure 2.1. Southern Paiute representatives	12
Figure 2.2. Southern Paiute consultants study a rock art panel	16
Figure 3.1. Larry Loendorf, a rock art specialist	18
Figure 3.2. Types and styles of North American rock art	30
Figure 4.1. The Kanab Creek Basin (adapted from Webb, Smith and McCord 1991:2)	51
Figure 5.1. Overview of Site 1 - C:03:006	63
Figure 5.2. Petroglyphs at Site 1.	64
Figure 5.3. Overview of Site 2 - C:02:038	66
Figure 5.4. Petroglyphs at Site 2	67
Figure 5.5. Overview of Site 3 - C:02:037	70
Figure 5.6. Petroglyphs at Site 3.	72
Figure 5.7. Overview of Site 4 - C:02:013	74
Figure 5.8. Petroglyphs at Site 4	75
Figure 5.9. Overview of Site 5	77
Figure 5.10. Petroglyphs at Site 5	78
Figure 5.11. Overview of Site 6 - C:02:104	79
Figure 5.12. Petroglyphs at Site 6	81
Figure 5.13. Overview of Site 7 - C:06:005	82
Figure 5.14. Petroglyphs at Site 7	84
Figure 5.15. Overview of Site 8 - C:05:001	86
Figure 5.16. Petroglyphs at Site 8	87
Figure 5.17. Overview of Site 10 - C:13:132	90
Figure 5.18. Petroglyphs at Site 10	92
Figure 5.19. Overview of Site 11 - C:13:322	94
Figure 5.20. Petroglyphs at Site 11	95
Figure 5.21. Overview of Site 12 - Deer Creek Falls	98
Figure 5.22. Pictographs at Site 12	99
Figure 5.23. Overview of Site 14 - A:16:263	101
Figure 5.24a. Pictographs at Site 14	103
Figure 5.24b. Pictographs at Site 14	104
Figure 5.25. Overview of Site 15 - A:16:181	106
Figure 5.26. Pictographs at Site 15	107
Figure 5.27. Overview of Site 16 - A:16:172	109
Figure 5.28. Petroglyphs at Site 16	110
Figure 5.29. Overview of Site 17 - A:16:179	111
Figure 5.30. Pictographs at Site 17	113
Figure 5.31. Overview of Site 18 - A:16:001	115
Figure 5.32a. Pictographs at Site 18	116
Figure 5.32b. Paint Source at Site 18	117
Figure 5.33. Overview of Site 19 - A:16:159	119

Figure 5.34. Pictographs at Site 19	120
Figure 5.35. Overview of Site 20 - A:15:018	122
Figure 5.36. Pictographs at Site 20	123
Figure 5.37. Overview of Site 22 - A:15:005	124
Figure 5.38. Pictographs at Site 22	125
Figure 5.39. Overview of Site 23 - Spring Canyon	127
Figure 5.40. Pictographs at Site 23	128
Figure 5.41. Overview of Site 24 - G:10:077	129
Figure 5.42. Pictographs at Site 24	130
Figure 5.43. Overview of Site 25 - G:03:080	132
Figure 5.44a. Pictographs at Site 25	133
Figure 5.44b. Pictographs at Site 25	134
Figure 6.1. The Kanab Creek ecoscape	154
Figure 6.2. Overview of Kanab Creek study area	162
Figure 6.3. Pictographs at Site # 1	164
Figure 6.4. Pictographs at Site # 1	165
Figure 6.5. Pictographs at Site # 2	167
Figure 6.6. Pictographs at Site # 2	168
Figure 6.7. Petroglyphs at Site # 3	169
Figure 6.8. Linear grooves at Site # 3	170
Figure 6.9. Overview of Site # 4	172
Figure 6.10. Pictographs at Site # 4	173
Figure 6.11. White paint source	174
Figure 6.12. Overview of Kanab Creek 5	176
Figure 6.13. Rockshelter at Kanab Creek 5	177
Figure 6.14. Observing the Pictographs at Kanab # 5	178
Figure 6.15. Paiute style pictograph figures	179
Figure 6.16. Paiute style pictograph figure	180
Figure 6.17. Cave Valley style pictograph figure	181
Figure 6.18. Archaic style pictograph figures	182
Figure 6.19. Pictographs at Kanab # 6	183
Figure 6.20. Yellow figure at Kanab # 6	184
Figure 6.21. Overview of Kanab # 7	185
Figure 6.22. Pictographs at Kanab # 7	186
Figure 6.23. Stenciled plant pictograph at Kanab # 7	187
Figure 6.24. Overview of Kanab # 8	189
Figure 6.25. Forest Service archaeologist's sketch of some of the paintings in the gallery	190
Figure 6.26. Pictograph at Kanab # 8	191
Figure 6.27. Pictograph at Site # 8	192
Figure 6.28. Knotted strings pictograph at Kanab # 8	194
Figure 6.29. Pictographs at F.S. Site # AR-03-07-03-1265	196
Figure 6.30. Pictograph at F.S. Site # AR-03-07-03-1256	197
Figure 6.31. Pictographs at F.S. Site # AR-03-07-03-1256	198

Figure 6.32. Overview of F.S. Site # AR-03-07-03-1258	199
Figure 6.33. Pictographs at F.S. Site # AR-03-07-03-1258	200
Figure 6.34. Overview of F.S. Site # AR 03-07-03-1284	201
Figure 6.35. Pictographs at F.S. Site # AR 03-07-03-1284	202
Figure 7.1. Vulcan's Anvil.	209
Figure 7.2. Overview of Hematite Cave Site.	213
Figure 7.3. Pumpkin Spring	215
Figure 7.4. Overview of Deer Creek Valley (note burn scars from unintentional tourist fire)	218
Figure 7.5. The Deer Creek Gorge	220
Figure 7.6. Overview of Granite Park	222

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A NOTE ON TRANSCRIPTIONAL PRACTICE

The transcriptions used in this report follow the system for writing Southern Paiute used by Bunte and Franklin (1987:297-298), despite some criticism of this orthography by other Numicists (Givon 1992; Miller 1992) because it is allophonic and not phonemic. Briefly, the vowels are as in Spanish, except that barred-u (\bar{u}) is a high central vowel, and the vowel (ϕ) is a mid, front, rounded vowel. Long vowels are indicated with two vowels. Most consonants correspond roughly to their American English equivalents. Consonant x is a velar fricative. Consonant xw is a labialized velar fricative.

It should be noted that spellings of Paiute words in quotations have been retained without any correction, except for glottal stop, which is indicated by a question mark (?), instead of the IPA symbol, for typographical convenience.

CHAPTER ONE

INTRODUCTION

The Bureau of Reclamation (BOR) is interested in understanding the human and environmental consequences of past Glen Canyon Dam water release policies and using these data to inform future water release and land management policies. One step in this direction is to understand how American Indian people have used the Colorado River and adjoining lands in Glen Canyon and Grand Canyon. The BOR, through its Glen Canyon Environmental Studies (GCES) office, has provided funds for various American Indian groups to identify places and things of cultural significance in the 300 mile long river and canyon ecosystem that has come to be called the *Colorado River Corridor*. This study is the second to report on the cultural resources of the Southern Paiute people found in this riverine ecosystem.

The funds for this rock art study were contracted from the BOR to the Southern Paiute Consortium. The Southern Paiute Consortium represents the specific cultural concerns of six Southern Paiute tribes incorporated into (1) the Kaibab Paiute Tribe and (2) the composite Paiute Indian Tribe of Utah, which represents the Koosharem Paiutes, Indian Peaks Paiutes, Kanosh Paiutes, Cedar City Paiutes, and Shivwits Paiutes. The San Juan Southern Paiute Tribe no longer participates in the GCES cultural resource studies. The remaining tribes combined after the first BOR-funded study to create the Southern Paiute Consortium, an organization that now represents the cultural resource concerns of the above listed Paiute tribes. The Southern Paiute Consortium subcontracted for expert services with a team of researchers from Bureau of Applied Research in Anthropology at the University of Arizona.

The Southern Paiute people view with great interest activities that occur within the *Colorado River Corridor* because this river and these lands are central to the creation, history, and contemporary life of Paiute people. These are a portion of the aboriginal lands or holy lands of the Southern Paiute people and the Southern Paiute Consortium supports any action that brings Paiute people into a partnership involving the culturally appropriate management of this river and these lands. Southern Paiute people respect the request of the Bureau of Reclamation for sensitive cultural information regarding this river and these lands, and so have participated to the fullest in these cultural studies. In all, four separate cultural studies have been completed. These involve (1) archaeology, (2) plants, (3) rock art, and (4) animals. The cultural significance to Southern Paiutes of known archaeology sites and plant communities in the *Colorado River Corridor* were submitted to the BOR as *Piapaxa 'Uipi (Big River Canyon)* in June of 1994 (Stoffle, Halmo, Evans, and Austin 1994). This report describes the cultural significance of rock

art sites in the *Colorado River Corridor*. The animal study was conducted in the spring of 1995 and will be incorporated into the third and final report of this series.

Due to the sensitive nature of some of the information provided by Southern Paiute consultants during this study, a special format has been suggested by the BOR for use in the preparation of this report. Two versions of this report have been produced. The first and complete version contains all information and is held in the office of the Southern Paiute Consortium. Individuals with a specific need for that information for management purposes can contact the office at 520-643-7214 to request access to it. The second version of this report does not include culturally sensitive information and is available for public distribution. The sections of the second report where information has been removed have been identified with boxes containing the message, "Culturally sensitive information held at the office of the Southern Paiute Consortium. Box same size as text removed."

TIERING

This report builds on the previous report, so unnecessary duplication is eliminated. This is a process called *tiering*, and it is suggested by the National Environmental Policy Act that guides environmental assessments in the United States. Tiering reduces duplication, but it results in the need to read all related studies in order to gain the full perspective on the issue. In addition, tiering permits hypothesis testing and takes into consideration the emergence of new ideas. This second Southern Paiute report has all of these elements, most especially it attempts to place both reports into a broader conceptual framework. The concept of *cultural landscape* (see Chapter Four) is suggested as best reflecting both the cultural perspective of the Southern Paiute people and the management needs of the BOR. This concept has standing in both the professional literature on cultural systems and the regulations and guidelines of U.S. federal agencies. Chapter Four of this report presents the conceptual framework that derives from the this American Indian cultural landscape model. This model more or less completely reflects how Paiute people, as represented by the Southern Paiute Consortium, would like to identify, protect, and manage their cultural resources located in the *Colorado River Corridor*.

COMMON GROUND

A key juxtaposition of interests occurs because both the Southern Paiute people and the BOR view the Colorado River and its associated lands in similar ways. The American Indian cultural landscape model simply suggests one way to define these commonly held geographically-based units of study and management. The U.S. federal government is moving to what it calls ecosystem management, and the BOR can serve as a model through its ten year old Glen Canyon Environmental Studies (GCES) program. At the beginning of the GCES, the BOR recognized the need to know about and manage the entire ecosystem influenced by the water release policies of Glen Canyon Dam. As a result, a series of ecosystem-wide scientific studies began to provide data that can be translated into information needed to manage the entire *Colorado River Corridor* ecosystem. This holistic approach of the BOR closely reflects the approach to land management preferred by Southern Paiute people. As a result of this juxtaposition of interest, this and the

third report will attempt to frame Southern Paiute cultural resource concerns in terms of a cultural landscape model.

ROCK ART (*Tumpituxwinap*) TERMS

This is a study of peckings on rocks, technically called *petroglyphs*, and paintings on rocks, technically called *pictographs*. Probably because these things are discussed together and because their technical names are cumbersome, the term *rock art* has come to be the gloss for both concepts. Today the term rock art is widely used in both the scientific literature and popular writings about pictographs and petroglyphs.

The term rock art is a misnomer, however, and one that conveys exactly the opposite message that the Southern Paiute people wish to convey about pictographs and petroglyphs. Conceptually the term rock art can imply expressive cultural activities which are generally understood under the term art. In Western culture, art can be either sacred or secular, but it tends to be the latter. Art does symbolically convey meanings as well as stories, although the latter is less common. When the corpus of conceptual meanings that are attached to the term art in Western culture are reviewed, it is clear that most of them do not fit with the Southern Paiute cognition of pictographs and petroglyphs. There seem to be two paths to a culturally sensitive solution for this problem. First, the term rock art is used in this report with the understanding that it has a restrictive meaning reflecting perceptions held by the Southern Paiute people. It is obvious that in order to facilitate communication it is necessary to use an English term that refers to both pictographs and petroglyphs. Even the Southern Paiute people associated with this project use the term *rock art* to describe the study to each other and to others. In this study the term *rock art* is operationally defined as pictographs and petroglyphs placed on stone surfaces for sacred purposes, and it does not imply a desire to express cultural aesthetics or casual communication of any kind.

Second, the Southern Paiute people associated with this study have searched for a proper Paiute language term which will also be used as a gloss for pictographs and petroglyphs. The term they have selected is *Tumpituxwinap*, which literally translates as *rock story* but more closely approximates *storied rocks*. According to one Paiute elder and her mother who worked on this question:

Tumpituxwinap is like a story telling time in winter. It is when you are telling a story about someone else's experience. Experiences as a child as well as mythology and legends. Like why do rabbits have white or brown tails. The deeper lessons.

The process of finding a single term for *rock art* was difficult because there are many varieties and no single term completely conveys this diversity. Another term that has been suggested is *Nisumaip tumpim po'okant* which literally means "having an important story told by symbols on a rock."

According to the Paiute expert:

Nisumaip tumpim po'okant means having a lot to tell on the rocks - like an historical event more than just legends or myths, but it would also include more abstract ideas like maps and territorial markers. When you have a lot to tell about Nisumaip, it is not just a normal story and this is evidenced by the effort they (former Indian people) went through to put the story on the rock. The people who put the story there had to talk to the rock to ask for its permission and, then, had to carefully place the story on the rock.

Tumpim po'op is a general term for symbols on rock. Sometimes the the meanings of these symbols are understood, and, at other times, they are not. It is generally assumed that the symbols have meanings but either these are Paiute symbols that have been lost over time or these symbols were made by other Indian people. *Navastump po'okant* literally translates as nonsense symbols, and this term is used particularly to describe graffiti. The Paiute language expert notes that:

It could be used to describe destructive graffiti. Indian people don't write their names on rocks, it does not reflect the respect we have for the rock.

The reader will note that the English language term *writing* has been avoided in this conceptual discussion of rock art. In fact the term rock art itself has been coined in order to avoid the term rock writing. English writing is based on a standardized phonetic and phonemic system in which written letters stand for specific sounds. The Paiute people who participated in this study uniformly distinguish what they observed from a system of writing. This study has stimulated Southern Paiute people to find common linguistic ground for discussing rock peckings and rock paintings made by Indian people for sacred purposes. That this is both a difficult and ongoing process clearly illustrates how complex it is to communicate information between very different cultures and of conveying very different perceptions of a cultural landscape.

APPROACHES TO ROCK ART STUDIES

Rock art is one of the few cultural resources that is predominately subject to observer speculation during interpretation. This may derive from the abstract nature of rock art. Unlike a stone arrow head which was probably used in hunting or a kiva ruin which was probably used for religious ceremonies, the purpose of rock art is not quickly understood by the observer. Many people have looked at rock art and individuals have seen everything from evidence of aliens to dinosaurs. Until recently, most rock art studies reflected as much about the researcher as about the intention of the person who made rock art.

The rock art of the Grand Canyon reflects a diversity of interpretation. On September 27, 1994, both on the cover of the *Weekly World News* and inside as a popular article entitled "4,000-year-old UFO Found In Grand Canyon," a painted figure described as "strange humanoid creature with bulbous head" was interpreted as symbolizing occupants of a spacecraft who had

crashed, lived in the Grand Canyon along the Colorado River, and had been painted as rock art images by local American Indians (Annon 1994). Seven decades earlier a team of scientists with the Doheny Scientific Expedition studied a large petroglyph panel in Havasu Canyon and determined that it recorded a dinosaur being hunted by American Indians (Hubbard 1925). This team of scientists was so certain of their evidence that they suggested geologic time periods would have to be reconsidered because of this pictograph.

Currently there are three major approaches to the study of rock art (*Tumpituxwinap*): these are impressionism, science and ethnoculture. The first two of these approaches dominate the published literature on the subject. The third approach, which involves working with the ancestors of the people who made the rock art, is rare. It is important to clearly distinguish these approaches because they can lead to very different types of cultural resource management decisions. In fact it could be argued that the approach of a rock art study necessarily predetermines the management recommendations.

Impressionism

Probably the first form of rock art interpretation was what is being called here *impressionism*. In this system of interpretation any person looks at rock art and decides what it means based on the impression it makes. If the rock art is systematic, it probably had a purpose. If no patterns are easily discerned, it is the work of children or the casual scratches of bored travelers. If the rock matches something recognizable in the culture of the observer, then that is what it means. A hunter points a drawn bow at a deer, and it is a ritual to magically assure hunting success. Unusually shaped humanoid figures tend to be quickly identified as space travelers from other planets.

The value of rock art, like its impressionistic interpretation, is a function of how the viewer feels about it. Well-made paintings of animals are more valuable than simple outlines. Pictographs that are elaborately integrated are more valuable than simple ones. Unusual styles of rock art are more valuable than common ones. When the observer's impressions correspond with those of many other observers, then an argument is made for land management recommendations that reflect how these contemporary people feel about the rock art. The recent Petroglyph National Monument was formed as much by and for average citizens as it was by and for others with rock art concerns such as scientists and American Indians. Once the monument was formed, these citizen groups pressured the National Park Service to provide public access to what they perceived as the *best rock art* and insisted that certain types of interpretations and even place names they had assigned be used by the park (Eastvold 1986; Evans, Stoffle, and Pinel 1993).

Science

The science of rock art emerged slowly out of a long tradition of impressionistic interpretation. As illustrated by the Havasu dinosaur petroglyph, the transition did not simply occur because scientists were involved. The first stage of scientific interpretation derived from

systematic observations and comparisons. Through such techniques, patterns emerged and were categorized, and the study of rock art style traditions was established. Parallel to this effort were attempts to date rock art. Most of the early efforts involved relative placement of style. Absolute dating awaited electron microscopes and sophisticated micro particle chemical analysis (Francis, Loendorf, and Dorn 1993). Today, absolute dates can be established for both pictographs and petroglyphs. With new chemical analysis methods, it is possible to relate paint sources with where the paint was used and begin to establish spatial relationships based on more than similarities in style.

The recommendations of scientists to cultural resource managers are based on the potential value to science possessed by a particular panel. Hypotheses have been developed about temporal and spatial relationships between rock art styles and these tend to dominate recommendations for preservation. Still, many scientists seem to respond to the same impressionistic and culture centric recommendations made by non-professionals. There seems to be a tendency to afford protection to the biggest, the most complex, the most aesthetically pleasing, while small rock art, not well done rock art, and common rock art receive less pressure for protection.

Ethnoculture

In North America most of what is called rock art was made by American Indian people. There are some exceptions, like Inscription Rock at El Morro National Monument. There, famous Spanish explorers carved their names and often comments about the world in the soft sandstone near a source of water. With few exceptions, however, the non-written rock art was made by Indian people.

At the present time it appears that Indian people continuously produced rock art for thousands of years in North America. While it may be impossible to connect some early rock art with living Indian peoples, it is reasonable to attempt to establish a cultural affiliation between living Indian people and the most recent rock art. Initial rock art studies did involve interviews with Indian people. These relationships failed to produce a positive product because these studies were looking for an Indian writing system in the rock art (Mallery 1886, 1893). Since these early studies, few rock art scientists have attempted to connect this cultural resource with living people and even fewer have worked directly with Indian people. Even when some reasonable connection with a living Indian group has been established for one style of rock art, another study of the same style rock art elsewhere may not involve the Indian people. This pattern of exclusion can only be explained by the assumption that some rock art scientists believe Indian people have nothing important to contribute to the study of rock art produced by their ancestors. For example, in a recent article by NPS staff from Petroglyph National Monument (Fletcher and Sanchez 1994), the authors concluded that even local Pueblo Indians do not know the purposes of their ancestors when they made 17,000 rock art features in the park. This conclusion was reached even though a cultural affiliation study sponsored by the NPS indicated

that many of the sites were currently being used and all of the rock art sites in the park were perceived to be culturally significant by Pueblo tribes (Evans, Stoffle, and Pinel 1993). The article does not specify why the NPS personnel chose to ignore Indian expert opinion.

The American Indian people who have been invited to share in the study of rock art have expressed two views which are important in evaluating their contribution to such studies. First, most Indian people say they do not know everything about all rock art. Instead they insist that only some information has been passed down through the generations, especially about old rock art that is not currently being produced. Often such rock art is as great a mystery to Indian people as it is to others. As noted above, the Southern Paiute people even have a term that includes such rock art (*Tumpim po'op*). Rarely will Indian people venture an interpretation of such rock art, although they may express the opinion that because it was made by Indian people it is culturally important to Indian people today as a part of their culture history.

Indian people also express the view that they do know something about rock art that was made by their ancestors, that closely resembles what was made, or that is currently being made. In many cases Indian people have kept secret, and desire to keep secret, information about the meanings associated with rock art, especially if it is now located on lands controlled by others.

A key issue, when one discusses the meaning of rock art, is what it means to Indian people today. This meaning may have changed since the rock art was originally made. It is normal for the meaning of culturally defined places, artifacts, and ceremonies to change over time (Lesser 1978). These changes usually are responses to corresponding changes in the society and culture of the people who made and continue to use them. For example, there are Indian plants whose primary use is in curing syphilis, a disease that did not exist before 1492 anywhere in the world. Clearly the Indian people either redefined the primary uses of an existing curing plant, or the Indian people found a new plant to cure a new disease. The original uses of a rock art site made a thousand years ago by the ancestors may be different than the uses it has for the people today. A place used in the past for women to go during a difficult childbirth, may be used today for prayer and meditation and for teaching children about the past. These contemporary uses give new meanings to the site, but both the initial and the contemporary meanings are viewed as significant to Indian people. The initial meanings are part of the people's culture history. The contemporary meanings reflect the role of rock art in their lives today. Also, even though the specific uses of a rock art site change, the reasons why the place was initially chosen often remain unchanged. Rock art sites tend to be places of power, and these places are sought because they can lend that power to helping a pregnant woman, curing a sick person, or educating a child. The cultural significance of the powerful place, therefore, remains the same regardless of how it is being used by Indian people.

GCES ROCK ART STUDY

The rock art study funded by the BOR and managed by the Glen Canyon Environmental Studies (GCES) office is the basis of this report. This study is unique in the history of rock art studies and is unusual when compared with other American Indian cultural resource assessments.

There are five unique features of this study. First, all funds for conducting the research were contracted to the Southern Paiute Consortium. Second, the Southern Paiute people decided during the previous studies that their next study would be about rock art. Third, the GCES/BOR permitted research to be conducted in terms of Paiute perceptions of the study area rather than specifically in terms of the scientifically established study area for the project. Thus, it was possible to conduct the Kanab Creek side canyon study. Fourth, all interviews were guided by a ten-page survey instrument, so Southern Paiute responses could be systematically compared. Fifth, both all-male and all-female research trips were conducted, thus producing the first gender-specific interviews of rock art sites. The resulting study is both interdisciplinary and multivocal.

Interdisciplinarity

Many approaches to collecting and interpreting data are presented in the following report. First and foremost are the data of the Southern Paiute people who participated in the study. They collected data from family oral histories, cultural logic, and actually speaking with rock art panels and places. A fuller discussion of how Southern Paiutes collect data is presented in Stoffle, Halmo, Olmsted, and Evans (1990:11-27). Whenever possible Southern Paiute data are historically contextualized by statements made by other Paiute people in the past. Much of the history of Paiute involvement with the Colorado River and the Grand Canyon is contained in the previous report, *Piapaxa 'uipi (Big River Canyon)*, which should be consulted for this information. In addition, as in the case of the Kanab Creek ecoscape study, new information is presented in this report to show the historical continuity of Southern Paiute concerns for this area.

Data provided by Southern Paiute researchers are further contextualized by two anthropological disciplines: archaeology and ethnography. A professional archaeologist, who is a recognized specialist in the study of rock art, accompanied Paiute people to every site studied. A professional archaeological description and commentary accompanies every rock art site discussion. Professional ethnographers accompanied Southern Paiute people during every interview and also served in the capacity as interviewers, transcribers, coders, and data presenters. Where appropriate, site discussions are accompanied by an ethnographic commentary. The many voices of this report do not always exactly agree, but together they do provide the fullest possible understanding of these sites.

Multivocality

When scientists disagree over the interpretation of rock art sites, it neither implies that one is more correct than another nor that one does not understand the subject. Quite the contrary, diverse interpretations often derive from different data sources and should be welcomed when attempting to understand difficult research questions. Similarly, when Indian people offer different interpretations of rock art sites, it neither implies that one is more correct nor that some do not understand the subject. The issue of what has been termed *multivocality* in American Indian societies is the subject of much professional discussion. In general, these studies suggest

that American Indian cultural traditions always were (1) unevenly held because some people were supposed to have knowledge and others were not, (2) not held in consensus because cultural systems are structured to stimulate new ideas (innovation) as well as maintain consensus, and (3) diverse because societies adapting to a changing environment will have legitimate cultural disagreements.

The following study is designed to bring forth the diversity of opinions held by Southern Paiute people regarding the rock art sites studied. The correctness of these opinions will be the subject of some debate, by both the ethnographic and archaeological scientific communities and possibly by Indian people themselves. A telling point, however, is the number of times that Southern Paiute people said they did not know the answer to a question about a rock art site. The willingness to go on the record as not knowing something suggests that, when people did go on the record with an opinion, they did so with some confidence it was correct and could be shared with others. The issue of correctness is considerably muted when once again it is emphasized that this is a study of the contemporary meanings of these rock art sites to Southern Paiute people. These rock art sites mean what these people say they mean, and that is the only basis for protecting these sites through culturally appropriate land and resource management plans.

KEY STUDY FINDINGS

Researchers are inevitably asked to develop a thumbnail sketch of what was found, before the reader begins to read the full text of a report. Of course, it is never easy to highlight certain findings, because doing so seems to relegate other findings to lesser status. In order to avoid such an implication, the following findings are defined as key inasmuch as they represent the variety of findings at different levels of abstraction. Only the following few findings are presented and their order does not indicate relative importance:

- * Southern Paiute people believe that the rock art sites in this study both reflect and define the Grand Canyon as a cultural landscape.
- * Many rock art sites were jointly used by Southern Paiute people and their neighbors the Hualapai, Havasupai, and the Hopi.
- * Kanab Creek ecoscape contains rock art that reflects its historic role as a region of refuge for Southern Paiutes.
- * The 1890 Ghost Dance was jointly celebrated by Pai and Paiute peoples at two locations along the Colorado River, near Pearce Ferry and upper Kanab Creek, where white painted figures commemorate the event.
- * Rock art is one expression of Southern Paiute relationships with the natural world; placing symbols on a rock is a significant act that requires special preparation. Consequently, all rock art has meaning for Indian people.

- * The sacredness of the minerals used to place symbols on the rock is just as significant as the rock art itself, and the minerals possess their own power.
- * Rock art complexity is not necessarily an indicator of cultural significance. *Ompi* (red hematite paint) smudges reflect blessings on rock walls and are as culturally significant as elaborately drawn figures.
- * A Southern Paiute rock painting style is identified for the first time by a professional rock art archaeologist.
- * A cultural landscape model is suggested for framing American Indian cultural resource studies and incorporating these into Federal agency land management plans.
- * Sources of red, white, and yellow paint used in rock art are identified and their cultural significance defined.
- * Rock art within the canyon is seen as one of the physical evidences of the interconnectedness that Paiute people had and continue to have with the spirit world.

CHAPTER TWO

OUR HOMELAND

This land that some consider to be desert, isolated and containing little life, is the home of the Paiute people. Through the eyes of the Paiute people, this land is beauty that no other place in the world possesses. It is the place of our creation as a people, and in our belief, it is the place that our individual life cycles end. At the end of one's life journey, there is a place that is walked to, possibly even walked through, to enter into the next life. That life possesses all the beauty, bounty, and richness that one can only conceive of in this world. Many Southern Paiute people believe this entrance to be an actual physical place within the Grand Canyon. In addition to this belief, there is much more there that is also important to our spiritual well-being.

Evidence of Paiute presence within the *Colorado River Corridor* is marked by *ompi*, or hematite, showing the path of the People and physically visualizing their journeys. Throughout Paiute history, the canyon and its surrounding areas have been a place of prayer, of everyday living and, in the end, a final refuge for a people who were being squeezed out of their traditional lands by newcomers.

Within the lives of Southern Paiutes, there is an inherent understanding that all things are placed on this land with the breath of life just as humans. This land is considered to be their home, just as it is for man, and it is taught that one must consider that rocks, trees, animals, mountains and all other things are on the same level as man. Each has a purpose in life, and the one who created every living thing on this earth placed all living things here to interact with one another. Therefore, it is customary to show respect to everything that must be disturbed. There is mutual regard between man and these things, each having something to share and each being dependent on the other for life. It is said that the plants, animals, and in fact everything on this land, understands the Paiute language, and, when one listens closely and intently enough, there is affirmation and a sense of understanding.

One of the most primary and innate responsibilities of the Southern Paiute people is to care for and nurture the land which feeds, cures, and clothes us. When cultural knowledge can be employed in a way that maintains, utilizes and enhances the land, then it is to the advantage of the resources and the people. For instance, plant resources are at a maximum when they are pruned by utilization, and they will reoccur in their most advantageous state. In a traditional context, it is said that if plants aren't used, then they will disappear and be gone from the People forever.

To further explain this innate responsibility to care for the land and its resources, the Southern Paiute recognize the Colorado River, when allowed to run its natural course, was unpredictable and sometimes disruptive. But even with this, the People saw it as the process by which the land cleans and renews itself once again to be utilized by the People. In running naturally, the river placed sediments onto the beaches and stabilized the banks for plants which enhanced the growth of the plants that fed the animals and finally the People.

The power of the Colorado River is seen by most as a controllable water source, and its power can be harnessed to create energy. Today, the Colorado River is somewhat controlled by the Glen Canyon Dam, but there have been a few instances where the dam couldn't control the power and strength of the river. Now the Southern Paiute must employ yesterday's teachings with today's technology to best care for the land.

It is with our basic knowledge that Paiute people have a responsibility to care for this land that we have sustained a life through impediments placed here by those who sought to constrain and disseminate our culture. The prior awareness of life as it should be and how one day traditional life will be again sustains the Paiute people. It is believed that we will once again have the opportunity to live as naturally as was intended.

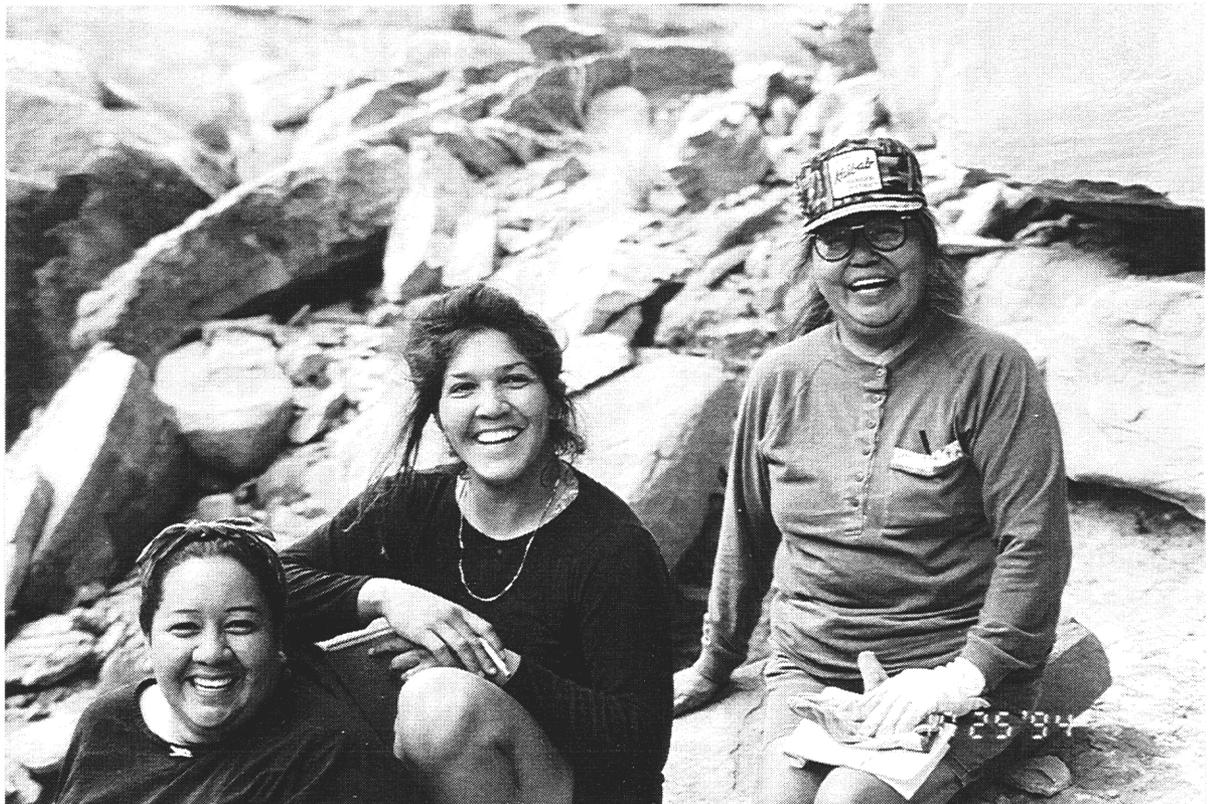


Figure 2.1. Southern Paiute representatives

Much of the land that the Colorado River passes through has been the traditional lands of the Southern Paiute. Submerged under what is today called Lake Powell are Paiute farms that supplemented the traditional food gathered by the People. Beneath the waters of Lake Mead is one of the most important natural resources considered by the Southern Paiute, that is salt. When the U.S. federal government chose to take traditional lands away from the aboriginal people, it also took the People's ability to live a traditional lifestyle. The taking away of land also caused the People to become dependent upon others for sustenance instead of relying on traditional hunting and gathering skills and tools.

Today, there are many interested parties with concerns for the *Colorado River Corridor*, and this makes traditional land use difficult. Although the Federal land managers consider this land to be in their control, the Southern Paiute continue to perceive it as land without ownership and a land that cannot be controlled but merely utilized in a good way. The People can only serve as stewards and act in its best interest. The power of the river has, in itself, been a deterrent for many who wish to control and take advantage of the waters. These waters are seen as a commodity many would like to possess and control, but this is ideologically reserved for the Federal government. For the Southern Paiute, dominion over the natural part of life is inconceivable; it is as a person having ownership over another and controlling his or her capabilities.

Conceivably, the traditional land of the Southern Paiute may one day be restored back to a people who will care and nurture the land and its resources. Prior to Euroamerican encroachment, it is said in tribal oral history, this plateau contained grasses as tall as one's knees, the children could hide and play within it. After the arrival of the pioneer, use of the land became a competitive process for range animals and the wildlife that were here prior to the livestock intrusion. It was only a very short time span until the grasses began to disappear and, in more time, some species of wildlife disappeared as well.

The traditional culture of the Southern Paiute people has been documented by anthropologists during this century. This research views Paiute culture as primitive and simplistic, and, to the outside researcher, this may be what one sees when merely looking in through a window without having the capacity to be enveloped within the culture. The complexity of our culture lies in our ability to converse with the animals and the landscape in this land. It is believed that this ability will prove to be important for all mankind someday.

This entails much more than the simplicity of speech, it entails the knowledge of a higher communication through the animals and the ability to live humbly within the grandeur of this land. One of the basic truths of the Southern Paiute people is the need to ensure that care is maintained for the land; then, in turn, the land will care for the People. This fundamental concept has enabled the Paiute to live continuously on the Colorado Plateau.

Materialistically, the Southern Paiute lived very humbly. The land provided all that was needed to live; though, within literature, it is implied that the Southern Paiute were nomadic with no real direction, merely living to suit nature's will. In truth though, present Southern Paiute people view themselves as part of a legacy of people who were the first conservationists and having the ability to live off the land and prospering within it. Cultural characteristics that include little or no ceramic development may be categorized as primitive, but Paiute basketry skills were such that there was no need to advance the art of ceramic technology. As an example, the tightness of a basketmaker's weaving was such that food stuffs could be cooked by placing hot rocks within the basket that contained water, resulting in the heating of a broth or boiling of plants or meat.

Farming was practiced near water sources such as springs, rivers, and creeks. Within the Grand Canyon, it is historically documented that Paiute farms were observed during the time of the Powell expeditions, and, in fact, these were scavenged when the crew's food was no longer palatable. Through tribal oral history, descendants of the owners of the farm have stated that their grandfather was there in the rocks observing these men the day that his garden was trespassed on. Interestingly enough, the majority of researchers in Paiute ethnohistory continually state that the Paiute people did little or no farming prior to contact with Euroamericans. This, coupled with the little practiced art of ceramics, leads professionals to believe in the primitiveness of the Southern Paiute. Even today, Paiute people pride themselves on their gardening expertise, passing fruit and vegetable seeds on from parent to child. Grandparents take pride in teaching their grandchildren to plant, how to water and care for the garden.

Insofar as the belief system of the Paiute people can be documented, there is much more that cannot be told to non-Paiute people. Prophecies of the People explain many of the reasons why certain aspects of Paiute beliefs cannot be shared with those outside of the culture. During the 1930s, an anthropologist studied the Paiute people and became one of the premier authorities on the Southern Paiute culture. Through tribal oral history, there is a story about that situation and smiles emerge as people recall those who were telling the make believe stories. These interviews were later documented from the field studies by the anthropologist. Unfortunately, the people chose to mislead the anthropologist, giving misleading information that was taken as fact and tradition. They chose to do this rather than to explain that some of the stories and traditional information must be kept confidential and stay within the culture.

From this study came misleading information of Southern Paiute traditions, and, even today, it generally takes a Paiute person many years to really become comfortable enough with a researcher and even longer for that Paiute person to speak confidentially with the researcher. It is with this study that the Southern Paiute Nation can now speak on its own behalf and research can be conducted with Paiute people leading the way.

As previously stated, the familial ties of the People are a central part of our culture, and that is why Southern Paiute people consider the waters of the Colorado to be the mother and the Little Colorado River to be the infant. It is this representation that is the most outward exhibit

of the familial importance that relationships play in the life of the People. Through bloodlines and marital connectedness, a child comes to realize that extended family is just as significant as the part in life played by the nuclear family. Many times, children are like the Little Colorado River when it meets the bigger river and is eventually enveloped by it. The family of a child surrounds him throughout his lifetime, teaching him the way of the People. It is of central relevance that a child could be taught lessons in life by an uncle, aunt, or cousin just as he could be taught by a parent or grandparent.

In traditional times, the children were taught about the trails down to the Colorado River, about the plants and animals there and the significant places that must be visited. Stories were passed on from one generation to another by way of the children. Many of these stories were repeated over and over, year after year, so a child would not forget the importance of the story and why it is being told. During the harvest of the *yaant* (century plant), singing and dancing by children and adults would be exercised within the canyon walls to celebrate the yield of the harvest.

Knowledge of the places of healing within the canyon walls were to be passed on to the children, to be utilized and safeguarded for themselves and the next generation to come after them. Minerals were gathered to heal, to protect, and to prevent bad occurrences one may experience in everyday life. At the end of one's journey in life, a person's spirit went on by leaping a grand divide and entering the world of one's deceased people. All of this was and is still taught to the children.

Prior to the coming of the Euroamerican, one of the ways the Southern Paiute utilized the *Colorado River Corridor* was to make contact, trade, and intermarry with the other Indian people of the area. Through intermarriage, the Southern Paiute formed connections with other Indian people to protect the land and its resources in and around the canyon. Many forms of cultural traditions were exchanged and passed on to the other tribes, namely basketry, songs and dances, and even sometimes beliefs. The Southern Paiute viewed the Colorado River as the dividing line with the other tribes; therefore, the northwesterly portion of the canyon was safeguarded by the Paiute and the other side of the river was designated for the other tribes.

The Colorado River and the Grand Canyon were further divided by the Southern Paiute through band region. The Kaibab Paiute utilized the western portion of the river from the Paria, through what is today known as House Rock Valley, and downriver to the beginning of the Shivwits Plateau; the San Juan Paiute utilized that area of the river that contained what is today Lake Powell, down the eastern part of the river, and to the salt mine which is beyond the Little Colorado River; the Shivwits Paiute lived and farmed the part of the river from the Shivwits Plateau to the area where Lake Mead begins. Interestingly, during the historic period at the time the Hualapai people were at war with the U.S. Government, the Shivwits lived with them at and near Granite Park. In what is now Lake Mead National Recreation Area, the Paiutes of the Las Vegas and Moapa area resided; they lived in the area to gather salt in a presently submerged mine.

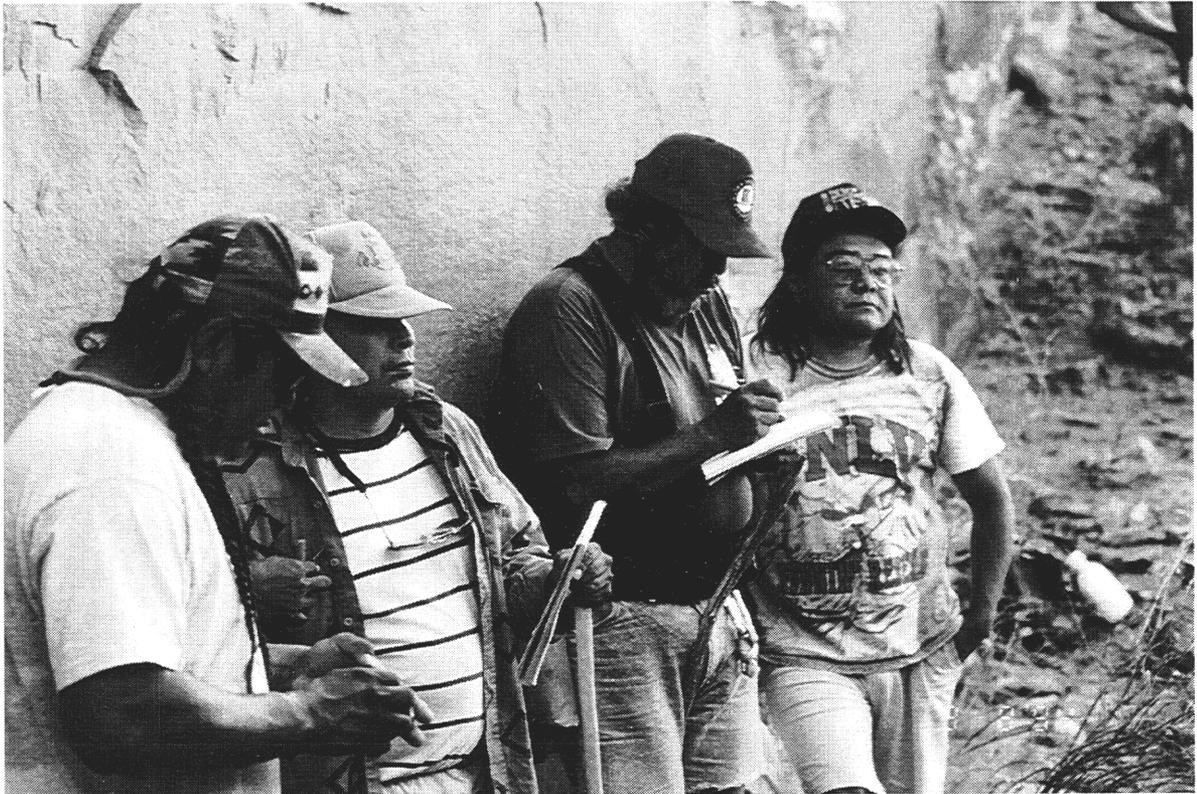


Figure 2.2. Southern Paiute consultants study a rock art panel

The people of the Southern Paiute Nation continue to gather food and medicinal plants in and around the *Colorado River Corridor*. Through tradition, each band possessed sacred knowledge about certain portions of the river, and, in many instances, it was the responsibility of the membership to preserve the water sources, plant gathering and garden locations for use by the People. The river was divided in the middle with an imaginary line, with one side belonging to the other tribal groups and the other belonging to the Southern Paiute. In this way, it was possible for the Paiute people to preserve resources being utilized year after year by the bands. Even with this imaginary boundary line, the Southern Paiute continued to exchange culturally significant goods with the other tribes; in fact, in the historic period of time, the traditions and songs of the Yuman-speaking people and Paiute people co-mingled in the canyon walls and were brought north to the Southern Paiute Nation. Within a traditional ceremony of the Southern Paiute, the words of the songs are sometimes spoken interchangeably between languages.

It is said that songs are derived by spiritual guidance in the canyon and on the river, that these two places have the ability to speak to Paiute people. In Southern Paiute mythology, there are certain places in the land of the Paiute that give songs to the person who opens herself up to hearing them. There are several places in the canyon such as this. One need only listen to

them speaking. This goes back to the belief that all things in the land of the Paiute speak to man, and if he humbles himself to these things, then he will learn.

The richness of the canyon may not be immediately visible to the eyes of common person, but there is much to be seen when exploring the canyon walls and the areas that are near springs. Many centuries of living by the original people can be evidenced on the rocks and shelters of the canyon. For the Southern Paiute, symbolic writing on the rocks was a way for man to communicate with the spirit world and sometimes to be an intermediary between the supernatural and this world. In traditional times, it was customary for only those with spiritual authority to view these rock art panels, but today with the influx of tourists and explorers in this area, many eyes and hands see and touch them. It is the intrinsic duty of the People to maintain the level of spirituality that the panels were meant to contain.

During a summer of 1994 trip into the canyon, a group of Paiute people recorded a panel with recent graffiti written on it. Important sites continue to be desecrated, and, once there is writing placed on these panels, they will never be recovered. They lose that essence of spirituality that was intended to be connected to it.

The importance that rock art panels have played in the lives of the Southern Paiute will never be measurable. Some panels show the transition of supernatural and mythological stories in a written form on the rock. Along the river, there is a petroglyph of 'original man' and how he enters the canyon for the first time. Simplistic though the petroglyph may be, it speaks of the first People entering the canyon and the trail that was taken to get to the river, the wanderings of the bands until finding paradise in the canyon and on the river.

Through long-term monitoring efforts by all parties concerned, it will be necessary to document the disfiguring of all cultural resources, including rock art panels, through man-made actions and the flows of the river. It is to the benefit of all people that the cultural history of the Grand Canyon and the Colorado River be maintained for the future.

CHAPTER THREE

A SCIENTIST'S PERSPECTIVE

Between May 1, 1994 and May 15, 1994, Larry Loendorf, a rock art specialist, served as part of the Southern Paiute Consortium rock art study team in the *Colorado River Corridor*. Twenty-three rock art sites were visited during the study (see Chapter Five). Though some sites were difficult to access and the older consultants were unable to reach them, the majority of the sites were reached by all the consultants. The consultants made sketches and notes at the sites for their own use while they thought about the importance or the interpretation of the site. After this viewing and recording of each site, ethnographers asked the consultants a series of questions related to a questionnaire. The task of the rock art specialist was to make observations as to the content, the age, the cultural affiliation, and the relative significance of each site.



Figure 3.1. Larry Loendorf, a rock art specialist

The rock art specialist was instructed not to offer information that would influence the Southern Paiute consultants. A great effort was made to meet this expectation, but at one or two sites things may have been said in the excitement of seeing the rock art panels that may have given thoughts to the consultants. The influence of these outbursts was minimal, and they did not significantly affect the outcome of the questionnaires. It should also be clear that the rock art specialist wrote this chapter and the *Archaeologist's Commentary* in Chapter Five before learning the results of the consultant interviews.

When these parameters are taken into account the reader will recognize this chapter as primarily descriptive. It includes observations that are based upon the experience of an archaeologist who has intensively studied rock art over the past decade with an emphasis on establishing its age and understanding it as an archaeologist might tackle any problem (Loendorf 1994:95-103).

GRAND CANYON ROCK ART

The rock art sites along the Colorado River in the Grand Canyon represent an impressive array of styles, types, and cultural affiliations. Along the upstream end of the river, below Glen Canyon Dam, the rock art sites are dominated by petroglyphs which appear to range in age from 2000 B.C. to A.D. 1900. Late Archaic cultures are represented in this array, but so are the more recent groups, such as the Southern Paiute. Along the river in the lower end of the Grand Canyon, above Lake Mead, the styles and types are primarily painted images. Although some of the pictographs at one of these sites are believed to be from the Late Archaic, the majority of these sites contain components of Southern Paiute or Pai paintings.

In part, because rock art has not been the focus of archaeological research, archaeologists know very little about the rock art styles of the Southern Paiute or the Pai groups. It is highly problematic to identify styles by assigning sites according to the boundaries of former tribal territories. Territorial boundary lines were seldom fixed among American Indian tribes. Fixed boundaries were designed to contain Indians, and, throughout North America, these boundaries seldom correspond to the actual territories used by tribal groups. Use of these arbitrary lines as a mechanism for identifying the artists who made certain rock drawings must include ethnohistorical research.

Perhaps even more problematic is the use of archaeologically derived cultures and their boundaries for assigning rock art to a cultural entity. In other words, simply because the Anasazi are recognized in the region to the north of the Grand Canyon does not mean the rock art, older than Paiute or Pai, is that of the Anasazi. As with many research issues, the assignment of rock art to cultural entities is complex.

In the American Southwest, ceramics are the most common artifacts used to define cultural association. This is done despite the fact that ceramics may not be very reliable

indicators of cultural affiliation. Citing studies by Dozier (1970) and Brugge (1963), Cordell (1979:147) reminds us that "virtually all ethnographic studies indicate there is no relationship between language spoken and ceramics manufactured." Rock art may fall into a similar category, but preliminary studies suggest it may be a more reliable indicator of cultural groups than ceramics. An important consideration regarding rock art, compared to ceramics, is the fixed location of sites. Ceramics are portable and carried or traded from one region to another. Rock art, on the other hand, is completed at a site that cannot be moved from place to place. While it remains true that individuals of diverse cultures can travel from one region to another and complete rock art, the non-portable dimension of rock art is significant when trying to identify cultural affiliation for a site.

Rock art has not been the focus of archaeological research in the past primarily because it has not been possible to establish the age of rock art motifs. Recent advances in rock art dating are changing this problem.

DATING OF ROCK ART

Establishing the age of rock art is a difficult problem regardless of the setting, and the Grand Canyon sites are no exception. Different methods have been developed for petroglyphs and for pictographs. Each of these is discussed in turn in the following sections.

Petroglyphs

Petroglyphs are dated through two primary means, and, although both are experimental, they have produced reliable results (Loendorf 1991; Francis, Loendorf, and Dorn 1993). One petroglyph dating method requires the removal of a small bit of organic matter from the varnish that has developed on the petroglyph since it was made. Rock varnish is a dark, thin accretion of manganese and iron oxides, clay minerals, and over 30 minor and trace elements that accumulate on rock surfaces in arid and semi-arid regions. Organic matter comes from plants and animals and contains carbon. It can be dated because a small portion of the carbon is radioactive and will decay at a standard rate once it becomes fixed, as when the plant or animal dies. Knowing the rate of decay and the amount that has decayed, a researcher can determine how long ago the organic material was made. To find out how much of the carbon has decayed, the organic matter can be submitted for an accelerator mass spectrometry radiocarbon date (AMS 14C). This process will provide a numerical age estimate for the petroglyph. This is a reliable but expensive method. Individual petroglyph dates cost around \$1000.

The second method is known as cation-ratio dating which relies upon changes in the chemistry of the rock varnish. Precise and accurate measurements of the chemistry of the varnish on petroglyphs can be obtained through use of a wavelength dispersive electron microprobe. A ratio of potassium (K) plus calcium (Ca) divided by titanium (Ti) $[(K + Ca)/Ti]$ can be calibrated against numerical dates to provide the age of the varnish (Dorn 1983). Calibration is a process of creating a standard for measurement. Calibration curves are established for a particular area, and petroglyphs may be dated by comparing their cation-ratios to the calibration curve. This

method is meaningful because potassium and calcium leach out of the varnish and cause the ratios to change systematically over time. The cation-ratios are calibrated by measuring radiocarbon dates and the (K + Ca)/Ti ratio from the same varnish. The initial calibration is based on historic time and is obtained by measuring the cation-ratios of dust samples collected from the site. The other calibrations are obtained by AMS 14C measurements of organic matter encapsulated by the varnish.

Extremely small samples of varnish are required for dating each petroglyph. These are collected by mechanically removing five different spots on the pecked area of a petroglyph. A tungsten carbide needle is used to loosen the varnish, which is then collected on a neutral tape. This results in up to five pin-point sized marks on an individual glyph. Marks are visible only if one is aware that the samples were taken; they are not noticeable to the casual site visitor. This method has the advantage of being much more cost effective. Once a calibration curve is established, individual petroglyph dates cost less than \$100 each.

Pictographs

Finding a numerical age for a rock painting or pictograph is also accomplished by AMS 14C dating. This technique works with very small samples of organic matter extracted from the paint itself rather than from a varnish that has developed over the paint.

Pictograph paint is made of two primary components: pigment and a binder or extender. The pigment is frequently an inorganic compound, such as clay or ochre, and it cannot be dated through AMS 14C techniques. Often, however, the binder or extender used to turn pigment into paint contains an organic compound. Although researchers have not been able to absolutely identify these binders, they apparently contain animal and plant oils, blood, and other organic matter that can be dated. In addition, if the pigment is organic, such as charcoal, it can be dated.

Unfortunately, the rock upon which the painting was placed can also contain organic materials (carbonates), and the major problem in dating a pictograph is finding a technique to remove the organic compound from the paint without releasing or contaminating the sample with organic matter from the rock. The most sophisticated technique devised thus far is a low-temperature, low-pressure, oxygen-plasma, coupled with high vacuum equipment (Russ, Hyman, Shafer, and Rowe 1990). This technique releases the organic matter in a sample of the binder or extender by turning it into a gas, without releasing the carbonates from the rock. In each dating episode, a sample of the rock without paint pigment on it is subjected to the process to learn if organic gas is released.

A second way to date a pictograph can be used if the sample has charcoal in it that can be extracted by simply picking it out. This technique assumes non-contamination from the parent rock and proceeds to date through the usual AMS 14C technique (Farrell and Burton 1992). The "old wood" problem of charcoal is apparent; the wood may have been burned to make charcoal many years after the plant from which it came died. Other than that, within its parameters, the technique produces reasonable dates.

A third technique to date a pictograph relies upon other organic matter in the paint, which can be extracted. Occasionally, plant fibers, perhaps from a brush used to make the painting or from an incompletely crushed binding vehicle, can be extracted and dated (Cole and Watchman 1992).

Another significant issue to be considered when dating pictographs is the damage done to the rock art by removing a sample. Sample size varies with the technique employed. For example, dating a pictograph by the oxygen-plasma technique requires a sample the size of a quarter. This can significantly damage a painting, and to avoid damage, samples are taken from pictographs that are deteriorating due to erosion. In the individual site descriptions in Chapter Five, sites where dating is possible have been noted.

Rock art differs from other archaeological phenomena because the pictograph or petroglyph is not destroyed through mitigation. Thus when the archaeologist completes the excavation of a hearth feature, it can only be reconstructed through the photographs and other documentation collected in the research. On the other hand, when an archaeologist is finished recording a pictograph it still remains in its original form. As described above, however, sampling for dating purposes can destroy some of the rock art panel.

ETHNOGRAPHY AND ROCK ART

Although anthropologists seldom collected information about rock art sites, there are three or four relevant accounts for petroglyph sites in Arizona. Some of these accounts are directly stated as the answer to a question about a site locality, and other times the reference to rock art is made in the course of conversation. More frequently, because rock art is often part of rituals or ceremonies that are kept within the purview of shamans, it is necessary to construct feasible explanations by searching the ethnography for clues and metaphors to rock paintings and engravings. The latter are made by using direct references to the practices of shamans in a local group and using this information with the more general knowledge of shamanism and trance states on a world-wide scale.

Laird (1976:103) noted that, when the Chemehuevi (Southern Paiute) were questioned about rock art, they commonly replied that it was *tutuguuvo?opi*, "made by the spirit helpers." David Whitley (1992a; 1992b) points out that this reply did not result because there was any confusion in the minds of the consultants concerning who made the art. Instead, *tutuguuvo?opi* was a ritual circumlocution used to avoid naming a dead shaman. A shaman and his helper were one and the same; thus *tutuguuvo?opi* equally may be translated as "made by the shamans."

Whitley (1992a:97) makes this point especially clear:

The art was metaphorically denoted as made by these spirits for one simple reason: no distinction was made, semantically, epistemologically, linguistically,

or otherwise, between the actions of a shaman, his spirit helper and his dream. To say that the art was made by a water baby, in other words, was simply to affirm that it was engraved by a shaman.

The prevailing belief among rock art researchers is that significant numbers of rock art sites in western North America are the products of shamans. This idea is by no means a new one. Only recently, however, have researchers completed intensive reviews of the ethnographic record to support the link between rock art sites and shamans. David Whitley (1992a, 1992b, 1994) has completed the most significant research on these topics and a review of his publications will give the reader an excellent overview.

The Relationship of Rock Art to Shamans in the Grand Canyon

Smithson and Euler (1994:12) describe the fear of pictographs among the Havasupai:

It was thought that pictographs painted on cliff walls were done by shamans with intent to harm someone. Those in a rockshelter in Cataract Canyon a few miles upstream from the village were considered especially dangerous...My lay consultant denied any knowledge of the paintings. Our shaman consultant believed that one individual who lost his vision did so because he frequently passed this point.

It is important to recognize the shaman had knowledge of the paintings while the lay person does not understand them. This does not mean, of course, that the lay person did not respect them. Quite the contrary, they were respected because they were the work of shamans. The link between shamans and the rock paintings is made again for a Grand Canyon site. Writing about the dream of a Havasupai shaman who is instructed to visit Rain Tank a few miles south of Grand Canyon village, Smithson and Euler (1994:9) state:

When he arrived there in his dream, he followed two tracks leading east. Soon he came to two tall blue rocks. He climbed the south one and, halfway up, he found some barely visible pictographs that appeared old. He blew on them four times until the pictures became clear. They depicted many kinds of animals and some humans.

A significant number of rock art sites are described as having been made in a shaman's dream. In other words, the rock art is the result of a vision or a trance associated with an altered state of consciousness (ASC) that was sought by the shaman.

Cultures that practice shamanism can be said to divide their universe into objective and subjective space. Objective space includes the region that has been explored and is known to the members of the culture. More extensive than the territory controlled by a tribe, objective space is verified by exploration and through narrative traditions.

Subjective space, on the other hand, includes the unknown parts of the universe. When one wonders what is on the other side of the mountains, she is thinking about subjective space

(Tuan 1977:86). One's cognitive processes construct geographies for these unknown parts of the universe. The sky and the things that are in it, the underworld that is obvious in the passages of caves, and the bottom of the water that swirls in a whirlpool, are examples of subjective space.

The basic power of shamans is the ability to pass from objective space into subjective space, i.e. from one's home territory to the sky, from the earth to the underworld, or over the mountains to the unknown side. Shamans accomplish this exploration by travel that is taken in altered states of consciousness, trances, or dreams.

Movement between the principal realms is often made possible by the makeup of the universe which is on "levels--sky, earth, and underworld--connected by a central axis" (Eliade 1964). This "axis mundi" is one route used by shamans to travel from one world to another. Cultures usually have an archetype of the "axis mundi" -- a tree, a rope, a ladder, or some other symbolic representation of the connecting link between the realms of the universe. Among Plains Indians, the center pole in the Sun Dance lodge is an apparent example of the "axis mundi" (Hultkrantz 1981:252). But many other routes are used by shamans to travel between objective and subjective space, such as the paths of the sun and the moon, a cave passage into the earth, or a whirlpool that takes things under the water.

To undertake a journey to the cosmic realm, an individual goes to a location of spiritual significance. Among the Numic peoples these locations were frequently rock art sites that were named *pohaghani* or "house of power" (Malouf 1974:8; Shimkin 1986:325). Fasting and praying, the supplicant would stay at the "house of power" for 4 or 5 days or until a dream (an ASC) was obtained. The morning after an ASC experience, so it would never be forgotten, the shaman recorded the vision in rock art. Whitley (1994:6) has compiled ethnographic data for Numic speakers which explain that a shaman returned to a rock art site to refresh his memory regarding the dream or to renew his connection with the supernatural.

David Lewis-Williams, J.D. Dowson, and Thomas Dowson (1987) describe the visual aspects of ASC as a progression from small flickering images that turn into recognizable forms and ultimately into a full vision. Because shamans use trance throughout the world, Lewis-Williams and Dowson reason that this commonality may account for similar rock art images. They believe that peoples in trance see images known as entoptic forms and that these forms are transformed into more sophisticated rock drawings. The basic entoptic forms are often grids of dots, short flecks, rows of parallel lines, zigzag lines, nested catenary curves, and meandering lines (Lewis-Williams, Dowson, and Dowson 1987:6).

These basic entoptic phenomena are construed by individuals in trance to make iconic images that match the cultural background of the subject and his current psychological state. Thus a circular entoptic form could be changed into the iconic form of an orange if the subject was hungry or a cup of water if he was thirsty. These constructs are culturally bound, i.e., an orange or a cup could only be seen in trance by someone who had cultural knowledge of oranges or cups. Lewis-Williams, Dowson, and Dowson (1987:9-10) believe entoptic forms change into

iconic images in three stages that are not always sequential. The most sophisticated stage includes a vortex or whirling of the senses with full view scenes included.

Lommel discusses trance as the "...process of giving shape in inner images..." and emphasizes the fact that a "shaman's psychological experiences in a trance are always expressed in images from the real world" (1967:84). These authors believe that much of the rock art in the world is the product of shamanic trance. Some art may have been completed during trance and some may have been done after the shaman completed the trance as a record of the experience.

The key to recognizing shamanic art is the identification of a series of universal attributes. Power lines connecting figures to one another or radiating lines from the head is an example of such a universally known attribute. Joan Halifax (1981) outlines the universal themes that are found in the art of shamans:

Maps - Not conventional maps of a geographic territory but maps which show cosmic geography that is revealed to shamans in their initiation. These maps often show the connection between the Sky Realm, the Living World, and the Underworld. Thus it is not unusual to have stars, moon, sun and/or birds in the sky realm; humans, other animals, and plants in the living world; and snakes, monsters, or spirits in the underworld. The paths between the worlds may be represented by lines or paths or by an "axis mundi" that might take the form of a cosmic tree.

Spirits of the other worlds - These may be demonic figures encountered by the shaman on the journey between the worlds. Or they may be flying figures upon which the shaman rides between the worlds.

Dismemberment and/or skeletonization of human figures - These represent death since the shaman first dies to be reborn in another form. These skeletonized figures have often been labelled as x-ray art, since they reveal internal structure for human figures.

Therianthropic figures - Once dismembered, a shaman assumes a new form. This form is often a combination of an animal with the shaman's human form. It may be winged.

Energy forces/power lines - Some shamans become solarized and radiate the power of the sun. Others are depicted attached to whorls and concentric circles. These lines may radiate from the head, but frequently the eyes of a figure are shown with radiating lines.

Flight - The travels of the shaman in trance. They transcend space and time. Shamans often report flying and depict it in their imagery.

Kanab Creek Site #4 as an Example

Perhaps an example is the best way to demonstrate the association between rock art and shamanism in the Grand Canyon region. Kanab Creek Site # 4 is a good candidate for shamanistic explanation. One significant pictograph panel at the site has been attributed by the Kaibab Paiute to an origin associated with the Ghost Dance. Before describing the pictographs, it is appropriate to discuss the site and its setting.

The site, located along an outcrop of sandstone adjacent to Kanab Creek, has a seam of white pigment (diatomaceous earth?) near its base. In one location this pigment appears to have been dug out, leaving the scars of this mining effort in a corner where two faces of the outcrop come together. It is important to recognize that the variation within the rock art at the site suggests some of the paintings were made more than a thousand years ago before the modern movement of the Paiute into the region. This means that when the Paiute arrived at this site location it was a source of white pigment, and it exhibited ancient paintings. Either reason is sufficient to assume the site was recognized as a "house of power" and used by shamans as a place where visions or ASC's were sought.

Descriptions of the Ghost Dance, obtained from ethnography, present data worthy of consideration. First, it is necessary to remember the Ghost Dance was brought forth on two separate occasions. The first was *circa* 1870 when the dance was initiated to revitalize Indian ways in California and Oregon. Although this movement failed, the prophet Wovoka, a Yerington, Nevada Paiute, had an unsought revelation (trance) in which he learned that if he practiced certain ritual the old ways would be restored. According to Hittman (1990:63), Wovoka had his revelation on New Year's Day 1889 during a solar eclipse. There is some variation in how he received the vision; one explanation is that he was ill with a high fever and the other is that he was chopping wood, heard a loud noise, and collapsed into trance when walking toward the noise. Other Indians used both traditional and non-traditional vision seeking methods to enter trance during the Ghost Dance movement. As explained above, the traditional way was to visit a rock art site to fast and pray for a dream, but, during the Ghost Dance, the revelations often came through dancing or the ritual associated with it.

Dobyns and Euler (1967) describe the Ghost Dance in 1889 among the Hualapai and Havasupai in Arizona. The Hualapai learned the Ghost Dance from the Southern Paiute in 1889, shortly after Wovoka's revelation (Dobyns and Euler 1967:14-17). As a result, the clear descriptions of the ceremony among the Hualapai allow us to glimpse it as it was practiced at its inception. Good descriptions of the 1889 Ghost Dance among the Southern Paiute are not available because the Indians, fearing reprisal from the United States government, held the Ghost Dance in private. Descriptions of the Dance from other tribes, like the Sioux or the Cheyenne, are also not extremely relevant because these tribes changed the dance according to their own cultural requirements. While the Hualapai probably also made adaptations in the dance, their proximity to the Southern Paiute and the didactic component where Hualapai shamans learned the dance directly from Paiute shamans suggests the descriptions of the Hualapai dance represent

the practice of the Paiute with considerable fidelity. Several parts of that practice are worth noting when comparing the rock art at Kanab Creek Site # 4 to the Ghost Dance.

Initially it is important to recognize that the pictographs in the site are in white pigment, and white clothing was worn by Hualapai Ghost Dancers. As described by an eyewitness to a Ghost Dance held in 1891 near Kingman, Arizona:

As darkness began to fall, the every-day flashy, though scant clothing was exchanged for the white robes prescribed by the medicine men as a dancing costume; faces and hair were painted white... A favorite mode of painting seemed to be to paint the lips, eyes, nose and hair white, leaving the rest of the face its natural color... (Miller 1952:33-334 quoted in Dobyns and Euler 1967:5).

Although other descriptions suggest red face paint, if one were trying to depict Ghost Dancers in white costumes, white would be the most appropriate color. The white pigment may have had more significance than a correct iconographic representation. Hittman (1990:186-194) describes an elaborate hypothesis linking Wovoka and the color white to rainmaking magic and shamanic curing. While components of this hypothesis are conjectural, it is apparent that Wovoka sought white pigment (*ebe*) from a source in the Wabsuka Hills and that it was an integral part of Ghost Dance ceremony.

Control of the rains, or other natural forces like earthquakes, to do harm to Euroamericans was an important part of the Ghost Dance. The association between rainmaking and rock art has been described by Whitley for Numic speaking groups in the Great Basin. Whitley (1994:362-363) learned that a vision of "killing a mountain sheep" was prophetic to rainmaking, and a rock art depiction of a hunter shooting an arrow at a mountain sheep does not show a successful hunter; rather, it is a metaphor for bringing the rains. This metaphor, a hunter pointing a bow with an arrow at a mountain sheep, is expressed in several pictographs at Kanab Creek Site # 4. Thus, at the least, it can be suggested that the site was frequented by shamans who were trying to make it rain, a desired outcome of the Ghost Dance. More important, however, is the association between white pigment, the Ghost Dance, and rock paintings.

The source of white pigment at Kanab Creek Site # 4 is also significant. This seam of pigment has definitely been mined, and, although white pigment was used for many different purposes, the direct association between white paint and the Ghost Dance makes this location a particularly good one to place Ghost Dance pictographs.

Examining the paintings themselves also reveals some clues regarding a possible Ghost Dance origin. The most obvious, learned by Richard Stoffle from Paiute consultants during a visit to the site in the 1970's, is the upside down horse and human figures. The consultants suggested that these represent the dead who will be returned to life after the Ghost Dance. Other important iconographic considerations include the spiral near the end of the panel. A spiral was painted on the center pole used in the Ghost Dance, presumably a representation of the route used to enter a trance (Dobyns and Euler 1967:2, quoting Kroeber 1935:198). Some dancers ran

to the center pole, swinging around and around until they fell into trance while others apparently climbed the pole and fell from it into trance (Dobyns and Euler 1967:13, 26, quoting Parsons 1936:II:996). The suggestion of trance is also depicted in the pictographs by the flying figures shown on the roof of the small outcrop above the panel.

An ovoid shaped object with a straight handle, found to the left of the upside down figures in the pictograph panel, may represent a gourd rattle, a musical instrument used in the dance (Dobyns and Euler 1967:4), while other depictions might represent rasping sticks, instruments also used in Ghost Dancing. Some of the figures may be wearing feathers both on their heads and on their shoulders. Eagle feathers were an important part of the Ghost Dance.

The suggestion that rock art may be associated with Ghost Dancing has been made previously for California Indians (Schiffman and Andrews 1982:79-96). With ethnographic support for a Ghost Dance connection to rock paintings at Kanab Creek Site # 4, it does not seem unreasonable to assume a relationship between this site and the Ghost Dance. The trance component of the Ghost Dance indicates it is a good candidate for comparison to the shamanic themes outlined above.

The arrangement of the panel with the flying figures at the top suggests a cosmic map with spirits of the sky realm shown above the figures in the main panel. These flying figures are often the vehicle used by shamans to explore other worlds. Wavy lines around some of the figures, the spiral, and the long undulating line connecting parts of the left side of the panel are all examples of the sorts of power lines depicted by shamans in their art. Several figures are headless, a possible representation of the death associated with trance.

On another level, the grids of dots shown above the heads of several figures probably represent the entoptic phenomena that are the first stage of trance. These grids are connected to the heads of several human figures suggesting the construct stage or the second step into trance.

Relying on the foregoing information, there is a distinct possibility for a shamanic association and the rock paintings at Kanab Creek Site # 4. The same sort of correlation can be made for other rock art sites in the Grand Canyon; at some it is more apparent than at others, but for the majority of the sites there is a shamanic component.

The question as to why the paintings at Kanab Creek Site # 4 may be depictions of a Ghost Dance is another matter. With the strong didactic component of the Ghost Dance, it is possible the paintings were done to serve as a reminder or mnemonic instrument for shamans learning the dance. Among California Indians, a reason offered for executing rock art is to record a vision in sufficient detail the visionary will never forget any part of it. In other cases, the paintings are done to show the people the supernatural journey a shaman had completed (Whitley 1992a:91). These examples suggest the paintings may have been done at Kanab Creek Site # 4 as a reminder of the components of the Ghost Dance or as a public validation of the supernatural journey taken by Ghost Dance participants.

The strong association between shamans and rock art is expressed in several other motifs as well. Shamans frequently depicted the guardians of the supernatural world in their rock art. In the Grand Canyon region these were dangerous animals -- rattlesnakes, grizzly bears, and mountain lions. Shamans also depicted their spirit helpers. Thus the person who dreamed rattlesnakes controlled the medicine to cure rattlesnake bites, and paintings of rattlesnakes were put on the rocks for validation of this power.

It is important to recognize that, although the understanding of the rock art might be within the knowledge of the shaman, any Native person demonstrated respect for the rock art. Cushing (1965:71) describes a small ritual that took place at rock art sites:

The worship of the Ha-va-su-pai' consists of prayers, made during their smokes, or at hunting shrines, which are merely groups of rude pictographs along the nooks or caves in the walls of the canyon. Here, seated on the ground, the worshiper blows smoke to the north, west, south, and east, upward and downward; then says in a low tone, some simple prayer...

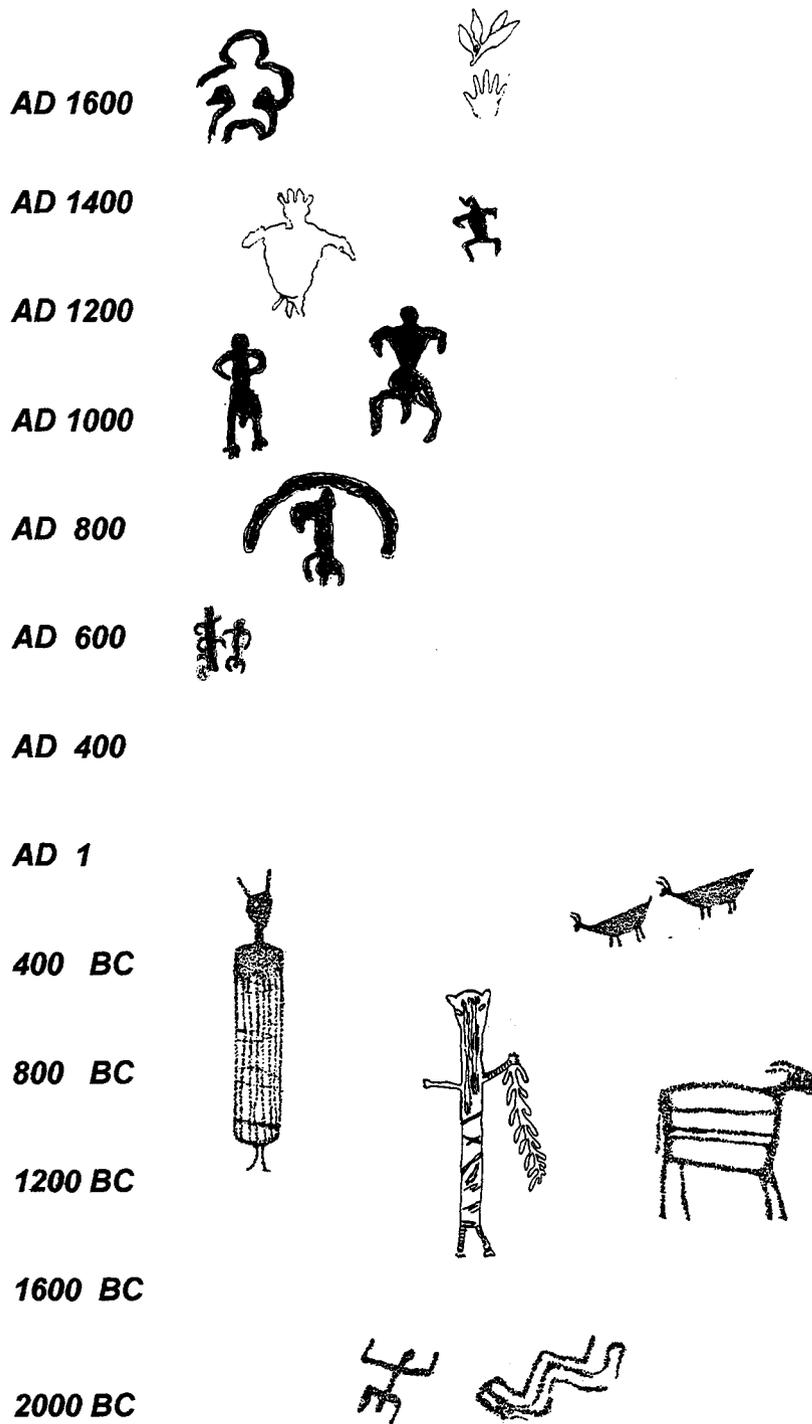
These examples make it apparent that rock art sites were selected for offerings and prayers. Apparently, some of the offerings were *ad hoc* and made by passersby or short-term visitors who spent a few minutes at the site to insure success in their endeavors. Other rituals may have been more sophisticated and included shamans who utilized the rock art in their practices.

One should remember, the individual artists responsible for the rock drawings may have had a reason for their efforts, and that reason may differ from that of persons who visit the sites. Some sites are used for many generations by persons who have high regard for the images on the rocks, and they are significant regardless of who made or understands them. Thus the declaration that a site is not significant to the Paiute because it was made by someone 5,000 years ago is completely invalid.

ROCK ART TYPES OR STYLES AND CHRONOLOGY

Rock art in North America has been categorized into types and styles (see Figure 3.2). Even though there are significant problems with the criteria used by some researchers to identify these styles, the approach is useful for organizing the rock art in a region. In this section of the report, the rock art types and styles in the Grand Canyon and adjacent side canyons are briefly described, and some of the rock art is tentatively placed into styles. To help explain the more recent rock art, the Paiute rock art style is described.

Using existing information it is also possible to make some preliminary statements regarding the age of the rock art in the Grand Canyon. Most of this information is based on relative-age estimates of sites, usually made by archaeologists who noticed that rock art tends to match the other cultural deposits at the site. Thus it has been noticed that sites with Anasazi ceramics or other evidence of Anasazi use also have a certain variety of rock art. Repetitive patterns of these associations allow some confidence in assigning rock art styles to groups.



Tentative Rock Art Chronology, Grand Canyon

Figure 3.2. Types and styles of North American rock art

It should be noted, however, that sites like Whitmore Wash are too complicated for the use of this method. Whitmore Wash has been used by prehistoric and historic Indians for more than 3,000 years. How does one know which group made the rock art? Part of this problem can be sorted out by studying sites with a single component or only one period of rock art production, but it is a complicated process. Numerical age estimates, using one of the methods outlined above, are an especially important addition to this problem.

Great Basin Abstract Styles

The oldest rock art in the Grand Canyon appears to be associated with the Great Basin Abstract and Great Basin Representational petroglyph styles (Schaafsma 1986). Great Basin Abstract is further subdivided into Great Basin Curvilinear and Great Basin Rectilinear (Heizer and Baumhoff 1962:202-207). The terms used to discuss these styles, at sites outside the Basin, are Pecked Curvilinear, Pecked Rectilinear, and Pecked Representational.

The Great Basin Abstract styles were originally named and described for rock art in Nevada and adjacent portions of California (Heizer and Baumhoff 1962:197-202, 205-207). The Great Basin Curvilinear style was first defined by Steward (1929) and redefined by Baumhoff, Heizer, and Elsasser (1958). Using a scaling method, sites were plotted according to the number of elements found at each site and according to a positive or negative rank ordering. A group of elements that had a significant correlation was the one containing "...the circle, tailed circle, chain of circles, curvilinear meander, bird tracks, zigzag lines, and snake..." (Heizer and Baumhoff 1962:199). This group was labeled the Great Basin Abstract style. Additional research allowed for a division of the Abstract style into curvilinear and rectilinear styles. The defining elements in the Curvilinear style are "...circle, concentric circles, chain of circles, sun disc, curvilinear meander, star or asterisk, and snake" (Heizer and Baumhoff 1962:200). The Rectilinear style is defined by the following elements "...dots, rectangular grid, bird tracks, rake, and crosshatching" (Heizer and Baumhoff 1962:200).

The Pecked Representational style is dominated by animals, with the quadruped as the primary figure. These quadrupeds are shown with both rectangular and boat shaped bodies. Legs sometimes have digits displayed as inverted u-shapes, while at other times the legs end with no digits. Heads usually have head appendages, but these appendages are rarely, if ever, shown as branching antlers. The quadrupeds, totally pecked out, can be found alone on an individual rock art panel, but there is a high probability that another quadruped will be found a short distance away. The figures seldom have lines connected to them or any signs of extra embellishment. For example, the motifs often described as spears are not found sticking into the sides of the figures.

The Pecked Representational style is found at the same time as the Pecked Curvilinear style and the Pecked Rectilinear style. More than likely, the same cultural groups were making all three styles in varying frequencies through time. At its start, the Representational style was less abundant than its abstract neighbors, but, as time passed, the distribution of the styles

changed and the representational forms were produced in greater numbers. The distribution of the style is poorly understood, but it is clearly related to other similar styles in the Great Basin.

Pecked Abstract styles with occasional animal forms have been dated, by radiocarbon and cation-ratio methods, in southeastern Colorado at 3,500 to 5,000 years (Loendorf 1991). Recent research at a petroglyph site on a horizontal bedrock surface near Pecos, New Mexico confirms these dates (Bock and Bock 1994). In the latter study, the petroglyphs were covered by a mantle of about 20 centimeters of soil, and archaeologists were able to recover charcoal from the soil for radiocarbon analysis. The date of *circa* 5,000 years B.P. was consistent with direct radiocarbon dates and cation-ratio dates of the petroglyphs themselves, and it was consistent with the soil formation processes. In the *Colorado River Corridor*, some of the petroglyphs at site C:05:001, possibly site C:06:005, and some of the figures at site C:13:132 can be placed in this category. If the trends are the same as they are in other regions, the representational figures tend to increase in popularity through time.

Glen Canyon Style V

The Great Basin styles may have been popular when the Glen Canyon Style 5 was introduced. This rock art includes petroglyphs at sites between Glen Canyon Dam and Lees Ferry. Some of these are assigned to the Late Archaic, made perhaps as long ago as 1,500 to 2,500 years. Glen Canyon Style 5 is clearly related to the interior-line petroglyph traditions, most abundant in the Coso Range of California, where Numic-speaking peoples lived in the historic period. A similar style, known as Dinwoody, is also found among the Numic speakers in Wyoming. Both of these regions are now known to have petroglyphs which are 1,500 to 2,500 years of age. Stated in another way, there are tall, parallel-sided anthropomorphic petroglyphs with complicated interior body designs made in California and Wyoming 1,500 to 2,500 years ago that are almost certainly the products of Numic-speaking peoples. Very similar petroglyphs are found in the Glen Canyon style 5 but not assigned to Numic-speaking peoples because they are thought to be too early.

Future research may help us sort out these differences. At present it is perhaps best to suggest the similar petroglyph traditions are related through common Uto-Aztecans ancestors. In other words, the Glen Canyon Style 5 petroglyphs represent Uto-Aztecans-speaking groups before they can be differentiated into Paiute, Hopi, or Tubatulabal. This belief is consistent with linguistic and archaeological evidence:

It is probable the earliest Anasazi Basket makers of the Virgin and Kayenta regions, ancestral to the Hopi, spoke Shoshonean and about A.D. 1 had a Desert culture pattern with the addition of corn and squash agriculture and later acquired ceramics from the south [Euler 1964:380].

Some scholars think these Shoshonean (Uto-Aztecans) -speaking groups entered the southwest from the north, but the prevailing thought today postulates a southern origin. The Uto-Aztecans languages are believed to have been spoken for about 5,000 years, beginning in a location near

the Arizona/Sonora border and then spreading north (Hale and Harris 1979:174). It matters little whether the speakers of Uto-Aztecan languages originally came from the north or the south; in either case they appear to have introduced a style of making petroglyphs and pictographs dominated by large anthropomorphic figures with elaborate interior line patterns. As time passed, these rockart figures continued to be made in the regions inhabited by the Uto-Aztecan groups that practiced hunting and gathering as their primary means of food procurement. New rock art traditions appear to start in regions where maize and squash agriculture was practiced. Thus the rock art in the Grand Canyon region changed while it retained many of its stylistic components in the Coso Mountains of California.

The Glen Canyon Style 5 figures are complimented in age by the style known as Grand Canyon Polychrome style. Some faded figures at Whitmore Wash are probably related to this style, but the most impressive pictographs in the style are found on the Esplanade.

Grand Canyon Polychrome Style

The oldest human figures in site AR-03-07-03-1284 are quite similar to the anthropomorphs reported by Polly Schaafsma for Shaman's Gallery, a sandstone rockshelter to the north of the Grand Canyon. Schaafsma describes an array of elaborate anthropomorphic figures and lesser numbers of quadrupeds and abstract designs. The largest anthropomorphs, painted in red and white, measure 1.75 meters in height while smaller human figures, 25 to 30 centimeters tall, are in either red or white.

Schaafsma compares these figures to the well-known Barrier Canyon rock art style as a distribution centered in Utah. In general, she suggests there is greater diversity in the Grand Canyon figures (Schaafsma 1990:225). These figures are also more elongated without the broad shoulders found in the Utah figures. Round heads and the crowding of figures against one another in Shaman's Gallery are other characteristics not found in Utah. The Grand Canyon figures also tend to have arms, legs, and phalli, and these are not normal in the Utah sites. The Shaman's Gallery figures are frequently painted in red outlines with white interiors, white decorative lines, and white dots around the heads. In sum, the Grand Canyon figures are more complex and elaborate than their neighbors in Utah.

Despite these differences, Schaafsma (1990:228) suggests the figures at Shaman's Gallery and at other locations in the vicinity are a variant of the Barrier Canyon style. In her view, these figures are part of the western Archaic cultural tradition made at the same time as the Barrier Canyon paintings.

Others do not agree. Mary Allen, who has discovered more than a dozen sites north of the Grand Canyon which contain both large and small anthropomorphic figures, suggests the name of Grand Canyon Polychrome style for this rock art tradition (Allen 1992). After viewing three of these sites, it appears that Allen is correct, and perhaps the Grand Canyon figures are more complex and elaborate than the Utah Barrier Canyon Style because they were painted several centuries later than those in Utah. At the Red Cliff sites, to the west of Sedona, both

varieties of these anthropomorphic figures have been identified. Through studying superimposition, it appears the Grand Canyon Polychrome figures are more recent than the Barrier Canyon Style figures (Loendorf 1994:25). This suggests the painted anthropomorphic figures are part of the same tradition with changes through time.

Tapering-body Human Figures

Based on the superimposition examined at the site on the Esplanade, the smaller human figures with tapering bodies are believed to represent the same tradition at an even more recent time. The tapering body figures can be painted in two colors, one (often red) used to outline the figure and another (often white) used to fill in the interior of the figure. Other examples are made by alternating the colors of vertical lines within the bodies of the figures. These anthropomorphs lack the round heads with rows of colored dots around them. Heads are more likely to have a flat shape with rounded protruding ear-like appendages. Although the figures lack legs, they do have arms that are connected to abstract things like grids and circles.

More research is needed to learn which animal forms are associated with these tapering body humans, but they apparently include sheep. An especially well-made group of thin straight and slightly curving lines that terminate at one or both ends in a well-formed ram's head may be part of this style. What appear to be dogs or coyotes are depicted standing on the tops of some of these lines. Small winged figures near these lines may be birds.

Establishing the age of the Archaic rock art in the Grand Canyon is problematical. Schaafsma (1971:131-135) discusses the similarity between the Barrier Canyon styles rock art and the Archaic rock art tradition along the Pecos River in Texas. Recent numerical age estimates based on radiocarbon dates of the paint from Pecos River rock paintings indicate the Archaic figures date between 3,000 and 4,000 years BP (Chaffee, Hyman, and Rowe 1994:11). With these radiocarbon age estimates in hand, it is not out of place to suggest an estimate of 1500 B.C. for the ghost-like anthropomorphs in the Barrier Canyon style.

If this is accurate, the Grand Canyon Polychrome Style probably begins after this time. Using stylistic evidence and available archaeological comparative material as a guide, Schaafsma (1990:229) suggested the paintings in Shaman's Gallery are dated at a time before 1000 B.C. The oldest anthropomorphs in the style are the large round head figures with polychrome aureole; these are followed, based on superimposition, by the tapering body figures. The tapering body figures are apparently more recent, but at present their precise age is unknown. An estimate of *circa* 500 B.C. does not seem unreasonable.

Western Anasazi and Fremont Rock Art

With so many overlapping cultures in the region, the identity of the artists at various rock art sites is difficult to determine. It is also likely there is considerable overlap in the styles during this time period. For this reason, the rock art which represents the Anasazi and Fremont in the Grand Canyon is currently the least understood. It is obvious there is a relationship

between the human figure under the arc, or rainbow, at the Whitmore Wash site and the Chinle Representational Style. Other figures at this site and elsewhere are probably associated with the Anasazi. For example, the triangular body figures at site A:15:005 appear to be related to the Cave Valley Style, and Allen (1992:64-66) thinks the vertically oriented figures with the linear bodies and multiple arms or legs are part of the Great Pueblo style, dated sometime between A.D. 1000 and A.D. 1300. Site G:03:077 exhibits two of the multiple-arm or -leg figures.

The Anasazi Culture sequence is recognized as beginning on the Arizona Strip *circa* 100 B.C. (Plog 1979:113) and lasting until about A.D. 1200, when Numic cultures start to dominate the region (Fowler and Madsen 1986:182). Throughout this millennium there are several Anasazi rock art styles recognized in the Arizona Strip. Beginning about A.D. 900, Fremont Culture is found overlapping with the Anasazi on the Arizona Strip (Fowler and Madsen 1986:180). The influence of Fremont rock art is also apparent at several sites in the side canyons. To add to this confusion, the Arizona Strip was an important trade route with salt and turquoise from Nevada traded east for various ceramic wares. This means that isolated ceramic sherds may reflect trade items rather than habitation remains.

Considerable research is needed to sort out the different rock art styles within the Anasazi time frame. Such research is beyond the scope of the present project but a single style, the Cave Valley Style, is recognizable at several sites and, for this reason, a short description of the style is included in this overview.

Cave Valley Style

The rock art style was named for an important site in Zion National Park (Wauer 1965; Schaafsma 1971:116). The style is recognized for its distinctive human figures which are depicted with triangular bodies, outlined in one color and filled in with another, and bucket shaped heads. Shoulders are straight and bent down at the elbows while legs attach to the lower body at right angles and as downward pointing appendages. Although not the norm, the figures can be digitate. Grids of dots are often shown above the heads of the figures, but there are examples which have horn-like appendages.

Other animal figures and abstract figures associated with these human forms have not been identified. In this project, the most apparent Cave Valley figures are at site Forest Service AR-03-07-03-1019 in Kanab Creek Canyon. These figures have triangular bodies outlined in red with bright yellow interiors. Other colors include white, black, and a blue/green. The latter color is eroded at the site where it is found in the side canyons and no longer part of a recognizable outline. Perhaps the blue/green pigment and its binder does not penetrate the rock like other pigments.

It is extremely difficult to place the Cave Valley style into a time period. The bucket-shaped heads, square shoulders, and triangular bodies with narrow waists are reminiscent of the classic Fremont rock art figures. Additional research may reveal examples of superimposition

but tentatively the Cave Valley style is equated with the main Fremont use of the region after A.D. 900 and culminating about A.D. 1200.

Southern Paiute Pictographs

In the course of the project it was possible to identify a style of rock art that is tentatively assigned to the Southern Paiute. Additions and corrections to this style will undoubtedly be made with further research, but to advance the study of rock art in the region the parameters of the style are presented in this report. The most apparent figures in the style are pictographs made in opaque colored paints. White is more common than all other colors by a ratio of 12 to 1, with red, black, and yellow as other colors used in the paintings. Individual pictographs are usually done in a single color.

The pigments used in the paints are available at the sites or within easy walking distance of about half the sites currently recorded with the Paiute rock art. Although no analysis of the pigment has been completed, the white is apparently a white clay (like kaolin) or a diatomaceous earth, the red is hematite, the black is manganese or charcoal, and the yellow is limonite.

Sandstone outcrops often beneath ledges are popular places for the Paiute Style pictographs. Much of the sandstone in the Grand Canyon region is in relatively thin beds, interspersed by unconsolidated levels, creating alternate layers of harder sandstone and softer unconsolidated materials. In many locations the sandstone levels are *circa* 30 centimeters in thickness. Paiute Style rock paintings at these sites tend to use the full width of the outer edge of the exposed layer of sandstone as a palette. Paintings like a row of triangles or a zig-zag pattern will sometimes follow these exposed outer edges, filling them from top to bottom, over a length of 5 to 6 meters. Ceilings immediately above the wall paintings are also used as palettes, but the figures on them are more frequently small anthropomorphs rather than abstract designs.

Human figures which appear on the vertical wall face tend to be made with rounded arms, bent down and crossing the torso beneath a rounded head. Legs are often attached to the base of the body in a similar downward curving arc. Hands and feet are not shown on most of these figures, and the round heads do not exhibit eyes, nose, mouth, or ears. A significant number of these human types, probably about 25%, have either no heads or poorly formed heads. Headless figures are often crammed into their space with the top of the torso ending in a crack or at the base of a jutting rock ledge. These figures are made by painting their outlines and by filling in the entire figure with paint.

Another variety of human figures is more elaborate. These figures have better made arms with elbows, hands with fingers, and knees, feet and toes. This group tends to have better formed heads, and, although they do not display eyes, nose, or mouth, they can have some sort of headgear, like horns or feathers. The bodies of these figures are shown as long, vertically oriented torsos with the legs and arms crossing them at right angles giving the figures an angular

appearance. The body line can continue downward between the legs, as a phallus or tail. These figures look as much like lizards as they do humans.

Most of the anthropomorphs are shown in full views which are presumed to be the front of the individuals. These full view figures occur alone and in rows across the same surface. Occasional figures show a profile figure, sometimes in action, holding a bow and shooting an arrow at a horned or antlered animal.

Quadrupeds in the style are shown in profile with both ovoid and rectangular bodies and poorly defined oval heads. Legs are usually simple straight lines which give the animals a static appearance. Exaggerated antlers are a defining characteristic for the style, and, even though these oversize antlers are only found on about 5% of the quadrupeds, one or two of these animals are usually found at a large site. These are likely representations of deer.

Quadrupeds with curving horns are also shown, but examples with oversize horns are uncommon. These figures probably represent bighorn sheep, but antelope may also be in these categories. Horses are not a common part of the style.

A significant element within the style is the occurrence of positive and negative hand prints. The latter are the most common where the hand has been stenciled on the wall by splattering paint around its outline. Perhaps more important is the occurrence of stenciled outlines of plants parts including the stems, leaves, and flowers. Stenciled leaf outlines are occasionally done in a chain-like pattern where the outlines of leaves, tip to stem, are left across the surface for a distance of half a meter.

Abstract designs include circles and dots (alone or connected by a bisecting line), triangles, spirals, meandering lines, and amorphous painted areas with no apparent pattern. Zig-zag lines, rows of dots, rows, or triangles, and meandering lines are frequently found in long, horizontal series across a panel done in this style.

The time the Paiute rock art style was made is poorly understood. The presence of occasional bows and arrows indicates, as one might expect, that it postdates the development of these weapons. Although rare, horses are found in the style, suggesting a date after their introduction. Because the style has been associated with a cultural group, it is possible to offer an age for the rock art that corresponds to the time the Southern Paiute have lived in the region. Current ideas regarding the movement of Numic speaking tribes into the region suggest they left a homeland centered in present day California about A.D. 1000, reaching areas like northern Arizona shortly later. Fowler and Madsen (1986) believe there could have been an overlap between the Anasazi, the Fremont, and the Numic peoples between A.D. 1000 and A.D. 1200. After A.D. 1200, however, "only the Shoshonean tradition continues, carried into historic times by Numic-speaking peoples - the Southern Paiute bands..." (Fowler and Madsen 1986:182).

Using these dates as a guide, the lion's share of the Paiute Rock Art Style was most likely made after A.D. 1200. Some of the variation within the style might be explained by the

long time the Paiute made the paintings. For example, early human forms might have more of the rectangular appearance of the Anasazi and/or Fremont anthropomorphs, but it will require additional research to sort out these variations within the style.

The majority of the rock art sites, especially at the southern part of the canyon and in the side canyons, exhibit some rock art of the Southern Paiute. A single site in the Grand Canyon, Deer Creek Falls, is clearly Southern Paiute in origin. Site C:16:164 has polychrome painted figures which are sufficiently similar to Havasupai rock art to suggest an affinity between them, but a second figure at the site appears to represent the Southern Paiute. As described in detail above, the main panel of rock art at Kanab Creek Site # 4 is definitely associated with the Southern Paiute. As discussed in the descriptions of the sites in the side canyons, most have Southern Paiute paintings.

CONCLUSIONS AND RECOMMENDATIONS

Until recent years, the rock art of the Grand Canyon has not been the focus of many studies. The recent discovery of large polychrome paintings in rockshelters on the Kanab Plateau and the Kaibab Plateau has brought new attention to Grand Canyon rock art (Allen 1992; Schaafsma 1990). The National Park Service considers these large, colorful paintings sufficiently important to have undertaken a detailed recording project including the production of a videography. The park management keeps the site locations a secret. On the other hand, there are high quality rock art sites along the Colorado River which have received only minimal research, and they are visited annually by thousands of tourists. Something seems inconsistent in this differential treatment of the sites.

The problems with rock art research are not so much the lack of funds because funding is never adequate for cultural resource work. Rather the problem is with the allocation of the funds. In the example offered above, funding for research at the large polychrome paintings was forthcoming, presumably because the National Park Service thought they were more important than the rock art along the Colorado River.

The rock art along the Colorado River is worthy of additional research. Rock art sites differ from many other kinds of archaeological sites in that they qualify for the National Register of Historic Places under both criteria (c) and (d). These criteria are for sites:

c) that embody the distinctive characteristics of a type, period, or method of construction or that represents the work of a master, or possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d) they have yielded, or may be likely to yield, information important in prehistory or history.

The rock art site in the Grand Canyon meet these criteria in a number of different ways. For example, the stencilled hand prints at the Deer Creek site are not distinctive, but known to the project archaeologist, the stencilled outlines of plants are the only ones like this in North America. Obviously this makes them distinctive of the type and the method of construction. Some might suggest the rock art of the lower Grand Canyon, representing the Southern Paiute and Hualapai, lacks individual distinction, but collectively this genre of rock art is extremely important. It is worthy of additional research.

At the outset, it should be clear that the Southern Paiute and/or the Hualapai have a vested interest in the rock art of the Grand Canyon, and any research completed at the sites must include their approval. Rock art research has become more standardized over the past decade (Loendorf, Kordecki, and Gregg 1988; Loendorf et al. 1989; Hartley, Vawser, Smith, and Johnson 1993). Photography with black and white film and color film is the preferred recording method, but there are important aspects to good documentary rock art photography. Because the methods for rock art photography are described in other places, they need not be repeated in these conclusions, but researchers will have to be familiar with them before entering the field.

In some cases, it is not possible to photograph faint petroglyphs or pictographs. In these cases, tracing is the recommended recording method. As with photography, the proper tracing of rock art requires training and skill.

Of course, these recording techniques are complimented by other data collection methods--extensive note taking, map making, measurements, and sampling. The samples would be taken for analysis of the paint and for dating some of the rock art sites in the Grand Canyon. As described above, the methods for dating rock art are experimental. Some researchers have less confidence in the numerical age estimates obtained in cation-ratio dating than other methods. This concern aside, cation-ratio dates are unquestionably reliable relative age estimates, and this in itself offers a tremendous research tool to the rock art chronologist. Using cation-ratio estimates with techniques like seriation can produce good chronological frameworks, and this sort of research needs to be completed at Grand Canyon rock art sites.

More testing needs be accomplished at some of the sites. Site G:03:080 is a good example of a location where additional recording should be completed. An intensive search of the rockshelter floor, after a good map has been made, will probably produce fragments of pictographs which have fallen off the wall. During the May visit it was evident that one of these can be fitted back onto the wall to complete a pictograph. The relationship of the deteriorating fire board base in the deposits of this site to the rock art should also be explored. Other sites also contain potentially important information regarding features and artifacts that are in association with the rock art.

Perhaps the most important rock art research in the Grand Canyon is a study of pigment sources. The pigment "mine" at the Whitmore Wash site offers an extremely important opportunity to learn more about paint and its ingredients. Through the use of scanning electron microscopes, it should be possible to learn the ingredients in the pigment at this site. If the

pigment contains some of the Bright Angel shale, it may be possible to link the ingredients to the Grand Canyon, and with this knowledge a great deal can be learned about the rock art and its makers.

For example, knowing the ingredients in the paint makes it possible to tie together paintings at the same site. This means the information about the content of the style can be expanded, and, if one painting of a certain recipe can be dated, it can be assumed that other paintings with the same ingredients were made at the same time. Information can also be learned about the distribution of the paint in the region. This sort of information can help determine who was visiting the *Colorado River Corridor* to obtain pigment. More and more sophisticated techniques for learning the binders in paint are also being developed. DNA studies are allowing researchers to learn if the ingredients are from animal or plant sources (Rowe et al. 1994). Establishing a "finger print" for a paint offers archaeologists a powerful tool for studying the past, one that has been ignored in North America.

This scientific research is important, but none of it is as important as these sites are to the Southern Paiute and other Indian tribes. Native peoples know some of the sites are places of sacrament where prayers and ritual are essential. Other sites are places of historical importance; they are significant as locations needed to establish the roots or the underpinnings of the tribe. Still another group of rock art sites are significant because they are places of sentiment, and they are important simply because they are the products of American Indians. For these reasons, regardless of whether they are important for scientific research, all of the rock art sites in the *Colorado River Corridor* are important to the Southern Paiute.

CHAPTER FOUR

ETHNOGRAPHIC OVERVIEW

Southern Paiute people bring various perceptions of and preferred approaches to the study of their cultural resources. This chapter compares and contrasts scientific and Indian cultural resource conceptualizations and selects terms that best reflect both approaches. Underlying conceptual similarities are emphasized despite outward differences that have been produced by an array of terms. Although communication about cultural resources will be facilitated if the number of terms is reduced to a common set, still in this essay it is necessary to add new terms when discrete conceptualizations are needed to convey a special American Indian perspective.

This chapter presents four brief essays about key Southern Paiute, and to some extent general American Indian, perceptions of land and its resources. The first essay is about *cultural landscapes* which are sacred geographic areas. Based on both size and function, there are at least three types of cultural landscapes (1) holy landscapes, (2) regional landscapes, and (3) landmarks. Regional landscapes are further divided into ecoscapes and storyscapes. The second essay illustrates general cultural landscape concepts by providing the *Southern Paiute perceptions of cultural landscapes*. The third essay is about *boundaries and joint use* of cultural landscapes by Southern Paiutes and other Indian ethnic groups. Indian people developed cultural landscapes that are shared for various reasons with other ethnic groups, and this fact has important implications for this study. The fourth essay is about *interaction patterns* which are produced when Southern Paiutes interact with landscapes and formulate categories based on kinds of interactions. This essay is specifically illustrated with findings from this rock art study and serves as a transition to the following chapters.

CULTURAL LANDSCAPES

Southern Paiute cultural resources (plants, animals, artifacts, minerals) tend to be viewed together according to inherent criteria. There are specific studies of plants, animals, archaeology, and rock art each conducted without reference to other cultural resources found in an area under study. The grouping of cultural resources by inherent characteristics has the advantage of providing an information-rich discussion about a single type of cultural resource. For example, a complete study of Native American plants is conducted and written as a separate report with specific recommendations for protecting plants. This procedure has further utility in that most recommendations for resource management and preservation are focussed on types of cultural resources. In fact, most Federal preservation laws are singularly focused on one type of cultural

resource. Thus it is somewhat problematic, given the legal basis and widespread use of resource-specific categories, to suggest that these procedures for typing American Indian cultural resources do not fit and in some cases are meaningless in terms of how American Indians in general and Southern Paiute people specifically view cultural resources.

Southern Paiute people tend to view cultural resources as being bound together in broad categories based on functional interdependency and proximity rather than being defined by inherent characteristics such as shape or color. Most places where Indian people lived and visited contained the necessities of life: plants and animals for food, medicine plants for continued health, paintings and peckings on rock walls to tell about historic events and to bless the area where the people are gathered, and water to drink and use in ceremonies of all kinds. Places and the things associated with them are interrelated. For example, some archaeology sites were created where people gathered plants and some animals appear in rock paintings and peckings that address the relationship between Paiute people and animals.

The questions that confront Indian people, scientists assisting them with cultural resource studies, and agencies who must use the information to make land use policies are "how best to conceptualize Indian cultural resources" and "what terms should be used to refer to these conceptual categories?" Indian people contribute to resource-specific studies because they recognize that this has been the best way to protect the resource in a given cultural resource assessment situation. On the other hand, Indian people desire to reassemble the components of their culture, so that the fullest meanings associated with things and places are recognized and protected.

The suggestion that American Indian cultural resources be viewed, evaluated, and protected in new categories is more than repackaging, for it is an attempt to seek to understand culturally different cognitions of the environment, history, and place. There is a growing professional literature that demonstrates the importance of different culturally derived cognitions of the environment. Greider's (1993:79) analysis demonstrates that one Native American medicine woman transforms the same plants into Indian and non-Indian medicine, each requiring different culturally expected practices for the medicine to be effective. Winthrop (1994:27-28) explains disputes over where to include Indian concerns in the Environmental Impact Statement of a proposed ski area by contrasting a U.S. regulatory agency definition of nature as a *wilderness* lacking humans, with an American Indian definition of nature as *oikumene* or inhabited world. The Indian people involved in the ski assessment believed that their cultural concerns belonged in all sections of the report and should not be restricted to a human-impacts section. Howell (1994:130-131) suggests that the conceptual removal of people from the natural environment has had adverse impacts on how effectively U.S. national parks have been managed; so, a reconceptualization of nature as human ecology is essential before ecosystem management can occur. Treitler (1994:22-23) suggests that three Indian tribes have chosen different strategies for interacting with a Federal environmental regulatory agency based on differing cultural perceptions of the environment and the implications of sharing sacred information about the natural landscape being studied. Greider and Garkovitch (1994:8) conclude that:

Cultural groups socially construct landscapes as reflections of themselves. In the process, the social, cultural, and natural environments are meshed and become part of the shared symbols and beliefs of members of the groups. Thus the natural environment and changes in it take on different meanings depending on the social and cultural symbols affiliated with it.

The Kelley and Francis (1993) research with Navajo people suggests that they view places as a part of larger landscapes and that it is ethically wrong to refuse to adopt the culturally appropriate categories that people use in their cognitions of the environment. Even the Navajo Nation's Historic Preservation Department (HPD), according to Kelley and Francis (1994: 101), often uses a *piecemeal* instead of the culturally appropriate *landscape* approach of its own people when forced to do so by Federal laws. The Navajo HPD argues (Downer et al. 1994), however, that the HPD is working within U.S. federal regulations while attempting to broaden overly constraining concepts such as *history* so that data derived from what is called *traditional history* can be used in the preservation of culturally important places.

Places are managed by land management agencies. So if there are objects, plants, or animals to be protected, the place where the objects are located, or the plants grow, or the animals live is assigned special status. Sometimes the place is the cultural resource, and thus is termed a *traditional cultural property* (Parker and King 1990) (see Chapter Seven). In most instances, however, the place is set aside to protect the cultural resources it contains. Given the reality of contemporary land management practice in the United States, ultimately cultural resources must be studied and managed as geographically coherent units. A key question is "how big do these geographically units have to be to afford acceptable protection to the cultural resources they contain?"

A number of terms are being proposed by both Native Americans and scholars of Native culture to discuss these geographically coherent units: *sacred geography* (Walker 1991), *spiritual geography* (Griffith 1992); *sacred landscapes* (Carmichael 1994), *symbolic landscapes* (Grieder and Garkovich 1994) and *cultural landscapes* (Kelley and Francis 1993, 1994; NPS 1994). Each of these terms conveys similar key elements of what Native peoples often express when they talk about their conceptualization of a holistic view of the land and its cultural resources (Stoffle and Evans 1990).

In this essay, the terms *sacred* and *spiritual* will not be used even though they reflect the intensity of attachment Indian people have towards their landscapes. Unfortunately, the terms *sacred* and *spiritual* imply in Western epistemology the concept *secular*, thus limiting cultural resource discussions to what non-Indians perceive to be strictly religious activities. Religious terms are appropriate if a study is only about ceremonial resources, but usually the terms *sacred* and *spiritual* cause many Indian cultural resource concerns to be eliminated from the discussion of landscapes.

The term *symbolic* was not selected for use in this essay because it is not commonly understood, and thus requires technical explication before being useful. Actually, the term

symbolic does reflect how landscapes are created by humans and why it is so difficult to find common terms to discuss them. Greider and Garkovich (1994:8), who currently have the best synthesis and theoretical discussion of how landscapes are created, conclude that

cultural groups socially construct landscapes as reflections of themselves. In the process, the social, cultural, and the natural environment are meshed and become part of the shared symbols and beliefs of members of the groups.

A human group, in essence ... "constructs a landscape from nature and the environment through culturally meaningful symbols and then reifies it" (Greider and Garkovich 1994:6). Thus a landscape exists and lives only in the minds of social groups. When more than one social group occupies or otherwise has some reason to establish a cultural perception of a landscape, then competing views are expected. When developmental changes to the landscape are discussed, the assessment of these changes will be determined by which symbolic landscape is being considered. The consequences of planned environmental change can only be understood with reference to a people and their symbolic construction of the landscape.

The term *cultural landscape* is used in this essay because it is widely understood without further explanation and has official standing in a number of U.S. federal laws, regulations, and guidelines. Perhaps the most detailed policy statement on cultural landscapes has been released by the National Park Service (NPS) in the NPS *Cultural Resource Management* guidelines (NPS 1994). There, the agency defines *cultural landscapes* as complex resources that range from rural tracts to formal gardens (NPS 1994:93). The natural features such as landforms, soils, and vegetation provide the framework within which the cultural landscape evolves. In its broadest sense, a cultural landscape is a reflection of human adaptation to and use of natural resources. A cultural landscape is expressed in the way the land is organized, divided, settled, and used, and in the types of structures that are built on it.

The NPS stipulates that a *cultural landscape* is a geographic area, including both natural and cultural resources, associated with an historic event, activity, or person (NPS 1994:94). Using these criteria the NPS recognizes four cultural landscape categories:

- (1) *historic designed landscapes* which are deliberate artistic creations reflecting recognized styles, such as the twelve-acre Meridian Hill Park in Washington, D.C. with its French and Italian Renaissance garden features.
- (2) *historic vernacular landscapes* which illustrate peoples' values and attitudes toward the land and reflect patterns of settlement, use, and development over time. Agriculture areas, fishing villages, mining districts, and homesteads are examples.
- (3) *historic sites* are important for their associations with important events, activities, and persons. Battlefields and presidential homes are examples.

- (4) *ethnographic landscapes* which are associated with contemporary groups and typically are used or valued in traditional ways. In the expansive Alaska parks, for example, Native Alaskans hunt, fish, trap, and gather and imbue features with spiritual meanings.

The NPS definition of cultural landscapes is both similar and dissimilar to those often expressed by Native Americans. Both definitions include the land, its natural components, places touched by pre-human spiritual beings, and objects left there by Indian people as these are conceived within the cultural system of the people. Both conceptualizations of cultural landscapes reflect the full range of human activities, all of which are perceived of as being a part of life and thus culturally significant. Native American landscapes, however, are much larger in geographic space than are those considered by the NPS guidelines. The latter suggests that tracts of several thousand acres are the upper size limit for cultural landscapes (NPS 1994:94). By simply broadening the spatial parameters of cultural landscapes, the NPS and Native American conceptualization of these cultural resource units can be united.

The term *ethnographic landscapes* accurately reflects the concept that is being conveyed in this essay. Ethnography is the study of the culture and social organization of contemporary peoples, including the study of cultural ecology. The study of cultural landscapes is often included within the study of cultural ecology. The term *ethnographic landscapes*, however, is not clearly articulated in the guidelines, so a number of issues need to be clarified before it is used as a concept. Even though the concept seems appropriate for studying Native American cultural resources, the term *ethnographic landscapes* lacks both common and scientific use and so is not used in this essay.

The following discussion outlines three major types of cultural landscapes as these are perceived by many American Indian people: (1) holy land, (2) regional landscapes, and (3) landmarks.

Holy Lands

Edward Spicer (1957) used the term *holy lands* to explain one of the broadest and most fundamental connections between American Indian people and the land. Holy land is a term that seeks a common land perception in order to convey to non-Indian people the cultural significance of Native American land perceptions. A holy land is created by a supernatural being who establishes a birthright relationship between a people (however this is defined) and that portion of the earth where they were created. This relationship provides the people with special rights to use and obligations to protect resources on this portion of the earth. The relationship between a people and their holy land cannot be broken by the diaspora. Forced relocation by another ethnic group will not break a relationship created by the supernatural, so holy land ties tend to be viewed similarly by contemporary occupants and those who have moved away.

Although the term holy land conveys many similar features between land conceptions held by American Indian and those of people from other societies, there can also be distinctions. Holy

lands tend to be where a people were created by the supernatural, but the location of this place in real and spiritual space may differ. Middle Eastern religions, for example, view the surface of the earth as the only existing surface while many Native Americans perceive of living surfaces above and below this one. The holy land on this earth surface may have been produced when the people emerged from another earth surface below this one where they were originally created. The center of the Zuni Indian pueblo is such a place.

The term holy land never exactly fits American Indian views of their origin land, but many Indian people have accepted this as a gloss for their perception of creation lands and have agreed to assign a term to it. These terms tend not to be in the Indian language, probably because the concept is foreign. The Navajo Nation, for example, officially uses the English language term *Navajoland* when referring to an area bounded by the four sacred mountains (Kelley and Francis 1993). The Pima people of southern Arizona and northern Sonora Mexico commonly refer to their creation land by the Spanish language term *Pimeria Alta* (Griffith 1992:xix). The use of foreign terms to refer to Indian places is common; after all the term *Navajo* is Spanish for a people who call themselves *Dene* and the term *Pima* is Spanish for a people who call themselves *O'odham*.

Regional Landscapes

Regional landscapes are components of holy lands. Like other cultural landscapes, they are defined in terms of both geography and culture. Typically, regional landscapes are spatially expansive involving hundreds, perhaps thousands, of square miles. A regional landscape is often defined by a major geographical feature like the Black Hills of South Dakota or the Grand Canyon of Arizona. A major river like the Columbia may define a regional landscape, as can a desert like the Mohave.

Usually, regional landscapes have somewhat unique natural resources that are generally bounded by a major geographical feature. For example, there are certain types of plants and animals found in the Black Hills, the Grand Canyon, and the Mohave Desert. When American Indian people used the natural resources of a regional landscape over long periods, then specific adaptive strategies developed and were incorporated into their overall cultural systems.

Human adaptive strategies reflect but are not determined by the environment. Environmental deterministic theories have long since been set aside because studies demonstrate that ultimately people can live anywhere and do so largely on their own terms (Moran 1990, Vayda 1969). There are many dynamics between people and their environment (Ness, Drake, Brechin 1993), and these special relationships tend to be criteria in defining cultural landscapes, including regional landscapes.

One goal of this essay was to reduce the number of terms that applied to similar American Indian conceptualizations of the environment. Unfortunately, some new terms are

necessary because past discussions require greater conceptual specificity. There are two major subcomponents of regional landscapes, called here (1) ecological landscapes or *ecoscapes* and (2) story landscapes or *storyscapes*.

Ecoscapes

The term *ecoscape* refers to a portion of a regional landscape that is clearly defined by an unusual or distinct local geography and its unique cultural relationship to an American Indian group or groups. The ecoscape tends to be recognizable terrain that has already been named by both Indian and non-Indian people; for example, a mountain, a canyon, or an area with many hot springs. The ecoscape is by definition smaller than the regional landscape where it is found, but there is a direct relationship between the two. The geographical structure and cultural meaning of a regional landscape derives in large part from the structures and meanings of the many ecoscapes it contains. For example, the Mohave Desert is composed of great expanses of dry lake beds and their surrounding mountains, a massive unique valley called Death Valley, and dramatic areas defined by volcanic cinder cones, magma tube tunnels, and mesas capped by surface flows. Each of these have the potential of becoming an ecoscape due to its own physiological components, the unique plant and animal communities it supports, and the special relationships it has with Indian people. Together they become the Mohave Desert as a regional landscape.

American Indian people ultimately define an ecoscape when local geography is specially incorporated into their culture. The ecoscape may be viewed as a power place, it may have the shape of a mythic person that is lying down, it may provide mineral waters for healing, or it may be of special historic importance; still, each ecoscape will serve a special role in the history and culture of an Indian group. In this way, the ecoscapes combine to produce a regional landscape, and this combines with other regional landscapes to produce the holy land. These are all parts of a larger cultural tradition that uniquely belongs to a people.

Storyscapes

The term *storyscape* refers to a portion of a regional landscape or parts of a number of regional landscapes that are delineated by a Native American story or song. The structure and meaning of the story landscape or storyscape derives only from where the story or song occurs. The storyscape is held together neither by common topography nor by common plant and animal ecology. Quite the contrary, the story or song proceeds from place to place based on the activity it is conveying. Often times, the story is about spiritual beings that can move without reference to topography; that is, they can fly, swim along underground rivers, pass through mountains, or even move telekinetically.

A great variety of storyscapes crisscross the landscape of American Indian holy lands. Many of these involve a time before today's humans existed, what some would call a *mythic time*. The term mythic only implies another time before present time, it certainly does not imply that either that time or the stories were fictitious. Stories about the movements of mythic beings

convey the sense of purpose in the behavior of the mythic beings, but the story itself also is tied to places where either events occurred or the mythic being specifically established some relationship with the landscape (Kelley and Francis 1994). Often places along a storyscape contain topographical representations of what the story conveys. A hole in a sandstone cliff may be where a mythic being shot an arrow at an opponent, and a stain of color in a rock may represent an eagle frozen in flight. Were one to pass along the path of the story, the landscape would be marked with story or song points. Moving from point to point permits a living person to physically reenact and directly experience the story or song. The story or song landscape points are not more important than the less specific physical space between them because they all constitute the storyscape.

Landmarks

The term *landmark* refers to a discrete physical place within a cultural landscape (Kelley and Francis 1993:158). A landmark tends to be a small part of the local geography that is topographically and culturally unique. Landmarks are easily defined both in terms of their physical boundaries and the reasons why they are culturally important. A landmark may be a salt cave which is the source of an essential natural element, the object of numerous pilgrimages, and the end of a storyscape. A landmark may be a deep spring in the desert that is surrounded by pictographs from past ceremonies, plants for food and medicine, and water for the irrigation of gardens. A landmark may be a power rock that will heal sick people if they can talk to it in an Indian language and perform the proper ceremony.

Landmarks tend to be obvious places that seem to demand the focus of intense cultural interest. The residual volcanic core standing on the high plains of Wyoming, for example, called by Lakota people as *Mato Tepee* (Bear's Lodge) and by other people Devil's Tower, became the focus of cultural interest of at least ten American Indian groups as well as the Federal government that made it a national monument (Evans, Dobyns, Stoffle, Austin, and Krause 1994: 73-79). Because of what might be termed inherently interesting features, it is relatively simple to convey the cultural importance of landmarks to people belonging to another culture. As easily identifiable places whose meaning is easily conveyed to others, landmarks are ideal subjects for cultural protection and management. In fact, all cultural resource protection laws in the United States protect landmarks, but few laws have attempted to protect larger geographic units like regional landscapes, and no laws have attempted to afford protection or special management status for American Indian holy lands.

SOUTHERN PAIUTE CULTURAL LANDSCAPES

This discussion of Southern Paiute cultural landscape perceptions serves both to further illustrate the general development of the concepts in this essay and to prepare the reader of this report to better understand the range of cultural concerns that are expressed regarding the Grand Canyon pictographs and petroglyphs studied as part of this research.

The Paiute Holy Land

Southern Paiute people (*Nungwu*) perceive of many culturally significant places as being bound into a holy land called *Puaxant Tuvip*, or power land. This term, like those discussed above for the Navajo and the Pima people, has emerged in order to refer to all those lands that were given to Southern Paiute people when they were created. Southern Paiute people lived and used all places within their *Puaxant Tuvip*. At the most general level, Paiute people occupied and held valued lands for the use of their people. They held these physically and spiritually, integrating their occupation of these lands through the shared participation in religious ceremonies, a communication system based on runners, and intermarriage. At the regional level, Paiute people farmed, quarried, and manufactured products to be traded to other Paiute people as well as to be used locally. Some places were clearly recognized as having use and meaning for all Southern Paiute people whether they lived nearby or not. *Nuvaxantuu* (literally "where snow sits" or Mt. Charleston, NV) located near the Las Vegas Wash is commonly recognized by Southern Paiute people as the place where they were created as a people and where they received from the supernatural the right to occupy and the duty to manage and protect their holy land.

It has been argued by Southern Paiute people that when any place within their traditional holy land is potentially impacted by some project, it is the supernaturally-derived birth right of all Paiute people to understand what is being proposed and to participate in the identification, evaluation, and recommendation relating to those potential impacts. This is a holistic concern that some agencies have accepted in principal and adopted in practice, while other agencies have restricted their consultations to interactions with Southern Paiute peoples closest to the proposed project area. Despite narrower interpretations of consultation, Southern Paiute peoples continue to press for the complete involvement of all tribal members.

Grand Canyon as a Paiute Regional Landscape

The Grand Canyon is a bounded ecosystem and a place set apart by Native American people as culturally special. Before Euroamerican encroachment and diseases disrupted the Indian people of this region, the Grand Canyon was a critical part of Southern Paiute life, and those lands along the Colorado River were especially important components of the Paiute *transhumant adaptive strategy* (Stoffle and Evans 1976:5). That portion of the Colorado River that flows through the Grand Canyon involves the traditional territory of three local Southern Paiute districts whose people are called today by the terms Shivwits-Santa Clara, Kaibab, and San Juan. Each district is composed of an oasis where crops were grown near permanent communities and upland areas where plants were gathered, animals were hunted, minerals mined, and where other Paiute people belonging to the district lived on a more or less permanent basis. The Shivwits-Santa Clara district had its horticultural center on the *Tunakwint* (Santa Clara River, UT), the Kaibab district was centered on the Kanab Creek, and the San Juan people farmed along the San Juan River, Colorado River, and Little Colorado River. People from the Kaibab and Shivwits-Santa Clara districts used irrigated farming techniques most adapted to the steady and quiet flows of streams and rivers that flow into the Colorado River. While most

Paiute horticulture was adapted to these small riverine systems, techniques were available for farming the flood plains of the Colorado River. Such farms existed all along the Colorado River from the San Juan territory down river past the Las Vegas district (Jensen 1925-1926:140), to the farms of the Chemehuevi Southern Paiute at Cottonwood Island, and along the west bank of the Colorado River near the current town of Blythe, California (Laird 1976:19-20).

Clearly, the regional landscape called the *Piapaxa 'uipi* (literally "Big River Canyon" or Grand Canyon) is a place known and used by Southern Paiute people. Here are high quality mines of salt and red pigment needed for life. Here too is a place for farming, hunting, curing, conducting ceremonies, and exchanging manufactured goods with other Indian people like the Hualapai, Havasuapi, and Hopi. Central to this place is water, so all Southern Paiute people have a direct and personal relationship with the Colorado River.

Kanab Creek as a Paiute Ecoscape

Kanab Creek, called *Kanav 'uip* (literally willow canyon), is a culturally special ecoscape within the Grand Canyon regional landscape (see Chapter Six). Physically the Kanab Creek ecoscape is defined by steep-sided canyons and streams. Culturally the Kanab Creek ecoscape is defined by its contribution to the aboriginal adaptation of Southern Paiute people and to their ethnic groups' survival during the historic period.

The Kanab Creek ecoscape is the most extensive canyon and stream ecosystem to join the Grand Canyon regional landscape (see Figure 4.1). The greater Kanab Creek ecosystem, as defined by hydrology, is more than 60 miles north to south and 40 miles east to west. Kanab Creek begins in the mountains of southern Utah and flows to the south. The Kanab Creek ecoscape, as further defined by steep sided canyons, is significantly smaller, being about 30 miles from the Colorado River to where canyon walls begin to appear at a location now on the Kaibab Paiute Indian reservation and about 30 miles from the upper portion of Snake Canyon in the east to the upper portion of Hack Canyon in the west.

Aboriginally the Kanab Creek ecoscape fell within the territory or district of a local group of Southern Paiutes called the *kaivavichutsin* (Paiute people from the "mountain lying down" region), or the Kaibab Paiutes. Riverine and spring oasis farming were central to Kaibab Paiute aboriginal adaptation in this district, and the permanent waters of Kanab Creek were a key oasis. Kaibab Paiute people farmed the length of Kanab Creek oasis from Long Valley in the north to the delta on the Colorado River. Plants were gathered in this special ecosystem; in fact, the term Kanab comes from the Paiute terms *Kanav* (willow), and *Kanav 'uipi* (willow canyon) refers to the large expanse of willows which grew near Paiute residences along this creek. Animals of all kinds lived and were hunted in this topographically unique ecosystem, making it even more valuable to Kaibab Paiutes. Finally, the Kanab Creek ecoscape defined one of the major north-south access trails from the mountains of southern Utah to the water boundary defined by the Colorado River. Along this trail was a two-way flow of goods and materials drawn from neighboring Indian tribes to the south, as well as the transhumant movement of plants and animals found at various ecology zones.

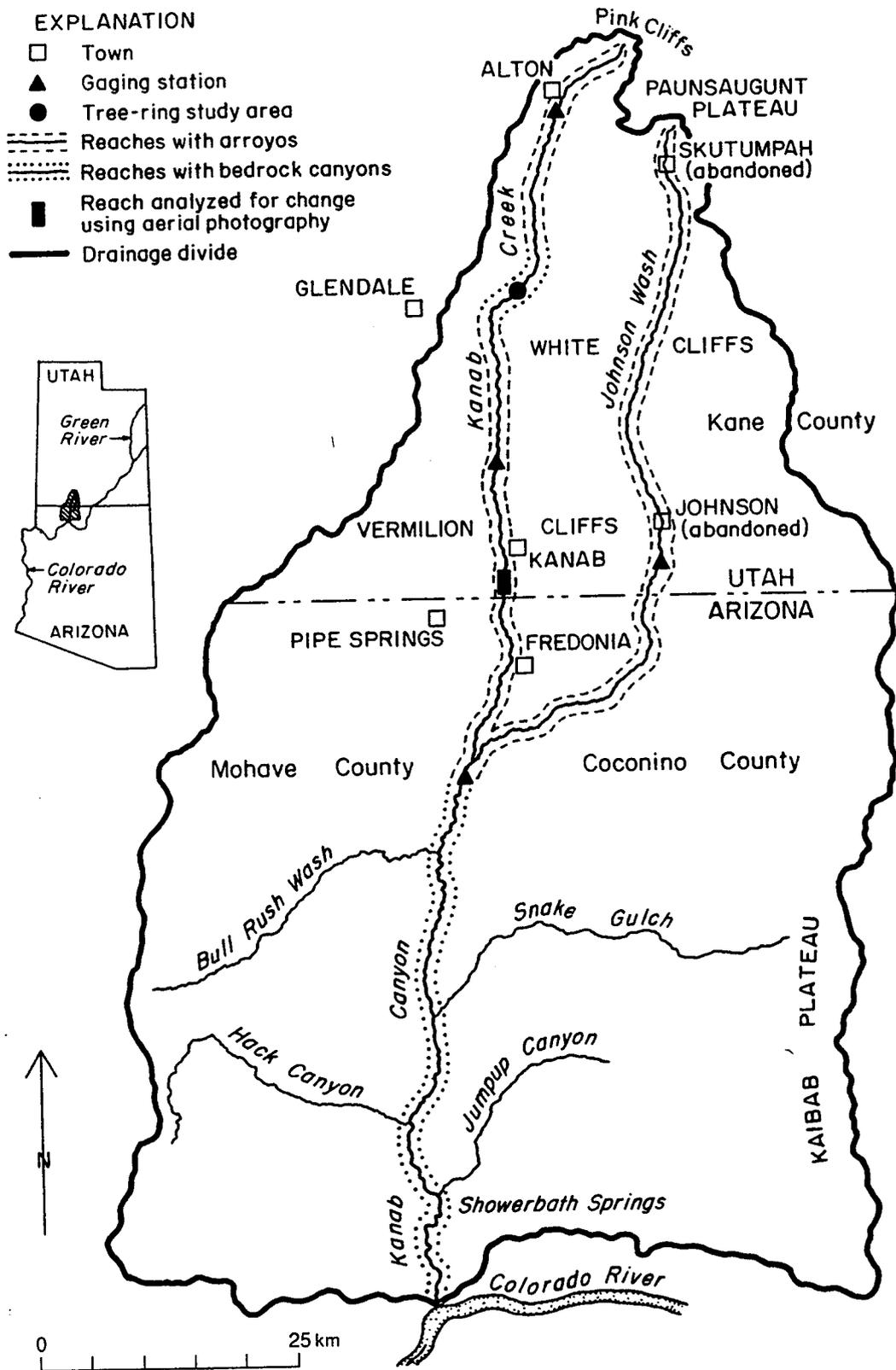


Figure 4.1. The Kanab Creek Basin (adapted from Webb, Smith and McCord 1991:2)

The Kanab Creek ecoscape is a persistent *region of refuge* for Southern Paiutes, especially because it was used as a protected area between 1870 and 1900. This was a period marked by the 1870 treaty between the Mormons and the western Navajos. After this treaty, Mormon reliance on Southern Paiute labor declined, and they were systematically excluded from labor positions in Mormon settlements. After 1870, Southern Paiute people were increasingly driven into lower Kanab Creek where they farmed in relative isolation until the turn of the century.

Kanab Creek is an ecoscape for Southern Paiutes because it represents a unique combination of topography, plants, and animals which served a key role in their aboriginal adaptive strategies. Because of events during the historic period the Kanab Creek ecoscape also acquired special cultural importance to Southern Paiute people as a region of refuge.

Trails and the Cry as Paiute Songscapes

The Southern Paiute people have two major categories of songscapes, one connected with specific trails and the other connected with the trail to the afterlife. Traditionally, Southern Paiutes had a system of trails and specialists who moved along them carrying messages, goods, and services. A knotted string, called *tapitcapi* (literally "something that's tied") was sent out via a runner to other Paiute people to inform them of events (Laird 1976:26-27). Perhaps the best account of these trails is provided by Carobeth Laird (1976:47-49), who was married to one of the last of the ritual runners from the Chemehuevi Southern Paiutes. These Chemehuevi Paiute runners traveled along trails specifically created by Southern Paiute people. The trails were complex because they passed from water source to water source across the rugged terrain of the Mohave Desert regional landscape. Often trails were traveled at night. In order to remember the trail routes, the runners would know a song that told the way. The trail songs described the path to be followed as well as encouraged the runner by recounting stories of mythic beings who traveled or established the same trail. The trail songs were so critical that ownership was limited to specific individuals and families, who maintained the songs and passed them from generation to generation as a heritage (Laird 1976:19-20, 268-276).

Perhaps the least known but most important trail is that traversed by Paiute people to the afterlife. The deceased person moves along this trail in response to songs sung by Paiute people at the funeral ceremony which is termed the *Cry* (Sapir 1912). The multiple days of collective singing moves the spirit of the departed along a trail that begins in the south and ends in the north where the spirit jumps into the afterlife. After each set of songs the singers know the physical location of the spirit person. In this way progress is marked, and the living are assured that the afterlife is being achieved.

Vulcan's Anvil as a Paiute Landmark

Vulcan's Anvil is a Southern Paiute landmark. It is virtually unique as a geologic feature and has clear role in Southern Paiute culture (see Chapter Seven). It is a large volcanic neck that is totally surrounded by the quiet flow of the Colorado River just before it crashes over a major

rapid called Lava Falls. The rock is the only one like it along 300 miles of the river as it flows through the Grand Canyon, and its setting is geologically unusual (Hamblin 1990:427).

The setting for this large jet black volcanic rock can best be described, from a Southern Paiute perspective, as a place of power. There are five major power forces converging at this location: the river, the rock, Lava Falls, a mineral spring, and the deep canyon. Culturally, the rock is specifically associated with a powerful Southern Paiute religious leader. Such a rock, even found elsewhere, would have the potential of being perceived as a curing rock.

This is the kind of cultural resource that Federal law has been designed to protect. It could easily qualify as a *traditional cultural property* and be placed on the National Register of Historic Places. The ease of protection for this landmark under Federal law illustrates a basic weakness in historic preservation focussed on places (landmarks). While the cultural significance of this landmark is clear, when asked about its relationship to other places Indian people point out (1) a nearby rockshelter where religious people would stay to prepare themselves to visit the rock, (2) a place used by religious people to sweat and purify themselves before visiting the rock, (3) a deposit of yellow pigment used in rock painting as well as body medicine for ceremonies before visiting the rock, and (4) a mineral spring used for curing. All of these places are functionally interrelated both to one another as well as to the river, the trail system on both sides of the river, the rapids, and the canyon. So what is the unit to be protected: the rock or everything related to it, including the entire Colorado River and the Grand Canyon as a regional landscape?

The Vulcan's Anvil landmark raises another fundamental issue that needs to be addressed in this essay: "who is culturally affiliated with places and resources and thus has the right to define how to protect and manage them?" The well known Southern Paiute religious leader who is most associated with this landmark moved across the Colorado River, married a Hualapai woman, and became an important figure in Hualapai society. He taught his Hualapai family and others about Vulcan's Anvil, which in turn became part of Hualapai history, culture, and religious practice. Thus the Hualapai people express cultural concerns for the protection of Vulcan's Anvil as one of their landmarks. The next essay attempts to address this type of question.

BOUNDARIES AND JOINT USE

Southern Paiute people perceive of the Grand Canyon and the Colorado River as being within their *Puaxant Tuvip* or holy land. Yet they recognize that other American Indian people used the Grand Canyon and the Colorado River. This raises specific management questions like "how is *cultural affiliation* defined for this regional landscape," "where are the boundaries," and "where did joint use occur?"

Southern Paiutes did and do have a sense of bounded territory. Aboriginally, before about 1840, this territory corresponded with their definition of *Puaxant Tuvip*, or holy landscape. The Indian Claims Commission studied, debated, and settled certain aspects of where Southern Paiute aboriginal territory is located (Sutton 1985). The ICC hearings concluded that while most of *Puaxant Tuvip* was exclusively occupied by Southern Paiutes aboriginally, certain areas were jointly used. Most of Southern Paiute territory along the Colorado River as it passes through the Grand Canyon was identified as an area of joint use.

Southern Paiute people were asked during this Bureau of Reclamation/Glen Canyon Environmental Studies (BOR/GCES) study of rock art along the Colorado River whether or not they thought other American Indian people used a specific rock art site and, if so, did they use it before, at the same time, or after the Southern Paiute people used the site. The complete answers to these questions are presented in Chapter Five and Seven, but it is clear that Paiute people do believe that other Indian people are culturally affiliated with places in this regional landscape and that there are a variety of ways they can become affiliated with places.

Southern Paiutes perceive that other American Indian groups can be culturally affiliated with places within the Grand Canyon regional landscape as follows: (1) living groups can be related to people who were there a long time ago, for example the Hopi attachments, (2) living groups are related by marriage to Southern Paiutes, and (3) living groups used to live there and continue to use the place. These sources of cultural affiliation are not mutually exclusive, so for example, one Paiute theory is that they and the Hopi are both related to the people called the Anasazi, while another theory is that the Paiute people are related to the Hopi because two of the Hopi clans (Snake and Horn Clans) are descended from Paiute speaking immigrants (Yava 1978:55-57). The ceremonies of the Snake Clan derive from experiences on the Colorado River. From a Paiute perspective, Hopi people are culturally affiliated with the Colorado River and the Grand Canyon portion of *Puaxant Tuvip* because both they and the Southern Paiutes have common ancestors and because a number of Paiute people intermarried with the Hopi people and started their own clans.

Other American Indian groups lived in what both perceived as Paiute territory. For the historic period, oral testimony establishes that both the Hualapai and the Havasupai visited and lived for periods of time in Southern Paiute lands (see Ghost Dance discussion in Chapter Six). The presence of "Pai-Style" pottery in what would otherwise be perceived as Paiute archaeology sites is interpreted by Paiute people as either a sign of trade with the friendly neighbors to the south or Pai people living in Paiute lands.

Joint use tends to be a two-way cultural affiliation issue. While some Hopi and Pai people are affiliated with places within *Puaxant Tuvip*, so too are some Paiute people culturally affiliated with places within Pai and Hopi holy lands. The Pai communities, for example, often contained Paiute families in the late 1800s. More than 50 mounted Paiute warriors fought with their Pai neighbors during the Hualapai War of 1867-1869. Granite Park, along the Colorado River on what is currently the Hualapai Reservation, contains Paiute pottery which the Hualapai believe was brought there when large numbers of Paiutes used Granite Park as a region of refuge

in the late 1800s. Similar exchanges and movements of people seems to have occurred all along the boundary of *Puaxant Tuvip*.

When an American Indian ethnic group has a recognized cultural affiliation with lands belonging to another Indian ethnic group, then it is necessary to develop a cultural resource assessment process that permits all involved ethnic groups to establish ground rules for speaking to cultural resource issues in joint use areas. Often this occurs when all Indian groups are a part of a common cultural resource assessment study (Halmo 1994). The current Glen Canyon *Colorado River Corridor* study separately funded the American Indian studies; thus the tribes have neither seen one another's cultural resource reports nor have had the opportunity to establish ground rules for resolving joint use issues.

INTERACTION PATTERNS

American Indian people establish rules for interacting with places of cultural significance. Some of these rules were taught to Paiute people by the places themselves. These rules are based on beliefs about the nature of humans and the rest of the world, what trained philosophers would call theories of knowledge or epistemological assumptions. These Indian beliefs define what is alive and what is inanimate, and what natural and supernatural forces exist in the world; they even define worlds before this time and dimensions of other worlds existing at this time. When cultural systems are coherent, the system of specific behavioral rules (called norms) reflect more abstract systems of evaluations (called values) which reflect a few fundamental beliefs.

Many American Indian cultural rules are generic and can be applied by any Indian person at any time to any common category of resource. So, for example, Southern Paiute people teach their young never to pick a plant without first talking to the plant to explain why it is needed and then asking for permission do the picking. If this is not done correctly, the plant has the right, the will, and the power to withhold its ability to cure or otherwise help Paiute people. Similar verbal instruction is provided with regard to interactions with animals, water, mineral deposits, mountains, and rocks of all kinds.

To Southern Paiute people all the world is alive and self actuated. Within Southern Paiute *Puaxant Tuvip* they have the right to pick, to gather, to hunt, and to mine, as long as these interactions with the non-human environment are conducted in a culturally appropriate fashion. Danger exists if the river, the mountain, the plant, or the rock becomes angry, because the world can strike out at the Paiute people as well as be their source of sustenance. Studies of Southern Paiute responses to radioactive waste disposal revealed a perception of radioactivity as deriving from an extremely powerful rock *who* could help or hurt humans (Stoffle, Evans, and Harshbarger 1989:115-119). Adverse health and environmental effects of radioactivity were perceived by Paiute elders as deriving from the rock becoming angry and striking out at the people who had taken it from its home without asking permission and using it in ways it felt to be inappropriate. Procedures for isolating radioactive waste by placing it in lead containers and burying it in tuff mountains were perceived as senseless, inasmuch as angry radioactive rocks are so powerful they can move at will. Instead, it was suggested that Indian religious leaders

should be asked to talk to the angry rock and see if it could be convinced not to harm humans again.

Rock Art Rules

Some rules are specific to kinds of places and activities that occur at those places. Rock art sites constitute a kind of place having its own types of activities that elicit behavioral proscriptions in Southern Paiute culture. First and foremost, Paiute people believe that no Indian person would casually mark a rock because all rocks are alive and powerful. It would be an insult to the rock to casually scar it with what might be called *graffiti*. Also, to mark a rock is to place a human desire on the rock's desire. It is much like picking a plant without its permission. Neither action would be done without a clear cut and culturally acceptable reason that both the Indian person and the rock understand and accept. Paiute people would not deliberately anger a powerful rock, so it is understood that any marks on a rock, whether pecked or painted, were made within the bounds of culturally appropriate behavior.

The act of painting or pecking a rock boulder or rock cliff involves additional interaction obligations between the Paiute person and the rock or pigment used. Cobble-size stones receive special attention, probably because they are especially vulnerable to human action. Such stones often talk to an Indian person in order to attract their attention. Sometimes the Indian person listens to this message and removes the cobble stone to a place that is mutually agreeable to the stone and the person. Some cobble stones are used in curing; they are heated and placed to remove a soreness in the muscles. Such curing stones are often highly valued possessions, but each stone has selected the person to cure, as much as the person selected the stone. The very act of picking up a cobble stone to peck a rock boulder or cliff involves double communication and double interaction responsibilities. Similarly, to paint a rock involves the mining of pigment. All pigment, whether white, red, orange, green, or black, occurs at special locations which are often approached with caution because of their perceived power. Like plants and rocks, minerals can only be mined after they have been told about the reason they are being disturbed and the pigment will only serve the Paiute person if the mineral agrees with the task to which it is being put. Paint further requires the use of animal fat, which involves additional interaction obligations.

No one knows today who made all rock painting and pecking, but it can be assumed that many of them were made by persons with religious knowledge and purpose. When medicine and religious persons make rock paintings, they do so for themselves, their fellow community members, and Paiute people in general. The action of painting or pecking a rock may be for good or evil or both simultaneously, because sickness and misfortune is perceived of as having been caused by some human action. Inappropriate actions need to be balanced by appropriate actions so that the sickness will abate or the misfortune will be reversed. When medicine and religious persons paint and peck rocks, they may leave the location with the power generated by the ceremony. A person stepping into ceremonial power associated with such a place risks becoming involved in the ceremony itself. Thus rock painting and pecking sites are associated

with personal threats that do not exist elsewhere. Indian people tend to stay away from them unless there is a good reason for entering such a site.

In summary, then, it is culturally serious to consider painting or pecking a rock or rocks. Therefore, when a Southern Paiutes approach these marks on rock, they do so with the fundamental understanding that the person who made the marks did so with a strong culturally-derived reason. They also only approach the site of the pecked or painted rock after making their reasons known and preparing themselves for the action.

CHAPTER FIVE

ROCK ART IN THE *COLORADO RIVER CORRIDOR*

This chapter presents the findings of the two rock art raft trips through the *Colorado River Corridor* during which Southern Paiute representatives shared their thoughts about petroglyphs and pictographs located there. The first trip occurred between May 1, 1994 and May 15, 1994 and, because prior religious commitments prevented prospective male participants from attending, included only female tribal representatives. The Southern Paiute Consortium chose to conduct a second trip to focus on rock art from a male perspective. The second trip occurred between September 7, 1994 and September 18, 1994 and included male tribal representatives. Both trips began at the base of the Glen Canyon Dam and included stops at 23 rock art sites in the 15 mile stretch to Lees Ferry and the 225 miles from Lees Ferry to Diamond Creek.

This chapter is divided into five sections. The chapter begins with a brief review of the methods used during the visits to the rock art sites and is followed by an overview of the findings presented. The third section provides the descriptions and interpretations of each of the rock art sites. Within each section there is a general site description and photograph of the site, the Southern Paiute interpretations of the site, and the archaeologist's commentary. The responses from both trips have been combined. The fourth section presents a summary of responses and mathematical analysis and discussion of the cultural significance of the rock art panels and sites, patterns of response based on gender, the patterns of past and present Southern Paiute use of the rock art sites, cultural transmission of knowledge about such sites, and interconnections among sites. The final section is a summary discussion of the information presented in this chapter.

METHODS

The tribes of the Southern Paiute Consortium chose to participate in this study because their traditional territories include portions of the *Colorado River Corridor* study area. Listed from west to east these tribes are (1) the Shivwits Band of the Paiute Indian Tribe of Utah, and (2) the Kaibab Paiute Tribe.

Each of the tribal governments appointed tribal members who are knowledgeable about rock art and traditional cultural properties to represent them on the river trips. Dr. Larry Loendorf, an archaeologist who specializes in rock art analysis, participated in the May river trip to assist in the characterization of sites and to provide scientific documentation of each site

visited by Indian participants. Dr. Loendorf was particularly important to this study because his extensive knowledge of rock art sites made it possible for him to characterize the rock art panels visited and provide photographic and scientific documentation of the sites. Three ethnographers from the University of Arizona conducted interviews on the May trip. The same three ethnographers and the Southern Paiute Consortium Coordinator conducted interviews on the September trip.

During the 1994 river trips, Southern Paiute tribal representatives were taken to places along the river that either had rock art or traditional cultural properties. Rock art sites were chosen based on past survey research by archaeologists working with the National Park Service. Official archaeology site forms and locations were provided by the Grand Canyon National Park archaeologists. Each tribal representative was provided with a copy of the *Grand Canyon River Guide* (Belknap and Belknap Evans 1989), a note pad, and a writing tool. Several representatives brought along their own cameras and tape recorders to further record their experiences and ideas. At each rock art panel, the Indian participants walked over the site, examined the panels, and recorded their thoughts in their notebooks. On the May trip, the procedure at each site had five steps:

- * Larry Loendorf and other participants studied the rock art archaeology site descriptions and located the sites on topographic maps.
- * Larry Loendorf and other participants canvassed the area indicated on the map until the rock art panel(s) was(were) located.
- * Southern Paiute representatives went to the panel. They walked around the site and surveyed the panel(s) located there.
- * Southern Paiute representatives reproduced what they saw in their notebooks. They also recorded their thoughts about the site.
- * Southern Paiute representatives provided information about the panels and their cultural significance through a formal interview process.

On the September trip, only the last three steps were included in the procedure. During both trips, when a Southern Paiute representative had viewed the rock art panel and surrounding site, the individual was given the opportunity to discuss the site. An ethnographer recorded the individual's observations and interpretations on an Ethnoarchaeology-Rock Art Information Form. The purpose of the formal interviews was to provide an opportunity to collect the same information from each person about a specific location. A wide range of questions were asked (see Appendix A). These questions were adapted from the successful archaeology interview forms used in the earlier study in the *Colorado River Corridor* (Stoffle, Halmo, Evans, and Austin 1994) and by the UofA research team elsewhere in the southwest. A tape recorder was available at all times in case Indian people wished to further comment on a rock art site.

OVERVIEW OF FINDINGS

There have been very few studies of rock art that involved Indian people, so this study broke new ground in terms of both methods and data. Another unique feature of this study is that the female and male representatives visited the rock art sites separately so gender effects could be studied. Most of the other rock art studies conducted with American Indian people have only talked with males. A recent exception is Young's (1988) analysis of Zuni perceptions of rock art. Generally, though, the assumption has been that only Indian males know about rock art; this study explicitly demonstrates that is not true.

Several general statements about the rock art sites can be made. First, nine representatives knew at least some of the sites were present prior to their participation in the rock art studies. Representatives had learned about the sites through hearing stories about Southern Paiute history in the region, communicating with tribal representatives who participated in earlier river trips, and visiting the sites. The absence of specific knowledge about many of the sites is a consequence of the exclusion of the Southern Paiutes from the Grand Canyon in the first quarter of the twentieth century (see Stoffle, Halmo, Evans, and Austin 1994). Still, several of the sites, such as the Whitmore Wash, continued to be used after tribal members were officially prohibited from doing so. When a site was unfamiliar to the representative, the individual was asked to talk about sites that were *like* the site. Information about sites that are considered similar to the rock art sites that were visited is included in this chapter where appropriate.

Sacred Paint

One feature of the rock art panels that received particular attention by the Southern Paiute representatives was the presence of red or white paint on the panel. *Ompi*, the red paint, is a sacred material and has been recorded as an important source of protection from "inipic" [ʔnəpitsi], the evil spirit. "They put red paint on the face... inipic is afraid of that" (Kelly 1964:141). Southern Paiute representatives confirmed that *ompi* continues to be a very important material and that the presence of *ompi* on a rock art panel was especially significant.

[Ompi] is very sacred. It is used for protection, too, from bad luck and haunting.
(D526)

[These are important] because they're in red paint... how the figures are drawn in red paint. Red paint is something sacred. Red paint is not used for everything.
(D2031)

The red paint was to ward away the spirits so they can have a good night's sleep.
(DA2025)

By taking this sacred red paint we mark the area sacred. (R2020)

White and yellow paint have also been used for traditional ceremonial purposes and are sacred minerals. The relationship between white paint and special ceremonies such as the Ghost Dance or healing has been discussed in Chapter Four.

They drew the white symbols with the paint from here. It symbolizes purity. White paint is put on the baby's soft spot... This was a path that they took to collect white and yellow paints for ceremonial uses. (D2032)

They use the white clay. It seemed to me when they have traditional powwows or traditional doings they use the white paint like they do the Indian paint [ompi]. Sometimes they use yellow, and in doctoring. This place is very sacred - the way the cave is there. There might be some burial things under where we seen the white clay on the walls. (DA534)

Stories and Legends

At all sites a majority of the representatives believed there are Paiute stories and legends associated with the panels. The representatives were not asked to share those stories and legends. There are specific times of the year for stories to be told, and some stories may not be shared during a spring or summer river trip. In some cases, the representatives acknowledged that they did not know specific stories but were certain there are some. Such a response indicates that the representative perceives the rock art panels to be significant; there are stories and legends associated with significant places and events. In a few cases, the representatives spontaneously shared stories they believed were associated with the rock art panels with the researchers. In those cases, the stories are included below in the Southern Paiute site interpretations.

SITE-BY-SITE INTERPRETATION

The purpose of this section is to provide a site-by-site discussion of the 23 rock art sites that were visited on the May and September river trips. A total of 249 interviews were conducted with 14 Southern Paiute representatives. This study focuses on rock art panels. Nevertheless, previous studies have shown that Southern Paiute people respond to sites holistically. Many of the rock art panels are located in spatial proximity to archaeological sites. The Southern Paiute representatives were given the opportunity to comment on features and artifacts that they perceived were related to the rock art panels, but they were not asked detailed questions about each artifact or feature. In the following discussion, features and artifacts that were observed at the sites are discussed when they were considered important by the Southern Paiute representatives.

The purpose of this section is to provide the reader with enough information to understand both the rock art site and the Southern Paiute and archaeologist's comments about it without overwhelming the reader with numbers and statistics. Mathematical analyses are

provided in the following section. Therefore, throughout this section there is minimal use of numbers. The following four terms are repeatedly used to indicate the frequency of responses given by Southern Paiute representatives: (1) *a few* indicates less than one-fourth of the respondents; (2) *some* indicates between one-fourth and one half of the respondents; (3) *a majority* indicates between one-half and three-fourths of the respondents; and (4) *the vast majority* indicates between three-fourths and all of the respondents. These terms are summarized in Appendix B for easy reference. Other terms such as *none*, *all*, and *one-half* are used to indicate response frequency when appropriate.

Site 1 - C:03:006

The site is located below Glen Canyon Dam, about 14 miles upriver from Lees Ferry. The petroglyphs are on an upright surface of Navajo sandstone that faces to the southeast. The single panel is about 80 meters from the river at a location which is used extensively by boaters, hikers and fishermen. During the May visit to the site, a couple and their two dogs were using an adjacent rockshelter to get out of the wind and rain.

The primary figures in the panel are tall, thin anthropomorphs; the majority of these have open bodies that are filled with vertical and horizontal patterns, while a lesser number have totally pecked bodies. The figures either lack arms or have very short arms. Legs point straight down from the base of the torso, and, if feet are shown, they are bent outward. Most of the figures have two projecting horns or feathers from the tops of their heads. Eyes are the only facial attribute depicted. At least one of these figures appears to post-date the others by hundreds of years.

Other petroglyphs in the panel include rectangular-bodied sheep with interior line designs in their open bodies. These figures have four straight legs, which are oriented slightly toward the front of their bodies, and horns which curve back over their bodies. One has a long tail, while others have short stubby tails. Another zoomorph represents a branching-antlered deer or elk. A human hand, a wheel or sun disc, and a few other abstract forms make up the remainder of the rock art at the site.

Southern Paiute Interpretation

Eleven interviews were conducted at this site. This site was recognized by eight of the representatives as a hunting or camping site. One individual believed the site was used to gather plant foods and another stated that it was a place to "read the rock." Praying was also mentioned as it would have occurred in conjunction with hunting or gathering. One individual interpreted the site solely as a place where some type of ceremony would have occurred. In addition to the rock art panel, features that were noted include a trail out of the canyon, plants, and the water in the river.

According to a majority of the Southern Paiute representatives, the rock art panels at this site were made by Southern Paiutes. The representatives said that the panels were used by



Figure 5.1. Overview of Site 1 - C:03:006

Southern Paiutes in the past, but none of the representatives were aware that their families have used the panels, and only one person said the panels are currently used by Southern Paiutes. All representatives stated that there are stories and legends associated with the panels, and one individual specifically mentioned songs that she knew are associated with the panels. The vast majority of the representatives stated that Indian people other than Paiutes also visited or used the panel. The other Indian people named include Anasazi, Havasupai, Hopi, Hualapai, and Navajo. As one individual commented:

[Other Indian people] used it later because of some of the sheep symbols. At one time all tribes knew about these symbols because they were passed down from people to people. (R2001)

Several individuals noted that the way the drawings were made is significant because the panels were etched deeply into the stone. As one individual said, "They were pecked in to last a long time." (D2001) Two different types of etchings were observed on the panel. The panels were identified by the representatives as being like other panels made by "the old people." Specific mention was made of similar panels located on the Kaibab Reservation, in Five Mile Canyon, in *Mu'uputs* (Owl) Canyon, and at Mt. Trumbull. The panels at those locations were perceived to be related to the Site 1 petroglyphs because they have the same meaning. All the

representatives said the site was related to other sites in the area, primarily hunting sites located both in *Colorado River Corridor* and on the rim.

The map figures are a guide because without them we would not have known that people had discovered ways to get down. (R2001)

I think that's a family that was here - a woman on the left, man in the middle [who is] tall, two kids, one grandparent, one deer, one sheep, a dog - a family scene. (D501)

To me one of the figures looked like he was hunting, or that she was hunting, whatever. Most likely a man. I could be wrong, it could've been something else. But he seems to be going in the direction of the sheep... He's got something in his hand, and it's pointing that way. At the end of the panel. He's got something there with him, maybe a spirit showing him the way. (D502)

Well, I think it means that the person who drew it was trying to tell the story about his hunt. He was tracking this big sheep and by the circles probably tracked it for two days. Probably a big sheep because he made the horns real big.

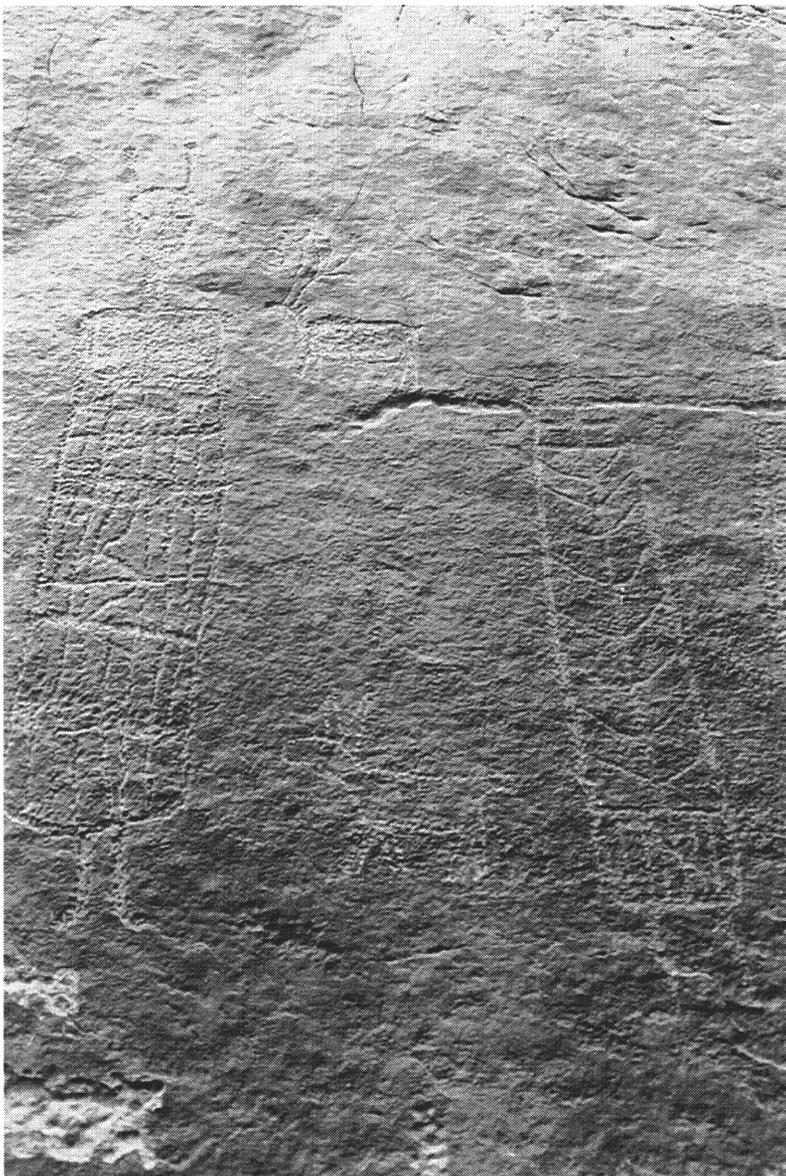


Figure 5.2. Petroglyphs at Site 1.

Archaeologist's Commentary

The rock art is clearly related to Glen Canyon Style 5, thought to be primarily a late Archaic style in this region. The more recent additions to the panel, in the same style as the older ones, may represent a copy-cat artist. Apparently, because they thought they were the products of Euroamerican graffiti artists, the archaeologists who recorded the site did not

describe or sketch the more recent figures. Based on experience at other rock art sites, this assumption may be incorrect. Rock art sites are continuously used by native groups and it is not uncommon to find figures in the same style as older ones added to a panel.

After consultation with the appropriate Indian tribes, the panel should be photographed using the standards currently employed in rock art recording. This includes a scale, information board, north arrow, and extensive panel information. Multiple types of film should also be used, with a set of archival photographs for preservation.

Samples for cation-ratio dating and ¹⁴C AMS dating should be considered. Although these techniques are controversial for numerical-age estimates, the cation-ratio technique is unquestionably good for relative dating. This technique would allow one to establish the relative sequence for the rock art at the half dozen petroglyph sites in the immediate region and cause minimal damage to the petroglyphs. This sort of information would present a good start on the chronological framework.

Site 2 - C:02:038

The site is about 10 miles above Lees Ferry. More than 35 petroglyphs are found on the panel at the site, on a Navajo Sandstone surface that faces south at 170 degrees east of north. The dominant figures in the panel are bighorn sheep, some with rectangular, outline bodies which contain interior-line designs, and others with solidly pecked, boat-shaped bodies. Many of these sheep, especially those with the boat-shaped bodies, are lined up in rows as though they are following one another. One highly stylized sheep is unusual among the others, which are depicted in more realistic forms.

A snake-like figure and two upright, stick-like human forms are apparently older than the sheep. This assumption is based on the relative degree of re-varnishing within the petroglyphs, and, because the snake and stick human figures are much darker than the sheep, they are likely older. The sheep, on the other hand, are probably less than 1,000 years in age.

Archaeologists discovered cultural remains near the site, identified as site C:02:081, that are tentatively assigned to the Late Archaic and PI to PIII Anasazi. It is not clear, from the site form, as to their reasoning for this assignment, but it appears that most of the rock art is at the recent end of this sequence.

The site is a favorite for tour boats. A well-used trail from the beach to the panels, with wooden steps and parallel rows of rocks, is used to direct the pedestrian traffic. A row of rocks outlining a transplanted cactus garden beneath the panel, with a sign asking people to stay out of the area near the petroglyphs, is used to control the visitors at the site itself. In general, this approach seems to be effective. The low rock walls and the cactus garden are natural components of the site setting and are not offensive to the visitor. A tour group who visited the site in May while the representatives were studying the panels expressed as much interest in the cactus blooms as they did the petroglyphs.



Figure 5.3. Overview of Site 2 - C:02:038

Southern Paiute Interpretation

Twelve interviews were conducted at this site. This site was recognized by all of the representatives as a hunting or camping site. In addition to the rock art panel, abundant plants, including medicine plants, herbs, and teas were noted, and the representatives indicated that animals such as bighorn sheep and antelope were present. Five representatives said that important hunting ceremonies, including the Mountain Sheep ceremony, would have occurred at the site. Although women are typically excluded from the ceremony, one woman knew of the ceremony because she had seen it performed. She described a particular song that was sung at the ceremony.

All but one of the Indian representatives stated that the rock art panels at this site were made by Southern Paiutes and were used by Southern Paiutes in the past. None of the representatives were aware that their families have used the panels, and only one individual stated that the panels are currently used by Southern Paiutes. All but two of the representatives stated that Indian people other than Paiutes also visited or used the panel. The other Indian people named include Anasazi, Havasupai, Hopi, Hualapai, and Navajo.

Several individuals noted that the way the drawings were made is significant because the drawings were made at an angle to depict a direction for travel. Although two people said the panels were unique, other representatives identified them as being like some found near the Shivwits Reservation and the ones at Site 1, and one individual anticipated that similar panels would be found at other hunting sites. The panels were perceived to be related because they contain similar figures and would have been used in similar ceremonies. These panels are related to hunting, and three people noted they may have been made by the same person. All but two of the representatives perceived the rock art site was connected to other sites in the area. The sites were connected by trails and songs.

The symbol on the right - animals coming in and going out year after year.
(D2005)

I'm looking at the sheep. They are going on a trail. There is a trail where the sheep came in and out. The two sheep around the circle - the Paiutes used to have a Mountain Sheep Dance. They used the head of a mountain sheep. That reminds me of that because of the winter. The dance is a contest. I used to do it when I was six or seven. (DA2006)



Figure 5.4. Petroglyphs at Site 2

It represents a cycle. The signature of two antelope heads in a circle [means] abundance here - a good cycle. (DA503)

There are six deer. The deer came down here. There is a man on a rock with what looked like a bow. And intertwined ram heads. [Paiutes have a] high regard for the ram. It was elaborately placed by the artist to appease the ram spirit... The staircase line is showing where and how to go to hunt. (D2004)

The snake, man, mountain sheep, deer, rabbits, birds - all are associated with the hunt and hunting ceremonies. (R503)

Archaeologist's Commentary

As with other sites visited heavily by tour groups, a photography station should be established in front of the panel. Rangers or other park personnel could then visit the site on an annual basis to take photographs from this position and the photographs could be used to monitor site erosion and damage. The visitor control at the site, the outdoor diorama, is effective, but the lack of good interpretive information should be changed. A series of good interpretive signs would be useful for the viewing public. A possible example follows:

The petroglyphs are made by pecking through the dark outer varnish of the sandstone surface to expose the lighter colored interior stone. The primary animals shown are bighorn sheep. These animals were an essential resource to the indigenous cultural groups who inhabited the canyon over the past 4,000 years. Their meat supplied protein essential to their diet, hides were prepared to make fine clothing, horns were made into spoons and cups, and hooves made rattles for musical instruments. The sheep depicted in this rock art panel are thought to have been placed there within the past 1,000 years.

This text is provided as a sample only, and, before use, it should be edited and offered for review by the cultural committees of the Indian tribes who have an interest in the Grand Canyon.

Varnish samples from the petroglyphs would help establish the numerical or relative age of the petroglyphs. Without such information it is possible, using information from sites C:02:006, C:02:037, and C:02:038, to place the sheep in a temporal sequence. The older sheep appear to be those with rectangular bodies, interior line designs, short, straight legs, and horns that curve over their backs. These sheep tend to be large, as much as 75 cm across their bodies, and they are completed as individual petroglyphs, each with some unique design elements. In the earlier stages of the sequence, the sheep are found in panels that also contain upright, often armless, anthropomorphic forms with outlined bodies containing elaborate interior-line designs.

The later sheep have boat-shaped bodies, made by totally pecking away the body. These sheep are generally smaller and tend to be found in groups, some in rows, suggesting they are

following one another. They are less likely to be in association with the upright, outlined, interior-line anthropomorphic figures.

Site 3 - C:02:037

The site is situated on a Navajo Sandstone surface about 11 miles above Lees Ferry. The rock art is above the river, adjacent to an open and exposed ledge of the sandstone outcrop, where it is obvious to river travellers. The two panels at the site are on a nearly vertical surface that faces southeast at 140 degrees east of north. The petroglyphs are dominated by anthropomorphs and mountain sheep. Most of these figures have open bodies, both rectangular and ovoid, with interior line patterns, while a few of them are solidly pecked to form the figures. All of the anthropomorphic forms are armless, but most have short, straight legs attached to the bottom of their elongated bodies. The small heads on these human-like figures do not display eyes, noses, or ears, but most have two appendages attached to the crown of the head that are best interpreted as horns or horned head gear.

The zoomorphic forms have both rectangular- and ovoid-shaped bodies with short, straight legs. Some of the larger zoomorphs, most likely bighorn sheep, have feet made as horizontal lines that connect to the bottom of the legs and point forward. These feet are at least moderately unusual because sheep should have hooves which point down rather than forward. A few of the figures, both human-like and sheep-like, are made by totally pecking the body.

One of the largest figures in the panels is a sheep with a pecked and outlined, rectangular body form with interior lines that measure 60 cm across its body. This figure has four short legs with feet that point forward, a short tail, and a head attached to a short neck. The head has a snout and horns, but it is not as well-formed as the body of the figure. Abstract elements are nearly absent in the panels.

An historic panel of inscriptions near the prehistoric panels, described on the site forms, was not visited in this project. According to the site form, it displays the names and dates of individuals, including one of G. M. Wright who visited the site in 1892.

Southern Paiute Interpretation

Eleven interviews were conducted at this site. This site was recognized by six of the representatives as a hunting or camping site. Three of those individuals also stated that ceremonies were conducted at the site. Three representatives named only ceremonial uses for the site, one person identified it as the possible site of a council meeting and place to gather foods, and one individual said it was a place where people would stop to read the rock writing on the wall. In addition to the rock art panel, features that were noted at the site include animals and plants.

According to the majority of the Southern Paiute representatives, the rock art panels at this site were made by Southern Paiutes. All of the representatives said that Southern Paiutes

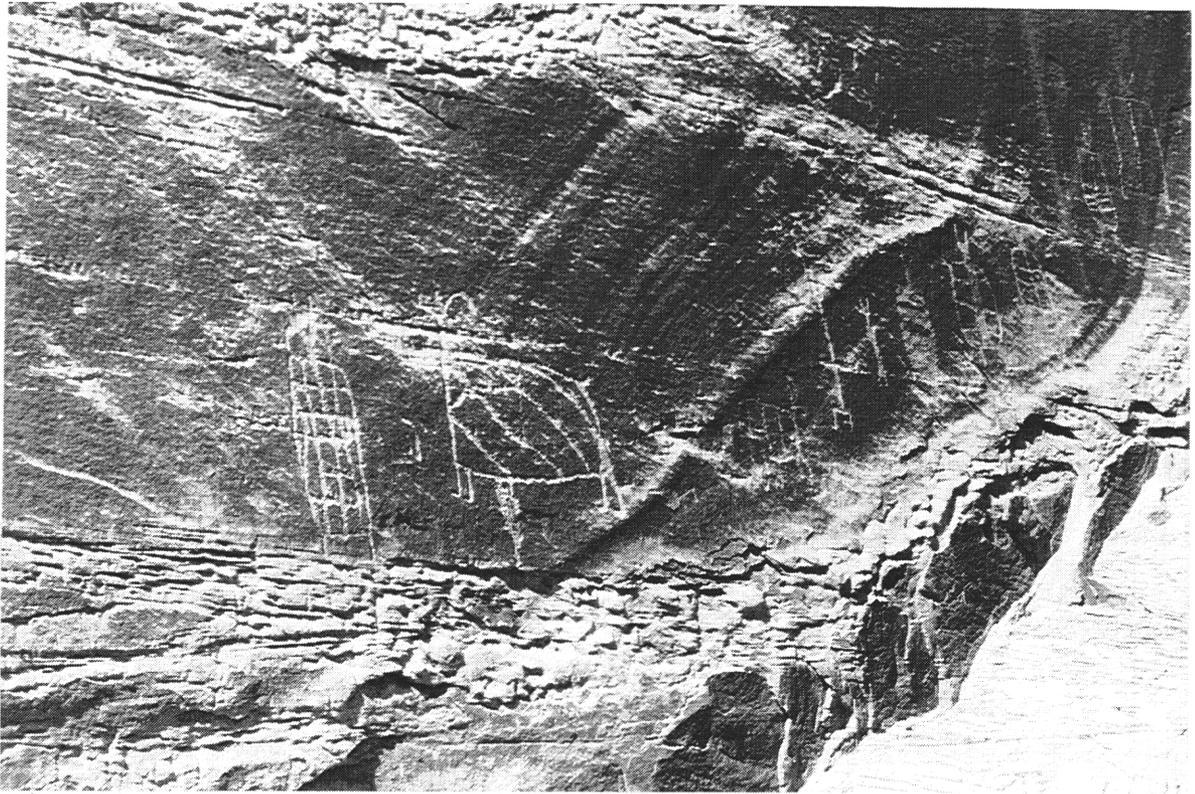


Figure 5.5. Overview of Site 3 - C:02:037

would have visited or used the panels in the past, but none said that the panels were visited or used by their family or are currently being visited or used. All of the representatives said there would be stories or legends associated with the panels; one related the panels to the Mountain Sheep Dances and one noted that the panel was mostly related to animal legends. A majority of the representatives said the panels would have been used by other Indian people. The Indian people named include the Anasazi, Havasupai, Hopi, Hualapai, Mohave, Navajo, and Yavapai.

Several individuals noted that the way the figures at this site were placed on the rock was unique.

These are different symbols - the exaggerated sheep. (D2003)

The way the animals are pointed in different directions. They are drawn right at you, standing up, towards you with lines or dots in there. (R2002)

The panels were identified by the representatives as being like those located at Sites 1 and 2. The panels are related because the animal and human figures look the same. However, one individual noted that although the figures looked similar, the panels were different because this one was a map but the previous two were used for prayer. One individual perceived the panels

to be like those located on the Shivwits Reservation. All the representatives perceived the rock art site to be connected to other hunting and ceremonial sites up and down the river.

It means power, medicine, bringing of offerings because of the exaggerated sheep.
(D2003)

Maybe they had a council with members of each area... It might be they had hats on - deer horns, willow hats - whichever way they like to dress when they powwow... They are preparing for a hunting trip. They had to ask each other for their advice on how to go and what to do. (DA506)

[They] used the insides of the sheep, the horns, etc. [Here they] show the parts. They have a hole in the center of the human figure... I knew what the lines meant - most of them had six or five. They mean something, but I can't remember.
(DA2004)

It's talking about somebody's hunt and their family, different numbers they saw.
(DA2003)

There is a man hunting - men in blankets - full - both hunting together. The patterns are sewn together clothing - rabbit skin blankets. (R505)

The number of lines and number of dots - the way the trails are pointed in different ways. (R2002)

Archaeologist's Commentary

The archaeologists who recorded the site suggest all of the prehistoric petroglyphs belong to the Glen Canyon Style 5, a Late Archaic rock art style which is believed to be older than 1,250 years before the present. This assessment appears incorrect. While some of the petroglyphs may be as old as the Late Archaic, others are clearly more recent. The relative degree of rock varnish in the petroglyphs is obvious, and this difference, in addition to the change in the form of the sheep, suggests a definite chronological sequence in the petroglyphs. The rectangular-bodied forms appear to be older than the ovoid-body sheep forms at the site, and this same observation may apply to the anthropomorphic figures.

As described for other petroglyph sites in the vicinity, the pattern-bodied anthropomorphic and zoomorphic forms at site C:02:037 may be related to the Numic rock art in the Coso Range of California. The formal similarities between the two rock art genre - outline bodies with interior patterns for the larger figures, and interspersed, smaller, solidly pecked figures - are obvious. A more conclusive association between the styles will require dating of the sites in the Grand Canyon to learn their actual age rather than their estimated age.

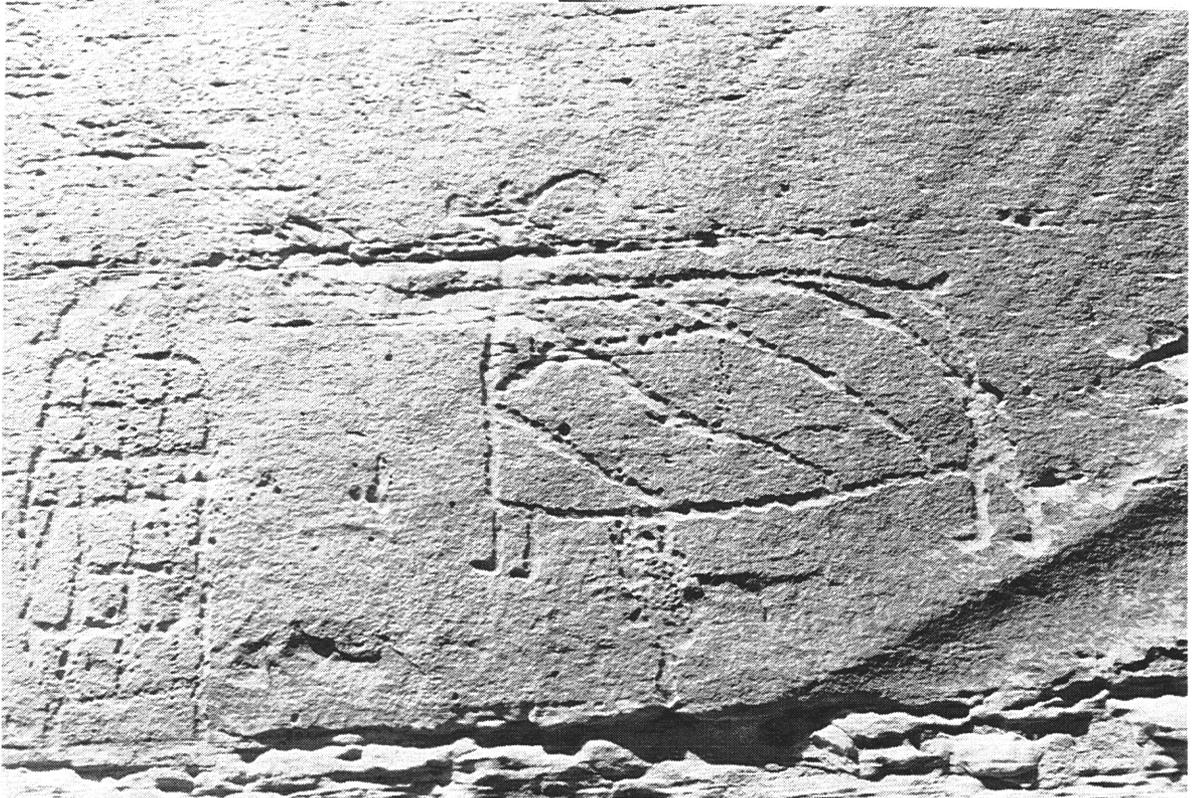


Figure 5.6. Petroglyphs at Site 3.

The site is a good example of petroglyphs made in the interior-line style; it may be associated with the initial movements of Numic-speaking groups out of their California homeland. Presently, the site neither exhibits graffiti nor does it appear to be endangered by any immediate erosional problems. The historic names are in a separate site area, and it would probably be best to assign them a separate site number.

Nonetheless, the site should be monitored by establishing photography stations in front of the panels, which can be used to take repetitive photographs. These sorts of data are especially important if the site is vandalized by the addition of graffiti, but they also help a conservator understand problems in site deterioration.

The petroglyphs at the site can be interpreted using a shamanistic interpretation of rock art because the site displays characteristics which support the "trance hypothesis." A large sheep in the panel has its insides hanging out, suggesting it is either dead or dying. If this is interpreted as a metaphor for death, the obvious link to one's death in a trance is apparent. In this explanation, the elongated forms, with the solid bodies lacking any interior form near this figure, represent the feeling of being drawn or pulled into another realm. And, perhaps most important, the anthropomorphic forms with the horns represent a combination figure, where

sheep and humans are blended to create a therianthrope form who represents the salvation or sustenance of the shaman's culture.

The panel does not display the tools of the hunt - atlatls, bows, spears, darts, or arrows, and it is difficult to interpret as an example of a successful hunt. Instead, it shows strange, human-like forms associated with a dead or dying sheep, and if this is interpreted as a metaphor for death, ie. trance, other figures in the panel may represent the movement into trance and the completed transformational figures, ie. sheep and human combinations. Regardless of its age or its cultural affiliation, this site is more likely to have been a shaman's retreat that was used for communication with the spiritual world than it was for communication in the world of the individuals who encountered the panel.

Site 4 - C:02:013

The site is situated about 2 miles upriver from Lees Ferry. Located on a low wall of Kayenta sandstone, the site has two separate and distinct panels of rock art.

Panel 1 is located on a vertical surface that is oriented nearly directly north at 350 degrees east of north. It measures approximately 4 meters in width and 2 meters in height. At least seven elements, made by pecking their form, remain on the panel; others were probably also present, but are now so faded they cannot be recorded. The figures are primarily abstract forms. One is a scroll design, on the left side of the panel, connected to a line which is straight and then meandering. Another scroll design is nearby. Two inverted, U-shaped elements are found to the right side of the panel. The only form which may represent an animal is a winged element that is suggestive of a bird.

Panel 2 is located on the back side of a large erosional block of the sandstone that has separated from the main outcrop wall. The single element in the panel faces northeast at 75 degrees east of north. The element is a well-made diamond figure with carefully measured equilateral sides. Both ends of the totally pecked diamond display scroll lines like antennae, curling back in toward the main figure. It measures about 12 centimeters from top to bottom.

Southern Paiute Interpretation

Nine interviews were conducted at this site. This site was recognized by all of the representatives as a living and farming area or a hunting and camping site. Two representatives also specifically mentioned that the site would have been used to gather foods. In addition to the rock art panel, features that were noted include grinding stones, rock houses, food plants, and ceremonial plants such as tobacco and jimsonweed.

Just over half of the Indian representatives stated that the rock art panels at this site were made by Southern Paiutes. All of the representatives said that the panels were used by Southern Paiutes in the past. One individual mentioned that her family had used the panel in the past, and two representatives said that Southern Paiutes currently visit or use them. All but two of the

representatives stated that Indian people other than Paiutes also visited or used the panel. The other Indian people named include Anasazi, Havasupai, Hopi, Navajo, and Ute.



Figure 5.7. Overview of Site 4 - C:02:013

Several individuals noted that the way the drawings were made is significant because the diamond or star design that faces the rock wall. As one individual said, "Not everyone can see it... It was intended for people who knew where to look." All of the representatives identified the panels as being like other panels along the river, and two individuals also related them to panels located on the Shivwits Reservation. The panels along the river were perceived to be related because they contain similar figures and would have been made by the same people. The panels on the rock wall were generally perceived to serve as maps. All representatives said this rock art site would be connected to other sites; this site was perceived to be connected by trails.

Several of the figures on the rock wall were not visible during the May trip, so only the male representatives on the September trip commented on them.

Like some sort of map... There are sheep at the bottom, sheep in the area. There was enough food... That one drawing to me over there is like it could be two sheep back-to-back, protecting each other. And that could represent some sort of a dance. (DA2007)

Paths - where it curls around usually means a trail - or water - maybe a ram. Just like telling them there was a trail here - kind of directions. (DA 2008)

Symbols of trails - also had other meanings. (R2004)

The large one is a map to another area. I don't know what the diamond-shaped one is. (D2006)

[The diamond figure shows] the way the river looks - goes around the bend on both sides, making like a swirl. (DA507)

Archaeologist's Commentary

Several things about the site are different from other petroglyph sites above Lees Ferry. Most obvious are the designs in the petroglyphs, which display scrolls and diamonds but are neither anthropomorphs nor zoomorphs. Examination of the degree of revarnishing suggests the petroglyphs were made within the past 300 to 400 years.

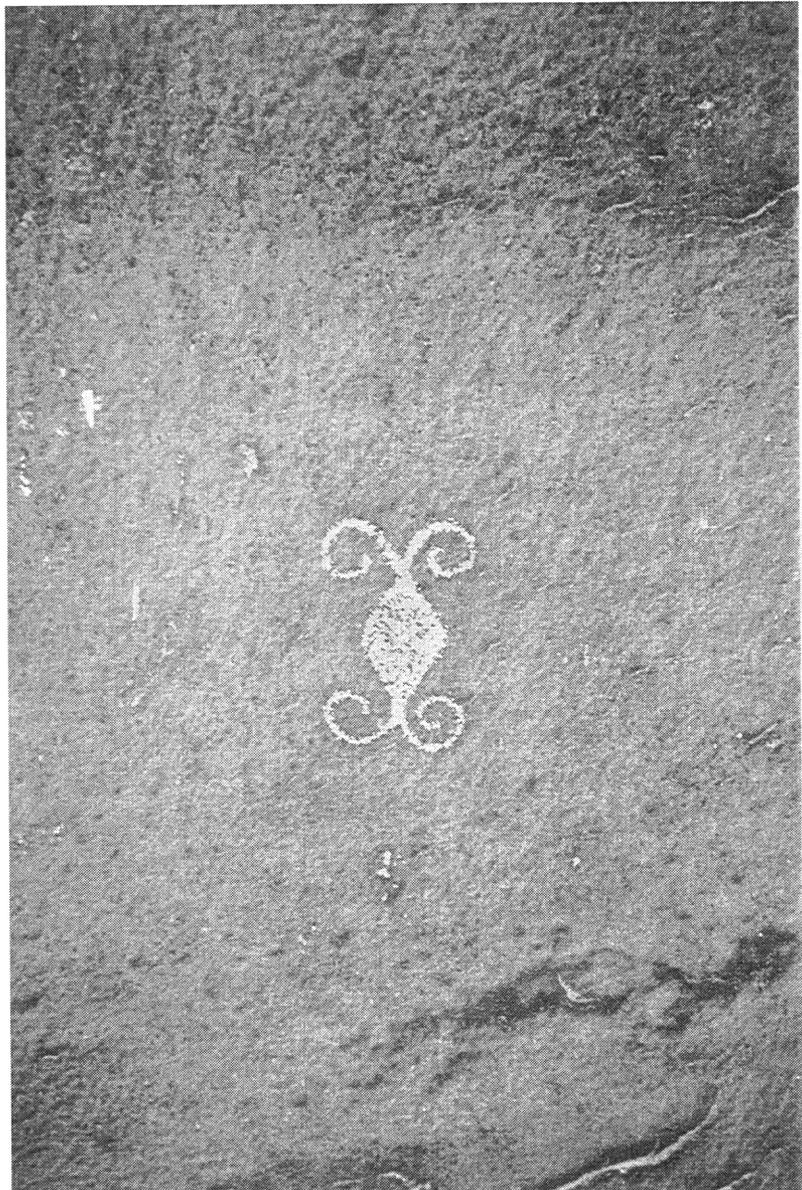


Figure 5.8. Petroglyphs at Site 4

The site also exhibits considerable evidence of day to day living activities. Rock outline remains of domiciliary structures on the site are intermixed with fire-blackened earth and heat-cracked stones. A low, rock shelter on the end of the outcrop, where panel 1 is situated, has a low rock wall across its opening, presumably to aid in creating a sheltered area for household activities. Another recess in the outcrop wall retains a bedrock metate on a shelf of rock, and metate and mano fragments were noted, intermixed with chipped stone and ceramics on the surface of the site. Glass and tin indicate an historic component, but it is not known if this represents the Euroamerican activity in the area or the native use of the site.

The archaeologists who recorded the site suggest, on the basis of surface ceramics, that it has a PII Western Kayenta cultural affiliation and that the structural remains may be field houses. While this component of the site may be present, the house remains are likely to be from protohistoric Pai or Numic groups and the rock art within this time frame.

Some of the rock art fits a little-studied style known as the Cave Valley Style. Because more sites with this style were found downriver, it is discussed in greater detail in a later section (see Site 18 - A:16:001). Briefly, it has a spatial distribution in southern Utah in the Zion National Park region, and into northwestern Arizona on the Kaibab Plateau. Although it is usually executed in either white or red paint, it can occur in petroglyph form. More recent rock art of Paiute or Pai groups is frequently found at these sites.

Site 5 - C:02:056

The site exhibits a faint petroglyph made by rubbing, rather than pecking, the varnish away. It is in a small alcove of Wingate sandstone rocks, about 225 meters northeast of the restrooms at Lees Ferry. The site, about 100 meters from site C:02:104, exhibits different rock art than its neighbor, and the two sites are most likely unrelated.

Two petroglyphs, called the turtles by local personnel, are found at the site at Lees Ferry. The archaeologists who recorded the site suggest the petroglyphs "resemble Navajo face masks used for healing and other ceremonies" (site form by H. Fairley, dated 3/14/91). The site form also indicates the petroglyphs are fading and not as distinct as they were just a few years ago.

One of the petroglyphs is only partial, and it is not known if it is incomplete or if its more complete form has eroded away. The more complete one is a profile view of a unique form that resembles a mask more than it does a turtle. The archaeologists who recorded the site are probably correct, but it is possible that other masks, from other tribal groups, might be the intended representation.

Southern Paiute Interpretation

Twelve interviews were conducted at this site. Four representatives identified several different possible uses for the site, including farming, hunting, gathering foods, and trading. Three people viewed the site as a place to pass through, and five people did not have any site type to offer. When asked what activities or events occurred at the site, one individual replied, "Nothing except someone putting their clan insignia here." Similarly, another person commented that people just passed through the area to see what happened. The variety in responses is related to the differing perceptions that the Indian people shared about the features they perceived to be present at the site in relation to the rock art panel. These features include historical period rock houses, water, plants, clay, and the hills.



Figure 5.9. Overview of Site 5

A majority of the Indian representatives stated that the rock art panel at this site was made by Southern Paiutes. Likewise, a majority said that the panel was visited or used by Southern Paiutes in the past. Two individuals stated that their families had visited or used the panel in the past, two said that Southern Paiutes currently visit or use the panel, and two said their families currently visit or use the panel. A majority of the representatives stated that Indian people other than Paiutes also visited or used the panel. The other Indian people named include Hopi, Hualapai, and Navajo.

The representatives' responses to the question of whether or not the way the panel was made is significant were quite varied. A few individuals noted that the panel was not etched into the rock as deeply as the previous panels. One individual commented that "the turtle is sketched in lightly and not made to last longer than the pecked figures." (AB2004) Only two representatives perceived the panel to be like other ones they had seen. The representatives responded differently to the uniqueness of the panel; a few stated they did not believe the panel was made by Indian people while others perceived that the uniqueness made the panel especially significant. A majority of the representatives said the site would be connected to other sites in the area.

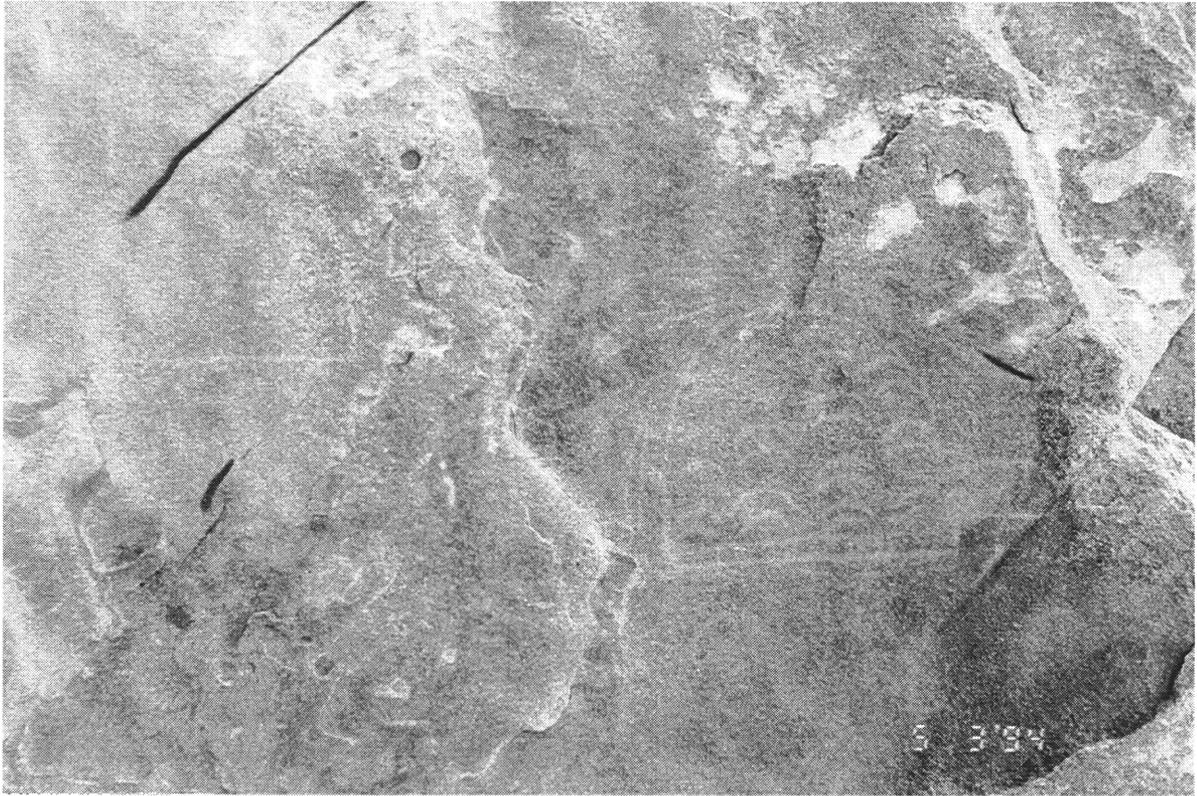


Figure 5.10. Petroglyphs at Site 5

Maybe the turtle was done by people who lived in the houses here. (DA508)

The site was made by non-Indians. There's too much detail. Turtles do not live at this elevation. It is not a local animal. You may see turtles down south. (R2005)

It means to me just what somebody saw on the river. Maybe they saw a big giant turtle or something - swimming or sitting on the beach or something. (DA2009)

It means a lot because I have never seen a turtle. (D508)

The way it was drawn and the feathers on top- sometimes if you respect things you put feathers on it to give it power - true among the Hopis and others. (D2008)

Archaeologist's Commentary

The site should be carefully recorded. The current site-form data is good, and the scale drawing is accurate. Nonetheless, the site is a candidate for tracing in order to make a precise

replica of the petroglyphs. The archaeological assessment that the site is historic in age is probably correct.

The site should be monitored to determine the extent to which erosion is destroying the petroglyph. Extensive photography at various times during the day and year might be a useful way to get a good record of the petroglyph.

Site 6 - C:02:104

The site is located in a boulder-strewn series of erosional channels, about 120 meters north of the restrooms at Lees Ferry. The single panel of pecked petroglyphs is on a sandstone boulder that measures about 1 meter by 1 meter. The upright surface with the petroglyphs faces southeast at 130 degrees east of north. This orientation is probably not the original position of the petroglyphs, however, because the boulder is almost certainly in a secondary setting, having been moved either through water erosion or perhaps by road-blading activities.



Figure 5.11. Overview of Site 6 - C:02:104

The petroglyphs consist of a single bighorn sheep (which measures about 15 centimeters across) with a rectangular body, straight legs, and horns that are curved over its back. Although this sheep is presently positioned with its tail at the base of the panel, it was probably in a more horizontal position when it was made. Two pecked circles, one with a short tail, are also found on the panel. The varnish cover on the circles suggests they may be more recent than the sheep.

Southern Paiute Interpretation

Twelve interviews were conducted at this site. This site was recognized by some of the representatives as a hunting or camping site, and two individuals also recognized the site as a place for ceremonies. Other uses each named by a single individual include living, gathering food, trading, traveling, collecting clay, and fishing. Three representatives named no use for the site. The features that were noted at the site include water, plants, the hills, game, the rock houses, and the clay. One individual commented that some things that were present at the time the panel was made might be missing because the panel is located in a wash.

All but one of the representatives stated that the rock art panels at this site were made by Southern Paiutes. The vast majority of the representatives said that the panels were used by Southern Paiutes in the past. Two of the representatives stated that their families had used the panels in the past, one person said that Southern Paiutes currently visit or use the panels, and two said their families currently visit or use the panels. A majority of the representatives stated that Indian people other than Paiutes also visited or used the panel. The other Indian people named include Hopi, Hualapai, and Navajo.

Several individuals noted that the circles on the panel make the drawings significant. All of the representatives identified the panel as being like other ones in the area. The panels were perceived to be related because they contain similar figures. One individual perceived the panel is similar to those on the Kaibab Reservation, and one perceived it to be related to panels located on the Shivwits Reservation. All representatives said that the site would be connected to other sites in the area.

Several people commented that the meaning of the site was diminished because the site was so disturbed by human activities. A few individuals said the rock with the panel on it had been moved, either by water or falling from above.

Well, I think it means that the person who drew it was trying to tell the story about his hunt. He was tracking this big sheep and by the circles probably tracked it for two days. Probably a big sheep because he made the horns real big. (DA2010)

A hunting party stoned a sheep because it looks like it's laying down. The circles are the stones. (D509)

There are a lot of sheep in the area. The circles with lines represent direction. (D2010)

Archaeologist's Commentary

It is difficult to fit a small number of petroglyphs like those at this site into a recognized style. Sheep were made as rock art elements throughout most of the prehistoric and protohistoric periods in the Grand Canyon.

Isolated rock art boulders that are no longer in their original context are not as meaningful as those which remain in their original position.

After consultation with Indian tribes, the National Park Service might consider moving the boulder to a museum. If there are established Indian tribal museums in the area, they might be considered as recipients for the boulder. The consequences of such a move need to be considered (ie., would such action increase the potential theft of other boulders for private collections?), but the petroglyph does not offer much for interpretive or scientific purposes where it is at present.



Figure 5.12. Petroglyphs at Site 6

Site 7 - C:06:005

The site is a single petroglyph panel located on a horizontal surface about 12 miles downstream from Lees Ferry. The site north of Salt Water Wash is near the base of the trail that allows access to the canyon rim. The site is somewhat unique in that it is unusual to find petroglyphs on horizontal surfaces in the Grand Canyon region.



Figure 5.13. Overview of Site 7 - C:06:005

The obvious elements are found in the panel. One is an anthropomorphic form which has a circular, bulbous head connected by a thin pecked body to an elongated abdomen. Arms are made as a horizontal line across the body with down-turned ends. Except for the absence of multiple legs, the petroglyph resembles a bug (like an ant or cricket) as much as it does a human. Above the head of the figure, oriented in the same direction as the river, there is a curvilinear line, and below the figure, oriented at a right angle to the river, there is a 1.3-meter-long straight line.

Archaeologists who have visited this site do not attempt to classify it in a known rock art style, and, its orientation on a flat surface which receives considerable erosion from a variety of agents makes it a difficult site to estimate age by varnish development. The position of the petroglyph also makes it a poor candidate for any of the current dating techniques.

Southern Paiute Interpretation

Twelve interviews were conducted at this site. The site was identified by seven representatives as a place through which people traveled, perhaps staying overnight.

They read the panel and moved on. They didn't spend much time here. (R2007)

A man probably camped here or passed through here. (D512)

Two representatives identified the site as a ceremonial site, and three individuals did not offer any interpretation of the site. The features that were named in relation to the panels are the water and the canyons.

Three-fourths of the representatives said the panel was made by Southern Paiutes. The vast majority said that Southern Paiutes visited or used the panel in the past, but only one individual said Southern Paiutes currently visit or use the panel. Three-fourths of the representatives said there would be Paiute stories and legends associated with the panel; one individual identified the rock as a curing rock and identified stories related to a doctor rock or healing rock. Three-fourths of the representatives stated that Indian people other than Paiutes also visited or used the panel. The other Indian people named include Anasazi, Havasupai, Hopi, Hualapai, and Navajo.

Two people mentioned the way the rock lays horizontally and the way it was carefully pecked as significant aspects of the way the panel was made. As one individual commented:

The person probably would use this trail over and over again. (DA2014)

The vast majority of representatives stated that the panel was not like any of the panels they had visited upriver. One individual commented that it may be like sites that were not found yet or like ones that had been destroyed. Only two people related the panel to sites upriver. One individual said he had seen a panel of this style in St. George, Utah.

I think the person that drew it was different. Because most of the sites I've seen are on the side of the rock. But this one's on a flat rock and we're looking down on it not across from it. (AB2006)

Well to me it looks like it means that a person came down through one of these canyons and that's why it looks like he drew himself there on the rock and drew the canyon he came down. There was probably more but it's all kind of eroded away. (DA2013)

Well, I think it's just telling that person which way to go - straight and don't turn, just go straight. And this wash is pointing straight down into the river. (DA2014)



Figure 5.14. Petroglyphs at Site 7

Someone experienced a vision of a supernatural being hovering over the water and recorded the event here. (D2012)

The 'U' is directional. The human figure is a man... People are letting others know they were here. (D513)

Archaeologist's Commentary

The site should be carefully recorded. Its position, on a flat surface near the river, places it in a vulnerable place for destruction by foot traffic or water erosion.

Although they are poorly studied, petroglyphs similar to this one are found along the lower Colorado, where they are frequently correlated to the geoglyph complex in the region. The position of the petroglyph at site C:06:005, on horizontal bedrock, is much like the geoglyphs found on the flat terraces above the Colorado River. Many of the geoglyphs are associated with trails, and some are believed to be maps. There is potential for the petroglyph at C:06:005 to be a map - the curving line represents the Colorado River, the figure a known icon in the cultural group that made it, and the straight line the direction of the Salt Water Wash trail into and out of the canyon.

Although this site is the best example of a possible correlate to the geoglyphs, other petroglyphs along the Grand Canyon, described below, may also be affiliated with the lower Colorado River. If this assessment is correct, the petroglyphs are doubtless linked to Yuman-speaking groups.

Site 8 - C:05:001

The site is located about 32 miles downriver from Lees Ferry. Named the South Canyon Ruin site, it is situated on a Redwall limestone ledge on the upstream side of South Canyon. The site contains multiple components, with structural remains and associated ceramics representing the Kayenta Anasazi. The archaeologists who recorded the site suggest it had considerable re-use by the Southern Paiute.

The rock art at the site is composed entirely of petroglyphs made by pecking and abrading. It is situated on three separate boulders; two of these had been previously recorded and the third was found during this project. The two most extensive panels are on a large boulder that stands adjacent to the trail through the site area. Some of the figures are human, stick-like elements made by pecking their form. A group of abraded, human footprints and human handprints is associated with other animal tracks, concentric circles, and spirals on a surface that faces south at 166 degrees east of north. The human footprints and human handprints are small, and are either those of a baby or simply made small as representative images. Both pecked and abraded figures are found in the panel, and abrading appears to be the more recent of the techniques. Some of the older, pecked forms were apparently abraded, to make them more visible, when other new abraded forms were created.

Another panel is located on the east side of the boulder, where it faces east at 80 degrees east of north. It displays two pecked elements. One is a human form with a straight, vertical body and arms and legs that cross the body horizontally. The ends of the arms bend upward, whereas the ends of the legs bend down. The body line continues below the legs to create a penis, if the figure is a human male. Some researchers refer to these figures as lizards or lizard/men and in the explanation the continuation of the body beneath the legs represents a tail. The second element in the panel is comprised of three parallel lines that have a flying-W form.

Panel C is on a separate boulder, located downslope and closer to the edge of the limestone outcrop above the river. The rock art on it is more eroded and indistinct. Panel C exhibits small, human handprints and human footprints, much like those in panel A. It faces 100 degrees east of north. A more faint set of petroglyphs is found on the south face of this boulder. Labeled panel D, these were so difficult to distinguish at the time of the May river trip that they are only noted as indistinct forms.

Another boulder was located to the southeast of boulder one that also exhibits petroglyphs. Two elements, a tailed circle and a connected circle, one with an interior dot, were noted on the panel. The pecked petroglyphs face southwest at 211 degrees east of north.

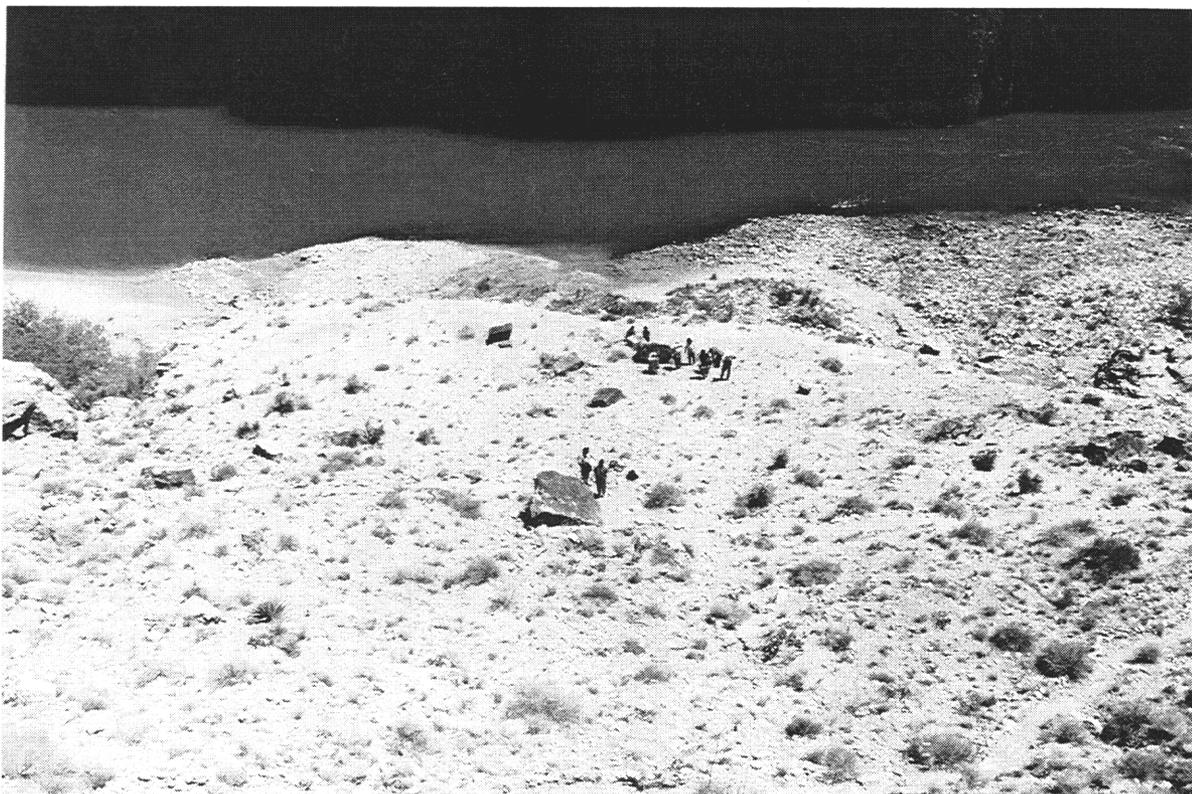


Figure 5.15. Overview of Site 8 - C:05:001

Southern Paiute Interpretation

Twelve interviews were conducted at this site. This site was recognized by all but one of the representatives as a living area. Two individuals also said the site was a camping area, two said it was also a burial ground, and one representative identified it solely as a burial area. In addition to the rock art panel, features at the site that were noted include the rockshelters, water, pottery pieces, grinding stones, and plants, especially tobacco, Indian rice grass, cacti, sage, and teas.

All of the Southern Paiute representatives said that the rock art panels at this site were made by Southern Paiutes. All also stated that Southern Paiutes visited or used the panels in the past. Three individuals said that their families visited or used these panels in the past, and one person said Southern Paiutes currently visit or use the panels. All representatives stated that there are stories and legends associated with the panels, and one person referred specifically to the "footprints wandering all over the place." Some of the representatives said that Indian people other than Southern Paiutes used the panels. The other Indian people named are the Anasazi, Havasupai, Hopi, Hualapai, and Navajo.

Several individuals noted that the way the drawings were made was significant because the panels were etched deeply into the stone. One individual noted that the panels on each rock

were drawn by a different person. The panels were identified by the representatives as being like those located up and down the canyon because they contain similar drawings related to hunting and trails going in and out of the area. The panels were also related specifically to those near Indian Peak, Utah and on the Shivwits Reservation. All but one of the representatives said the site was connected to other sites in the area.

Well, on the different panels - starting with this big one behind us, to me it means that somebody saw what they did. Like saw different plants and different aquatic animals maybe. Maybe they even drew themselves - a man. The other ones - pretty much the same thing but drawn by another person. (DA2015)

Well they have a few things on the panel. It's like where the figure on it is a male and he is laying down, he's not standing up. And there was figures of tracks - footprints going towards that man coming towards him on each side. (DA2016)



Figure 5.16. Petroglyphs at Site 8

It is a chronicle of some individual of high status' life at this spot. (D2015)

The panels tell a story of what people did here. (D2014)

Archaeologist's Commentary

In general, small footprints and handprints, like the ones on panel A and panel C at site C:05:001, are associated with Hopi sites. Human footprints, in particular, have an association with Hopi rock art (Kodack 1990); the footprints and tracks are interpreted as clan symbols (Wellmann 1979). The Southern Paiute consultants visited the Grand Canyon salt caves unaccompanied, but the rock art which could be seen from the boat includes similar images. Even though they are executed in red paint, the images are sufficiently similar to suggest an affinity between the rock art at the salt mines and panels A and C at site C:05:001. Half of the Southern Paiute representatives who commented on the panels identified the salt cave images as the products of Hopi visitors.

The figures on panel B are more like the rectangular human/lizard petroglyphs more common in southern Arizona. The juxtaposition of the human figure and a flying-W element is similar to the figure at site C:06:005. It should be noted that the figures on panel B face the river on a sloping surface, with an angle of 120 degrees. Although this is not as flat as the surface on which the figure at site C:06:005 is found, it is also not a vertical surface, the most common place for rock art. The flying-W may represent the Colorado River and its bends within the canyon. The varnish on this figure suggests it has greater antiquity than the abraded ones in panel A.

A rancher's brand, the bar N, is found on top of a rock adjacent to boulder one. An enterprising person has cleverly covered the brand with a rock, so that it does not lead to more graffiti. This is an effective and simple technique that may be protecting the site from additional names or initials.

The site receives heavy visitation. Interpretive information about the petroglyphs might help the visitors understand the importance of rock art to Indian people. This information could be delivered through the tour guides on the boat trips, or it could be placed at the site on informational signs.

Complete photography, in varying lighting conditions, needs to be undertaken at the site. Even though the trip archaeologist completed a panel form for the unrecorded boulder, it should receive additional recording, including extensive photography.

Site 9 - C:13:003

The Salt Cave has been placed off limits to non-Indian visitors. Therefore, only the Southern Paiute representatives visited the rock art panel located there and neither an official description of the panels nor an archaeologist's commentary could be written. In addition, no photographs were taken of the panels. As seen from the river, the panels are made with red paint and include images like those located at Site 8.

Southern Paiute Interpretation

Nine interviews were conducted at this site. All representatives linked the rock art panels to the Salt Cave and ceremonies that accompany salt gathering. The representatives conducted ceremonies and gathered salt during both river trips (see Chapter Seven). Some of the representatives perceived the rock art panels at this site to have been made by Southern Paiutes. A majority said that Southern Paiutes visited or used the panels. Some representatives said their families traditionally visited or used the panels, two said Southern Paiutes currently visit or use the panels, and one said her family currently visits or uses the panels.

Three-fourths of the representatives said there are Paiute stories and legends associated with the rock art panels and salt cave. One individual recalled hearing stories when he was young about villages whose people would go to one spot to gather salt. All who responded said the site was used by other Indian people. The Indian people named include Havasupai, Hopi, Hualapai, Mohave, and Zuni. One-third of the representatives said the symbols on the rock art panels were Hopi clan symbols, one-fourth did not have any specific thoughts about them, and one-fourth did not know what they were.

The way the panels were made is significant because they were made with red paint. The panels were perceived by some of the representatives as being like other panels in the canyon and on the rim and to have been connected to those sites by trails. One individual noted that some of the panel symbols were similar in design to those found at other salt caves, specifically mentioning another major Southern Paiute salt cave near St. Thomas, Nevada.

Site 10 - C:13:132

The site is located upstream from Tanner Rapids, about 68 miles below Lees Ferry. The rock art is composed entirely of petroglyphs that are on boulders within a loosely consolidated conglomerate of boulders scattered as talus down the point of a ridge. A trail leads across the sand dunes from the boat-landing area to the site.

A single, low, rock wall, constructed from locally derived boulders, is found upslope from the rock art. This dry-laid wall is about 3 meters in length and still stands to about a half meter in places. It is straight and constructed at a right angle to the slope of the ridge.

In previous archaeological visits to the site, the rock art on four boulders was recorded. Although it was not intensively recorded, rock art was noted on seven separate boulders, four of which exhibit the most obvious petroglyphs. In addition, a flat, smoothed area on the top of a low boulder which may have been used to grind hematite, plus examples of superimposition, not previously recorded, were noted. These could help in understanding the rock art.

In general, the petroglyphs are dominated by abstract curvilinear designs that are heavily varnished. Some of the designs have maze-like shapes while others are meandering lines. The human forms have straight bodies with horizontally crossing arms and legs. The body continues

between the legs making them resemble lizards as much as humans. One of these figures is associated with a flying-W design, and both are superimposed on the older, abstract, curvilinear petroglyphs. They are obviously more recent. This panel faces the river at a south to southwest orientation, 210 degrees east of north.

Southern Paiute Interpretation

Twelve interviews were conducted at this site. This site was recognized by five of the representatives as an indication that there were living areas nearby or in the area. As one individual said, the particular site "was too steep a place for them to stay very long. Maybe they had to travel alongside this because the water was higher." Two representatives viewed the site as a lookout area, two said it signified a point that people passed when traveling, and one said it was a place to view the area and think. One individual identified the site as a hunting camp, and one individual identified it as the site of a birth ceremony or a place where a birth was recorded. In addition to the rock art panel, features that were noted at the site include the canyons, the river channel, the mountains, the rock wall nearby and the trail leading to it, the animals, the plants, and the water.

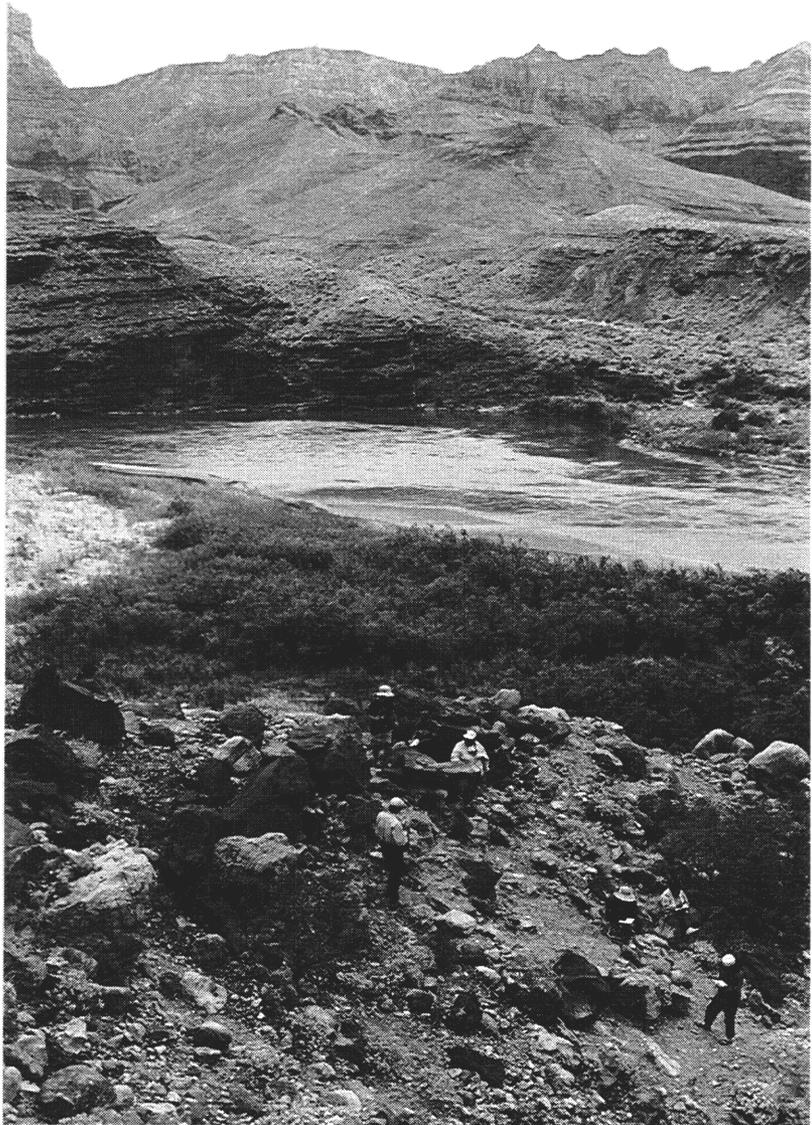


Figure 5.17. Overview of Site 10 - C:13:132

According to all of the Southern Paiute representatives, the rock art panels at this site were made by Southern Paiutes. Several individuals pointed out the Paiute sign, identified as the "reverse swastika." All of the representatives who responded said that Southern Paiutes would have visited or used the panels in the past, one individual said his family used the panels in the past, and one individual said Southern Paiutes continue to use the panels. All but one of the representatives said there would be stories and legends associated

with the panels. A majority of the representatives said the panel would have been used by other Indian people. The Indian people named include the Anasazi, Havasupai, Hualapai, Hopi, and Navajo.

Aspects of how the panels were made that were noted as significant include the spiral shape and the fact that the figures were only put on certain rocks facing a specific direction. The panels were identified by all the representatives as being like those located at the Grand Canyon salt cave and other sites located up and down the river. These individuals perceived the sites to be connected because hunters and other travelers were moving back and forth up and down the river and would have visited or used them. One individual noted that the panels were connected to the village up river in a system of living and protection.

It's all part of a village security system... They always talk about the Paiute system being like the quail guarding system.

Another individual indicated that the panels would be connected both within the main canyon and up the side canyons and that there would be one panel that serves as a big map to the other panels. Three individuals also related the panels to panels seen elsewhere in Nevada, Utah, and Arizona. All of the representatives perceived the rock art site to be connected to other hunting and ceremonial sites in the area.

Two of them show maps. One was for a person that was maybe confined for awhile, maybe lots. The other was maybe a map out of the canyon. The other two were pictures of animals. (DA2017)

Maybe that's what the maze is all about - so many trails, so many canyons... one may have represented the four directions. (DA517)

The panels reflect where they went and what happened at that particular time, what they saw. (D2017)

[That's the] Paiute sign... [That's a] map. If you can read it you can travel out or to another spot. (D2018)

It is a map to travel. On this panel is strange - a man with four arms and a woman. Then the power symbol of the Paiute people. (DA2018)



Figure 5.18. Petroglyphs at Site 10

Archaeologist's Commentary

The site needs to be more intensively recorded. Study trip participants had neither sufficient time nor the proper tools for adequately recording the site. The site map is poor. Perhaps because the trail created by tourist traffic has changed, it is very difficult to determine the position of the boulders on the map. Scale drawings need to be made of each boulder and, because some of the rock art is in complicated patterns, this is not a simple task. Intensive photography, in color and black and white, with scale, color board, and identification board should be completed. A photography station should be established at a location where erosion from the trail can be monitored.

The rock art at the site represents at least two separate time periods. The abstract forms are associated with the styles known as Great Basin Curvilinear and Great Basin Rectilinear, with some intermixed, Pecked Representational forms. It is not uncommon to have all of these styles at the same site and research has shown the abstract designs usually predate the human and animal imagery. All are Archaic in age, and it would not be surprising if some of the petroglyphs at this site were made 3,000 to 4,000 years before the present.

Using the differential varnish and superimposition as a guide, the lizard man and the flying-W are believed to be more recent than the abstract forms. These figures are reminiscent

of similar designs at the two previously described sites. It is noteworthy that they are oriented toward the river on a sloping boulder surface with an angle that ranges from 110 degrees to 135 degrees. They are likely to have a relationship to the river, where the flying-W represents the river.

No relationship between the rock art and the low rock wall has been established. The unusual nature of the wall, set on an isolated ridge point, suggests there might be an association between it and the rock art boulders. This potential (perhaps by using pollen samples from beneath both sets of features) should be explored in any additional research on the site. The rock art at this site is a candidate for varnish dating. The rock wall might be datable by one of the cosmic ray techniques currently being developed for surface features.

Finally it should be noted that the rock itself is an important component of this site. The jumbled nature of the boulders offers a potential rock artist multiple combinations of surfaces to make petroglyphs. This is the sort of setting often chosen for the Great Basin Archaic styles, identified above. More important, however, is the nature of the rock with eroded holes and knobs. The sandstone also exhibits swirled patterns and fossil inclusions. It is the correct kind of stone to house spiritual forces and to contain magical properties; interpretive information regarding the site should include this important aspect.

Site 11 - C:13:322

The site is a single panel of prehistoric petroglyphs and a set of historic initials, located about 71 miles downstream from Lees Ferry. The panel faces the river, south/southwest at 192 degrees east of north. It is on a nearly vertical surface.

The primary element in the panel has been identified as a "counter-clockwise spiral with a creature (either an anthropomorph or lizard) perched on top" (site form dated 10/17/89). This interpretation is plausible, but the element may actually be a coiled, horned serpent. The head is attached to a short neck at the top of its coiled form. Two very faint and eroded quadrupeds are found near the spiral design while other eroded forms are not easily deciphered.

The site is within a few meters of the river. It will sustain additional damage from undercutting by increases in the water flow. Although the initials ASG have been placed on the panel, visitors most often view the petroglyph from boats.

Southern Paiute Interpretation

Twelve interviews were conducted at this site. Nine of the representatives recognized the site as one of short term use. Eight of these individuals noted that it marked a river crossing or was a place of travel where messages were left. One individual said it was a place to gather medicinal plants, one individual said it was a place where people lived or traveled through the area, and two individuals said they did not know what the site was used for. The other features noted at the site include the water, beaches and trails, medicinal plants, and animals.

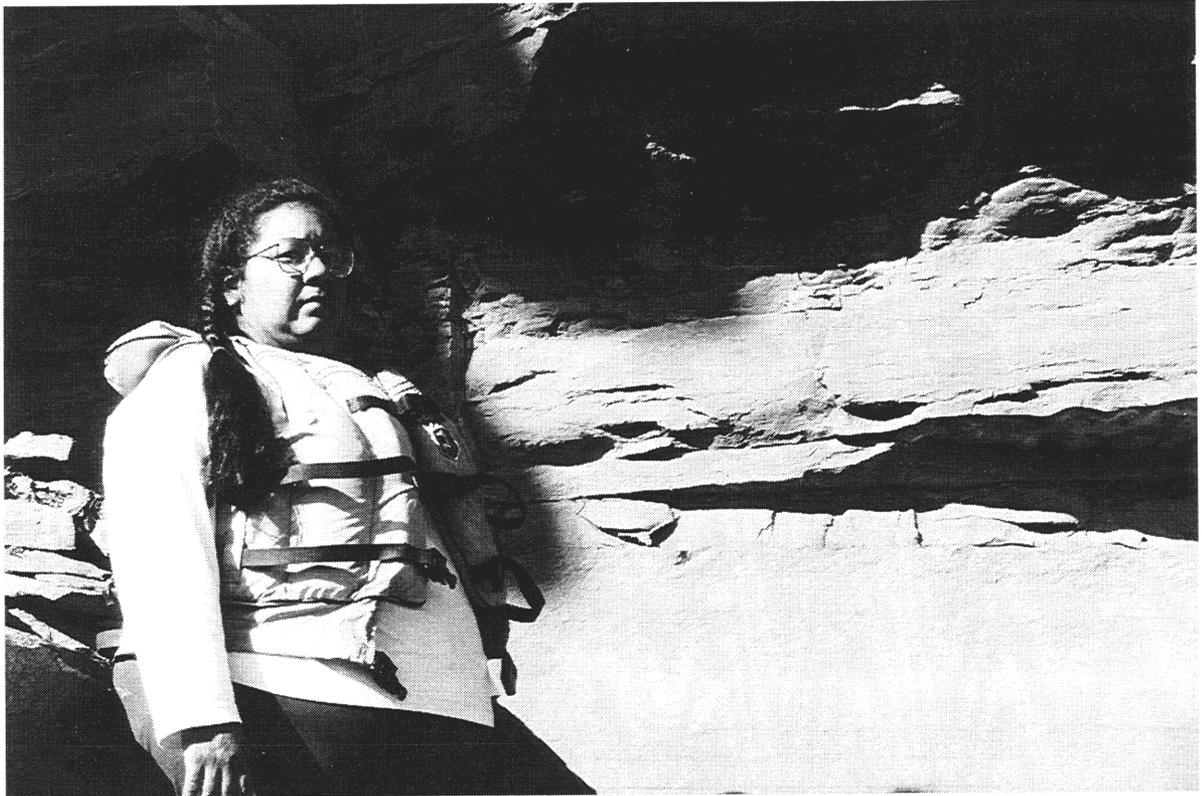


Figure 5.19. Overview of Site 11 - C:13:322

According to the vast majority of the Southern Paiute representatives, the rock art panels at this site were made by Southern Paiutes. All but one of the representatives said that Southern Paiutes would have visited or used the panels in the past, and one individual said Southern Paiutes currently visit or use the panels. Three-fourths of the representatives said there would be stories or legends associated with the panels; one individual also said there were songs associated with them. All but two of the representatives said the panels would have been used by other Indian people. The Indian people named include the Anasazi, Havasupai, Hualapai, Hopi, and Navajo.

Three representatives specifically noted that the panel had been etched deeply into the rock to last a long time. The panel was identified by the representatives as being like those located up and down the river that are related to hunting and to water. The representatives noted the similarity of the spiral and animal symbols to those seen on other panels in the vicinity. Four individuals perceived the panel to be like those located near the Shivwits Reservation. All the representatives perceived the rock art site to be connected to other sites where people lived and hunted along the river.

The panel symbolizes the crossing-water figure. The direction of the spiral is a good direction. (D2019)



Figure 5.20. Petroglyphs at Site 11

It may be an indicator that it's deep here and don't cross here... Maybe somebody was camping for the night and trying to find a way across. They probably made the signs for other people plus themselves. (DA2020)

Archaeologist's Commentary

The site should be recorded by tracing, which would produce an accurate facsimile of the spiral design, to learn if it is a spiral, horned snake or someone else. If it is a horned snake, it should be possible to compare it to similar figures. If it is a spiral, however, the form is so ubiquitous, it will not offer much from a comparative standpoint.

A photography station could be used to monitor the deterioration of the petroglyph as well as the erosion of the river bank. The present condition of the rock varnish is poor and it is not a good candidate for varnish dating.

Site 12 - Deer Creek Rock Art Site

The rock art site is located along the trail above Deer Creek Falls about 136 miles downriver from Lees Ferry. The location is a stopping place for river tour boats, both to view the falls and to hike to the area above the falls where Deer Creek is deeply entrenched in a meandering canyon. The creek in the upper area also has some low falls and pools of water, surrounded by large cottonwood trees for shade. These picturesque places near the spring-fed stream are popular among the several thousand tourists who travel the river during the summer months.

Six separate panels of rock art were noted on the canyon walls in this upper area. Three are on the west side of the canyon, adjacent to the trail, and the other three are on the opposite side of the canyon. The three panels on the west side are at the base of the Bright Angel Shale, where they are accessible to all passersby, while the panels on the east side are higher on the canyon walls, some in places that are difficult to reach without hazardous climbing.

The panels, numbered as they are encountered moving upstream on the west and then on the east, include stenciled human handprints as the primary motif. Other designs include stencilled plant parts, including leaves, stems and leaves, or stems and flowers.

Panel 1 is the first encountered along the trail on the west wall. It is immediately upstream from a narrow ledge where the trail is quite close to the precipitous canyon edge. Five human handprints, all stenciled in white pigment with the fingers pointing upward, are the only figures noted in the panel. The Bright Angel Shale is reddish in color and, in some of the hand print designs, it appears more vivid than surrounding areas outside the hand prints. At times it almost appears there was red paint applied to the inside of the hand prints, but this is not easily detected by casual examination. It seems possible the hands in the figures may have been covered with something, perhaps powdered red ocher.

Panel 2 is the next one encountered upstream, on the west side. It is located beneath a low overhang, created by erosion of the soft, Bright Angel Shale. Five or six handprints with the fingers pointing upward were noted. All are made as stenciled designs with a white pigment surrounding the hand outline. A group of fan-shaped leaf imprints, outlined in white pigment, was also noted in the panel. Individual leaves have an elongated, ovoid outline.

Panel 3, about eye level to a passing person, exhibits the greatest number of pictographs of any of the panels. Six upright, extended handprints are found in a group that is mixed with other figures. The other figures include a series of leaf imprints that have been connected, stem to tip, to make a chain-like pattern across the wall. Some figures appear to represent plant stems and leaves, or stems and flowers. Several of the stencilled figures are more obviously plant parts than others. One design with a butterfly shape is suspected to be a flower or leaves, and another may be a plant bulb with its connected stem. All of the figures are made by applying white pigment to the wall after placing the hand or plant part on it to protect that area from receiving any paint.

Panel 4 is located about five meters upstream from panel 3. It exhibits a single human handprint with the fingers pointed upward. The figure, made as a stencil with white surrounding pigment, may be the only remaining figure on a panel that once contained more.

Panel 5 is on the east side of the deeply entrenched creek, on the side opposite the trail, but about 4 to 5 meters above the level of the trail. Six stenciled, white handprints, with the fingers pointing upward, some of which appear to be both hands of the same individual, are obvious in the panel. The figures are on the ceiling of a small, recessed alcove. Near the alcove, on its upstream side, there is a narrow ledge in front of another small cave and a stack of rocks on this ledge appears to be a small human-made cairn. Trip participants did not visit this panel, and it is possible that one or both of the small caves contain other rock art or other cultural remains. The location could contain a burial.

Panel 6 is on the east side, upstream from panel 5, but below the low waterfall in the canyon. It is situated along a ledge of the canyon wall that is two or three meters higher than the level at which it can be viewed from across the canyon. No attempt was made to gain access to the panel, but it appears to exhibit primarily white, stenciled handprints with perhaps as many as eight in the panel. As with other handprints, most of these are displayed with the fingers pointing upward, but others appear to be depicted in a horizontal position with the wrists connected and the fingers pointing outward. These handprints appear to represent the left and right hands of the same person.

Panel 7 is upstream of panel 6 on the east side, between the two low waterfalls in the creek. Located higher on the canyon wall, it was not visited in this project. At least five stenciled handprints are obvious in the panel.

Southern Paiute Interpretation

Thirteen interviews were conducted at this site. Ten of the representatives recognized the area as a living and farming site; six of them noted it was a place to gather foods. Eight representatives identified the site with ceremonial practices; seven of them related the site to the Paiute story that describes the crossing of the spirit to the other world (see Chapter Seven). In addition, three individuals identified the site as a burial site. The features at the site that were noted include the canyon, the water in the spring, the waterfall, the creek, and the Colorado River, the plants, and the broken pottery. Several individuals noted the connection between living, farming, and gathering plants at the site because of what they perceived to be stencilled plants on the rock art panels.

They lived there and put those things on the wall. They gathered a lot of plants because they are on the wall. (D522)

These rocks could have been a marker to the entrance of the canyon or a symbolic representation of someone who had died. (R522)



Figure 5.21. Overview of Site 12 - Deer Creek Falls

All but one of the representatives said the rock art panels at this site were made by Southern Paiutes. The vast majority of them said that Southern Paiutes would have visited or used the panels in the past, three said their families had traditionally visited or used the panels, one said that Southern Paiutes continue to visit or use the panels today, and four said their families currently use the panels. All but one of the representatives said there would be stories or legends associated with the panels; one individual noted there was also a song related to them. Some of the representatives said the panels would have been used by other Indian people. The Indian people named include the Havasupai, Hopi, and Hualapai.

Most of the representatives noted that the way the figures at this site were placed on the rock was unique. The presence of red and white paint, the handprints, and the stencilled patterns were all noted.

It is unusual with white paint. (R2015)

The hand prints they put on these - they were smaller below and as you moved out of the gorge they were longer... It probably means there was a period when a little kid was growing up. It's a panel about life. (DA2022)

The hand prints are in ompi. All the hands are pointed up, reaching up. (R522)

The panels were identified by less than one-third of the representatives as being like the other panels in the area. The majority of the representatives emphasized the uniqueness of the panels. Two individuals perceived that the panels were similar to some near Shivwits. A majority of the representatives perceived the rock art site to be connected to other sites in the area.

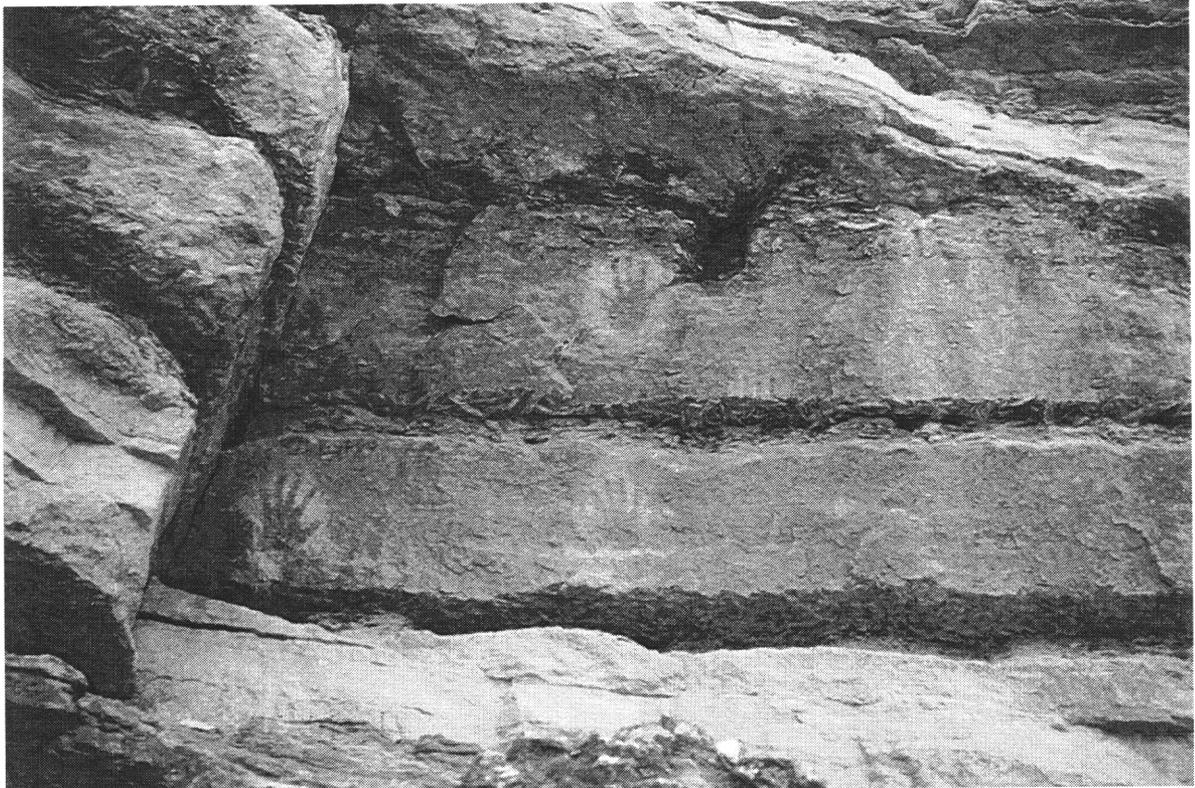


Figure 5.22. Pictographs at Site 12

Archaeologist's Commentary

The Deer Creek Falls site is a recognized Southern Paiute site. The rock art at the site is extremely important. Stenciled hand prints are known elsewhere in the American southwest, but they are much less common than the positive variety. Because these are directly linked to the Paiute, measurements of adult and children's hands could be compared for size. Using this sort of research, it may be possible to identify whether the hand prints represent women or men.

The new and developing techniques for identifying DNA in pictograph paint pigment also offer possible research areas (see Rowe et al. 1994). Examining the stenciled figures, there is a good possibility the paint was blown on from a person's mouth. The artists may have used a hollow reed or they may have simply spat the paint at the wall. In either case the pigment would contain the DNA of the artist. If an uncontaminated sample of the pigment can be obtained, it should be possible to identify the tribal affiliation of the artists. This sort of research is difficult

for several reasons: first, the sample has to be uncontaminated and all of the prints near the trail are probably contaminated by the DNA of passersby who touched them. Some of the prints on the opposite side of the creek are candidates, but for DNA to preserve, it has to be trapped in a silica layer of the rock. The amounts of silica and their rate of deposition on the surface in the Bright Angel shale is not known. Another shortcoming is the destruction to a painting caused by the sample removal itself. Researchers usually try to take samples from paint pigment that is eroding off the walls and no longer within decipherable paintings. More study needs to be completed to learn this possibility at the site. Finally, and perhaps most importantly, the site is a place of sacrament to the Southern Paiutes. They may not want any samples removed.

The stencil outlines of plant parts is extremely unique. Stenciled plant parts are not uncommon in Australia, but the trip archaeologist knows of no other location in North America, except this site and those found in the Side Canyon research (see Chapter Six), where plants are depicted by making stenciled outlines of them on the rock. With additional research it may be possible to identify some of the plants. More likely, rather than an outright identification, it will be possible to list a group of possible plants they could represent. Initially, it is worth noting that the elongated, ovoid-leaf stencils are shaped like the leaves of Coyote tobacco.

The importance of the site is obvious. After consultation with the Southern Paiute people, it should be properly recorded. The recording should include extensive photography in color and black and white formats. Lighting is difficult in the narrow canyon, and good photography will require visits at various times during the day to determine the best time for taking pictures. One set of documentary photographs should contain a color chart, scale, north arrow, and panel identification board. Photography of the panels on the east side of the canyon will be difficult. A good telephoto lens may help in capturing the rock art, but probably the only way to adequately photograph the paintings is through the use of climbing equipment or scaffolding.

Photography stations should be established in front of the panels on the west side of the canyon. These should be used to monitor the deterioration of the rock art from human traffic and natural erosion. It might also be feasible to set up positions from which to take monitoring photographs of the opposite side of the canyon.

Tracing some of the faint designs is advised. This is especially important for the figures on the trail side of the canyon.

A good site map needs to be made, and intensive examination of the rock walls in the Deer Creek Falls area should be completed. New and undiscovered rock art panels will undoubtedly be found, both on this site and on other sites in the region. Mary Allen, for example, briefly describes a site with "red" handprints done in a negative style; also unidentifiable "blobs" of red pigment. These are painted at the base of the cliff, next to the trail above the stream, near the mouth of Deer Creek Canyon (Allen 1992:69). The relationship of this site to the one described here, with hands stenciled in white (shown in negative), is not known, but it needs to be learned.

Site 14 - A:16:163

The site is located about 179 miles below Lees Ferry. It is downstream from Vulcan's Rock and upstream from Lava Falls. Two areas of rock art panels are found at the site. One is associated with a series of low, dry-laid rock wall features near an outcrop of Bright Angel shale. This area of the site produced grinding tools and ceramics that are primarily Moapa Gray Wares. A complete pot was found on a ledge above the rock art panel, but it is not described on the site form. The chipped-stone tools include a projectile point, but it is also not described on the site form. Raw material includes Kaibab chert, Redwall chert, other cherts, local quartzite, local chalcedony, and Partridge Ridge obsidian. Both burned and unburned mammal bone was observed. The relationship of these cultural remains to the rock art is not clear, but the site is a place where temporary camping and day to day activities were carried out.

The primary panel of pictographs at the main site locus are high on the outcrop wall, about 2.5 meters above the ground; they face to the northwest at 290 degrees east of north. Access to the panel was not gained and recording was completed by estimating from the ground. Three figures exhibit round bodies with smaller, round heads attached to the upper perimeter of the body without a neck. Short and rectangular legs protrude from beneath two of the bodies while the third figure is eroded along its lower side. All three figures had some sort of head decoration, perhaps feathers. The primary color of the bodies, heads, and legs is yellow. Square designs in red are set into two of the bodies, and red rectangular slits in the heads of two are reminiscent of eye holes in a mask. The feather, or other head adornment, is in white pigment on the two most

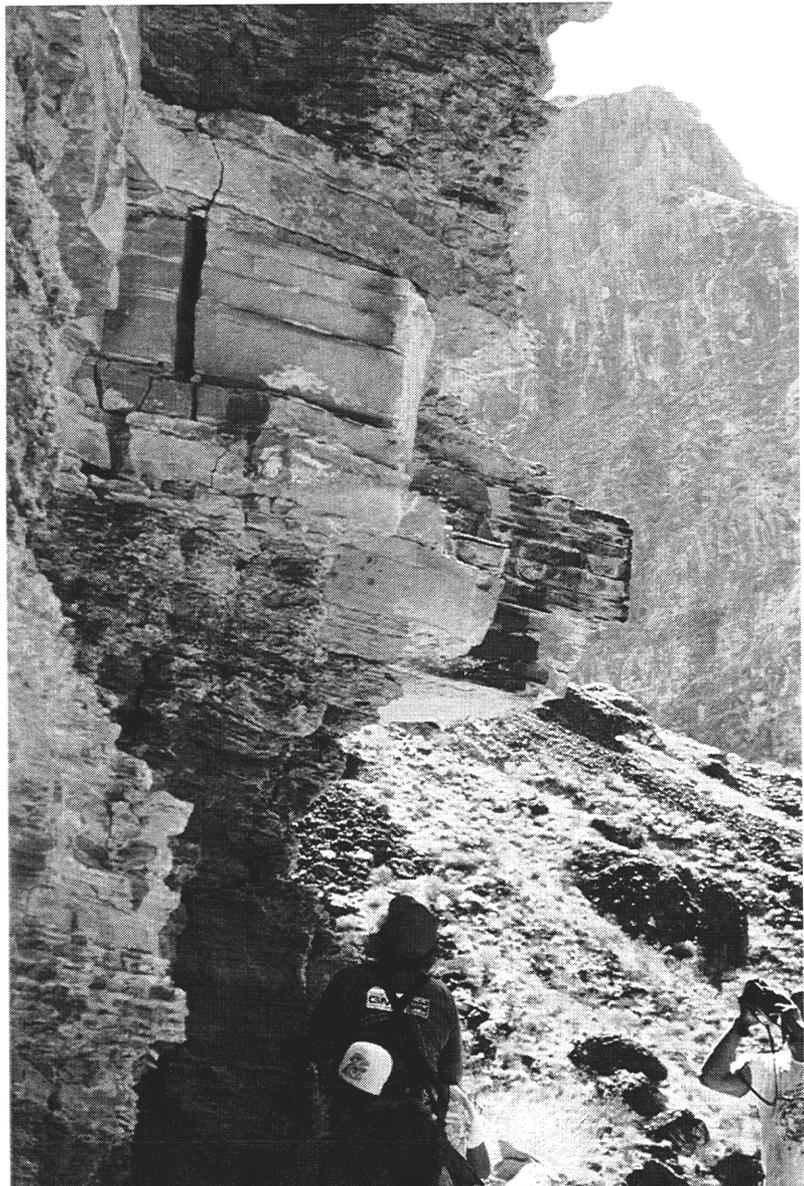


Figure 5.23. Overview of Site 14 - A:16:263

complete figures, while the eroded one has red feathers. The largest of these figures is about 20 cm in height.

To the left of these figures, on a separate face of the outcrop, there are several sets of intersecting lines. All of these are done in a red paint. Some are done such that they are on the wall and continue over a shelf of the outcrop to its underneath side.

The third panel of pictographs is at another locus of the site, downslope beneath a sheltered alcove. The main pictograph is a human form outlined in red, with a rounded torso, and with legs and arms. Based on the presence of paint residue, other pictographs, some in yellow and others in red, were also once found in this panel. This rounded human form is executed on the shelter ceiling where it faces down, an unusual position for a pictograph.

Southern Paiute Interpretation

Nine interviews were conducted at this site. Three representatives identified the site as a ceremonial site, two interpreted it as a living area, and one identified it as both a living and ceremonial area. Two of those individuals also specifically noted that the area was good for a lookout. One representative interpreted the site as a woman's isolation site, one said that someone died there, and one individual offered no interpretation of the site. The features at the site that were noted include plants, rock shelters, water, and the elevation.

It was a place they went to prepare for something to keep spirits away - that is what we do today. Not a ghost, which would be dots - a drowned person, flat and bloated. (R524)

It is a place where people with supernatural powers came. Women would come here if they needed to be healed by the shaman. (R2016)

It may have been a female site - a woman's isolated site for the moon. (D524)

Just over half of the representatives said the panel was made by Southern Paiutes. Two-thirds of them said that Southern Paiutes would have visited or used the panels in the past, one individual said her family visited or used the panel in the past and although no one said that Southern Paiutes currently visit or use the panel, one representative said her family currently visits or uses the panel. Two-thirds of the representatives said there would be stories or legends associated with the panel; the others did not know whether there were stories or legends associated with it or not. As one individual said, "If the panel is related to the Paiutes, then yes [there would be stories or legends associated with it]." (DA2024) Two-thirds of the representatives said the panel would have been used by other Indian people. The Indian people named include the Havasupai and Hualapai.

Several representatives commented on the way the figures at this site were placed on the rock. The use of colored paint was noted, but the figures were not stencilled. In addition, one individual remarked:

The red paint blob is not a current smudging sign. (R524)

The panels were identified by the vast majority of the representatives as being like others in the river corridor; several individuals mentioned the red paint as a common feature of those panels. More than half the representatives specifically discussed a connection between the panels and Vulcan's Anvil. A majority of the representatives perceived the rock art site to be connected to other sites in the area.



Figure 5.24a. Pictographs at Site 14

Women's menstrual - human figure smudges. it could be a heavy moon - yellow, red. I don't know. (D524)

The drawings could be some kind of ceremonial symbols representing power. I haven't seen anything like this. (DA2024)

They represent a vision or dream or something they saw - especially the yellow and red figures. (D2023)

Archaeologist's Commentary

The polychrome figures are unusual because they are made of three colors of paint, and they have a form that is not common in the rock art sites in the Grand Canyon. The figures appear to be wearing costumes. The heads may be in masks or helmets, whereas the bodies are covered by large shields. From a comparative perspective, the figures resemble the shield-bearing warrior motif, a pedestrian figure that has its body covered by a large shield. These figures are found throughout western North America from Alberta, Canada to Texas. Good examples are found in Utah at Fremont rock art sites while others are found in New Mexico associated with Anasazi and Pueblo sites. Another group of painted shields and shield warrior petroglyphs are believed to represent the Navajo and the Apache in Arizona and New Mexico.

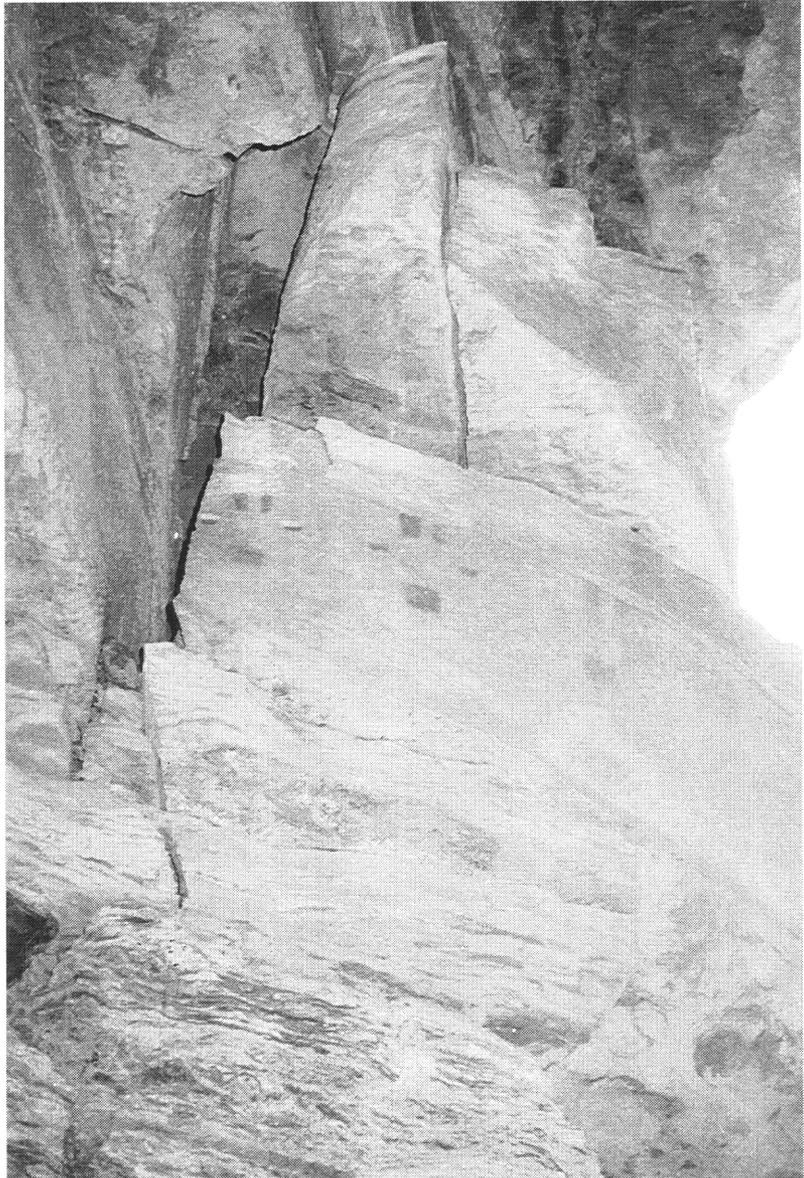


Figure 5.24b. Pictographs at Site 14

The painted figures at this site, A:16:163, do not resemble any of these other examples. This suggests they are unique and not related to the better known shield figures in the region.

Carla Smithson and Robert Euler (1994) present a photograph in a central interleaf that shows a pictograph site, with a group of pictographs, in a rockshelter in upper Havasu Canyon. Although the photograph is faded and it is difficult to determine colors, it appears the paintings are in at least two colors and perhaps more. The majority of the paintings are large, circular figures which resemble shields. This assumption is strengthened by the fact that a masked figure

is holding one of these large circular objects in one hand. The shield designs contain pie-shaped wedges with interior circular forms. None contains the square or rectangular designs that are found in the shields at site A:16:163. Nonetheless, the multiple color images of shields and masks are sufficiently similar to suggest an affinity between the sites.

The human form with rounded body and pudgy arms and legs in the downslope locations is similar to the human figures in the Paiute rock art style, defined after the research in the side canyons. There is an excellent opportunity for collecting a paint sample at this panel. A piece of an eroded painting on the ceiling of the rockshelter, adjacent to the rounded human form, is about to fall. Collecting it for dating and other pigment analysis should be considered in future research.

The rock art at these sites needs to be better recorded. In particular, the paintings in the upper shelter should be photographed with a scaffold or some other means of elevating the photographer so the lens is horizontal to the paintings. Detailed measurements should also be made of the panels. Establishing photography stations at the panels would help in monitoring their deterioration.

Site 15 - A:16:181

The site is located about 179 miles downstream from Lees Ferry. It is on the upstream side of Prospect Canyon, above Lava Falls. The site is primarily a series of low, rock walls that apparently served as the foundations for habitational structures. Charcoal, ceramics, chipped-stone tools, flaking detritus, and groundstone implements are scattered about the site surface. At least one surface feature appears to be the remains of a large roasting pit, presumably for agave and other cacti or tuberous plants.

The archaeologists who recorded the site suggest it contains evidence of a PI to early PII Virgin Anasazi-use episode, and a late prehistoric or early historic Pai period of use. Presumably, they made this assumption on the basis of surface ceramics which include 2 Moapa Gray Ware, 1 Tizon Brown Ware, 5 Aquarius Brown Ware, and 1 Jeddito Yellow Ware sherds. Kaibab Chert, Redwall Chert, and Partridge Creek Obsidian are identified among the lithic detritus.

Rock art at the site is confined to two rocks with reddened surfaces, presumably the result of grinding hematite to make red pigment for ceremonial use in its ground form or as a component in paint. The relationship of these pigment-reddened surfaces to the remainder of the site's contents is not known.

Southern Paiute Interpretation

Twelve interviews were conducted at this site. The relationship between the significance of this site and the presence of paint was recognized by eleven of the representatives. The representatives talked about paint gathering, prayers and ceremonies related to gathering paint,



Figure 5.25. Pictographs at Site 15 - A:16:181

and use of the site to prepare for ceremonies. One individual identified the site as the place for a roasting ceremony, noting the ram and a human figure that were on the panel and had been smudged over. One individual identified the site as a living area, noting that some people lived in high places so the big animals would not bother them. In addition to the paint smudges, features noted at the site include the roasting pits, grinding stones, rock shelters, and Vulcan's Anvil. The representatives noted that the grinding stones could be used for paint or for food.

All but one of the representatives said the smudges at this site were made by Southern Paiutes. Three-fourths of the individuals said Southern Paiutes traditionally visited or used the panels, and two representatives said that Southern Paiutes continue to visit or use the panels. All but one of the representatives said there would be stories or legends associated with the panels; one individual noted that those stories could only be told in the winter. Three-fourths of the representatives said the site would have been used by other Indian people. The Indian people named include the Havasupai, Hopi, Hualapai, and Zuni.

The significance of the way the smudges were made at this site lies in the use of the *ompi* (see **Overview of Findings** above). The use of the paint smudges instead of the etching, pecking, or stencilling was noted by the representatives. As one individual noted:

It is traditional to put red paint smudges on burials as well as oneself. It is very sacred. (D526)

The panels were identified by the vast majority of the representatives as being like those upriver, especially the panels found at Site 14, across the river. Two individuals perceived the panels to be like those located on the Shivwits Reservation; one person specifically noted the presence of yellow paint at Shivwits. All but one of the representatives perceived the site to be connected to other sites in the area. A majority of the individuals linked the site to Vulcan's Anvil. Some representatives specifically tied sites together as places where paint was collected and used.

One is the source of paint and the other is where the paint was used. (R2020)

The markings were left as an offering. (DA526)

The smudgings may indicate a burial or a ceremony. The body may have been placed in a shelter or some other spot. (D526)

By taking this sacred red paint we mark the area sacred. (R2020)

Archaeologist's Commentary

The site appears to have had considerable use during its more recent-use phase. Although it is likely the hematite-stained surfaces represent this later site use, there is incomplete understanding of the stability of



Figure 5.26. Yellow Paint at Site 15

pigment on rock surfaces. If the red pigment were encapsulated by a silica shield, it could be thousands of years old.

Future research at the site could include the removal of a tiny chip of the painted surface to examine its stratigraphy. If the pigment is well-layered in the rock, an estimate on its relative age might be made. Because there are no identifiable forms in the rock art at the site, it is probably not worthwhile to expend the money needed for a numerical age estimate. Site monitoring from the perspective of its rock art is also not warranted.

Site 16 - A:16:172

The site is located about 180 miles below Lees Ferry and immediately below Lava Falls. The site is located in a rockshelter beneath a large monolith of basalt. Large and small basalt boulders are scattered down the slope, in front of the rockshelter, to the river. Three petroglyphs are found on a smooth, collapsed slab of basalt that appears to have washed into the rock shelter. The petroglyphs and a single sandstone grinding slab are the only evidence of prehistoric activities in the rockshelter.

All three petroglyphs differ in form. One has the human/lizard shape, with a straight body line, crossing arms and legs, and a continuation of the body between the legs. Another has a straight, thin body with arms slanting downward along its sides. The legs are attached to the base of the body. Hands with four exaggerated fingers, and feet with three toes are depicted in such a way they make the figure look as though it has webbed hands and feet. Adjacent to this figure there is a twisted, snake-like line with a circular head. It is superimposed on a lightly pecked amoeba shape. The snake-like design appears, on the basis of its varnish cover, to be a more recent addition to the panel.

Southern Paiute Interpretation

Eleven interviews were conducted at this site. Five of the representatives recognized the site as a living, gardening, or harvesting area. In addition, three individuals said it was a place where a medicine man or other people came to conduct ceremonies and get their spiritual healing before crossing the river to get the red paint or to visit Vulcan's Anvil.

This is where they came to get their spiritual healing and their being able to go across the river and get the paint that they need to protect themselves from the spirits that are bad. (DA2026)

One representative said the panel was a territorial marker connected in some way to the river and the Anvil, one said the site was used to conduct ceremonies about snakes, and one did not offer any interpretation of the site. The features that were noted at the site include the water, the lava rock, the rockshelter and associated firepits and grinding stones, Vulcan's Anvil, the river and Lava Falls, the springs, and the wind.



Figure 5.27. Overview of Site 16 - A:16:172

All but one of the Southern Paiute representatives said the rock art panel at this site was made by Southern Paiutes. All but one said that Southern Paiutes visited or used the panel in the past, one said his family had traditionally visited or used the panel, and two said that Southern Paiutes currently visit or use the panel. A majority of the representatives said there would be stories or legends associated with the panel; one individual interpreted the panel as possibly a story or legend about Paiute philosophy. In addition, a majority of the representatives said the panels would have been used by other Indian people. The Indian people named include the Havasupai, Hopi, Hualapai, and Navajo.

Several of the representatives noted that the way the figures were pecked deeply into the rock was important. The panel was identified by all the representatives as being like other panels along the river. Four individuals linked the panel to Vulcan's Anvil; one person stated that the panel had nothing to do with the Anvil. Two representatives perceived the panel to be like ones near the Anvil, and the remaining individuals linked the panel to those located further upriver. One individual said the panel was somewhat like some located near the Shivwits Reservation but had different figures on it. All but one of the representatives perceived the site to be connected to other sites in the area.

The middle figure is telling a story - related to shelters and falls. (D2028)

It is a map and two stages of achieving spiritual strength. (R2019)

To me it shows on top of Vulcan's Anvil the spirit of the person going up to the sky where the creator lives - going up into the sun. The other one is the person coming down to get the spiritual healing. (DA2026)

It is a warning about snakes. (R526)

Archaeologist's Commentary

These petroglyphs are unlike others visited during the project. Their proximity to the river and the falls suggest they may have an affinity with the water. Among many American Indians, there is a general belief in a group of water spirits, often in freshwater springs in the desert regions of the American west, and in rapids or whirlpools in the rivers. The petroglyphs at this site may be related to the falls, but until other similar sites are found such an assumption is conjectural. These solidly pecked figures are most similar to the representational figures at site C:13:132. They are assigned to the Great Basin Representational style. It should be noted that both sites are associated with falls or rapids - A:16:172 adjacent to Lava Falls and C:13:132 near Tanner Rapids.

Because they are located in a rockshelter where they are protected from the same degree of rock varnish as surrounding areas, the petroglyphs are not a good candidate for cation-ratio varnish dating, but they could be directly dated by AMS 14C.

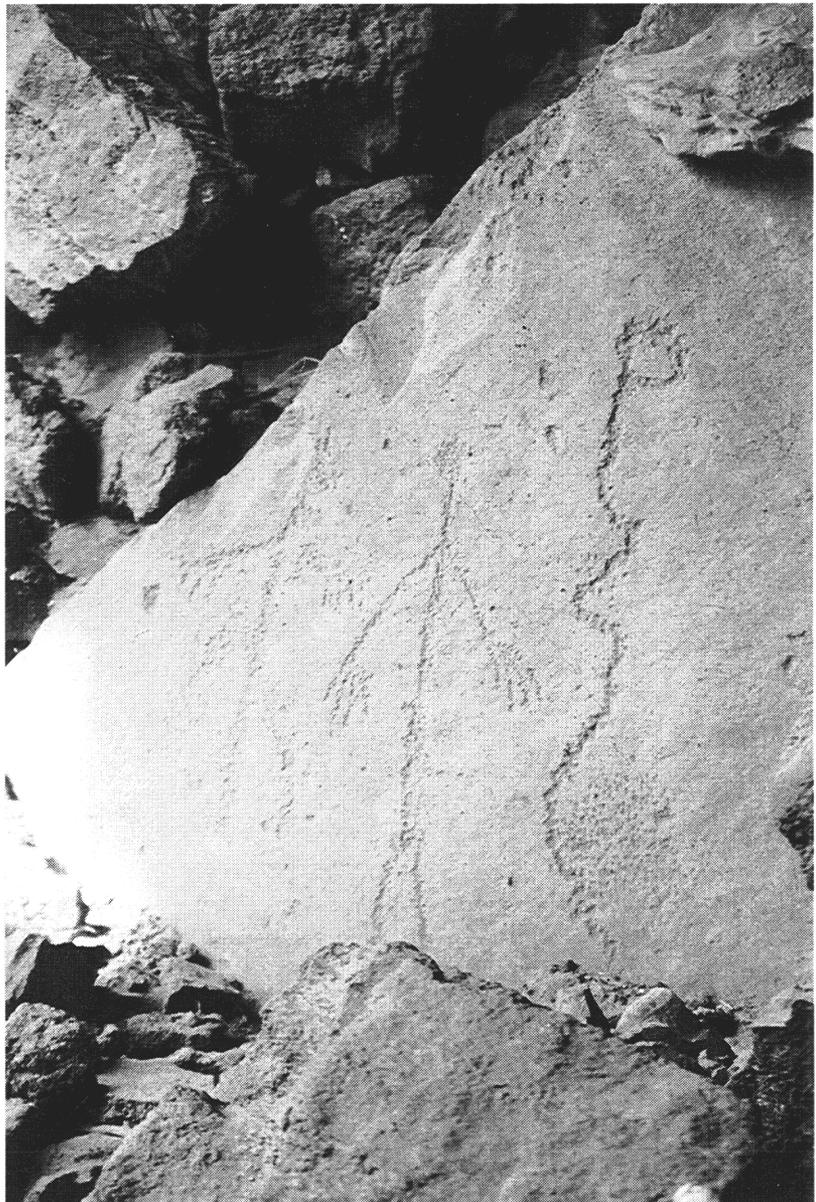


Figure 5.28. Petroglyphs at Site 16

The panel sketch associated with the site form is a good replica of the petroglyphs. Photography in black and white and color, with scale, color chart, identification board, and north arrow, should be completed. Test excavations at the base of the panel might reveal buried rock art on the same panel, and/or the tools used to make the petroglyphs could be recovered.

Site 17 - A:16:179

The site is located about 180 miles below Lees Ferry. The site is immediately below Lava Falls, near a large, travertine spring that issues fresh, clear water into the river. It is almost directly across the river from site A:16:172.

The site exhibits a half dozen red and yellow pictographs on a fractured outcrop of Muav formation limestone. The paintings are simple vertical lines in series and other intersecting lines. One lattice form in red pigment is superimposed on an area of faded yellow paint. Some of the figures appear to end in the horizontal bedding cracks of the limestone surface. The panel faces southwest at 240 degrees east of north.

Southern Paiute Interpretation

Twelve interviews were conducted at this site. Four representatives identified the site as a camping or living area where harvesting or gardening would occur and from which travel up

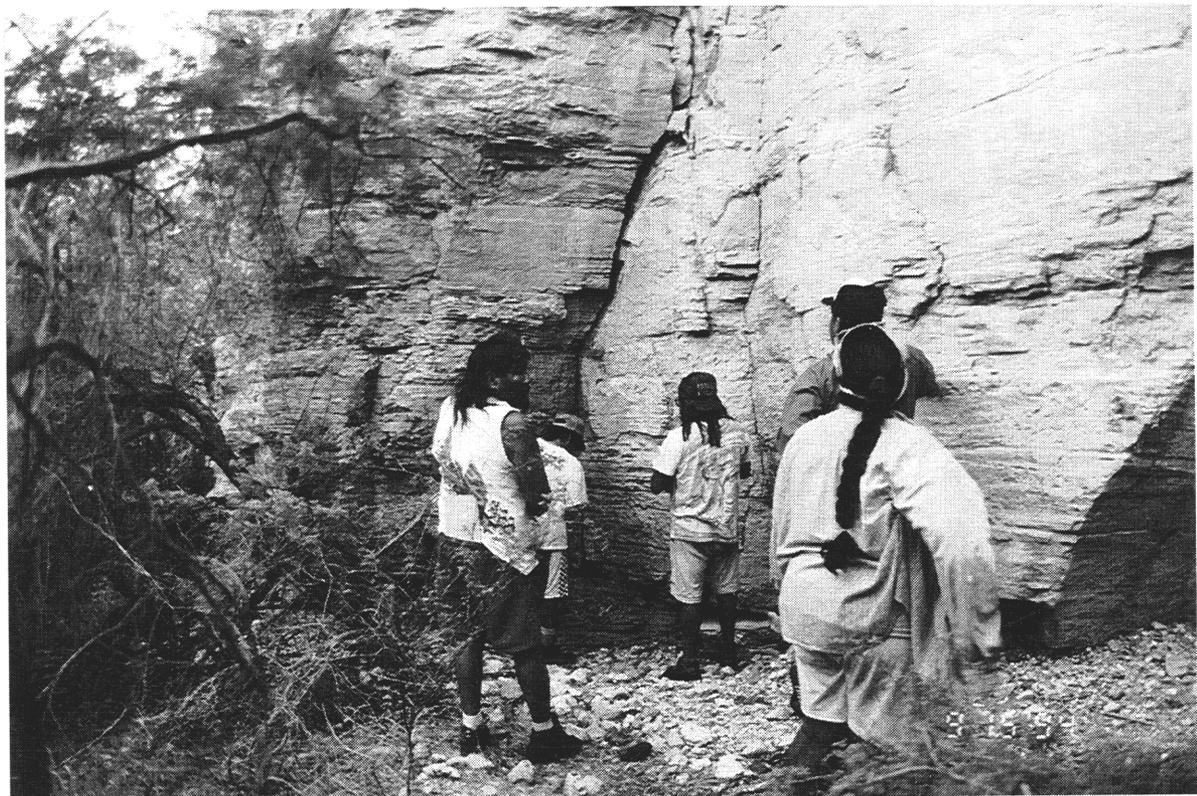


Figure 5.29. Overview of Site 17 - A:16:179

and down the river would be possible. Five individuals identified this as a ceremonial site; one person mentioned the medicine plants in the area and the doctor ceremonial, and another talked about purification ceremonies, possibly with the Hualapai, that would have been done before going upstream to Vulcan's Anvil. Three individuals offered no interpretation for the site. In addition to the rock art panel, features that were noted at the site include fire darkened rock, the river and springs, wind, and both food and medicinal plants.

Three-fourths of the representatives said the rock art panels were made by Southern Paiutes. A majority of the representatives said Southern Paiutes visited or used the panels in the past, but none said that the panels were traditionally visited or used by their families or are currently being visited or used. A majority of the representatives said there would be Paiute stories or legends associated with the panels. In addition, the vast majority of the representatives said the panels would have been used by other Indian people. The Indian people named include the Havasupai, Hopi, Hualapai, and Navajo.

Several individuals noted that the way the marks were placed on the rock was significant; the markings were identified as counting marks, an offering after prayer, and fingerprints. The panels were identified by all but one of the representatives as being like others in the canyon. The representatives noted the use of red paint, and several individuals linked the panels to others in the immediate area. Two individuals linked the panels to those at Site 16, noting that the symbols were similar despite the use of red paint at this site and the pecking at Site 16. One individual perceived the panels to be like some he had seen at Snake Gulch. Three-fourths of the representatives perceived the rock art site to be connected to other sites in the area.

They could mean a lot of things. I wouldn't know if it means days or months.
(DA2028)

The counting of something - deaths, killing, years, seasons. (AB2012)

I don't quite understand it. Maybe the days or the months or how many people that were there or how many people that were buried there. (DA530)

Archaeologist's Commentary

Because the pictographs have abstract forms, the site is difficult to compare to others. The proximity of the site to the spring is noteworthy. This spring is recognized as a location used by a Paiute medicine man in a preparatory ceremony before visiting Vulcan's Anvil.

The figures resemble "entoptic phenomena," or the imagery seen in the beginning stages of trance, visions, or medicine dreams. If the ceremony performed by the Paiute medicine man at this site included an altered state of consciousness, the figures may be related.

When the site was visited with Paiute consultants, two or three asked if the pigment would rub off the wall. They thought it looked so fresh that it must be *ompi*, the powdered red hematite used in a variety of ceremonial forms by the Southern Paiute. In this example, the marks on the rock are offerings, perhaps to the spring, the rock, or the location. If red ochre streaks on the wall survived for a sufficient period of time to be encapsulated in a silica shield, they would remain today and look much like the figures at this site. In this example, the person leaving the marks is not trying to make a representational form, rather they are leaving an offering of red pigment. The natural mineralization of the limestone surface preserves the red pigment to make it a pictograph.

Paint samples were readily available from crumbling and eroding places in the panel. Dating of the site might help associate it with the recent use by the Paiute medicine man.

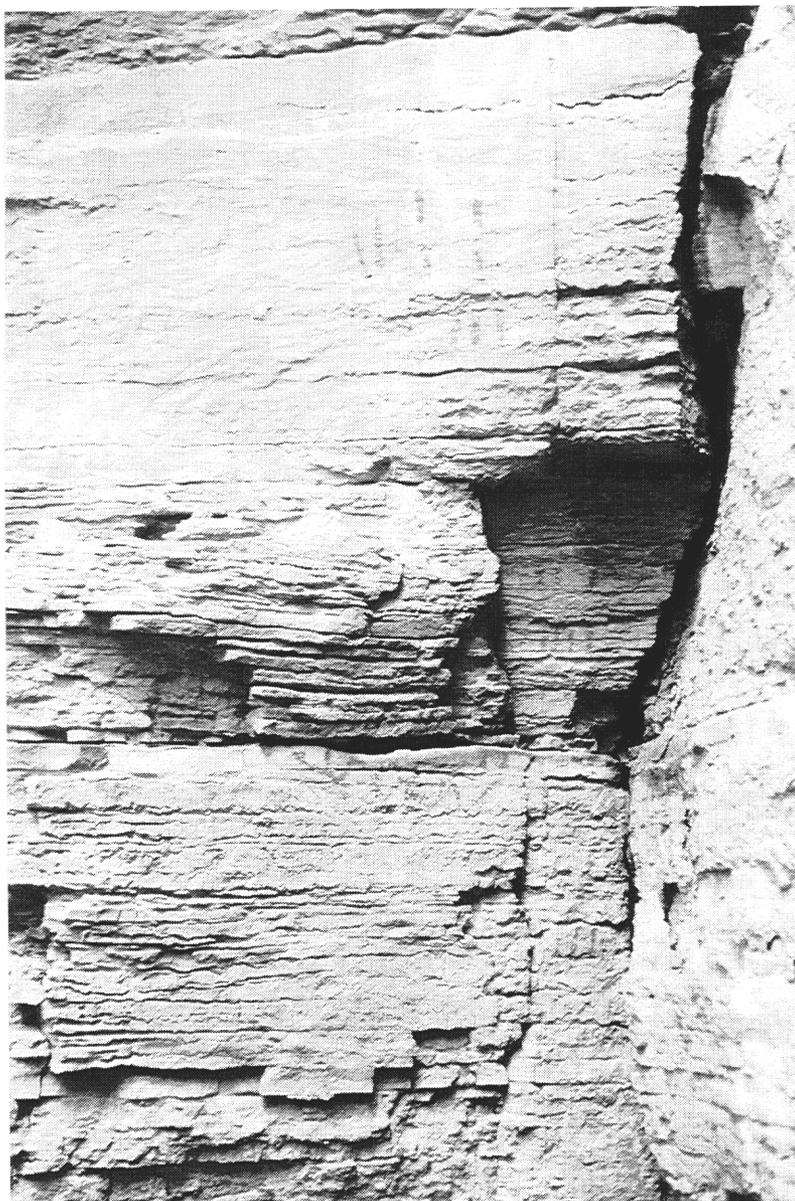


Figure 5.30. Pictographs at Site 17

Site 18 - A:16:001

The site is located in an outcrop of Tapeats sandstone about 187 miles down river from Lees Ferry. The site is at the bottom of the Bundy Trail, named for a large Mormon family who homesteaded the North Rim of the Grand Canyon near the Whitmore Wash area (Jones 1986:47). The site contains a stratified midden with cultural remains dating from the Late Archaic through the Late Prehistoric Period. The oldest dated level is equivalent in age to some of the split-twig figurines found in the Grand Canyon. Split-twig figures are found in caves where they are in caches, not associated with other cultural remains. Whitmore Wash, on the other hand, is a site where day to day activities associated with subsistence took place, and as such it represents one of the only known stratified, Archaic-age sites in the Grand Canyon (Jones

1986). The Archaic age deposits at Whitmore Wash are overlain cultural levels which contain a range of Anasazi ceramic types, while the uppermost deposits contain Southern Paiute ceramics. A radiocarbon date for the Archaic remains has a range from 1365 B.C to 905 B.C., and another radiocarbon date for the Paiute levels ranges from A.D. 1230 to A.D. 1340 (Jones 1986:103-111). The prehistoric rock art at the site, on a Tapeats sandstone outcrop, exhibits three distinct periods of manufacture while there are two periods of Euroamerican historic inscriptions.

The oldest rock art is extremely faint. It consists of red and white lines on the main outcrop wall, about 3 meters above the present ground surface. A narrow ledge below the panel allows access to it. The figures resemble the large polychrome anthropomorphs in the Barrier Canyon style, now known from several locations along the north rim of the Grand Canyon (Allen 1992; Schaafsma 1990). The figures are tall, thin bodies with vertical, parallel lines and are armless. The bodies are frequently outlined in red paint, while the interior designs are elaborate patterns in other colors. Two sets of vertical, parallel lines at Whitmore Wash are likely the remains of these figures. Additional research should be completed to verify this assumption, but, because the site contains Archaic age deposits, it would not be unusual for it to also exhibit paintings of the same time period.

The most obvious Anasazi paintings at the site are in a recessed area of the outcrop face, above a shelf of rock which also contains paintings. The panel, identified as panel 4 by Jones (1986:47), contains a large circle painted in red with some minor smoothing near its center. Near this figure there is a sitting anthropomorph, under an arc, that is characteristic of the Modified Basketmaker-Developmental Pueblo style, identified by Grant (1978) and later named the Chinle Representational Style by Schaafsma (1980:122-127). The earliest known flute players are in this style, which is thought to end ca. A.D. 1000. The profile view of the figure at Whitmore Wash, under an arc or rainbow, is almost certainly related to this rock art style. Other paintings at this site appear to be related to the Cave Valley Style.

The most recent rock paintings are also the most abundant. They are found lower on the outcrop wall, in panels that face several directions. Although some of these paintings may be related to Anasazi use of the site, the majority are believed to be related to the Paiute use of the site. This group of paintings is completed in two to three shades of red, two distinct shades of white, and lesser numbers of them in yellow or yellow/orange. The paintings are dominated by human forms, some depicted in v-shaped torsos and arms with hands and fingers. Dots and circles are also found in the paintings, including some which resemble sun discs. Animal forms include what are probably lizards or lizard/humans and sheep.

Some of the pictographs are extremely good representations of their style. For example, those in a group that faces downward on the bottom of an overhanging ledge of the outcrop are good representations of Paiute pictographs, and they are brilliant against their grey/green background.



Figure 5.31. Overview of Site 18 - A:16:001

Southern Paiute Interpretation

Twelve interviews were conducted at this site. Seven of the representatives related the panels to paint gathering, stating that the panels marked the path that people took to collect white and yellow paint for ceremonial uses or that some type of ceremony or offering was conducted in exchange for the paint. Two of the representatives specifically linked the site to the Ghost Dance. Another individual identified the site as a place for ceremonies, naming the snake dance and butterfly dance. Two representatives identified the site as a place for camping while hunting and gathering, and two said the site was a place for resting or telling a story. One individual did not offer any interpretation of the site because she believed the panels were made by Hopi people. The features that were noted at the site include the canyon, the cliffs, the rockshelter, the river, the pottery and metate, plants, and the white paint source.

The vast majority of the representatives said the rock art panels at this site were made by Southern Paiutes. All of the representatives said that Southern Paiutes would have visited or used the panels in the past, two said their families had traditionally visited or used the panels, two said that Southern Paiutes currently visit or use the panels, one said her family currently visits or uses the panels. The vast majority said there would be Paiute stories and legends



Figure 5.32a. Pictographs at Site 18

associated with the panels. Half of the representatives said that other Indian people would have used the panels. The Indian people named include the Havasupai, Hopi, and Hualapai.

The panels were identified by two-thirds of the representatives as being like those located elsewhere in the river corridor. The specific panels that were named include those at Prospect Canyon and those at Ninemile Draw (see Site 2 - C:02:038) that told an animal story. Several representatives are familiar with the *Ompi* (Hematite) Cave and related the panels to that site because they believed the red paint would have been obtained there. Two-thirds of the representatives perceived the rock art site to be connected to other sites in the area.

The [Hopi] snake dance and butterfly dance. One looked like it was carrying a drum, with little stripes on top. There were six of them. I thought that would be the marking of how many doings they had there. (DA534)

It is a record of what went on in the area, probably related to the Ghost Dance, a gathering of people - men and women. (D529)

It is some sort of map. Some symbols of that were sent to related to other Indians in the area. (DA535)

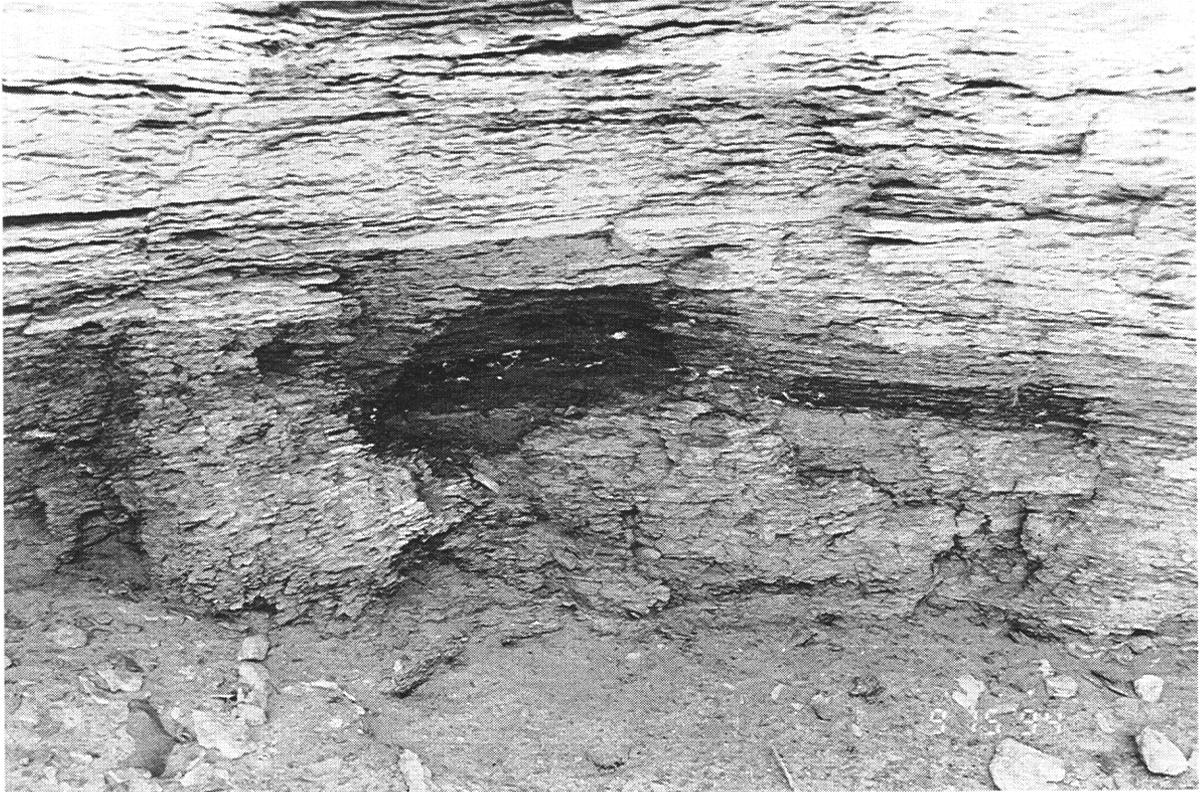


Figure 5.32b. Paint Source at Site 18

This is a story about the origin of white paint. (R2023)

Archaeologist's Commentary

Although Trinkle Jones identified the panels by number, and completed some basic recording, they need additional recording. Probably because the task requires considerable effort, the survey team who visited the site in 1990 did not accomplish this recording. There should be consultation with the tribes of the Southern Paiute Consortium, and detailed notes need to be taken with extensive and intensive photography. The photography should include black and white exposures as well as color. A set of exposures, taken from directly in front of the pictographs, should include scale, color chart, north arrow, and an identification board. Another set should be exposed from the "eye of the photographer" to capture the appropriate light and the pictographs at their best, and a set of archival photographs should to be taken.

The possibility of tracing the faint pictographs should be considered. This is especially critical for the old pictographs thought to represent the Barrier Canyon style.

The potential for paint samples was noted in several places. The bedded nature of the sandstone/shale on which the paintings are executed makes it a candidate for flaking and

eroding, and paint is coming off in several places. These areas will fall and be lost. They should be collected and studied to learn their ingredients and their age.

One of the most important aspects of the Whitmore Wash site is the white pigment source at the base of the outcrop. At several locations, one of which actually appears to have been enlarged by digging into the base of the outcrop, there is a white pigment interlayered with the greenish shale. It is not known if this shale represents the Bright Angel formation or if it is associated with the Tapeats formation, but it is obviously the source of the white pigment used in the paintings and probably collected for other uses. A small, rounded, river cobble, noted in the recessed area, exhibits evidence of its use to grind the white pigment. Upon examination of the pictographs, it is clear that some of the white has an admixture of greenish-colored pigment, presumably from the shale in which the white is exposed.

From the perspective of rock art research, very little is known about paint pigment, and even less about pigment sources. If techniques can be developed through which a pigment source can be "fingerprinted," it will be possible to learn its distribution in paintings. Research into paint ingredients is much better developed by Europeans than Americans (Clottes 1992, 1994). It is useful in relating paintings in a single site to one another, placing paintings into a style or time period, and developing patterns of movement for the individuals who made the paintings.

Whitmore Wash receives thousands of visitors each year. At present, these visitors view the pictographs with only minor interpretation from their boat crews. Although one Euroamerican name at the site is appallingly recent, graffiti at the site is not a major problem. The name of "Bundy" in two places is undoubtedly related to the large family who lived on the rim above the site. The other name is "Wilson Austin - Surveyors, Casa Grande, Ariz.", done in large, white, painted letters. According to the site form, dated 11/08/90, Wilson Austin confirmed in August 1991 that he left this inscription while completing survey work for Prospect Canyon Dam in 1958 or 1959.

The major site damage from the visitors is taking place in the erosion they are creating along the trails and in the deposits at the base of the panels. The pigment source, described above, is already on a sloping surface, and the heavy trail use is causing additional erosion. Another well known problem at rock art sites is the amount of dust caused by foot traffic and its damage to the paintings. These problems should be studied by a conservator, and a plan for management of the site should be developed.

Site 19 - A:16:159

The site, named the "Happy People" site, is located about 188 miles down river from Lees Ferry. The site is only a few meters from the Whitmore rapids. The rock shelter is partially collapsed, and the wall is continuing to fall into the river. Ceramics noted on the surface indicate the site was used during PII Virgin Anasazi times and by historic Pai groups. Other artifacts include a significant number of grinding tools, with some that may have been used in pigment preparation.

It was not possible to spend much time at the site during the river trips, but the two most apparent pictographs are in red paint. The figures are frontal-facing human forms, rendered next to each other and in poses that appear as though they are leaping or dancing.

Southern Paiute Interpretation

Nine interviews were conducted at this site. Five representatives recognized this as a ceremonial site, involving either a burial, ceremony for people crossing the river, place of offerings, or a puberty ceremony. Two of those individuals and two others interpreted the site as a living area where activities included grinding corn and processing hides. Three individuals identified the site as a camp or stopping place that would have been used by people traveling up and down the river. Features at the site include the dwelling area, grinding stones, and plants. One individual mentioned the spindle whorl that had previously been found at the site.

According to all of the representatives, the panel was made by Southern Paiutes. The vast majority said that Southern Paiutes traditionally visited or used the panel, one individual said her family visited or used the panel in the past, and one individual said Southern Paiutes currently visit or use the panel. Some of the representatives said there would be stories or legends associated with the panel; one individual also said there are songs associated with the panel. A majority of representatives said the panel would have been used by other Indian people. Those named include the Havasupai, Hopi, and Hualapai.

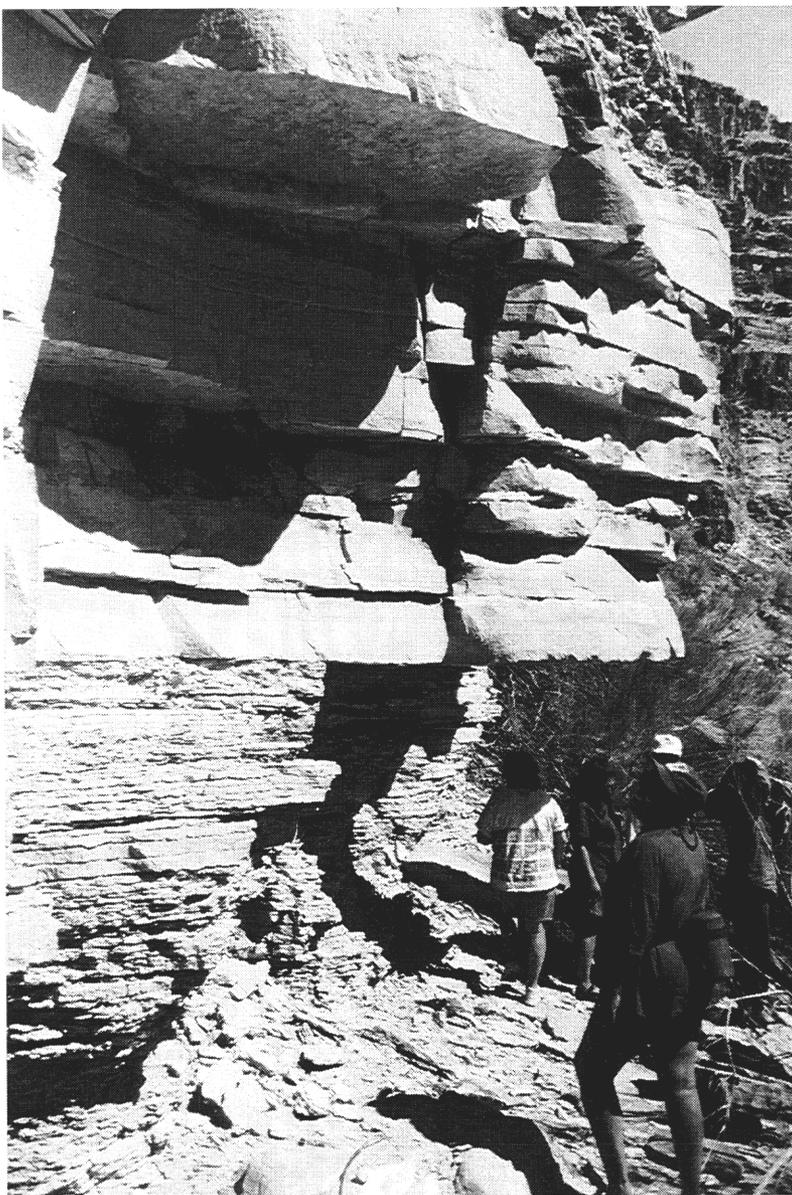


Figure 5.33. Overview of Site 19 - A:16:159



Figure 5.34. Pictographs at Site 19

The panels were identified by two-thirds of the representatives as like those at Whitmore Wash, Parashant Wash, and in the vicinity of Lava Falls (see Sites 17 - A:16:179 and 18 - A:16:001). The yellow paint on the panels was perceived to be a feature that linked the panels. Two individuals perceived the panels to be like some on the Shivwits Reservation. The vast majority of the representatives perceived the site to be connected with other sites in the area.

There are two figures - they may be the ones who ground the paint here. (D2030)

It is a marker. It shows that two people, two families, were here. (D2034)

It was a ceremony to protect those who are jumping into the river trying to cross. Lots of people didn't make it across the river. Indian people do that today, they give an offering before they cross the dam at Glen Canyon. (R531)

Archaeologist's Commentary

The site needs additional attention. The grinding tools should be studied to learn if any of them have been used in pigment preparation. The undercutting of the river is endangering this site, the site should be test excavated prior to its ultimate loss.

There are many areas of eroded pictographs on the walls. One might find pictographs on some of the collapsed blocks which have fallen off the wall.

Site 20 - A:15:018

The site is about 198 miles downstream from Lees Ferry. It is upstream two side washes from Parashant Canyon, beneath a shallow overhang in the basalt exposure. Vegetation between the river and the site is dense and difficult to traverse, a fact that aids in the protection of the site.

Chipped stone-flaking detritus and a metate were noted on the surface of the site, and although ceramics are not reported on the site form, a grey ware with a smooth exterior surface was observed. The vegetation near the site is so dense it is difficult to see much of the floor on its downslope side, where one might expect to find artifacts eroding out.

Most of the pictographs at this site are in red or yellow paint, but a complex spider-web design is done in black. The latter figure, probably in charcoal, is executed on an exposure of red-colored hematite. Apparently, several of these hematite exposures occur naturally in the basalt outcrop, while others are painted on the surface. Additional research is needed to determine their individual origin.

The other figures include the stick humans, some which look as much like lizards as they do humans, and quadrupeds which are likely sheep. One stick human figure, especially faded, is shooting a bow at a bighorn sheep.

Southern Paiute Interpretation

Nine interviews were conducted at this site. Six representatives recognized the site as a hunting and camping site. Two of those individuals noted that hunting ceremonies would have been performed at the site, and one said it was a place of storytelling. Two other individuals identified the site as a ceremonial site and one identified it as a living area. The features noted at the site include the plants, fire pits, grinding areas, rockshelter, pottery, and the canyon wall.

All of the representatives said the panels were made by Southern Paiutes, and all said the panels were traditionally visited or used by Southern Paiutes. Two individuals said their families had visited or used the panels in the past, two said that Southern Paiutes currently visit or use the panels, and one said her family currently visits or uses the panels. All of the representatives said there would be stories or legends associated with the panels. Some of the representatives said the panels were visited or used by other Indian people. The Indian people named include the Havasupai and the Hualapai.

The panels were identified by all but one of the representatives as being like other panels in the river corridor. The representatives related the panels to those at Whitmore Wash and in



Figure 5.35. Overview of Site 20 - A:15:018

the vicinity of Vulcan's Anvil because of the presence of paint and similar looking figures. Two representatives perceived the panels to be like some located in the Arizona strip, near Mt. Trumbull, and on the Kaibab Paiute Reservation. One individual perceived the panels to be like some located on the Shivwits Reservation. All but one of the representatives perceived the site to be connected to other sites in the area. Specific mention was made of the connection with camps along the river and with hunting sites on the rim or the bench where sheep and other animals come close to the river.

It looks like they mean a lot of people were hunting sheep or there were certain places where they could find the sheep. (DA2033)

It tells a story about how they hunted and strategies, also the location of hunting. (AB2015)

It depicts a hunter shooting at an animal, hunting. (D2035)

Archaeologist's Commentary

The site appears to be as important for the hematite as it is as a residential place. After consultation with the appropriate Indian tribes, it should be carefully recorded. Research should



Figure 5.36. Pictographs at Site 20

include extensive and intensive photography. Any pictograph which cannot be properly photographed should be recorded by tracing. A photography station should be established in the site area and used to monitor its status.

Exploratory testing at this site would probably produce information that would aid in understanding the pictographs. Several of the paintings are very low, near ground level. This suggests there may be buried rock paintings at the site.

Site 22 - A:15:005

The site is located up 202-mile canyon. The rock art in 202-mile canyon appears to have been known about for some time, but, in a re-visit to the site in 1991, archaeologists found other cultural debris in the mouth of 202-mile canyon and assigned it to the same site number as the rock art. Most of these features are low rock walls along the outcrop face, which apparently were used as the base for a superstructure employed for domiciliary activities. Two large, roasting pit features, probably used for agave or other cacti, are evident on the slopes below the



Figure 5.37. Overview of Site 22 - A:15:005

outcrop, and a digging stick, about 87 cm in length, with a sharpened and fire-hardened tip, was noted in a small rock shelter on the site. Ceramics suggest a late prehistoric use by the Paiute, but the relationship of this use to the rock art is not clear.

The rock art is composed entirely of pictographs that are found on the collapsing walls of a rockshelter. Several of the paintings are on blocks which have already fallen from the ceiling or back wall of the outcrop. The pictographs appear to represent at least two painting episodes. A more recent group includes a cross design and a bug-shaped figure. A butterfly, a lizard, diamond-shaped human, and net or basket designs make up the older paintings. Some of these forms may represent plants. All are done in red paint.

Southern Paiute Interpretation

Nine interviews were conducted at this site. Five representatives identified the site as a living area; one also stated that ceremonies would have been held at the site, and one mentioned that it was also a gathering area. Two people interpreted this as a camping site, and two identified it as a place for ceremonies. The features that were noted at the site include the dwelling, flint chips, medicinal and other plants, and water. Several individuals commented that there may be additional items buried beneath the fallen rocks.

All of the representatives said that the panels were made by Southern Paiutes. All but one individual said that Southern Paiutes would have visited or used the panels in the past, but none said that the panels were visited or used by their families or are currently being visited or used. The vast majority of the representatives said there are stories and legends associated with the panels. Two-thirds of the representatives said the panels would have been used by other Indian people. The Indian people named include the Anasazi, Hopi, Hualapai, and Yavapai.

Several individuals noted the unique designs present on some of the panels.

Some of the drawings are special - the trilobite and the diamond patterns which are like volcanic rock. (R2026)

The design is unique from what we've seen upriver... the diamond-shaped symbol - two diamond/arrow points meeting may mean war or peace. (D533)

Some of the representatives perceived the panels to be like others in the river corridor. Specific mention was made of the panels associated with Vulcan's Anvil and others with red paint. One individual linked the panels to those at Ninemile Draw (see Site 2 - C:02:038). Representatives also perceived the panels to be like those located on the Kaibab and Shivwits Reservations. Three individuals linked the panels to the *Ompi* (Hematite) Cave (see Chapter Seven). A majority of the representatives perceived the site to be connected to other sites in the area.



Figure 5.38. Pictographs at Site 22

It looks like it is telling a story about something that happened. (DA2034)

There is a figure that looks like weaving - river reeds - one may be carrying a basket - a burden. A butterfly-like, human-like figure is not a human. It is half animal, half person-spirit being. The cross-like symbol may mean the four directions. (D533)

It is an indication of things that were in the area - possibly as a marker. (DA539)

Archaeologist's Commentary

The figure with a diamond-shaped torso and the open, net-like designs are good examples of pictographs. They should be extensively photographed in color and black and white. One set of the photographs should be completed to the current rock art photography standards. Other photographs, taken to capture the best light and position of the paintings, should be completed to offset the scientific nature of the documentary photographs. Some of the older rock art at the site may be related to the Cave Valley style (Schaafsma 1971:116; Schaafsma 1980:131-134), but additional research is needed to confirm this possibility. The diamond-torso figure may also be related to the diamond with antennae, at site C:02:013 near Lees Ferry, and to other sites in the region. More extensive research needs to be completed before assigning it to a known style.

The rockshelter is collapsing. A well-positioned photographic station could aid in site monitoring. A conservator should visit this site.

Site 23 - Spring Canyon Rock Art Site

The site is located about 205 miles downstream from Lees Ferry. It is an important Southern Paiute site, with a rockshelter Paiutes formerly used along the mouth of the canyon. A freshwater stream flows through the canyon, supporting a variety of food plants along its banks. Metates and other grinding implements suggest these were used extensively by Paiutes.

The rock art site form information supplied for this project did not include Spring Canyon as a rock art location. This suggests the rock art has not been previously recorded at the site. The single panel noted in our visit is on a north-facing wall, on the downstream side of the rockshelter with cultural remains. The panel includes 4 or 5 faded and eroded red pictographs. Some of these appear to represent the lizard/human forms that are common at other sites in the region. They may also be plants.

Southern Paiute Interpretation

Eight interviews were conducted at this site. Four representatives interpreted the site to be a living, gardening, and harvesting area. Two individuals identified the site as a shorter term

camping area where foods were gathered; one individual mentioned it was a place the Paiutes could find shelter from the winter when it was cold on the Kaibab Plateau. One individual



Figure 5.39. Overview of Site 23 - Spring Canyon

recognized the site as a place for ceremonies, and one person did not offer an interpretation of the site. The features that were noted at the site include the creek, rockshelters, fire pit, grinding stones and metates, and the plants and animals.

Three-fourths of the representatives said the panels were made by Southern Paiutes and that Southern Paiutes traditionally visited or used them. None of the representatives said that their families have visited or used the panels or that Southern Paiutes currently visit or use the panels. A majority of the representatives said there are stories and legends associated with the panels; one mentioned a story associated with a panel with the same kind of figures as those present at this site. One-third of the representatives said that other Indian people visited or used the panels. The Indian people named include the Hopi and the Hualapai.

Several individuals noted the panels at this site are not as well preserved as those elsewhere. One half of the representatives perceived the panels to be like others in the river corridor. The panels were related by the use of red paint. The other individuals did not perceive there to be any connection with other panels. As one individual said, "These are just relevant to fields in this canyon." (D2039) Two representatives perceived the panels to be like some located on the Shivwits Reservation, and one individual linked them to panels located at

Parowan, Utah. A majority of the representatives perceived the rock art site to be connected with other sites in the area.



Figure 5.40. Pictographs at Site 23

At each shelter the Paiute had, they placed a figure of the man on this wall to show other [Paiute] people it was okay to stay there. (AB2018)

It is like a map. A man had been here once, going different directions, and what's here, too. (DA540)

Archaeologist's Commentary

The rock art at the site should be recorded. Photography is recommended, but, because the site has such faded paintings, it may be necessary to trace some of them. The site does not exhibit any damage, probably because there are fewer people exploring the canyon walls at this location. Documentation will assure its preservation, at least in record form.

Site 24 - G:03:077

The site is located along a small, overhanging ledge of the Tapeats formation near the mouth of Three Springs Canyon. It is about 216 river miles downstream from Lees Ferry.

Several bedrock metates were noted near the rock art panel at the site, but no other cultural remains were evident. Three Springs Canyon is a cool place with a variety of stream-side

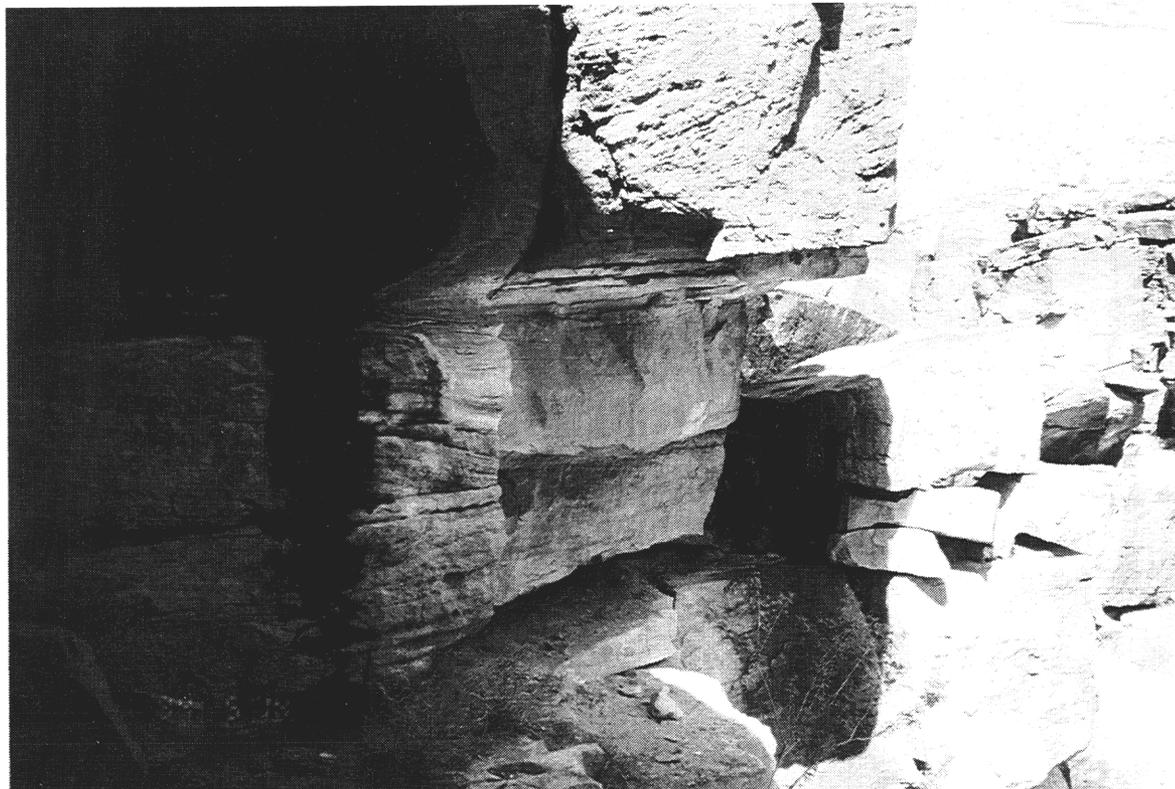


Figure 5.41. Overview of Site 24 - G:10:077

vegetation. It is a popular stop for tourists in the summer who use a trail that appears to receive regular maintenance.

The rock art is on a nearly vertical surface that is ENE at 40 degrees east of north. The panel is adjacent to a ledge of the sandstone outcrop, which is about 2 to 3 meters above the level of the creek.

Four figures remain visible in the panel. The most obvious of these are red-painted forms, with a vertical line bisected by horizontal lines which turn downward. If these designs represent animals, they must be something with multiple legs because one has four crossing lines (eight legs) and the other has three crossing lines (six legs). The figures may also represent plants. Two faded figures are difficult to decipher. One appears to be the torso of a v-shaped body with upper arms and a head. It may represent a human. The other design is eroded, but it once was a solidly painted area with a scalloped perimeter.

At present, although eroded, the site is in good condition. A single set of initials is scratched into the panel.

Southern Paiute Interpretation

Eleven interviews were conducted at this site. Seven representatives recognized the site as a living and farming area. Two of those individuals also said that ceremonies would have taken place at the site, and one identified it as a gathering place. Two individuals interpreted the site as a place for camping and gathering, one said it was a place for thanksgiving and harvest ceremonies, and one individual did not offer an interpretation of the site. The features noted at the site include fire and roasting pits, grinding stones, the river and spring water, plants, and animals.

A majority of the representatives said the panels at this site were made by Southern Paiutes. All but one individual said the panels were visited or used by Southern Paiutes in the past, and one individual said that Southern Paiutes currently visit or use the panels. None of the representatives said their families have visited or used the panels. According to a majority of the representatives, there are Paiute stories and legends associated with the panels at this site. Also, a majority of the representatives said that the panels would have been used by other Indian people. The Indian people named include the Hopi and Hualapai.

The significance of the red paint on the panels was noted by almost all the representatives. As one individual said, "The drawings of plants are done with sacred paint like they're praying for their plants to grow." (AB2019) The panels were identified by the vast majority of the representatives as being like



Figure 5.42. Pictographs at Site 24

those at other grinding areas. One individual recalled a site elsewhere in Arizona with similar figures that was also found in a grinding area. One individual linked the panels to those found above Parashant Wash (see Site 20 - A:15:018). The vast majority of the representatives perceived the site to be connected with other planting, grinding, and camping sites in the area.

The corn plant symbol for planting and harvesting prayers... There are certain types of ceremonies that our ancestors did before planting and harvesting - these ceremonies represent what we should always do when we use the basic elements of the universe. We do such ceremonies in order to live a harmonious life with nature. (R2028)

A story or record of the plant perhaps. (D535)

It looks like insects and they're pretty well sketched. The family that lived here made them. No one else came through to use them. (DA2038)

Archaeologist's Commentary

The site should be carefully recorded. Photography, at the standards currently used for rock art research, should be completed. Tracing of the faint figures should be considered as an option for recording them if they cannot be adequately photographed.

No good possibilities for dating samples were noted, and the age of the site is difficult to estimate. The design with the crossing arms or legs is found at other locations in the Grand Canyon. It may be possible to date it elsewhere and use the age, on the basis of stylistic similarities, to date the figures at this site.

Site 25 - G:03:080

The site is located about 222 miles downstream from Lees Ferry. The site is on the upstream side from 222-Mile Canyon, where there is a sheltered alluvial fan with multiple, jumbled blocks of basalt. Much of the area appears to have been used for food preparation, chipped-stone tool manufacture, and other day to day household pursuits.

The rock art is on a west-facing basalt outcrop beneath a shallow overhang. It includes eight to ten panels of red pictographs that are often on individual blocks of the fractured basalt. A few yellow paintings are also found among the red figures, and at least one of these, a yellow plant-like form, is superimposed on a painted, red surface. Primarily because of the way basalt fractures into rectangular chunks, the wall is collapsing at a steady rate. Part of one red pictograph, an abstract form, was found on the shelter floor about 1.5 meters downslope from the place where it fit back onto the wall to complete the painting.

Scattered ceramic sherds were found, including a polished ware with a reddish-brown exterior. The chipped stone includes cherts, and obsidian that is identified on the site form as coming from Government Mountain/RS Hill and Utah sources (site form dated 4/28/91). The



Figure 5.43. Overview of Site 25 - G:03:080

inventory of ground-stone tools is also varied and abundant. A groundstone mano with red pigment on it, presumably from preparing paint, was observed. Also noted was a deteriorated wood fragment that has holes in it as though it were used as the base-board in fire starting. A similar fire-starter board, covered with red ocher, and two spindles were found nearby.

The paintings include some anthropomorphs with triangular chests connected by short necks and with round heads. The lower bodies of these figures vary from triangular to round. The figures have arms and legs but no hands or feet. Other human forms are more stick-like, with legs and arms on straight, vertical-lined bodies. The majority of the paintings are abstract images of nested chevrons, concentric circles, nets or net-like patterns, and zig-zag lines.

The paintings are found in a variety of places at the site. Some are low and close to the present ground surface, others are in recesses behind the plants growing on the fractured wall, and others are on exposed points of the nearly vertical rock surface.

Southern Paiute Interpretation

Ten interviews were conducted at this site. Five representatives recognized the site as a seasonal living area where people stayed during the winter; one of those individuals also noted that ceremonies would have been performed at the site. Two other individuals identified the site

as a ceremonial site, two identified it as a camping and storytelling site, and one interpreted it as a lookout place. The features noted at the site include the river, hills, cliffs, grinding stones, pottery, stone chips, ash, rockshelter, and yellow pigment.

All but one of the representatives said the panels were made by Southern Paiutes. The vast majority of the representatives said the panels were traditionally visited or used by Southern Paiutes, one individual said her family traditionally visited or used the panels, one individual said Southern Paiutes currently visit or use them, and one said her family currently visits or uses them. All of the representatives said there are stories and legends associated with the panels; one identified stories that would keep away bad spirits up and down the river, and another said there might be stories of being chased by white people. The vast majority of the representatives said the panels would have been used by other Indian people. The Indian people named include the Havasupai, Hopi, and Hualapai.

The panels were identified by the representatives as being like other panels with red paint, particularly those near the *Ompi* (Hematite) Cave, above Parashant Wash (see Site 20 - A:15:018), at Three Springs Canyon (see Site 24 - G:03:077) and at Whitmore Wash (see Site 18 - A:16:001). Two individuals perceived the panels to be like those located on the Shivwits Reservation. All the representatives perceived the site to be connected with other living areas. Specific mention was made of the relationship between the site and Granite Park.

It depicts events that occurred here - the side of a mountain, a trail going up and down, men walking on a ledge. The one with a hat is a Spaniard or American. (AB2020)



Figure 5.44a. Pictographs at Site 25



Figure 5.44b. Pictographs at Site 25

It's telling you where something is or giving you some sort of a count like years. It's telling you what's there. (DA2041)

Trails, river crossings, corn planting ceremony, death, smudging offerings. The smudge marks, regardless of how meaningless they look, were ceremonial and made this a sacred place. (R2029)

Each of these panels may represent an individual. A lot of counting space for each person. There are a lot of male figures, several zig-zags. (D536)

Archaeologist's Commentary

The site appears to have been used extensively in the past 300 to 400 years. Although the rate of wood decay is not recorded for the region, the deteriorated wooden artifact at the base of the rock art panel cannot be extremely old. The ceramics and the lithics suggest the site was used by Paiute and Pai groups.

The rock art is important. It almost certainly is the product of these historic tribal groups, and it should be carefully recorded. A detailed map should be made of the rock shelter showing

the distribution of the rock art, along with other features and artifacts. A search should be made for other fragments of the pictographs which have fallen off the wall.

A photography station should be established to monitor the site. The nature of the basalt is such that there will be annual collapse of the rockshelter wall. A photographic record of the wall may be useful for any reconstruction of the origin of various pieces of basalt, especially those with pictographs on them. A well-thought out plan for the maintenance and care of this site should be developed. It should include instructions as to what to do if a recently fallen pictograph is found on the floor.

The individual pictographs should be photographed with black and white and color film. A set of archival photographs should be taken, and a set of photographs with scale, north arrow, color chart, and data board should also be taken.

Careful consideration should be given to possibly dating some of the rock art. The fragment which has fallen from the wall could be removed, dated, and returned to the site. Other fragments of the paintings will undoubtedly be found in future work at the site.

This site is extremely fragile. It needs to be recorded and studied before it is lost to erosion. Until it is intensively studied, the rock shelter should be off-limits to tourist traffic. Consideration should be given to protection of the fire board and spindles, and, if this is not possible, these should be measured and photographed before they are lost to a passerby.

PATTERNS

The individual Southern Paiute responses to the rock art panels and sites can be more fully understood in an analysis of the patterns of those responses. Taken as a whole, the sum of individual responses begins to approximate what is generally called the cultural system of a people. Individual variation is present within any society, but out of the individual responses can emerge shared and agreed upon beliefs, norms, and values. The diversity of approaches to rock art panels has been described in Chapter Four and presented in the site-by-site discussion in this chapter. The purpose of this section is to investigate what beliefs are shared. Nevertheless, there are many components to the meaning and significance of rock art sites in the *Colorado River Corridor*, and numerous interviews with a variety of ethnic group members are required to find out about the shared beliefs. Therefore, the following analysis is a work in progress, subject to revision in response to additional information from tribal members.

The Southern Paiute representatives had the opportunity to visit only 23 rock art sites in the *Colorado River Corridor*. Those sites represent the majority of known sites along the banks of the Colorado River between the Glen Canyon Dam and Diamond Creek, but they are only a small fraction of the rock art sites within the area. Therefore, an analysis of the patterns of Southern Paiute response is also offered as a means of using the responses to a selected non-random set of panels to predict the identity and meaning of all Southern Paiute rock art panels in the study area.

Cultural Significance of Rock Art Panels for Southern Paiute People

The question of cultural significance is a notion that is imposed on Indian people by Western societies seeking to choose between behavioral alternatives based upon some form of ranking (see Stoffle, Halmo, Evans, and Austin 1994). This study is conducted within a body of law and regulation that reflect the desire to identify resources that merit special attention or protection.

Previous studies of Southern Paiute cultural resources in the *Colorado River Corridor* have presented various methods for calculating the cultural significance of archaeological sites and plants (Stoffle, Halmo, Evans, and Austin 1994). The question of cultural significance of the rock art panels and sites was addressed by asking participants to indicate whether they considered the panels and sites to be of low, medium, or high significance for Southern Paiute people (see Table 5.1).

Table 5.1. Perceived Importance of Rock Art Panels and Sites

Site #	Perceived Importance (Number of Representatives)							
	Panels				Sites			
	Low	Medium	High	No Response	Low	Medium	High	No Response
1	1		9		1		9	
2		1	11			1	11	
3		2	8			2	8	
4		2	7			2	7	
5	1	5	5	1	1	5	5	1
6	1	4	7			4	7	
7		2	10			2	10	
8			12				12	
9			7	2			7	2
10		2	10			2	10	
11	1	4	7		1	4	7	
12			13				13	
14		1	8			1	8	
15		1	11			1	11	
16		1	10			1	10	
17	1	2	8	1	1	2	8	1
18		1	11			1	11	
19	1		8		1		8	
20		1	8			1	8	
22			9				9	
23		1	6	1		1	6	1
24	1	1	9		1	1	9	
25	1		9		1		9	

As shown, Southern Paiutes generally view all rock art panels and sites to have high significance. In general, as shown in Table 5.2, panels that have high significance are located at sites that are also considered to have high significance. Still, the correlation is not perfect. Representatives determined that some panels were highly significant even though the sites at which they were located were considered to have low or medium significance. Likewise, representatives determined that some sites were highly significant even though the panels located in those places were of low or medium significance.

Table 5.2. Relationship Between Importance of Rock Art Panel and Site

Importance of Site	Importance of Panel			
	Low	Medium	High	No Data
Low	2		2	
Medium	2	19	6	
High	4	12	195	2
No Data		1		3

Several aspects of the rock art panels were noted by the representatives and affect their perceptions of the significance of the panels. For example, the importance of red paint has been noted. Table 5.3 cross-tabulates whether the panel was pecked or painted with the perceived significance of the panels. Panels that were made with paint are significantly more likely to be rated as having high importance than those without paint ($p < .05$).

Table 5.3. Relationship Between Kind of Rock Art Panels and their Perceived Significance

Kind of Rock Art Panels	Panel Significance (Proportion of Respondents)*			Number of Respondents
	Low	Medium	High	
Petroglyph (pecked)	0.02	0.03	0.44	119
Pictograph (painted)	0.02	0.10	0.40	124
Total Respondents	8	32	203	243

*In five of 248 interviews, representatives did not respond to this question.

Another aspect of the rock art panels that may be related to their perceived importance is the condition of the panels. Southern Paiute representatives were asked whether or not they perceived the panels were being affected by both natural and human activities (see Chapter Eight). The representatives indicated that natural activities affecting the panels include wind and rain and that human activities affecting the panels include trails and vandalism. As shown in Table 5.4, there is no relationship between whether or not the representatives perceived there were natural activities affecting the panels and their rating of the panels' importance. However, as shown in Table 5.5, there is a relationship between the perception of human activities affecting a site and the perceived significance of the panels. Panels that representatives perceived were being affected by human activities were more likely to be perceived as having high significance while those that representatives perceived were not being affected by human activities were disproportionately likely to be perceived as having medium importance ($p < .01$). This relationship is not necessarily causal but warrants further attention. No other aspects of the panels were shown to be significantly related to the representatives' ratings of the importance of the rock art panels (see Appendix C).

Table 5.4. Relationship Between Perception that Rock Art Panels are Affected by Natural Elements and Their Significance

Rock Art Panel Affected By Natural Elements?	Panel Significance (Proportion of Responses)*			Number of Responses
	Low	Medium	High	
Yes	0.01	0.08	0.67	184
No	0.02	0.05	0.17	58
Total Responses	8	32	202	242

*In six of 248 interviews, representatives did not respond to this question or responded they did not know.

Table 5.5. Relationship Between Perception that Rock Art Panels are Affected by Human Activities and Their Significance

Rock Art Panel Affected By Human Activities?	Panel Significance (Proportion of Responses)*			Number of Responses
	Low	Medium	High	
Yes	0.01	0.03	0.49	127
No	0.03	0.10	0.35	113
Total Responses	8	32	200	240

*In eight of 248 interviews, representatives did not respond to this question or responded they did not know.

Uses of Rock Art Panels

Southern Paiute representatives associate uses with all panels they identify as having been made or used by Southern Paiutes. Panels are used (1) in connection with ceremonies, (2) to seek knowledge or power, (3) to communicate with other Indian people, (4) to communicate with the spiritual world, (5) to teach other Paiute people, (6) as territorial markers, (7) as decoration, and (8) for other purposes. Ceremonial uses include both general prayer and ritual preparation activities and association with specific ceremonies such as the Ghost Dance and healing ceremonies. Indian people seek knowledge or power from rock art panels by studying the figures on the panels. Rock art panels were used to tell stories, identify the locations of plant and animal resources, relate events that had happened, display maps of the area, and otherwise communicate with other Indian people. The panels are also used to communicate with the spiritual world, as when Southern Paiutes place red paint on rocks to ward off evil spirits. Southern Paiutes visit panels to teach others about Paiute history and culture. Rock art panels may also be used to mark Southern Paiute territory or specific geographic features such as a crossing point in the river. Only rarely did Southern Paiute representatives indicate that rock art panels are used for decoration. Finally, other reasons the representatives said that Southern Paiute people would visit or use the panels include to mark a burial area, shelter or living area, or "just to look at them."

Although the majority of rock art panels had not been previously visited or used by the Southern Paiute representatives, these individuals were able to use their knowledge of Southern Paiute tradition and culture and of similar rock art panels they had visited to interpret the panels in the *Colorado River Corridor*. Rock art panels can be characterized by whether or not they were used by the family of the Paiute person being interviewed as well as by Southern Paiute people in general. Occasionally, a panel is known specifically because it was used by a family member. Questions about family use of a panel may produce a rich discussion that is qualitatively different from a general discussion of how the ethnic group uses the site. For this reason, separate questions were asked about family use.

At each panel, the representatives were first asked to talk about the panels they were viewing. If they did not have anything to say about the particular panels at a site, they were asked about rock art panels they perceived to be *like* the panels there. As shown in Tables 5.6 and 5.7, when talking about *past ethnic group* uses of rock art panels, the representatives generally talked about the actual panels they were visiting. However, when talking about *current ethnic group* use and both *past and current family* use, they generally talked about panels that were *like* those they were visiting. In the following discussion, only data about the particular site visited is included for the *past ethnic group* use discussion, but all data is included for the discussion of *present ethnic group and past and present family* uses.

Table 5.6. Southern Paiute Past and Present Use of Rock Art Panels Visited on River Trips (Proportion of Representatives who Visited or Used the Panels)

Site #	Past		Present	
	Ethnic Group	Family	Ethnic Group	Family
1	0.73	0.00	0.00	0.00
2	0.83	0.00	0.08	0.00
3	1.00	0.00	0.00	0.00
4	1.00	0.09	0.22	0.00
5	0.58	0.17	0.17	0.17
6	0.83	0.17	0.08	0.17
7	0.83	0.00	0.08	0.00
8	1.00	0.08	0.00	0.00
9	0.56	0.33	0.22	0.11
10	0.92	0.08	0.08	0.00
11	0.92	0.00	0.08	0.00
12	0.85	0.23	0.08	0.31
14	0.67	0.11	0.00	0.11
15	0.75	0.00	0.17	0.00
16	0.91	0.09	0.18	0.00
17	0.67	0.00	0.08	0.00
18	1.00	0.17	0.17	0.08
19	0.78	0.11	0.11	0.00
20	1.00	0.22	0.22	0.11
22	0.89	0.00	0.00	0.00
23	0.75	0.00	0.00	0.00
24	0.91	0.00	0.09	0.00
25	0.90	0.10	0.10	0.10

Past Uses of Panels

Some rock art panels may have been used by Southern Paiute people for up to a thousand years. Certainly the uses of these panels changed during this time, but it is beyond the scope of the present study to assess such changes. What is assessed through the interviews is the total range of uses during this period for Southern Paiute people.

Table 5.7. Southern Paiute Past and Present Use of Rock Art Panels *Like Those* Visited on River Trips (Proportion of Representatives who Visited or Used the Panels)

Site #	Past		Present	
	Ethnic Group	Family	Ethnic Group	Family
1	0.27	0.55	0.73	0.45
2	0.08	0.75	0.50	0.58
3	0.00	0.64	0.55	0.55
4	0.00	0.67	0.44	0.56
5	0.00	0.50	0.33	0.33
6	0.00	0.58	0.50	0.50
7	0.00	0.67	0.83	0.42
8	0.00	0.50	0.50	0.42
9	0.00	0.11	0.22	0.11
10	0.00	0.58	0.67	0.58
11	0.00	0.58	0.58	0.50
12	0.00	0.31	0.38	0.23
14	0.00	0.11	0.44	0.22
15	0.08	0.58	0.67	0.42
16	0.00	0.55	0.36	0.45
17	0.08	0.42	0.58	0.50
18	0.00	0.33	0.58	0.33
19	0.00	0.33	0.44	0.22
20	0.00	0.33	0.56	0.22
22	0.11	0.44	0.56	0.44
23	0.00	0.63	0.63	0.50
24	0.00	0.55	0.55	0.00
25	0.00	0.50	0.40	0.00

The most commonly mentioned purpose for visiting or using rock art sites is communication with other Indian people. As one individual said:

A person of that time had a lot of common sense in communicating. This is key in human relations. (R502)

Table 5.8 illustrates the purposes for which the tribal representatives perceived Southern Paiute people visited or used the rock art panels in the past. All 23 rock art panels are perceived by at least some tribal representatives as having been visited or used by Southern Paiute people. All panels were perceived to have been visited or used for multiple purposes, but no panel could be categorized in terms of a single purpose.

Table 5.8. Purposes for Which Southern Paiutes Made, Visited, or Used the Rock Art Panels

#	Ceremony	Seek Knowledge or Power	Communicate with Other Indian People	Communicate with Spiritual Beings	Teach Other Paiute	Territorial Marker	Decoration	Other	Number of Representatives
1	6	3	10	6	2	0	0	0	6
2	7	2	11	3	2	0	0	1	9
3	6	2	8	4	1	1	0	0	7
4	1	0	5	0	0	0	1	4	6
5	2	1	3	1	0	3	1	1	6
6	3	1	4	1	0	3	1	2	7
7	2	1	6	3	0	2	0	1	8
8	6	4	6	4	2	1	0	2	6
9	5	0	2	4	0	0	0	4	1
10	3	1	10	2	1	1	0	1	7
11	2	0	9	1	0	5	0	1	7
12	7	1	6	7	2	1	0	0	4
14	5	3	1	3	0	0	0	0	1
15	8	0	1	4	0	0	0	5	7
16	4	1	7	3	0	1	0	1	6
17	3	1	6	2	0	0	0	1	5
18	6	4	8	1	0	1	0	4	4
19	3	1	3	1	0	2	0	2	3
20	3	0	7	1	0	0	0	0	3
22	3	4	3	2	1	0	0	1	4
23	1	1	3	1	1	0	0	1	5
24	4	1	5	3	0	0	0	4	6
25	4	3	5	4	1	0	0	3	5
Total	94	35	129	61	13	21	3	39	123

Table 5.9 shows the responses of tribal representatives to the question of whether they or any member of their family had traditionally visited or used the rock art panels. The Southern Paiutes recalled some family member visiting or using either the rock art panels in question or similar panels located elsewhere. The most commonly mentioned purpose for which family members visited or used rock art panels in the past is teaching other people, followed by ceremonies, seeking knowledge or power, and communication with spiritual beings.

Additional commonly noted purposes are ceremonial and communication with spiritual beings. As shown in the Tables 5.8 and 5.9, Southern Paiutes do not generally believe that rock art panels were made, visited, or used for decoration. In other words, this is saying that the Southern Paiutes believe that the vast majority of the rock art sites are meaningful.

Table 5.9. Past Family Visitation or Use of Rock Art Panels

#	Ceremony	Seek Knowledge or Power	Communicate with Other Indian People	Communicate with Spiritual Beings	Teach Other Paiute	Territorial Marker	Decoration	Other	Number of Representatives
1	2	3	2	2	2	0	0	1	6
2	3	2	2	3	7	0	0	1	9
3	2	2	1	3	4	1	0	1	7
4	0	0	0	0	5	0	0	1	6
5	3	1	1	2	1	2	1	1	6
6	4	1	2	2	2	2	1	0	7
7	2	1	0	2	4	1	0	2	8
8	1	4	1	3	3	1	0	1	6
9	4	0	2	3	0	0	0	2	1
10	2	1	2	2	3	0	0	0	7
11	1	0	1	1	4	1	0	0	7
12	4	1	1	4	1	1	0	1	4
14	1	3	0	1	0	0	0	0	1
15	5	0	0	2	0	1	0	4	7
16	2	1	1	2	1	1	0	1	6
17	2	1	1	0	1	0	0	2	5
18	3	4	1	1	2	0	0	2	4
19	1	1	0	0	2	0	0	1	3
20	2	0	1	0	2	0	0	0	3
22	2	4	0	1	1	0	0	2	4
23	0	1	0	0	2	0	0	2	5
24	2	1	1	1	5	0	0	0	6
25	1	3	1	0	3	0	0	2	5
Total	49	35	21	35	55	11	2	27	123

Current Uses of Rock Art Panels

Rock art panels can be characterized by current uses as well as past uses. For example, Southern Paiute people two hundred years ago may have used a rock art panel as they prepared to participate in a ceremony. Today, because Southern Paiute people were forced from the *Colorado River Corridor* and subsequently denied access to the area, they now have different reasons for visiting or using the panels, such as to help achieve cultural continuity by taking their children to the panels to teach them about past lifeways.

Table 5.10 shows the responses of tribal representatives to the question of whether Southern Paiute people currently visit or use either the rock art panels visited on the river trips

or similar panels elsewhere. Visitation as a result of participation in the Glen Canyon Environmental Studies was excluded from this analysis.

The most common reason Southern Paiutes currently visit or use rock art panels is to teach other Paiute people. It is important to note that the purpose of teaching goes far beyond relating the meanings of individual symbols to others. Southern Paiutes teach their children respect and cultural traditions at rock art sites. Visiting or using rock art sites for teaching is followed closely by going to these sites to seek knowledge or power and for ceremonial purposes.

Table 5.10. Current Southern Paiute Visitation or Use of Rock Art Panels

#	Ceremony	To Seek Knowledge or Power	Communicate with Other Indian People	Communicate w/ Spiritual Beings	Teach Other Paiute People	Territorial Marker	Decoration	Other	Number of Representatives
1	4	1	1	3	5	0	0	1	8
2	4	3	3	2	6	0	0	1	7
3	3	3	1	3	3	1	0	1	6
4	1	2	0	0	2	0	0	2	6
5	2	1	0	1	3	1	0	2	6
6	3	2	0	1	4	1	0	1	7
7	3	4	0	3	3	1	0	3	11
8	2	2	1	3	2	1	0	0	6
9	3	0	2	2	0	0	0	2	4
10	2	3	2	2	3	0	0	2	9
11	1	4	1	1	4	1	0	2	8
12	2	4	1	2	2	0	0	0	6
14	2	1	0	0	1	0	0	0	4
15	6	1	0	3	2	0	0	3	10
16	2	2	1	1	1	1	0	1	6
17	1	3	1	1	0	0	0	2	8
18	3	4	2	2	1	1	0	1	9
19	2	1	0	1	3	1	0	1	5
20	1	2	0	0	3	0	0	4	7
22	2	3	0	1	3	0	0	1	5
23	0	3	0	0	4	0	0	1	5
24	2	3	2	2	3	0	0	1	7
25	2	2	1	0	4	0	0	1	5
Total	53	54	19	34	62	9	0	33	155

Table 5.11. Current Family Visitation or Use of Rock Art Panels

#	Ceremony	To Seek Knowledge or Power	Communi- cate w/ Other Indian People	Communi- cate w/ Spiritual Beings	Teaching Other Paiute People	Territorial Marker	Decoration	Other	Number of Represent- tives
1	2	1	1	3	3	1	0	0	5
2	2	5	1	3	5	0	0	0	7
3	2	3	1	3	3	1	0	1	6
4	0	1	0	1	3	0	0	1	5
5	3	1	0	2	2	1	1	2	6
6	4	1	0	2	4	1	1	2	8
7	2	2	0	2	3	1	0	0	5
8	1	2	1	3	4	1	0	0	5
9	2	0	2	1	0	0	0	1	2
10	2	3	3	2	4	0	0	0	7
11	1	4	1	1	5	2	0	0	6
12	5	3	0	5	3	1	0	0	7
14	2	2	0	2	2	0	0	0	3
15	3	0	0	2	1	0	0	3	5
16	2	2	1	1	1	1	0	1	5
17	1	2	1	0	1	0	0	2	6
18	2	2	0	1	2	0	0	2	5
19	0	1	0	0	1	0	0	0	2
20	1	2	0	0	3	0	0	1	3
22	2	2	0	1	2	0	0	1	4
23	0	2	0	0	3	0	0	2	4
24	1	3	1	1	3	1	0	0	5
25	1	1	1	0	3	0	0	1	4
Total	41	45	14	36	61	11	2	20	115

Table 5.11 presents the responses of tribal representatives to the question of whether they or any members of their family currently visit or use either the rock art panel visited on the river trips or similar panels elsewhere. Again, visitation that occurred due to participation in the Glen Canyon Environmental Studies was excluded from this analysis.

Patterns of Response Based on Gender

Cultural resources are often distinguished by whether or not both men and women use that resource and for what purposes. Rock art panels and sites with restricted or special uses were often only visited or used by either men or women. Table 5.12 presents the responses of

tribal representatives to two questions concerning (1) whether men, women, or both traditionally used the panels and sites visited, and (2) whether men, women, or both currently use rock art panels and sites like those visited in the study area. According to the Southern Paiute representatives, every site was used in the past by both men and women. Men were mentioned as exclusive users at all but three of the sites, and women were mentioned as exclusively using three sites by at least one representative. Fewer Southern Paiute people currently visit or use the panels visited in the study, but the representatives said that there are similar panels that are currently used exclusively by men. Only one representative said there was a rock art panel that is currently used exclusively by women.

Table 5.12. Past and Current Use of Site By Gender

#	Past Use by Gender					Current Use by Gender				
	Men	Women	Both	Don't Know	Missing Data	Men	Women	Both	Don't Know	Missing Data
1	3		6					6		5
2	6		5			3		4		5
3	5		6					5		6
4	1		8			2		4		3
5	4		3			1		2		9
6	7		3		1			2	1	7
7	6		4			1	1	4		6
8	1		11					5		7
9	2		3			1		2		6
10	8		4			1		6		5
11	6		6			1		5		6
12	1		11					5		8
14		1	5			2		2		5
15	4		5	1		4		5		3
16	3		6			1		3		7
17	4		5	1		2		6		4
18	2		8	1		1		6		5
19	2	1	5					3		6
20	2		7					6		3
22	5		3	1		1		2		6
23			5					3		5
24		1	9					6		5
25	1		8					4		6
Total	73	3	136	4	1	21	1	96	1	128

The representatives' responses suggest that rock art panels in the *Colorado River Corridor* were used by groups of Southern Paiutes including men, women, and their children. These data suggest that in the past Paiute people lived for long periods along the river as part of their normal way of life. Despite changes in lifestyles and greatly reduced access, today some Southern Paiute families still return to these places or places like them near the Colorado River.

The perceived differences in use of rock art panels based on gender might be reflected in the way males and females interpreted the 23 rock art panels on the river trips. All responses were analyzed for gender differences and are presented in Appendix D. Only those where significant differences were noted based on gender are discussed in the following paragraphs.

The purposes for which representatives said that Southern Paiutes made, visited, or used the 23 rock art panels that were visited or used were cross-tabulated with gender. Representatives were allowed to name multiple purposes for each site, so each purpose was reviewed separately. Significant differences were observed in the representatives' perceptions of whether or not the panels were used for ceremonies, to seek knowledge or power, and as territorial markers. As shown in Table 5.13, females were more likely than males to interpret the panels as being used in ceremonies and as territorial markers. Males were more likely than females to say that the panels were used to seek knowledge or power.

Table 5.13 Gender-based Perceptions of Use of Panels for Ceremonial Purposes

Gender	Ceremony		Seek Knowledge or Power		Territorial Marker	
	Yes	No	Yes	No	Yes	No
Male	0.32	0.68	0.23	0.77	0.03	0.97
Female	0.45	0.55	0.03	0.97	0.15	0.85

Cultural Transmission

Cultural knowledge persists if it is transmitted from generation to generation. A common means by which Southern Paiute people pass on knowledge is to go to a place and do an activity there. Showing how to do something is bound up with showing when to do and where to do it. One of the most commonly mentioned restrictions on cultural learning is access, because without access to resource locations certain lessons cannot be taught. Stories are an important supplement to experiential learning for knowledge transmission. In addition, lost knowledge can return to Southern Paiute people because they believe that individuals who have prepared themselves properly can *talk to* rocks, water, mountains, and plants. During these conversations, these natural resources convey knowledge about themselves to the members of the living society. Tribal representatives pass along information about rock art panels to their children, grandchildren, young relatives such as nieces and nephews, and to tribal members who are not related to them. Tribal representatives were asked whether or not they had ever taught anyone about the rock art panels or ones like them. As shown in Table 5.14, females were significantly more likely to say they had taught someone about the panels than were men. Table 5.15 presents the responses of the tribal representatives to the question, "Who have you taught?"

Table 5.14. Cultural Transmission of Information About Rock Art Panels Based on Gender

Gender	Yes	No
Male	0.42	0.58
Female	0.54	0.46

Table 5.15. Who is Being Taught About Rock Art Panels

#	Number of Respondents	Children	Grandchildren	Other Relative	Friend, Neighbor	Southern Paiute Youth
1	7	3	2	3	2	2
2	7	5	3	0	1	2
3	7	4	2	1	2	2
4	5	3	0	1	2	1
5	6	4	2	2	3	2
6	6	4	2	2	3	3
7	8	5	2	2	2	1
8	8	4	4	1	3	1
9	1	1	1	0	1	1
10	8	5	2	1	4	2
11	7	3	3	1	3	1
12	5	5	4	1	1	1
14	2	1	0	1	0	0
15	6	3	1	0	2	0
16	5	4	1	0	1	1
17	4	4	0	0	1	1
18	4	2	1	1	3	0
19	2	2	0	0	0	0
20	4	3	0	1	2	0
22	3	2	0	0	2	0
23	5	3	2	1	1	1
24	4	4	1	0	1	1
25	3	1	2	1	0	0

How Sites Are Interconnected

The intricate web of relationships between people and places in the *Colorado River Corridor* having special resources and people in other areas with access to other special resources has been described (Stoffle, Halmo, Evans, and Austin 1994). Rock art panels and sites are frequently associated with other special resources and are elements in this web of relationships. Southern Paiute representatives were asked if the rock art sites were connected with other sites in the area and, if so, to what kind of sites and in what ways they were connected. The responses have been summarized in Table 5.16.

Of 246 responses to the question of whether or not sites were interconnected, the vast majority (87.4%) indicated that the sites visited in the study were connected to other sites. The sites were perceived to be connected both locally within the canyon and regionally with sites on the rim and beyond. These responses reflect the holistic perspective of the occupational complex

model that suggests that sites and their uses were determined within a network of trading and transhumant use relationships (see Stoffle, Halmo, Olmsted, and Evans 1990).

Table 5.16. Interconnectedness of Sites

Site #	Hunting/ Animal Sites	Living, Farming, Gathering Sites	Cere- monial Sites	Map, Travel Sites	Burial Sites	Nonspe- cific, "Other sites"	Not sure, Haven't seen yet	Other - Specific	Not Connected
1	0.36	0.27	0.18		0.09	0.09	0.27	0.09	
2	0.50		0.08			0.25	0.08	0.08	0.08
3	0.45		0.18			0.18		0.18	
4	0.22	0.11	0.22	0.33		0.22			
5						0.17			0.83
6	0.58	0.08		0.08		0.42			
7				0.17		0.42	0.17		0.25
8	0.18	0.09		0.17		0.36		0.27	
9		0.17	0.17	0.08		0.17		0.33	
10	0.08	0.25				0.33		0.17	
11	0.08					0.42		0.42	0.08
12			0.13			0.38		0.50	0.25
14						0.14		0.71	0.14
15								1.00	
16						0.27		0.73	
17						0.18		0.82	
18		0.11				0.22		0.56	0.11
19						0.13		0.63	0.25
20	0.29	0.14				0.14		0.43	
22						0.29		0.57	0.14
23		0.29				0.14		0.29	0.29
24		0.36	0.18			0.50		0.27	0.09
25		0.10				0.10		0.80	

As shown in Table 5.16, representatives were more specific about the particular interconnections between sites as they moved down the Colorado River. At the early sites, representatives were more likely to say they were not sure whether a particular site was connected to other sites or to give a nonspecific response indicating the site was connected without providing any details about the other sites to which it was connected. Clearly, as the representatives became more familiar with the sites and began to develop mental map of the region, they were able to relate the sites to one another. The most distinct pattern of connectedness was observed in what can be termed the "Anvil Complex," a system of rock art sites that the majority of representatives perceived to be related to one another with the Anvil as the focal point. The extent of the complex is not well defined; at least one individual perceived to be each of Sites 14, 15, 16, 17, 18, 20, and 25 to be related to the Anvil. At a minimum, the complex consists of Vulcan's Anvil, the "Shield Cave" at Site 14, the "smudging cave" at Site 15, and the cave at Site 16. Eighty percent of the representatives perceived Site 15 to be connected to at least the Anvil, 57 percent perceived Site 14 to be connected, and 55 percent included Site 16 in the group. In addition, 45 percent of the representatives perceived Site 17 to be part of that complex. Despite the high degree of agreement about the connectedness of these sites, at least one individual specifically stated that he did not believe Site 16 had anything to do with the Anvil. The nature and extent of this complex needs to be investigated further.

DISCUSSION

The Southern Paiute representatives faced a significant challenge interpreting rock art panels many of them had not previously seen by using their knowledge of Paiute traditions and practices and their experience with panels they perceived to be similar to the ones in the *Colorado River Corridor*. The respondents used the context within which the panels were found to help understand the panels. At the first few sites, some representatives commented that they needed to see more before they could fully understand the panels. After seeing several pictographs in the upper reaches of the river corridor, the representatives began to relate the rock art sites to one another as well as to sites on the canyon rim and to describe the panels in relation to activities that took place in the entire area. Similarly, the representatives noted a significant change in panel type when they began encountering pictographs. The initial sites were viewed as unique until the representatives had seen several sites and other significant features such as Vulcan's Anvil and the *Ompi* (Hematite) Cave. As they gathered information about the painted panels and the other places, the representatives were able to use their knowledge of Paiute traditions and culture, of particular stories of the river corridor, and of similar panels in the area to interpret the sites and assess their significance.

Now that I see this, [Site 14] must have been associated because they must have known this was here. All there right around here were all coming for the same reasons. They were putting their drawings on there so if they came back into this place the spirits would recognize them. The first time would be kind of a scary situation. They would put them things on there to signify that they were there. The

next time they came they would not need to be afraid. Now it seems like I have an idea that this is connected with the animal (DA2025).

Clearly, a key aspect of the rock art study was the opportunity for Southern Paiute representatives to visit many sites and develop an understanding of the panels *in relationship* to the other features within the river corridor. Additional information could be gained by having representatives revisit sites and visit them in a different sequence. The one-way flow of the river clearly constrains the research design and must be considered in future studies.

CHAPTER SIX

KANAV 'UIPI (WILLOW CANYON) ECOSCAPE STUDY

This chapter presents the findings from research conducted as part of a larger study to understand the rock art sites along the *Colorado River Corridor* within the Grand Canyon and how these are viewed by Southern Paiute people. This study is focused on one side canyon which is known in Paiute as *Kanav 'uipi* (literally Willow Canyon) and in English as Kanab Creek. Kanab Creek is the center drainage in a system of streams and canyons that lead into the Grand Canyon and the Colorado River. By examining sites in this side canyon system, it was hoped to obtain more information regarding the temporal placement and the cultural affiliation of various rock art types and styles located along the Colorado River. This side canyon study was designed to test the usefulness of cultural landscape concepts, especially that of *ecoscape* (see Chapter Four), for framing American Indian rock art research.

Two Southern Paiute Consortium Colorado River rock art trips were completed in May and in September of 1994; the Kanab Creek ecoscape study occurred from October 22nd to 28th, 1994. By the time of the Kanab Creek ecoscape study, most of the previous Southern Paiute interview data were analyzed and thus could inform the ecoscape study. Building on previous observations, the Kanab Creek ecoscape study was able to refine some earlier hypotheses as well as develop some new ones.

The Kanab Creek ecoscape study was somewhat of an experiment to see if information from a side canyon could contribute to the analysis of places along the main corridor of the Colorado River. As a result, the Kanab Creek ecoscape study was conducted on a somewhat smaller scale than the main canyon studies. It is important, therefore, to point out that while the Kanab Creek findings demonstrate the value of such a study, the level of research effort was insufficient to completely understand this ecoscape. An entire American Indian ecoscape cannot be understood from a few interviews conducted at a small number of places. Consequently, the interpretations of the Kanab Creek ecoscape should be considered preliminary. A full interpretation awaits further studies of unique plants, animals, mineral sources, and comparisons with other rock art sites.

DEFINING THE ECOSCAPE

Kanav 'uipi is a culturally special ecoscape within the Grand Canyon regional landscape. Physically the Kanab Creek ecoscape is defined by both a system of steep-sided canyons and

watersheds. Culturally the Kanab Creek ecoscape is defined by its contribution to the aboriginal adaptation of Southern Paiute people and to their ethnic groups' survival during the historic period.

Physical Parameters

The Kanab Creek ecoscape is the most extensive canyon and stream ecosystem to join the Grand Canyon regional landscape (see Figure 6.1). The greater Kanab Creek ecosystem, as defined by watershed hydrology, is more than 60 miles north to south and 40 miles east to west or about 6,013 square kilometers (Webb, Smith, and McCord 1992:6). Kanab Creek begins in the mountains of southern Utah and flows to the south. Tributary streams tend to be intermittent during some seasons but carry large volumes of water at other times. Hydrologists identify three distinct sections, called *reaches*: an alluvial reach from the headwaters to just downstream of Fredonia, Arizona, and two bedrock reaches below this point downstream to the Colorado River.

The Kanab Creek ecoscape, as defined by steep sided and bedrock canyons, is significantly smaller, being about 30 miles from the Colorado River to where canyon walls appear on the Kaibab Paiute Indian reservation and about 30 miles from the upper portion of Snake Gulch in the east to the upper portion of Hack Canyon in the west. The bedrock canyon that begins just below the juncture of Kanab Creek and its major tributary of Johnson Wash defines the beginning of a distinct bedrock reach of Kanab Creek (Webb, Smith, and McCord 1992:11), as well as the creation of a region of protection for Paiute people.

Cultural Parameters

Aboriginally, the Kanab Creek ecoscape fell within the territory or district of a local group of Southern Paiutes called the Kaibab Paiutes. The aboriginal boundaries of this *district* (see Chapter Four for definition of district) has been estimated as encompassing 4,824 square miles (Stoffle and Evans 1976). The southern boundary of the Kaibab district extended from the junction of the Paria and Colorado Rivers downstream until just beyond Kanab Creek (Euler 1966, Kelly 1934, 1964). The western boundary extended northward, crossing the Virgin River just east of the contemporary town of Toquerville, Utah, and ending at the Kolob Plateau. The northern boundary proceeded from that point to the Paria River, which formed the eastern boundary.

Riverine and spring oasis farming were central to Kaibab Paiute aboriginal adaptation in this district, and the permanent waters of the Kanab Creek ecosystem were a key oasis. Kaibab Paiute people farmed the length of Kanab Creek from at least Long Valley in the north to near the delta on the Colorado River. Plants were gathered in this special ecosystem; the term "Kanab" comes from the Paiute term *kanav* (willow). The Paiute term *Kanav 'uipi* (willow canyon) refers to the large expanse of willows which grew near Paiute residences all along this creek (Kelly 1964:9, Sapir 1930:629). Before Euroamerican settlement Kanab Creek even lacked a water course in the upper alluvial reach near Kanab, Utah. Instead, here was an alluvial plain with abundant native willows and other riparian vegetation (Webb, Smith, and McCord

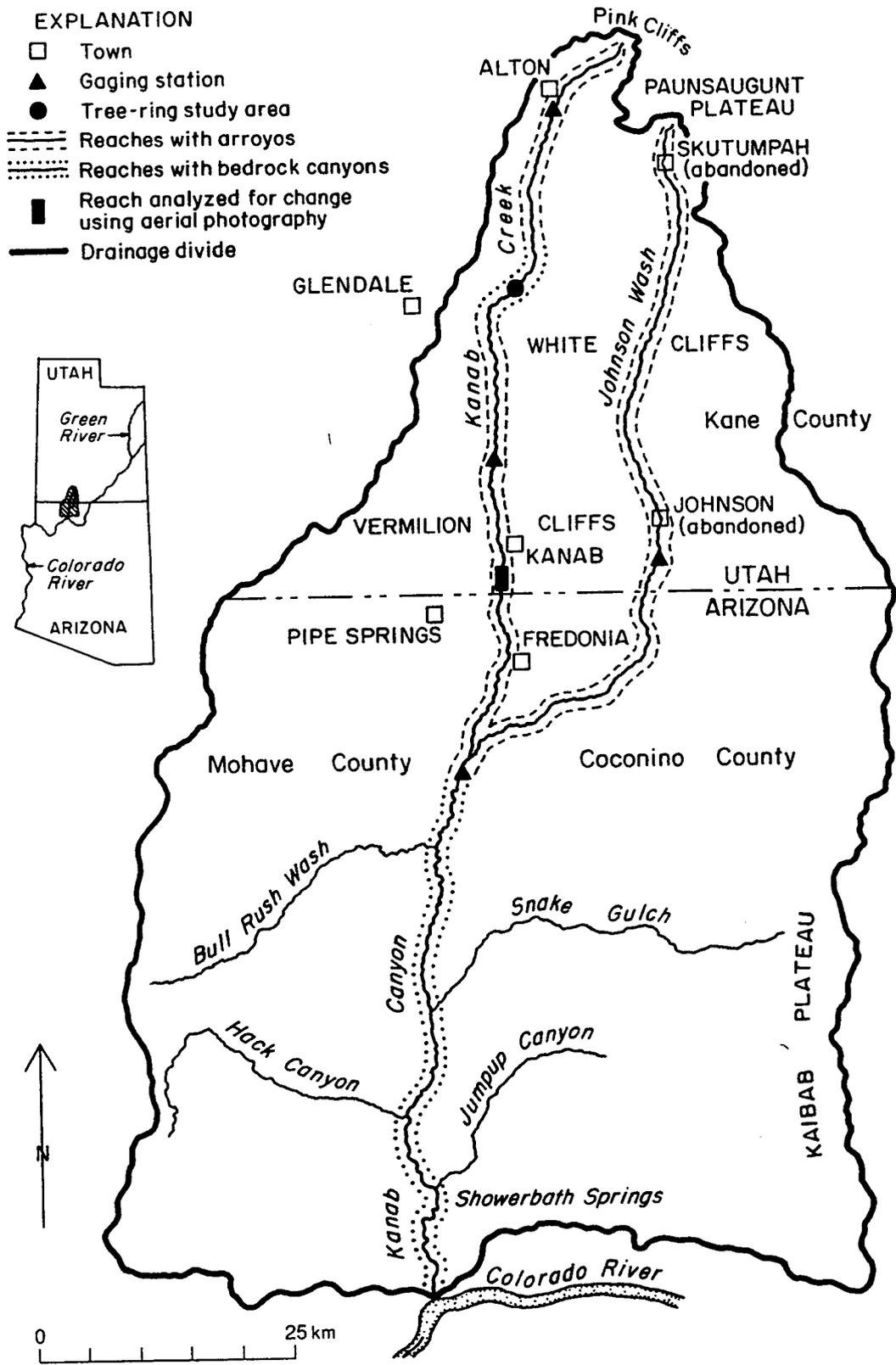


Figure 6.1. The Kanab Creek ecoscape (adapted from Webb, Smith and McCord 1991:2)

1992:15). All along this upper reach of Kanab Creek and Johnson Canyon, the groundwater table was within a meter of the surface most of the year (Webb, Smith, and McCord 1992:15). Animals of all kinds lived and were hunted in this ecosystem, making it even more valuable to Kaibab Paiutes. Finally, Kanab Creek ecoscape contained one of the major north-south access trails from the mountains of southern Utah to the Colorado River water boundary. Goods and materials flowed along this trail to and from neighboring tribes to the south. Transhumant Paiutes took this trail to harvest plants and animals distributed in different environmental niches.

Region of Refuge

The Kanab Creek ecoscape is a persistent *region of refuge* for Southern Paiutes, especially because they used it as a protected area between 1870 and 1900. During a trip from Pipe Spring to Mount Trumbull in 1876, Dellenbaugh (cited in Euler 1966:90-91) noted that "The Indians are off down towards the canyons. They killed a horse and some stock and are rather shy, especially as Tom Pierce had one of them whipped in St. George." Paiute people needed the walls and isolation of the Kanab Creek ecoscape for protection.

This was a period of Euroamerican domination of Southern Paiute lands, marked by the 1870 treaty between the Mormons and the western Navajos. After this treaty, Mormon reliance on Southern Paiute labor declined; consequently, Paiutes were systematically excluded from farming lands and labor positions in Mormon settlements (Stoffle and Evans 1976). Once the Navajo threat to Mormon communities was resolved by the treaty of 1870, Navajo people were invited to trade at Kanab and other Mormon communities. During these trading visits, Navajos switched from trading with Mormon communities to raiding Southern Paiute camps. Thus the eastern boundary of Southern Paiute territory was broken by the Mormon treaty and subsequent economic relationships between the Mormons and the Navajo people. After 1870, Southern Paiute people were increasingly driven into lower Kanab Creek where they farmed in relative isolation and security until the turn of the century.

The 1872 announcement that one of Powell's party found gold at the mouth of Kanab Creek stimulated a temporary but traumatic intrusion by gold miners (Fowler 1972:98; Stoffle and Evans 1976). When these miners found that the gold was located on alluvial flood plains at the junctions of creeks, interest declined, miners left, and again the area became available for use by Southern Paiutes. Unfortunately, the gold was found in places that had been prime Paiute farming areas, so the mining must have adversely impacted Indian irrigation systems and farming lands. The intrusion must have had great psychological impacts, a point that should not be lost when reading the following Paiute interpretations of rock paintings in Kanab Creek.

The early 1870s marked a time of new ecological threats to Paiute farming, hunting, and gathering in Kanab Creek. Euroamerican removal of trees in Southern Utah, dams, water diversion systems, and overgrazing most likely contributed to a series of devastating erosion episodes that down-cut the channel of Kanab Creek. Flooding was also caused by a higher than normal period of rainfall (Webb, Smith, and McCord 1992:22-23). Catastrophic failure of dams during floods locally increased stream power of Kanab Creek, possibly exacerbating erosion

(Webb, Smith, and McCord 1992:15). The impact of these erosion episodes is best known where Mormon farmers had taken over Paiute fields, as in the Mormon towns of Kanab and Fredonia on Kanab Creek and Skutumpah and Johnson on Johnson Wash. One farmer in Johnson Canyon plowed a ditch down the center of the valley so the meadow could be drained and the natural grasses could be cut and dried for hay (Robinson 1972:2, 17, cited in Webb, Smith, and McCord 1992:15). By the mid-1880s, portions of the alluvial reach were drastically entrenched. After 1885, the alluvial meadows had a stream channel that was about 18 meters beneath its former level and 21 meters wide for a distance of 24 kilometer (Webb, Smith, and McCord 1992:15).

Overgrazing by large Mormon private and church herds that were kept in the Arizona Strip during this period contributed to these erosion episodes, and also had another adverse impact on Paiute life styles. The roaming cattle and sheep grazed out the extensive stands of natural plants that Southern Paiute people carefully managed. Plants like chia (*Salvia columbariae*), Indian rice grass (*Oryzopsis hymenoides*), stick leaf (*Mentzelia albicaulis*), and sunflowers (*Helianthus* sp.) were concentrated and made more abundant by selective burning, harvesting, planting, and even flood plain irrigation. Such fields of natural plants were primary targets of free roaming cattle, sheep, and goats (Parry 1875:204, Fowler and Fowler 1971:22). When Southern Paiute land managers were forced off of these managed fields of natural plants, the composition of the plant communities changed rapidly to less productive species (Webb, Smith, and McCord 1992:21). Thus the ecology of the region was changed during this period, further biologically stressing Southern Paiute people in general, and specifically the Kaibab Paiute people.

Euroamerican territorial encroachment into neighboring Southern Paiute districts caused other Paiute peoples to move into the relatively isolated Kanab Creek ecoscape. To the north, the Kaiparowits district Southern Paiutes experienced settler intrusion causing some of the Kaiparowits people to move across the Colorado River and live with San Juan Southern Paiute at *Kaivyaxaruru* (Navajo Mountain, Utah) and some of the Kaiparowits people to move in with the Kaibab people. Immediately to the west of the Kaibab Paiutes lived a local group called the Uinkaret Paiutes, whose name refers to the Ponderosa pines that grow on *Yuwinkaret* or what Powell (or a member of his party) called Mt. Trumbull (Fowler and Fowler 1971:138). When their lands were encroached upon, the Uinkaret Paiutes moved to live in both the Shivwits-Santa Clara district and the Kaibab Paiute district. Contemporary people at both Kaibab and Shivwits reservations say that some Uinkaret people came to live with them. Kelly's 1934 study (Kelly nd:153) recorded the names of two Uinkaret people living with Shivwits people. It is interesting to note that one of the side canyons of Kanab Creek is called Kwagunt Hollow, and further east on the Colorado River is a stream called Kwagunt Creek near a place called Kwagunt Butte. These places were named by Powell in the 1870s after *Quagunti*, a Uinkaret Paiute (Fowler and Fowler 1971:139). These data suggest that the mid-1870s some Uinkaret people had come to live at these locations with the Kaibab Paiutes who primarily lived in the Kanab Creek ecoscape throughout late 1800s.

The Ghost Dance

When Kanab Creek is viewed as a Southern Paiute ecoscape, it causes a broader set of questions to be asked than if the rock art sites there were simply analyzed one at a time. Viewed as an ecoscape, for example, it can be expected that rock art produced during the Paiute period of occupation would reflect the ways that Paiutes used the ecoscape at that time. More specifically, given the ecoscape's use as a region of refuge in the late 1800s, it is expected that some of the rock art would reflect this key role. In fact, this theme does emerge in many of the following interviews.

Kaibab oral tradition says that a Ghost Dance ceremony was conducted in Kanab Creek in the latter part of the 19th century. During the summer of 1975 and 1976, Dr. Stoffle and other members of his ethnographic field crew were taken by the Chairman of the Kaibab Paiute tribe to this Ghost Dance location. The tribal chairman specifically wished to have the rock paintings recorded and his family's oral history recounted. Photographs of the Ghost Dance paintings were turned over to the Kaibab Paiute tribe at that time, and a copy of the contact prints and negatives were retained by Stoffle. Interviews conducted almost 20 years later document that this site continues to be associated with a Ghost Dance ceremony. Photographs taken in 1975 were used to compare the physical conditions of the rock art panels during the 1994 field session.

This Ghost Dance ceremony was conducted at an isolated location where the canyon of Kanab Creek begins to form. At the time of the ceremony, white paintings were placed on a sandstone cliff. It is not clear from this oral testimony whether the paintings were part of the ceremony or a record of the ceremony. Either way, the rock paintings mark where the Ghost Dance occurred, according Kaibab Paiute oral tradition.

The Ghost Dance movement sought to restore dead animals, destroyed botanical landscapes, and dead ancestors to their aboriginal condition, so as to shift power from Euroamericans (who would not survive the event) back to Indian peoples. According to Indian visions, the millennium would occur more quickly if Indian people performed the Ghost Dance ceremony. Old Mike, a Hualapai elder interviewed by Kroeber (1935:200), remembered a dance held in September of 1889 at Grass Springs, near Pierce Ferry, Arizona, that involved the following:

When night came all the girls and boys started to dance in a ring, alternating and holding hands. They started circling with a short step when the singing began. They alternated in a clockwise and counterclockwise direction. In the center was a fire, and there were also fires on the outside at some distance. The older people of my age stayed by the fire and watched the young people dance. Jeff knew the Paiute song and he sang. The boys wore their underwear and the girls wore white cloth dresses like coveralls. They painted their faces with qwada (red hematite) and matinyatc [white paint].

The people danced around a pole that was painted with a spiral and had eagle feathers at the top (Dobyns and Euler 1967:3). Anglo visitors to this dance noted that about five hundred Hualapai attended the dance (Dobyns and Euler 1967:5). The Hualapai gathering at Grass Springs lasted four months, during which dances occurred that lasted up to 15 days (Kroeber 1935:200). White clay was a key element in the dance. Havasupai Ghost Dance leaders, for example, told visiting Hopi traders that they must wash their bodies and paint them with white clay before entering the Ghost Dance encampment (Dobyns and Euler 1967:26, Mooney 1896: 813). Large quantities of white pigment would have been required for hundreds of dancers to cover their bodies for day-after-day of ceremonial dancing.

The Ghost Dance ceremony is best understood as a response by Indian people to stresses produced when Euroamericans encroached on Indian holy lands (Osterreich 1991). These stresses include depopulation from diseases (Thornton 1986), animal disruption of native plant areas (Crum 1994:62-63), decline of Indian food animals (Lesser 1933), dislocation from springs and rivers resulting in the loss of access to farming areas (Dobyns and Euler 1967), social disruption (Jorgensen 1969), a power shift from competition to domination (Stoffle and Evans 1976), and even religious disruption deriving from the failure of traditional religions to either explain or deal with the encroachments (Dobyns and Euler 1967:vii).

The Ghost Dance is recognized by scholars as potentially building on the ideas of the northwest coast Prophet Dances that began in the early 1800s (Spier 1935) and flourished as a series of revitalization movements between the 1870s and 1890s. The visions of Northern Paiute shamans began two Ghost Dance movements that spread to hundreds of Indian groups. Although each Indian group adapted the ceremony to fit its own culture, the reasons for dancing seem similar. Hittman (1973a) suggests that the 1870 movement was predicated on massive Northern Paiute social and economic deprivation and that the 1890 second Ghost Dance movement was further stimulated by a charismatic leader whose name was Wovoka (Jack Wilson).

After the 1890 Ghost Dance, native peoples continued to seek supernatural solutions to encroachment problems through the Native American Church, which is the organizational outgrowth of what is called the peyote or mescal religion (Stewart 1987:34), the Bear Dance, the Sun Dance, opiates (Hittman 1973a, b), and conversion to Christian religions (Dobyns and Euler 1967:57), including Mormonism (Lanternari 1963; Smoak 1986).

The Pai and Southern Paiute people exhibited all the symptoms of peoples under stress that seem to be a precondition for the Ghost Dance to occur. During the 1860s, all major riverine and spring oases north of the Colorado River had been either settled by Euroamericans or encroached on by their livestock. Only a few side canyons and the Colorado River itself remained under the control of the Paiute people. Conflicts and land loss caused many Southern Paiutes to move to the south side of the Colorado River to reside with their Pai neighbors in relatively more protected lands such as Havasu Canyon, Peach Springs Canyon, and Grapevine Wash. When these lands, too, were threatened, Paiute warriors fought along side the Pai warriors in the Hualapai War (1867 to 1869). After the U.S. army defeated the native resistance movement, many Paiute people moved to isolated places along the Colorado River and

back across the Colorado River to isolated regions of refugee like Kanab Creek. Again, 1870 seems to be a accurate date to mark real power shifts in the relationships between Euroamericans and the Pai and Paiute people.

Following the Mormon treaty with the western Navajos and the defeat of the Hualapai, Southern Paiutes increasingly turned to supernatural solutions for their problems. In 1875, there was a mass conversion to the Mormon religion on the Virgin River drainage near the town of St. George. Mormon accounts indicate that the 197 persons baptized or blessed in this ceremony represented nearly the entire Shivwits-Santa Clara Paiute tribe (Bleak 1954:409). Euler's (1966:93) research suggests that the conversion stemmed from shamanistic visions and was probably an attempt by the Paiutes to relieve the stress conditions confronting them.

The Shivwits-Santa Clara Paiutes' participation in the Ghost Dance is largely recorded by a study of the Hualapai Ghost Dance. In 1929, a team of ethnographers under the leadership of A. L. Kroeber conducted an ethnographic study of the Hualapai. Hualapai people told the researchers that the Ghost Dance was introduced to them "from the Paiute of St. George and St. Thomas in 1889..." (Kroeber 1935:198). After a Paiute leader named *Panamaita* had visited the Hualapai in the company of Jeff, a Hualapai shaman, several Hualapais traveled to the St. George area to participate in the Ghost Dance there:

a party of prominent Walapai, including Jeff and several recognized chiefs, went to St. George and witnessed the dance (Kroeber 1935:198).

A Hualapai with the initials M.P. told Mekeel that:

Once chief Serum and chief Kwasula wanted to visit the Paiute and see if this dance were true. They went in August. They took some men with them and traveled on horseback to Panyimsavokua on the other of St. George. There they danced with the Paiute. They stayed with them for a month and came home (Kroeber 1935:199).

Another Hualapai person with the initial K.J. told Mekeel that:

Kjinpuka, Jeff went to the Ghost Dance. Tamnada went. Oava'dima, my father Kua'da, Levi-levi, Serum, these four went as far as St. Thomas. The dance was held at St. George. They went there the next night. Sticks were put around in a circle. People danced in a circle around a pole. The dance stopped the forth morning. Jeff and Tamnada learned all their songs (Kroeber 1935:201).

Clearly, Pai oral history tells of the ceremony being taught to the Pai by their Paiute neighbors and records the physical movement of people back and forth across the Colorado River. Paiute people participated in both Hualapai and Havasupai Ghost Dance ceremonies. It has been suggested by Henry Dobyns (personal communication) that the biggest Hualapai ceremony may have been held at Grass Spring near Pearce Ferry and the Colorado River in order to facilitate

Paiute attendance. Both documents and oral history convey a picture of Pai and Paiute people working together to resolve massive social and environmental problems resulting from territorial encroachment by Euroamericans. After 1870 both Pai and Paiute people used the Colorado River and its side canyons as regions of refuge.

Downstream along the Colorado River, the Hualapai and the Havasupai both traveled to Chemehuevi Valley to dance the Ghost Dance with the Paiute people there in 1891. People from many tribes danced with the Paiutes at a time when a voice from above would speak to the dancers. According to George Laird, who participated in the Ghost Dance, the voice spoke to the dancers from different tribes in their own languages (Laird 1976: 44-45).

What connections could have been established between the Pai and the Paiute people who lived in the Kanab Creek ecosystem after 1870? Is it possible that essential ceremonial items such as white paint moved across the river and that the Pai people participated with the Kaibab Paiutes during their Ghost Dance ceremony in Kanab Creek? The major source of white paint for the Pai was a cave called (*Ookwata Giyo*) located about 20 miles up the Bill Williams River. Pai access to this important paint source was lost by the 1870s, so when they needed large quantities of white paint for the 1890 Ghost Dance where did they acquire it? Perhaps the extensive white paint source at the Kaibab Paiute Ghost Dance site (see discussion below) was the source. If so, it would be possible for the Pai to have participated in the Kaibab Paiute Ghost Dance held next to this white paint source. The possibility of Indian tribes jointly using a paint source, trading for paint, and ceremonially dancing fits with the broader model of cultural landscapes presented in Chapter Four.

One final bit of information about the religious importance of the Kanab Creek ecoscape comes from the 1932 to 1934 study of the Southern Paiutes by Isabel Kelly (1939:151-152). In her analysis of Paiute shamanism, Kelly recorded the names of recent but not then living shamans. Kelly's informants knew the names of twenty shamans from the Kaibab Paiute district, and only two of these were women. One of these women shaman was named *Tcantuya* (slashed forehead) and she lived in *Kana diuip* (willow canyon; Kanab Creek). *Tcantuya* was the only shaman known to Kelly's informants to have lived in the Kanab Creek area, so *Tcantuya* must have been powerful to singlehandedly attend to all spiritual needs of the people living in her area. It can be assumed that *Tcantuya* practiced with her Kanab Creek people in the late 1880s, before the Kaibab Paiute reservation was established and the Paiute people in the district were all moved to the new reservation in 1907.

In summary, the Kanab Creek ecoscape has a special place in the traditions of Southern Paiute people. As such it is expected that the rock paintings they made while living in this ecoscape would reflect the role of the ecoscape as well as the specific role of the site or ceremony associated with the rock paintings. More recent rock paintings are expected to reflect Southern Paiute people's stress from Euroamerican encroachment on lands elsewhere and thanks for the relative protection afforded by the Kanab Creek ecoscape.

METHODS

The Kanab Creek study was somewhat unusual because it involved testing hypotheses derived from the two previous Colorado River rock art studies as well as ones of its own. A key issue was the difficulty of access to most of the rock art sites. More than 26 miles of backpacking was required to reach these sites, so only a few Southern Paiute elders could make the hike, and those that came required assistance with their gear. Horse packers and their horses made two trips: the first to drop water and food at camps along the way, and the second to carry the heavier equipment and gear of elders. Threatening weather and a funeral at the Shivwits Indian Reservation caused some elders to withdraw from the backpacking trip. Those Southern Paiute people who came, however, were knowledgeable about the environment and excited about the trip.

Archaeologist's Commentary

Between October 22 and October 28, 1994, the Southern Paiute Consortium research team visited rock art sites in Kanab Creek north of the Colorado River. Site visits began on the Kaibab Paiute Reservation. Later site visits occurred about 21 miles to the south in that portion of Kanab Creek that is located within the Kanab Creek Wilderness Area. Representatives from the Southern Paiute Consortium were officially guided by Terry Burke, an archaeologist with the United States Forest Service, when visiting sites in the Kaibab Creek Wilderness.

Rock art sites are abundant in the side canyons of the Grand Canyon. In the course of this project it was possible to visit 12 sites, although time permitted only 8 sites to be fully studied. These 12 sites represent approximately 25 percent of the recorded sites in the areas visited. It is difficult to estimate what percentage these 12 sites represent of all rock art sites in the Kanab Creek ecoscape because most of the canyons have not been surveyed.

The sites visited represent a variety of different rock art styles. Some of the sites were large and complex with multiple styles, while others exhibited only a single style. This was especially helpful in sorting out the elements of one style when compared to another. It also was possible to learn significant information regarding the distribution of rock art motifs. The stenciled plant figures found in the Grand Canyon at the Deer Creek ecoscape, for example, were found at sites along Kanab Creek in the side canyon research. These data helped to further refine the parameters of a Southern Paiute rock art style.

The large number of superimpositions discovered at the rock art sites on the Esplanade were helpful in determining a sequential order for several styles. Although more research needs to be completed, it is possible with the current data to offer tentative remarks regarding the temporal placement of rock art styles from what is called the Archaic period to the Historic period.

Another issue of importance in the side canyon research was the distribution of pigment sources. It was particularly interesting to know if the pigment sources in the Grand Canyon were

rare and sought by various groups who may have made treks to get them. While this may be true for the high grade hematite found in the Grand Canyon, white pigments are available at locations along Kanab Creek and probably not a resource sought through expeditions. This pattern may have changed during the Historic period as other Indian groups lost access to their traditional sources of white paint.

Numbering System

Rock art sites on the Kaibab Paiute Reservation have not been assigned official site numbers, and they are referred to in the text in consecutive numerical order, while the sites on Kaibab National Forest lands have numbers within the Forest Service's master numbering system. The latter sites are referred to in the text by either the official Forest Service numbers or a consecutive number assigned during the project. Several of the sites were not included in the part of the report that contained Southern Paiute Consortium interviews. These sites are described briefly at the end of this chapter because they exhibit information that is helpful in understanding the distribution of the rock art in time and space.



Figure 6.2. Overview of Kanab Creek study area

KANAB 'UIPI ROCK ART SITES

The following discusses Kanab Creek ecoscape rock art sites that were visited by the Southern Paiute Consortium study team. The sites first visited (Kanab Creek # 1 - # 4) are located on the Kaibab Paiute Indian Reservation at a point that is being defined as the beginning of the Kanab Creek ecoscape. Here the first canyon walls appear in Kanab Creek as it begins to flow into the canyon system that eventually joins with the Grand Canyon. Evidence of American Indian occupation occurs on both sides of the canyon in the form of rocks used in the walls of homes, extensive scatters of pottery sherds, and worked stone materials. A formal archaeology survey has not been conducted in this portion of the reservation, but there is an extensive body of relevant oral history.

Kanab Creek Site # 1 (Swallow Nest Site)

The site is in a reddish colored sandstone outcrop on the east bank of Kanab Creek on the Kaibab Paiute Reservation. The paintings are about 8 to 10 meters above the level of the creek. The sandstone outcrop does not continue to the opposite bank of the creek where the steep banks of cut and fill sequences are evident. The immediate creek banks are presently lined with tamarisk trees (*Tamarix pentandra*), which presumably have replaced native willow, cottonwood, and other water dependent species.

The rock art at the site is near the northern end of the outcrop beneath an area of the overhanging sandstone wall. The rock art is dominated by paintings in white on a panel about 7 meters across in horizontal distance. Human figures with straight vertical bodies, rounded shoulders connected to downward curving arms, and rounded torsos attached to downward curving legs are found throughout the panel. Some of the figures are purposefully depicted headless. In general they do not display details like fingers or toes, nor do they support head decorations. Animals are shown in profile, some with exaggerated antlers that apparently indicate deer.

Southern Paiute Interpretations

Four interviews were conducted at this site. The site was recognized by all four people as being associated with the Indian sites in this part of the reservation and Kanab Creek. The site is located at the beginning of what is being called the Kanab Creek ecosystem, where the protective rock walls begin to define the bedrock reaches of Kanab Creek. Immediately across from this rock shelter are low hills strewn with various types of pottery sherds, stone tool materials, and the stacked stones of residual walls, all bearing evidence that many Indian people lived near this site for long periods.

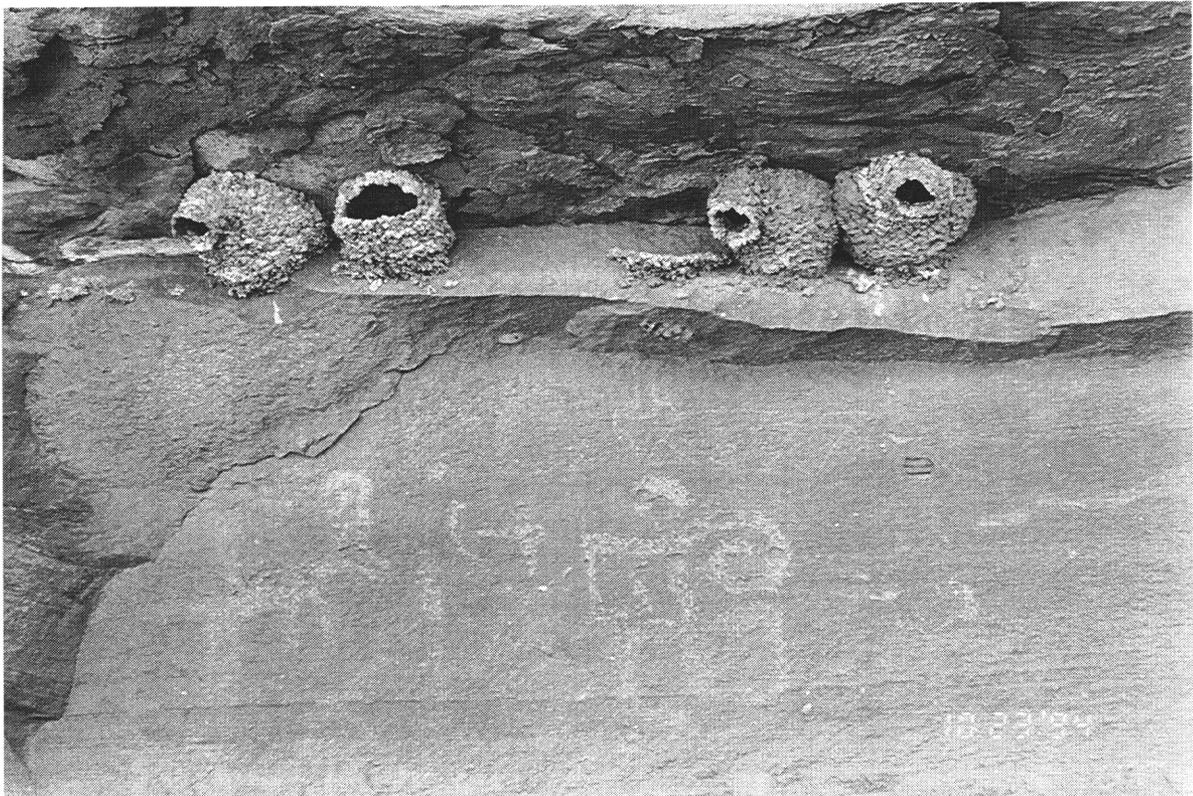


Figure 6.3. Pictographs at Site # 1

The rock art found on the sandstone cliff was interpreted as telling a story that was similar to but not identical to that in Kanab Site # 4 (Ghost Dance). The place was seen by all people as being where ceremonies had been conducted. The Indian people from those times placed the rock paintings to convey the story of what happened to Indian people here and nearby in the region.

The site and panel are well known by the people interviewed and generally well known by people who live on the reservation. The site had been visited by these Indian people in the past. One of the Paiute representatives brought her young son to visit the site during the interviews. She taught him about the rock art and the place as they participated in the study. Later after the interviews were completed, one of the women called her father to tell him of the visit to this and the other sites in this immediate area. He was aware of the sites and noted that he had recently hiked into the area to check on the sites to make certain they had not been disturbed by outsiders. The sites and immediate area around them are continuously involved in the lives of Paiute people.



Figure 6.4. Pictographs at Site # 1

Many animals appear painted on the sandstone wall. These were interpreted as being a part of stories told of hunting deeper in the Kanab Creek ecosystem. "When Indian people came out of the canyon they would come here and talk about the sheep, the hunting, and the trails." No other Indian groups were perceived as ever living at this site or making these rock paintings.

Archaeologist's Commentary

Although the site obviously bakes in the afternoon sun, it is in relatively good condition. Birds (cliff swallows and owls) are a present threat to the site, with the discoloration from their mud nests and dung stains on the rock wall in several places. Currently, the cliff swallows appear to have been driven from the site by owls, but the owls are equally damaging to the rock wall.

The rock art at this site, in comparison to neighboring sites, exhibits less evidence of multiple use episodes. The paintings are primarily the recent style identified in the Grand Canyon as the products of the Paiute or Pai tribes. The position of the site on the north side of the Grand Canyon on the Kaibab Paiute reservation in traditional Paiute territory supports a Paiute authorship for this rock art style.

Several human figures at this site are placed on the rock wall at joints or adjacent to faults in the rock where there is insufficient room to complete the heads. The resulting figure is a headless form which appears to be coming out of the rock. Figures like this were noted at other sites in the side canyons - Kanab Creek # 2, Kanab Creek # 4, FS # AR-03-07-03-1019, and FS # AR-03-07-03-1258; the figures are also found in the Grand Canyon at the Whitmore Wash site (A:16:001) and 222-Mile Canyon (G:03:080). The unique way the acephalous figures are placed on the rock is suggestive of a link between sites in both areas.

Kanab Creek Site # 2 (Mu'uputs Nest Site)

The site is located about 100 meters south of Site # 1 on the east bank of Kanab Creek. It is on the same outcrop as its neighbor, but the distance between the areas of rock art is great enough to assign it a separate number.

There are two main panels of rock art at the site. The most northerly, about 1 meter in width by 2 meters in height, includes white painted hands made by covering the hands with paint and putting them on the wall, a white painted rounded shoulder human figure with four dots above its head, a white painted spiral, and a pecked line. A large white painted quadruped is also found in the panel with other more recent looking figures.

The second panel, to the south, exhibits scratched, pecked, and painted rock art in a variety of styles. The most recent figures include the Paiute white painted humans with rounded shoulders and torsos, described in Kanab # 1, and white painted profile depictions of deer. Apparently some of these have been made by scratching a pattern of the figure to follow when the paint is applied.

At the southern end of the sandstone cliff and on the top where the stone is smooth and exposed, there are three large pecked figures. There are two spirals; one winds for four circles then ends, and another winds once around its center and then straightens out for about five inches where it ends. At this point it is about two feet from a pecked stick figure with what appears to be a headdress that looks like antlers. All figures are heavily eroded.

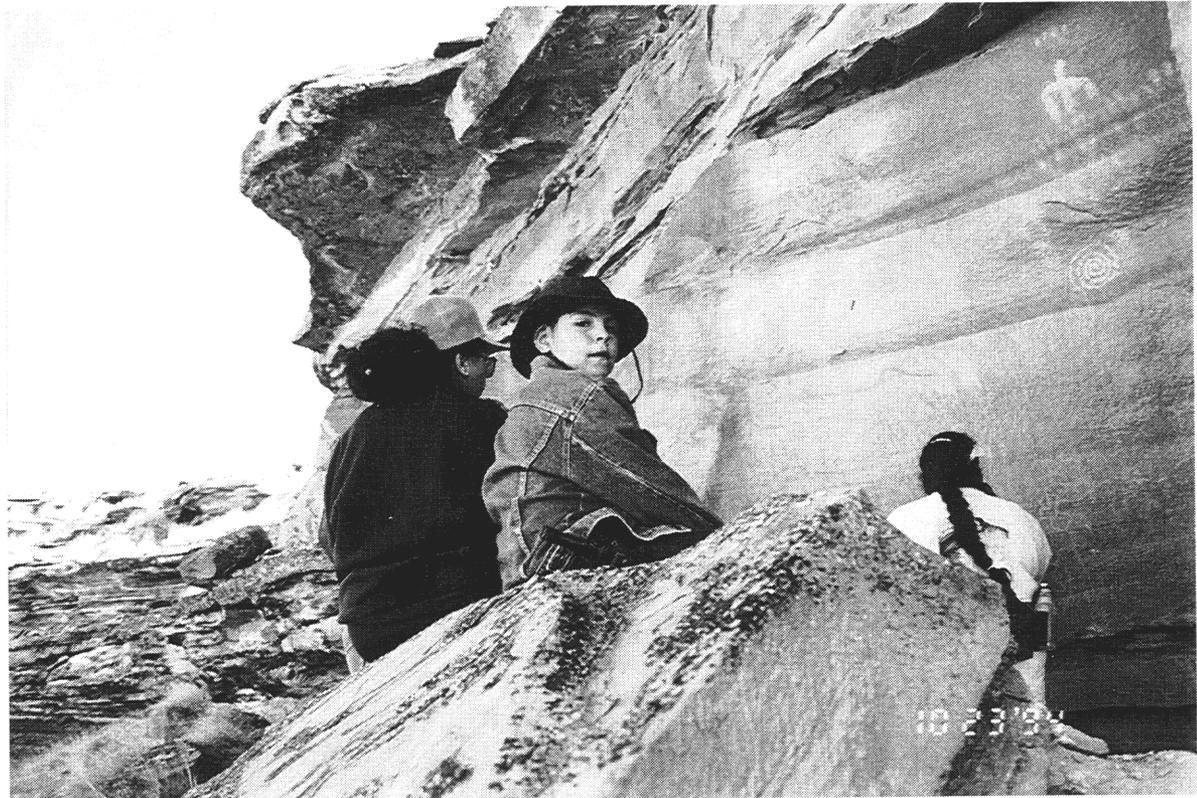


Figure 6.5. Pictographs at Site # 2

Southern Paiute Interpretations

This site is seen as directly related to Kanab # 1, but separate interviews were conducted on it because it could have a different purpose. Four interviews were conducted on this site, and all agreed that the paintings were somewhat different than at Kanab # 1. The white painted hands and the rounded shoulder figure seem to set the site apart.

In general this site was seen as similar to Kanab # 1 which is on the same sandstone cliff a few hundred feet away. It is perceived as being associated with the evidence of Indian occupation across the canyon and as being made by Paiute people. The rock paintings are part of where people lived and told stories about their life. No other Indian groups were perceived as ever living at this site or making these rock paintings.

Archaeologist's Commentary

The older paintings in the panel include human figures with triangular shaped bodies that are usually assigned to the Cave Valley Style. This style, originally named by Polly Schaafsma for the paintings at a site in the Cave Valley in Zion National Park, includes paintings in red, white, yellow, black, and green (Schaafsma 1971:116). The human figures at this Kanab Creek site are shown in yellow, white, and shades of red. Repetitive designs in fret-like patterns are associated with the triangular torso humans at the site.

Several facts support an older age for the Cave Valley Style at the site. The figures are frequently situated on a higher surface where access is currently difficult or no longer possible because it has eroded from the sandstone outcrop. The paint looks older with less intensity in the older figures. There are examples of the smaller white human figures, assigned to the Paiute, which are superimposed on the Cave Valley Style triangular torso figures.

Handprints are a relatively common motif in the rock art of the region. Grant (1978:158) describes five variations of putting a handprint on the rock: a normal positive print where the blank areas are left unpainted; a stencilled handprint; a positive print where the blank areas are fill in with paint; a positive print where the interior area has been enhanced with designs, often swirled patterns; and a positive print where areas have been exaggerated such as overly long fingers. The ones at this site, simple positive applications of a hand covered with paint, are the most common variety.

The rock art at the site is in generally good condition. Like its



Figure 6.6. Pictographs at Site # 2

neighboring site (Kanab # 1), it receives intense afternoon sun which is an obvious destructive force.

Kanab Creek Site # 3 (Tool Sharpening Site)

The site is located along the east bank of Kanab Creek immediately south of a small side drainage. What appear to be two hand prints are situated on the top of a sloping boulder that is downslope and away from the main outcrop face. The hand prints, pecked into the surface, are oriented with the fingers toward where Kanab Creek intersects with a large dry side drainage. A small water fall (approximately 20 feet) would be created when the side drainage flows.



Figure 6.7. Petroglyphs at Site # 3

A second feature of this site is located under a nearby low overhang of the primary sandstone wall. Under this overhang there is a group of narrow, linear grooves that are oriented across the flat surface of a sloping boulder. Most of these grooves are parallel to one another, but a few intersect at various angles. There are two lines of connected triangles on the surface of the boulder. One edge of the boulder displays the narrow grooves in a scallop-like design. Elsewhere in North America these grooves are interpreted a tool grooves, left after the sharpening of a bone tool. Two distinct sizes of the grooves are found, one a wider, banana shaped groove and the other a narrow v-shaped groove.

Southern Paiute Interpretations

The four Paiute people interviewed at this site only made comments about the large sandstone with the many grooves. They believed that this site and rock are associated with the homes across the canyon. The people would make lots of noise and so some would come across the canyon for quiet and to sharpen tools. Bone awls and softer materials were seen as most likely to be sharpened on the sandstone boulder. During these visits, the Indian people would bring their children and teach them about how to sharpen tools.

The sharpening rock was not seen as the location of formal ceremonies but was instead a working and visiting area. It was seen as a place that these Paiute people had not visited before, but three of them had visited other places like this when they were growing up. There are songs and stories about places like this one where women would gather. One person felt the place was only used by women and their children, the rest felt the place was used by both men and women. All perceived of the sandstone rock as a place ultimately made and used by Paiute people.



Figure 6.8. Linear grooves at Site # 3

Archaeologist's Commentary

In replicative experiments, Ken Feyhl (1980) learned that a large variety of grooves will result "from the smoothing and rounding of the rough ends or edges of bone and antler" (Feyhl 1980:26). Feyhl also learned that any sharp object, whether it be stone, antler, bone, or metal would produce the narrow grooves. Thus the grooves at the Kanab Creek site may have been made by sharpening an awl or some other sharp pointed object.

The hand prints are eroded and in average to poor condition. The tool grooves, under the protection of the low overhang, are in good condition.

Ethnographic Commentary

The tool sharpening sandstone rock was interpreted as a working and teaching area, not an area for ceremonies. This reflects a general use of the term ceremony, and unintentionally masks the everyday ceremonies that are associated with all Paiute activities. For example, rocks have power and are living beings, so one would not scrape a rock without first asking for permission to do so and thanking the rock after the activity was successfully completed. Also, the wood or animal bone being sharpened would involve everyday ceremonies of thanks associated with the taking and use of animal or plant parts. Perhaps some of the education for the children would have been directed to instructing them in why and how to perform everyday ceremonies associated with the making of sharp instruments.

Kanab Creek Site # 4 (Ghost Dance Site)

The site is located in a sandstone outcrop along the east bank of Kanab Creek where most of the panels face to the west. Rock art is found along the rock outcrop, in concentrations, over a distance of more than 400 meters. Although there are examples of pecked and incised petroglyphs, the rock art is dominated by paintings in a variety of colors. One group of the paintings is situated along a high ledge of the outcrop, 15 to 20 meters above the creek, that is narrow and dangerous to walk on in some places. Other paintings are on the wall at locations where it is no longer evident how the artists gained access to paint the pictographs.

A prominent series of the paintings, shown in a bright white colored paint, include mostly human forms with the rounded shoulders and torsos identified by both the project archaeologists and Indian oral history as the work of Paiute people. This panel was the one identified in 1976 as specifically associated with a Ghost Dance ceremony conducted at this location. Moving from left to right while facing the panel are various figures (see Figures 6.9 and 6.10). The panel begins with a figure that initially resembles a spiral but upon closer inspection is a closed circle around a central dot surrounded by an enclosed crescent moon. A line extends from the bottom of the crescent. Below the set of circles is a white smear. Above and to the left is a headless figure. Two conspicuous figures in the panel, one a human and the other a quadruped which probably shows a horse, are depicted upside down with their feet pointing upward. To the left,

facing the panel, is a long object with an oval head. This appears to be a rattle. Above this set of figures are six flying figures. To the left of this object are a series of stick figures with what appears to be clothing on them represented by a double outline of the arms, legs, and body. Next to these are more stick figures which have a white paint smeared over the top creating an opaque veil. Next to these are three-toed stick figures (one has a triangular body), a geometric design, and two more stick figures. Small white lines appear above these figures. These figures are connected with the next set of figures by a three-foot long angled line. Two of the next three figures have no heads and two have grids of dots over their heads. The remainder of the panel has two distinct animals, headless figures, and smears.



Figure 6.9. Overview of Site # 4

A seam of white colored pigment is located along the base of the outcrop wall. Although it was not collected for analysis, it had the consistency of corn starch; it would need very little grinding to prepare it as a pigment for white paint. At one location this pigment is found in a corner of sandstone outcrop where it covers an area more than a meter thick.

Southern Paiute Interpretations

The white paint panels were the focus of interpretation. They were seen as being directly related to the places of Indian residence located across and up the canyon from this location.



Figure 6.10. Pictographs at Site # 4

"People were living in this area when these paintings were made," according to one person. The place is related to the white paint source that is found below the panel and just beyond it along the base of the cliff (see Figure 6.11).

The four people interviewed at this site view the white paint panel identified in the 1970s (see Figure 6.10) by the tribal chair as related to a ceremony of some kind. They knew little of the Ghost Dance itself, but all agreed that the white paint panel was a record of events and things seen; it is a part of their life. This is a place where the Paiute people would come and give offerings, they would offer prayers to spiritual beings, and they would record events.

This is a good record of events, a part of history that took place including ceremonies. The whole panel is connected.

It is a record of traditional beliefs, where they conduct ceremonies.

It is all of the above, teaches children, translates traditions from one people to another, show trails, happiness and tragedies.

The use of the white paint is important part of this site. One person thought more white paint was used because more was available due to the white paint sources along the base of the wall. Another person agreed, but felt that "...it was all white for a reason. When they used red paint (*Ompi*), they used it for special reason also." The dots above the head are important, as are the "white filled figures," those with paint surrounding their bodies.

This is a well known site which has been visited much more often by Paiute people than they visited the Kanab Creek # 1 and # 2 sites. More is known today about this site, although many people do not know the Ghost Dance story. One person visited this panel when she was growing up, but her parents did not interpret the meaning of the panel, rather they gave her lessons of life in general - the do's and don'ts. The site was

interpreted by one person as being used before Paiutes by the Hopi, and it was possible that the Navajo used the site after the Paiutes. Another person thought it was visited by other Indian people including the Hopi and the Navajos, but they visited after the Paiutes lived here and made the panel. Everyone thought the white paint panel was made by the Paiutes. One person said it was an overwhelming experience to see the paintings are still there and that she can come down to view it and touch the white paint source.



Figure 6.11. White paint source

Archaeologist's Commentary

The styles of rock art at this site are directly comparable to other sites in the study. In the side canyons, the Cave Valley style is best represented at FS AR-03-07-03-1019, but, as noted with the site descriptions, this style is also found at other sites. The diamond-shaped grids and other triangular patterns are most similar to designs found at Parashant Canyon (A:15:018) in the Grand Canyon. Even though it is clear the Southern Paiute visited and respected these sites in Kanab Creek and the Grand Canyon, it is not possible to scientifically define the authorship of the diamond and triangular patterns.

Paiute rock art at this site is best represented by the "Ghost Dance" panel where "flying figures" are shown on the bottom on the outcrop above the panel, long zig-zag lines and other patterns are oriented horizontally across the panel, and the human figures display short rounded arms and legs in outline (see Chapter Three for a definition of the Paiute style). In the Grand Canyon, very similar "flying figures" are depicted on the ceiling over a panel at Whitmore Wash (A:16:001) while these same figures are found on the ceiling of an overhang at FS AR-03-07-03-1019. There is unquestionably a direct relationship between these sites. From a science perspective, the Kanab Creek # 4 site is an important rock art site.

The white paint figures seem to be within the Paiute Style, but other figures at the site are clearly related to the Cave Valley Style. The most obvious of these are human figures with triangular bodies that are usually larger than the Paiute figures, made in more colors, and located at positions higher on the outcrop wall. Several areas of zigzag patterns are found along the rock face. An interesting painting is found along the outer edge of a layer of the sandstone that measures about 10 centimeters in thickness. A zigzag pattern, painted in white, fills the width of the surface, over a length of 4 meters. This long zigzag pattern appears to be related to the Paiute style of art at the site. Other scalloped and fret-like patterns appear to be older and related to the Cave Valley Style.

Incised grids of diamonds and squares are found at various locations in the site. At one place there is a figure made by placing a plant on the wall and spraying it with paint to leave its form in silhouette on the wall. The rock art at the site is complex and varied, and, although counts were not made, the majority of the paintings represent what is being called the Paiute Style.

Kanab Creek Site # 5 – (Forest Service Site # AR-03-07-03-1019) (Red Angel Site)

The site is located along the west canyon wall that parallels Kanab Creek and runs downstream a few kilometers from the mouth of Hack Canyon. The rock art consists primarily of paintings that are found at several distinct settings along the canyon wall over a distance of about 200 meters. In general the rock art panels face east southeast but there are exceptions.

At the ground level, near the northern end of the site, there are two rectangular rock structures made of sandstone slabs that are stacked to form three walls, with the canyon wall as the fourth side of the structure. These structures, which measure about 1.5 meters across their maximum distance, could be either Euroamerican or Native American in construction. Additional research is needed to determine the origin of the structures. In this regard it is worth noting there are no historic artifacts at the site; however, there are historic names at the site, and local residents are familiar with it. No Native artifacts (other than the rock art) such as metates, ceramics, or chipped stone were found at the site. Active erosion along the canyon wall is adding to the soil deposits in the rockshelter, and this may serve to obscure surface artifacts fairly quickly.

One group of paintings is found in a rockshelter that is about 3 meters above the canyon floor (see Figure 6.13). Access to it is attained by climbing up some ledges that serve as a stairway at its north end. A low rock wall made by stacking and standing slabs of sandstone is oriented across the mouth of the rockshelter where it serves as a retaining wall. This structure is partially collapsed and almost assuredly a product of protohistoric or historic site used at sometime in the past 250 to 300 years. A local Mormon rancher carved his name in the wall as *Johnson 1941*, which is evidence of visitation during the historic period if not use by non-Indian people.

Southern Paiute Interpretations

"This is a hiding place where they came to hide from the white people," according

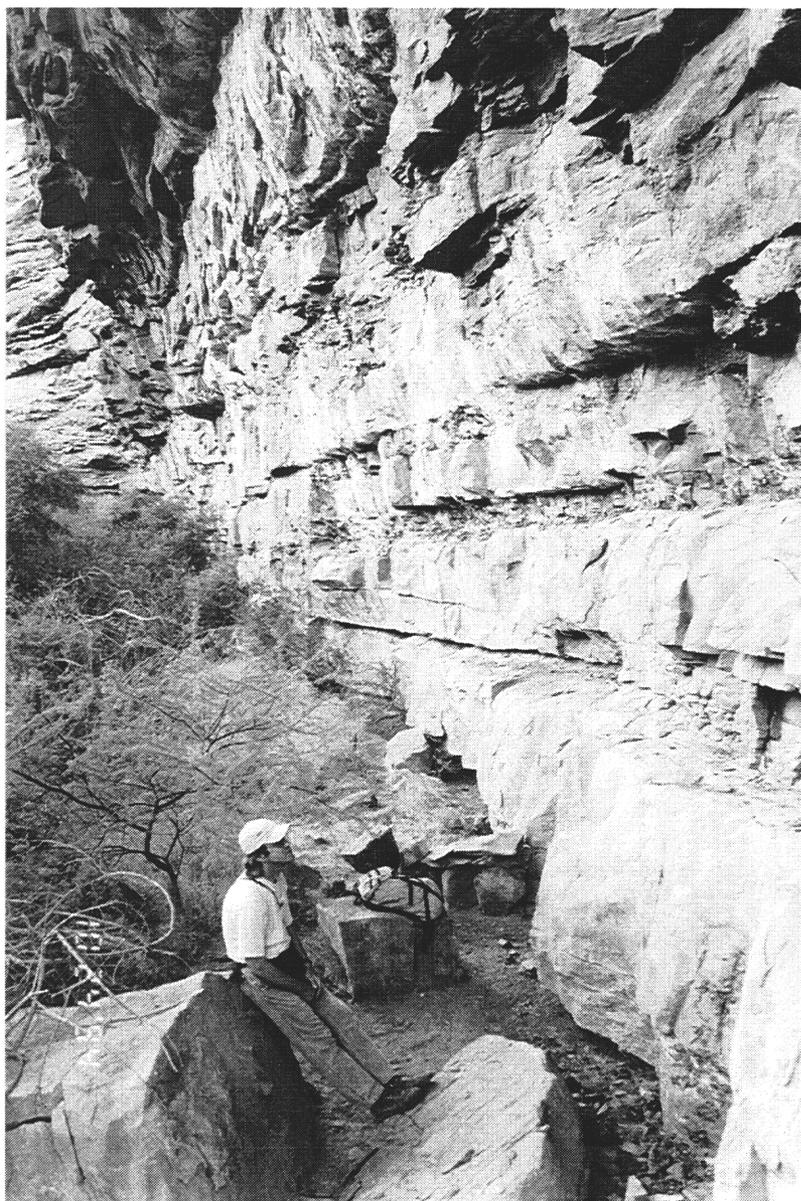


Figure 6.12. Overview of Kanab Creek 5

to one of the two people interviewed at this site. The old Paiutes lived in this area, using the water from Kanab Creek and Hack Canyon to farm. The panel is here because the old Paiutes were living here, and they wanted to tell the generations the history of events.



Figure 6.13. Rockshelter at Kanab Creek 5

Neither Paiute person interviewed had visited the site before, but both were deeply moved by the experience of seeing the panel of painted figures. One person said, "I am looking at my ancestral history - it's been here all this time and now I can look at it." She went on to say how impressed she was by all the different colors used at one spot; she had never seen such a panel before. Another individual said:

There was one that we saw - it looked like the figure was splattered with blood. Such tragedy, such trauma to have to be going through at the time of recording that. I'm thinking when I see all of these tragic figures - heads that are cut off and such. It brings back to me when our people were slaughtered and my grandfather and my mother have told me about those in the areas. So for our people to have made an escape from the encroachment they had to know the places where they could hide and it was down here in the canyon. While they were here hidden from the encroachers they took time to record that, of what had happened to the people. Some of the figures are so abstract that it's truly amazing because it seemed to me like there were two figures that were joined, that

were sharing something. It seems to me like that might have been a figure of twins. There was somethings there that bonded them together - a body part or something, a body organ that made them separate from a husband and wife again. These look to me like twins.

The outline and the dots were consistently like 4, 8, 12, 16, four rows of dots. It might have been a numbering system for days, for how long maybe tha person had been there. I didn't see the dots over any figure.

*There is a story of having a winter's supply of u'usi [yucca fruit, *Yucca baccata*].*



Figure 6.14. Observing the Pictographs at Kanab # 5

When asked whether or not the rock painting panels are related to other places, one person said:

Yes, these panels are related to places up near the (Kaibab) reservation where these events occurred - these killings. Places where so many Indian people died. This place is where the survivors came and where they told the story of the massacres.

Another Indian person answered this question by saying that the painting style is similar to rockshelters in upper Kanab Creek on the reservation. White is used in both places, and both have headless men. This is a means of communication, like a book telling other Paiute people about an event in their lives, possibly the time during Mormon beheadings. There, also, is a connection with the Colorado River. Kanab Creek was the main tributary to the Colorado River; it was used by Paiute people as a path to the Grand Canyon.

Archaeologist's Commentary

As noted in descriptions above, the rock art at site AR-03-07-03-1019 is directly comparable to the sites along upper Kanab Creek on the Kaibab Paiute reservation. For example, under an outcrop ledge near the ground, and obviously more recent than other paintings at the site, there is a row of white triangles in a horizontal pattern much like a similar row at Kanab Creek # 1. And at several locations there are human figures with grids of dots over their heads that look much like those at Kanab Creek # 4. The "flying figures" painted on a ceiling of an overhang above a panel of rock art are found at this site and at Kanab Creek # 4, as well as Whitmore Wash (A:16:001) and 222-Mile Canyon (G:03:080) in the Grand Canyon along the Colorado River. These similarities show the direct link between the sites along the Colorado River and in the side canyons.



Figure 6.15. Paiute style pictograph figures

There are two distinct styles and possibly a third style of rock art at the site. Each of these styles appears to have been made at a different time. The most recent is the style identified as the rock art of the Paiute, produced primarily between A.D. 1000 and A.D. 1900. Human figures, usually white in color, are depicted in full body views at the site. These figures are often acephalous (without heads) or shown with little attention to the heads; they frequently have rounded shoulders and torsos with downward curving arms and legs. Quadrupeds are shown in profile with exaggerated antlers. Rows of dots across the surface in a horizontal row are also part of the style at the site.

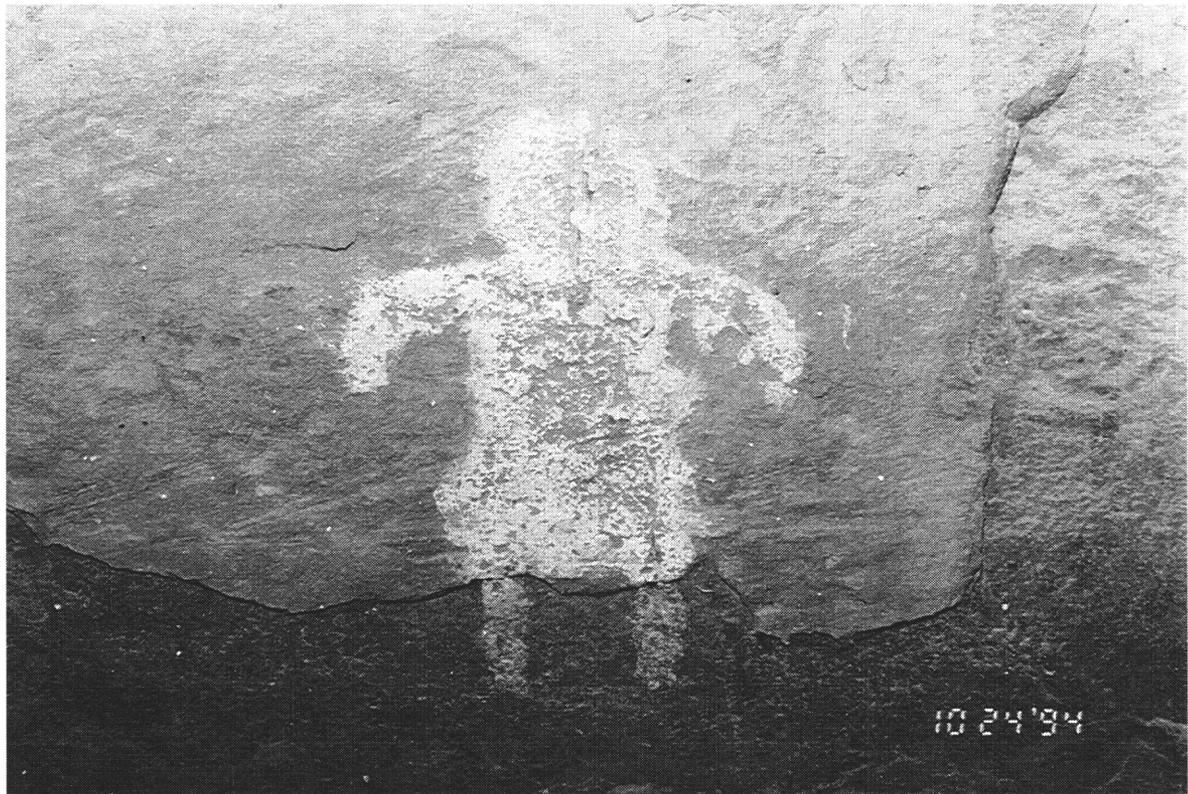


Figure 6.16. Paiute style pictograph figure

The Cave Valley Style is represented at the site by human figures with triangular torsos that are made in more than one color. The most impressive ones are red and yellow with the yellow retaining a bright hue. A faded blue figure was also likely part of this style. Non-human figures in the style were not identified in the short visit we made to the site, although they undoubtedly exist. Cave Valley Style rock art is dated some time between A.D. 500 and A.D. 1250.



Figure 6.17. Cave Valley style pictograph figure

The third style appears to be an earlier version of the Cave Valley tradition. It includes several large (50 cm in height) figures which have tapering torsos that terminate at the base without legs. The figures have rounded shoulders and attenuated arms without hands. Their heads, attached directly to the shoulders are rectangular in shape. Lines radiate upward from the heads with rows of dots superimposed on each radiating line. The figures are painted in white and black. They are most similar to the styles currently identified as Archaic in the region, suggesting a date before A.D. 1.

Of course, the age estimates offered in this discussion are preliminary and subject to change with additional research. It is noteworthy, however, that some of the presumed Paiute paintings are very close to the present ground surface. One horizontal row of dots is found beneath a ledge within a few centimeters of the ground. In addition, one of the human figures in this style has been made on a surface which is flaking or peeling off the sandstone wall with the legs of the figure extending across the edge of the eroded surface. Obviously the painting is more recent than the erosion on the wall.

Excellent opportunities for removing samples of the paint for dates are found at the site. The erosive nature of the sandstone has left many of the paintings in fragments with portions that are falling from the wall.



Figure 6.18. Archaic style pictograph figures

**Kanab Creek Site # 6 -- (Forest Service Site # AR-03-07-03-1252)
(Dame Cinco Site)**

The site is located on the west side of Kanab Creek, in the canyon wall about 25 meters above the level of the creek, upstream from the mouth of Grama Canyon. Access is by scrambling up the talus slope and onto a sandstone ledge in front of the panel.

The most obvious rock art at the site includes a group of painted figures, one with a yellow triangular body outlined in white and another with a linear body in red (see Figure 6.19). The figures have well-made round heads and arms with elbows. A vertical wavy line resembling a snake, in a faded yellow color, is found between the horizontal row of human figures. To the side of these figures is a large curved line having five triangles coming out from the underside of the curve. Five positive hand prints, in white paint, are found across the top of the panel.

A group of smaller human figures are painted in white across the bottom of the panel. One of these is depicted without a head. There is a yellow figure with a white dot in the middle of the head (see Figure 6.20).

A second area of minor paintings is found under a rockshelter to the south of the main group. It is eroded and no longer exhibits any recognizable forms.

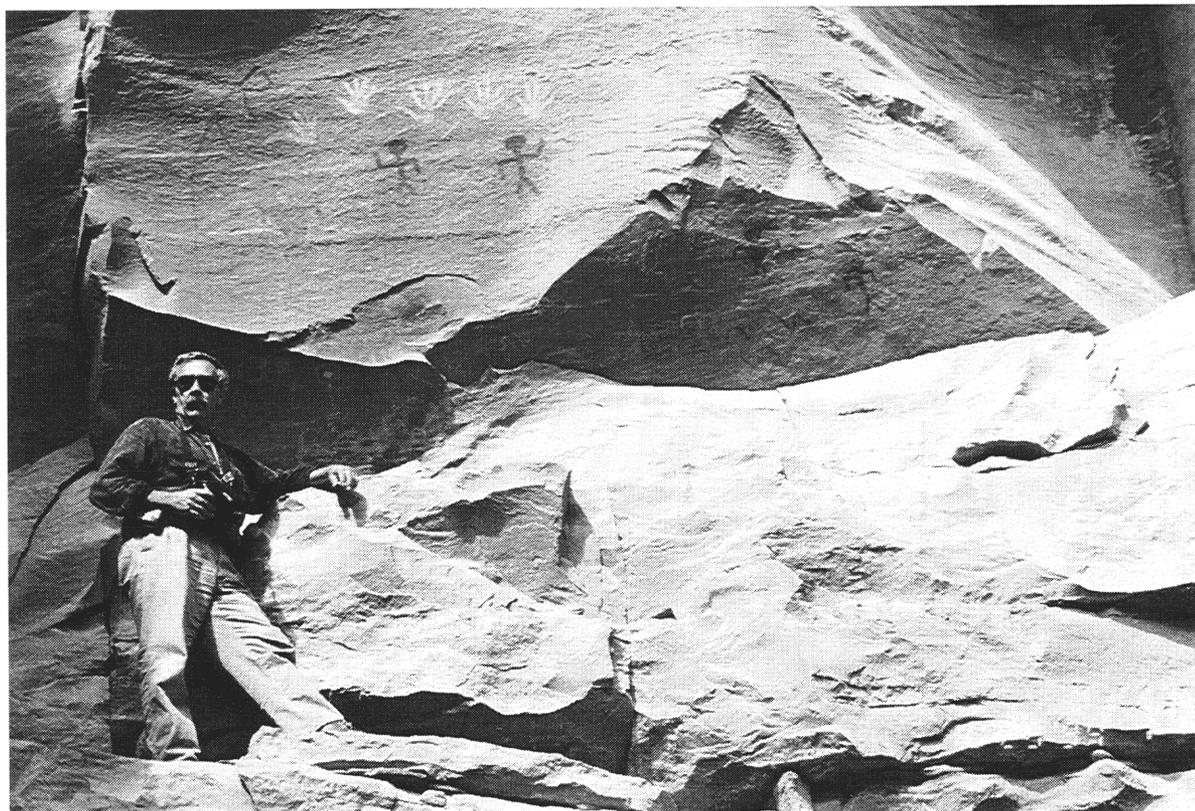


Figure 6.19. Pictographs at Kanab # 6

Southern Paiute Interpretations

One of the Paiute representatives interviewed at this site found it totally unusual and decided that she didn't know whether or not it was used by Paiute people but thought it may have been made by other Indian people. The other individual felt it was a Paiute painting panel because she had seen aspects of this panel elsewhere. The following interpretations derive from the second interview.

This was a farming area. There were five people down here, and one was a spiritual person who worked with the farmers. Not clear if the forms (in the painting) are male or female. Each hand print represents a person. The man in yellow would be the spiritual person. Might have been here for a time or may

have gone back to his home after a ceremony. This may be a blessing panel, if so, we should just look at it in passing and respect it and go on. My mother told me about blessing panels when I was growing up, but we never visited any. The purpose of a blessing panel is to tell other people that the place is blessed and that five people live here. The Yellow figure is the blessing person [shaman].



Figure 6.20. Yellow figure at Kanab # 6

When asked if the site was connected with other sites in the area, the person answered. The farms in Kanab Creek nearby and the petroglyph down the stream which told the story (Kanab Creek # 5). People would live in one place, have the blessing panel nearby, and have their history panel elsewhere.

Although this is mainly a blessing area, the farming may indicate it was an escape area. This [Kanab Creek] was a hide out canyon. These people could feed people from on top [near Kaibab]. Runners would bring messages to tell of a death or a problem. Indian people would come by and eat and drink and go on to another community. Then they would be on their way again after receiving a blessing.

Everything is so important here - this is where the protection is. The canyon walls protect the people.

When asked whether or not other Indian people used this panel, this person thought that both the Pai and Pueblo people visited this panel.

They and the heads of other Paiute clans would pray here. They would give offerings and tell the spirits that are guarding this place the reason they are here and that they are here in passing and will do no harm and to thank them (the spirits) for allowing the visit.

Archaeologist's Commentary

The rock art at this site is not as abundant as at other sites visited during this research trip, but it still has two distinct components. The smaller white figures are identified as Paiute paintings that were placed at the site after the larger multi-colored paintings. The latter paintings appear to be similar to Anasazi rock art, but more research is needed to fit them into a recognized style.

Older rock art and more recent Paiute rock art at the same site is a phenomenon found at more than a dozen sites in the Grand Canyon and side canyons. Numic speaking tribes in the region believed rock art sites were powerful places, and, regardless of whether they were the persons who left the rock art, the sites were visited for fasting and prayer. Perhaps after receiving power at these sites, the Paiutes left some of their own images.



Figure 6.21. Overview of Kanab # 7

**Kanab Creek Site # 7 -- (Forest Service Site # AR-03-07-03-1264)
(Stenciled Flower Site)**

The site is located on an outcrop of sandstone that forms the northern side of a tributary canyon entering Kanab Canyon from the east. Much of the rock art at the site faces a southerly direction, but nearby rock art sites (not visited in this project) face east and west. The site is about 10 meters above the canyon floor and reached by a talus slope. A small spring is active at the site, in an area between the panels.

White paintings dominate the site, with a row of small armless human figures across the top of the panel and a larger human figure with upraised arms and downward pointing legs (see Figure 6.22). Elbows and knees are bent, giving the figures a rectangular shape. A spiral and a poorly formed quadruped are also found in the scene, but the most interesting figure is a stenciled form which appears to be a plant (see Figure 6.23). The leaves and stem of the plant are evident, but they are not sufficiently distinct to identify the species.

Other paintings in a nearby panel, under an overhang, are also in white paint. These include some human forms, one with arms bent at the elbow to point down, and what may be some other stenciled figures. The latter are too indistinct to decipher their intent. A zigzag line and a grid of dots are also found in the panel.



Figure 6.22. Pictographs at Kanab # 7

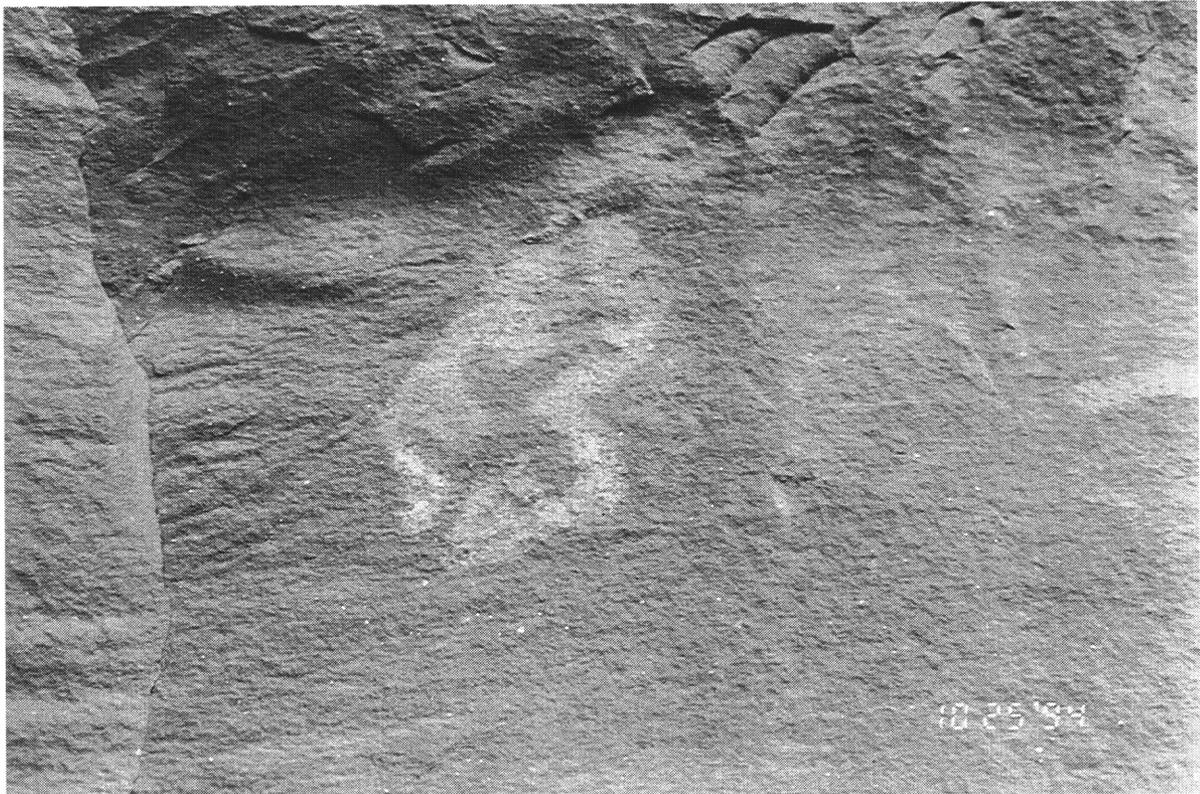


Figure 6.23. Stenciled plant pictograph at Kanab # 7

Southern Paiute Interpretations

The two people interviewed agree that the stenciled flowers are a key element of these panels. One person related these to the ones in Deer Creek (see Chapter 5). Generally, however, only one person felt she recognized enough in the panels to make an interpretation. The following comments are from that person.

They lived here - had good and bad experiences. There is a farming area in the front of the rock shelters. The rocks have been cleared away from the bottom. The stenciled flowers could be squash plants in bloom. There is a counting system that is related to the farming system in the way of weeks when to plant and how long before harvest. The person who stencil painted the flowers was taken with the beauty of the flowers. There were Paiute villages below here with whole families in them. The deer were here and important to this community. Any ceremony conducted at this location was giving thanks of offerings from crops.

The following Paiute representative had not visited this panel before, but she had visited other similar panels elsewhere.

My mother and I especially went to time keeping panels. I was taught that when you visit such panels you give an offering for disturbing the place and speak to the spirits there. You look and learn and pass it on to the generations.

When asked about the connection of these panels with other sites in the area, this person said the panels are related to the Paiute farms below, and the products of these farms and ceremonies would be shared and traded with other Indian communities. She believed that other tribes like the Hualapai, Havasupai, and Hopi visited or used these panels and that the site was used all year round.

When asked about the meaning of the panels this person said:

It just tells me that our people were here and the things I find important now they believed was important: planting and gardening, the beauty of plants, how life is given to plants and taken from a plant. During our lives, like the plants, it has beauty and thorns, then we both die. The panel tells me that the basic concepts were here then as now. It tells me that there is continuity. This country has a lot of power.

This place is special with the canyon area because of the solitude. The cove in the canyon wall here and the shape of the rocks here make it special.

Archaeologist's Commentary

A group of orange blobs are found splattered onto the wall and ceiling in the alcove between the two rock art panels and above the spring. These sorts of orange blobs are believed by archaeologists to be related to some sort of ritual identification with the site where the supplicant formed a ball by mixing water with reddish colored earth and then throwing it at the wall and ceiling. At other sites in Arizona these earthen balls are still adhering to rock art panels and the walls near the panels. The group of orange blobs is interesting in that they are near rock art panels but are apparently directed toward the canyon walls above the spring.

The rock art at this site is most similar to the Paiute Style identified at nearby sites. The rectangular shape of the larger human forms differs from the more rounded shape of the Paiute forms, and it may be these figures are older in a developing tradition. Or it may be that the figures are equivalent in age to the Paiute art but made as replicas of older figures.

Several important characteristics are evident in the rock art at this site: (1) the stenciled outlines of plants are similar to other figures in Deer Creek which have been tentatively identified as Paiute in origin; (2) the figures are entirely white, a color that is used extensively by the Paiute artists; and (3) a deer at the site is depicted with oversize antlers. These characteristics are all believed to be diagnostic of the Paiute rock art style.

In addition to this site and the Deer Creek site, similar rock art is found at Kanab Creek # 1, Kanab Creek # 2, Kanab Creek # 4, Whitmore Wash (A:16:001), 202-Mile Canyon (A:15:005), and Lava Falls (C:16:163).

**Kanab Creek Site # 8 -- (Forest Service Site # AR-03-07-03-1267)
(Gallery Site)**

The site is located at the head of a side drainage to Kanab Canyon on the edge of a region known as the Esplanade. The site is in the side of the drainage under an overhanging slab of the sandstone outcrop. The floor to this sheltered area is partially eroded to the sandstone bedrock, but one portion retains a midden which probably would produce cultural materials important for understanding the site.



Figure 6.24. Overview of Kanab # 8

The rock art is dominated by human figures with upright linear bodies that display tapering torsos (see Figure 6.25). Arms, hands, and fingers are depicted, but legs are ignored. Vertical patterns down the length of the bodies are common. A prominent figure in this variety is apparently holding a large partially ovoid form divided by parallel lines into three vertical segments. This latter form has short rayed lines appended to its top and bottom. The human-like figure painted in white is outlined in red, while the ovoid form is a brownish-red color. Many of the anthropomorphic forms have antennae-like appendages attached to their heads. Others have the same tapering bodies with internal vertical patterns, but they lack both arms and legs. Some of these outlined figures are in bizarre shapes, and, although one gets the impression they are supposed to represent humans, they are not easily classed as anthropomorphs.

Several figures have round heads with ears and whiskers that suggest a cat-like face to some archaeologists; this was not the interpretation given by Southern Paiute representatives who visited this site. One of these figures has "heads" at both ends of a vertical line with the upper head in its correct position while the lower one is inverted (see Figure 6.26). Rectangular "wings" made of horizontal white boxes with red vertical staves are connected to both sides of the linear body on this confusing figure.

Rectangular abstract forms and lines bisecting a series of circles are a part of the presentation. Some of these are in patterns of parallel groups while others tend to be shown alone. Small recesses in the rock were used in the art. One of these, a small circular area about 15 cm across, has been filled with white dots.



Figure 6.26. Pictograph at Kanab # 8



Figure 6.27. Pictograph at Site # 8

A significant component of the art is a group of dull red thin lines, usually straight but sometimes curving, which have well-made ram-like heads at the ends and what appear to be dogs or coyotes standing on them (see Figure 6.27). The lines in these figures are only 2 to 3 millimeters in thickness while their length can reach 10 to 15 centimeters.

Southern Paiute Interpretations

Neither Paiute person interviewed had seen a rock painting panel like this one before. One of the Paiute people felt it better to make few comments about the meaning and origin of the paintings.

Culturally sensitive information held at the office of the Southern Paiute Consortium.

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Kanab Creek # 8 - Box continued

Archaeologist's Commentary

Another group of paintings includes more crudely made figures, often quadrupeds associated with circles. Painted in white, these figures are found near a group of solid red figures depicting a bighorn sheep and an upright human figure with crossed arms and inverted u-shaped legs. The latter rock art is likely related to the Anasazi and Paiute styles in the nearby canyons, while the more elaborate figures in multiple colors are probably Archaic in age.

This site has been tentatively named Panther Cave by the individuals who know about it. A well-known Archaic age site in Texas is known as Panther Cave, and because there is potential for confusion between the two (or the inevitable comparison) the name of this site should be changed.

The rock paintings at this site are extremely important to science. The majority of them were most likely made during the Archaic, and, inasmuch as they are old and well preserved, they are significant. Anthropomorphs with tapering bodies like those in this rockshelter are found on the Esplanade, and perhaps at other nearby locations, but they are neither well-defined nor identified. Although some human forms in Shaman's Gallery (in a side drainage to the north of the Grand Canyon) have tapering bodies, they are not exactly like the figures at this site.

Tapering-body figures like these were not noted in Kanab Creek nor were any painted figures found along the Colorado River in the Grand Canyon. Petroglyphs of human forms at sites like C:03:006 and C:02:037 above Lees Ferry are similar to these tapering-body figures. Sheep with boat-shaped and rectangular shaped bodies are also found in the petroglyphs above Lees Ferry and the pictographs on the Esplanade.

It is not uncommon to find both paintings and petroglyphs within the same style. In this example, the similarity in the paintings and petroglyphs should not be surprising because both are believed to have been made in the Archaic period.

The more recent Paiute paintings at this site are evidence of its importance to them. The pattern of recent Southern Paiute rock art at sites with much older paintings is repeated at other sites in the region like Whitmore Wash (A:16:001) and Kanab Creek # 4. The pattern underscores the significance of the sites to the Southern Paiute people.

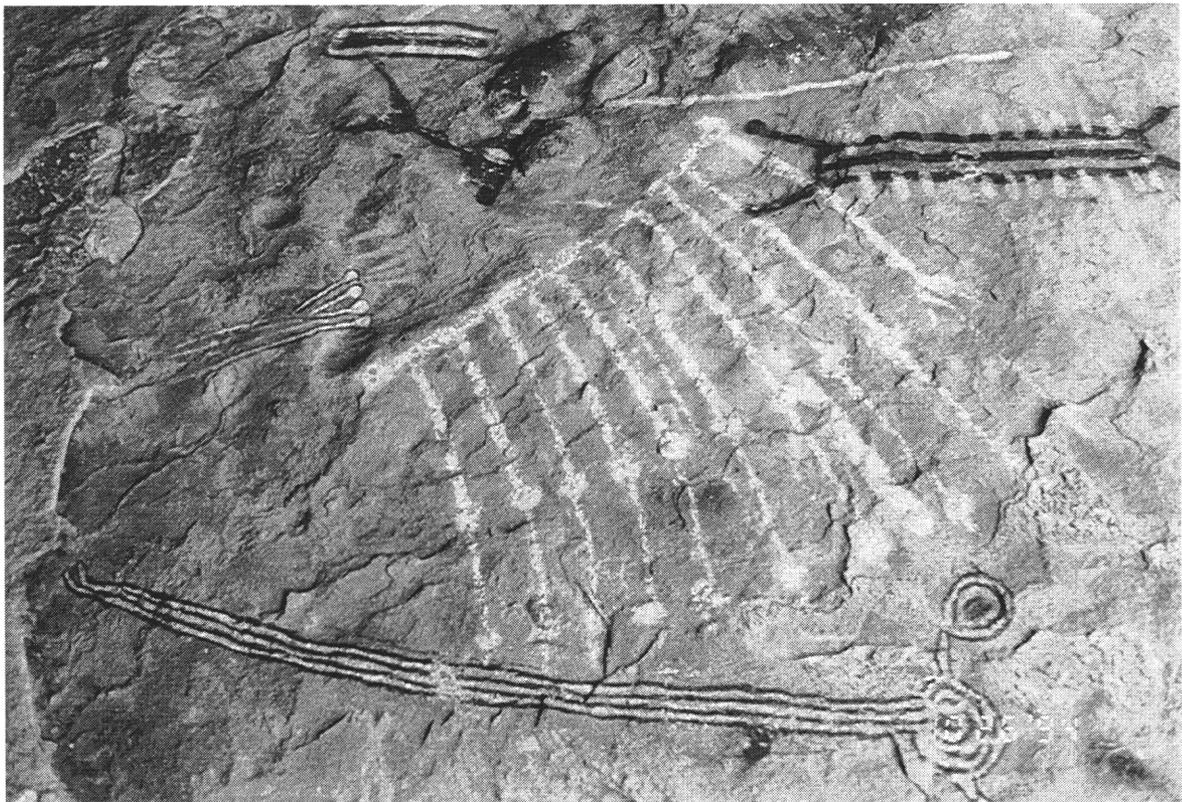


Figure 6.28. Knotted strings pictograph at Kanab # 8

Ethnographic Commentary

The place where these rock paintings are located, the kinds of rock paintings that are here, and especially the presence of one special rock painting called a possible knotted string (see Figure 6.28) suggest that this place is part of a Southern Paiute songscape (see Chapter Four). The Southern Paiute people have two major categories of songscapes, one of which is connected to the specific trails. Traditionally, Southern Paiutes had a system of trails and specialists who moved along them carrying messages, goods, and services. A knotted string, called *tapitcapi* (literally "something that's tied") was sent out via a runner to other Paiute people to inform them of events (Laird 1976:26-27). The trails were complex because they passed from water source to water source across the rugged terrain of the Mohave Desert regional landscape. Often trails were traveled at night. Trail songs described the path to be followed and encouraged the runner by recounting stories of mythic beings who traveled or established the same trail. The trail songs were so critical that ownership was limited to specific individuals and families, who maintained the songs and passed them from generation to generation as a heritage (Laird 1976:19-20, 268-276).

ADDITIONAL SITE INTERPRETATIONS

The rock art sites described in the following section were visited by the archaeologist, but there were no Southern Paiute interviews conducted at them. The following site descriptions and photographs are included in this report to provide additional data for future rock art studies.

Forest Service Site # AR-03-07-03-1265 (Counting Site)

The site is on the Esplanade about 300 meters from the previous site (Kanab Creek # 8). Located under an erosional remnant of sandstone, the site is not as protected as its neighbors. For this reason the site is more eroded, and the paint is in much poorer condition.

From the short visit made to the site, it is apparent the rock art is related to site # AR-03-07-03-1267 (Kanab Creek # 8). It has the same colors of paint with a group of tapering body figures. A series of vertical lines in red and white are an important component of this site.

A significant surface scatter of cultural material around the rock art site contains primarily chipped stone detritus. Intermixed in this material there are cutting, drilling, and penetrating tools. The latter include projectile points which appear to be similar to late Archaic types in the Great Basin. Potsherds on the site, scarce and in poor condition, cannot be assigned to a time period with any reliable accuracy.



Figure 6.29. Pictographs at F.S. Site # AR-03-07-03-1265

Southern Paiute Interpretations

No interviews with Southern Paiute representatives were conducted at this site.

Archaeologist's Commentary

Insufficient time was spent at the site to analyze its rock art. It contains abstract figures like two-pole ladders and net-like designs, but these forms are ubiquitous and common at many sites in the region. Research at this site will need to focus on paint colors and pigment types before the figures can be adequately compared to other sites.

The rock art in this site, although not as spectacular as nearby sites, deserves additional research for two reasons. One, it is eroding more quickly and the opportunity to study it will soon be lost, and, two, the art is in an exposed position and may differ from the more hidden and private places for a reason.

Forest Service Site # AR-03-07-03-1256

The site is in the Big Cove region of Kanab Canyon about 3 kilometers upstream from the mouth of Grama Canyon. It is located in the west wall of the canyon near the north end of a cactus covered terrace. The site was visited briefly, after establishing camp, and photographed for comparative purposes. No interviews with the Paiute participants were completed at the site.

The rock art is in a small overhang about 3 meters above the canyon floor on a nearly vertical surface that faces ESE at ca. 50 degrees east of north. Access is possible by climbing up some ledges in the canyon wall.



Figure 6.30. Pictograph at F.S. Site # AR-03-07-03-1256

Southern Paiute Interpretations

No interviews with Southern Paiute representatives were conducted at this site.

Archaeologist's Commentary

The lizard-like figure and the figures with multiple arms or legs are found at several sites in the Grand Canyon such as Whitmore Wash (A:16:001), Parashant Canyon (A:15:018), and

Three Springs Canyon (G:03:077). The lizard-like figures are also found at Kanab Creek # 4, but the multiple arms and legs figures were not noted at the sites along upper Kanab Creek. The meaning of this distribution is not understood by rock art scientists.



Figure 6.31. Pictographs at F.S. Site # AR-03-07-03-1256

The oldest paintings at the site include at least two large (about a meter in height) eroded human figures. One of these is painted in an antique looking white paint. It has a bucket shaped head, straight shoulders, and downward oriented arms that are bent at the elbows. Hands are shown. This figure has characteristics much like Fremont rock art. Another figure has a round head, made in a white outline, with solid red ear bobs. Its shoulders are eroded, but its right side (as one faces it) has a downward trending white line that terminates in a crude red hand. Neither of these figures appears to have well-made lower bodies.

A bright white figure, which looks as much like a lizard as a human, is superimposed on the figure with the red ear bobs. This figure, about 15 centimeters in height, is definitely a more recent addition to the site. Other figures in the panel appear to have a vertical body and three sets of arms (or legs) made by rectangular and curving lines that cross the body. The figures look as much like six-legged insects as humans.

There are several places where the paint is flaking off the wall in the panel that would work well for paint dating. The older paintings appear to be related to a period of Anasazi site use, while the more recent figures are not yet placed in a tradition. The rectangular shape of the arms and legs on the lizard figure are not as characteristic of Paiute art as rounded forms, but additional research may show the style has wider parameters than currently identified.

Forest Service Site # AR-03-07-03-1258

The site is in the Big Cove area of the Kanab Creek Canyon about a half kilometer downstream from site AR-03-07-03-1256. Located in the west wall of the canyon at the south end of a cactus covered terrace, the rock art is in an angular cavity in the canyon wall about 3 meters above the present ground surface. Access is not possible without ropes or a ladder. The paintings, all white, are on the back wall of the overhang where they face ENE; none are found on the ceiling.

The panel was briefly visited, in poor light, and photographed from below. The figures are dominated by human forms which have angular arms oriented in both up and down positions. Fingers and toes are shown on some of the figures. Several figures have wavy-line antennae attached to rounded heads.

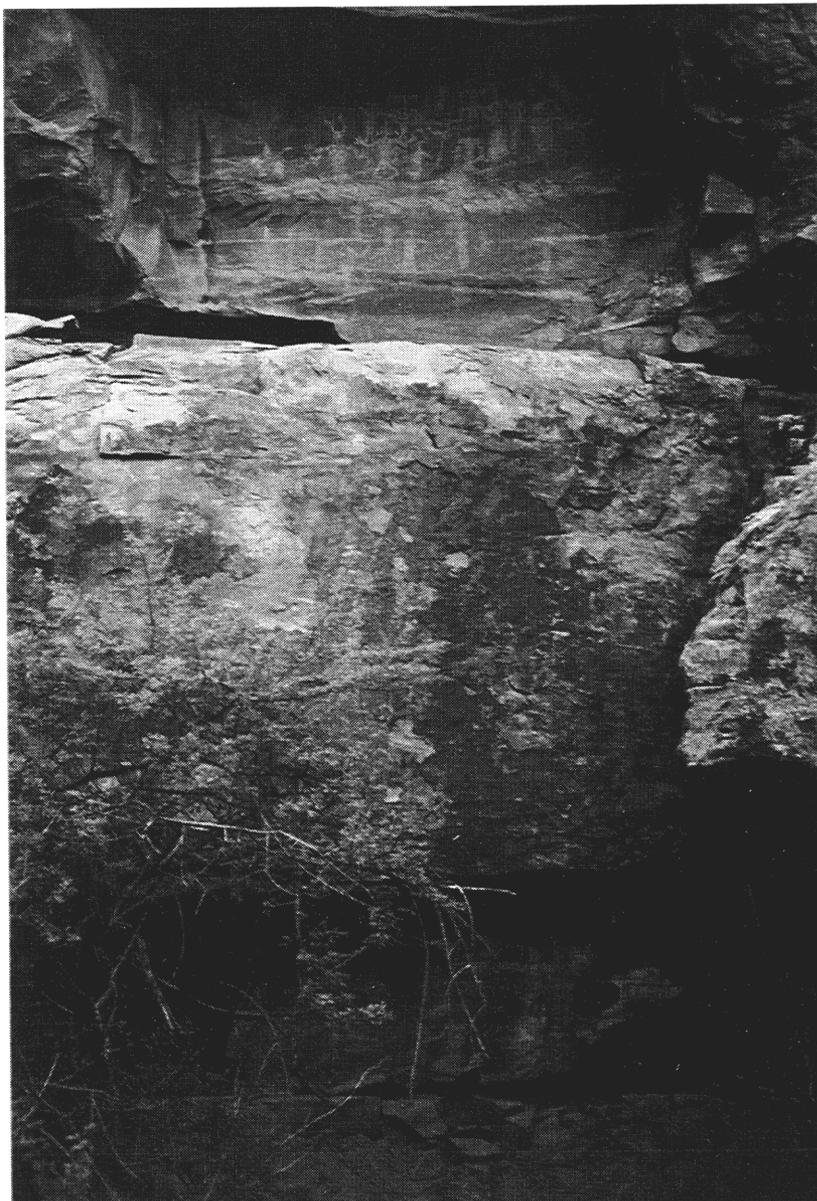


Figure 6.32. Overview of F.S.
Site # AR-03-07-03-1258



Figure 6.33. Pictographs at F.S. Site # AR-03-07-03-1258

Southern Paiute Interpretations

No interviews with Southern Paiute representatives were conducted at this site.

Archaeologist's Commentary

The panel is crowded with more figures interacting or touching each other than in nearby panels. There may be opportunity to study superimposition in the panel, if access can be gained. The site maybe "developmental Paiute" with attributes, like the rectangular arm and legs shapes, that are older than the characteristic rounded shoulder and torso figures. The panel should be studied in greater detail.

Forest Service Site # AR 03-07-03-1284 (Like Gallery Site)

The site is on the Esplanade near the head of a small side canyon. Under a low overhang, the paintings are primarily on the back wall of the shelter. The site was visited for a brief time,

but some of the paintings in it are apparently related to the rock art in nearby rockshelters. The colors and composition are similar to the tapering body figures in site AR-03-07-03-1267.

An important series of paintings in this shelter are large round-head figures made by outlining their shape in a multicolored band or by enclosing the shape with rows of dots around the outer perimeter. Facial features are not shown on the heads which are perched on rounded shoulders, but bodies below these shoulders are not depicted. At least one of these figures is superimposed on a row of white bighorn sheep with ovoid bodies, straight legs, and short necks attached to small head with curving horns. Another sheep is apparently more recent and on top of these round-head figures.

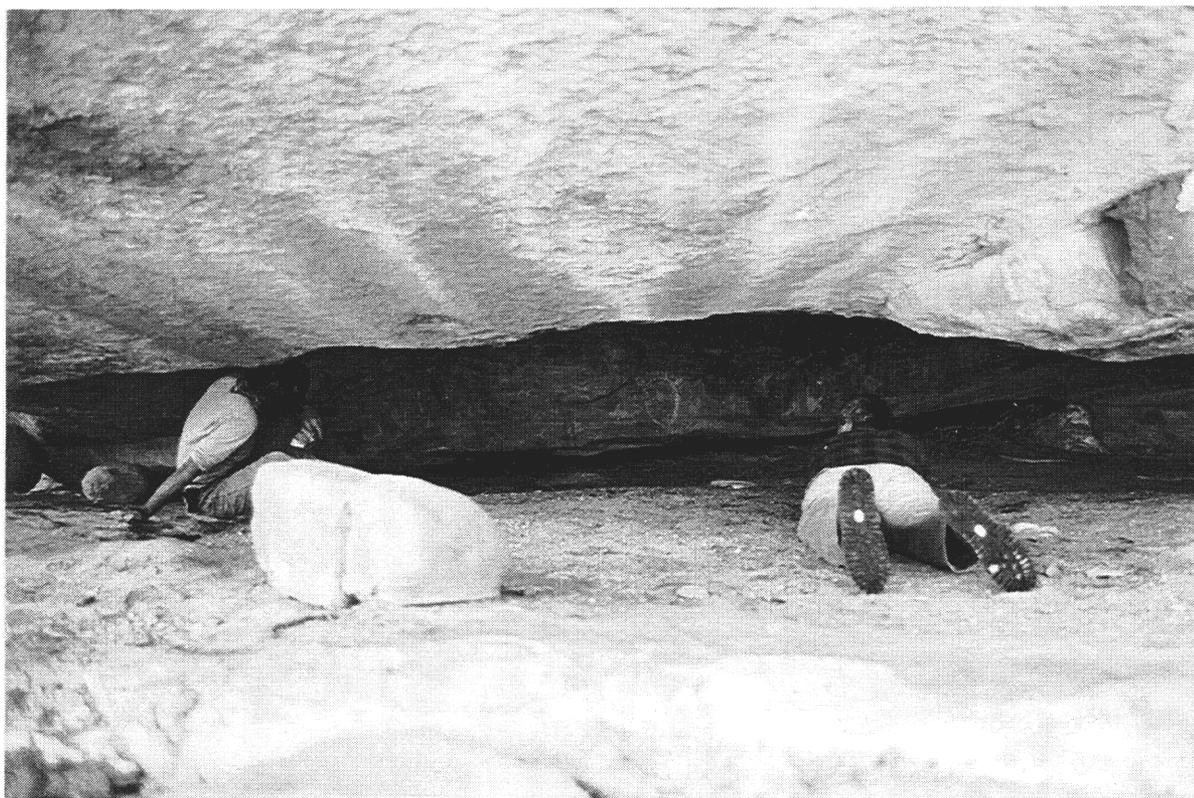


Figure 6.34. Overview of F.S. Site # AR 03-07-03-1284

Southern Paiute Interpretations

No interviews with Southern Paiute representatives were conducted at this site.

Archaeologist's Commentary

The round-head anthropomorphic figures are the oldest rock art at this site, based on the sequence of superimposition. Figures similar to these are known from Shaman's Gallery, to the

north of the Grand Canyon, and in a very faded panel at Whitmore Wash (A:16:001), along the Colorado River in the Grand Canyon. Other figures in the shelter - tapering-body humans and profile views of sheep with rectangular and boat-shaped bodies - are like paintings in nearby sites on the Esplanade and executed as petroglyphs above Lees Ferry in the Grand Canyon.



Figure 6.35. Pictographs at F.S. Site # AR 03-07-03-1284

The tapering body figures, similar to the majority of the human figures in site AR-03-07-03-1267, are superimposed on the round-head figures. Other figures are apparently related to the Paiute styles identified at nearby sites in Kanab Canyon.

The site is important because it represents a private and hidden style of art and because it exhibits superimposition which needs to be studied in greater detail.

CHAPTER SEVEN

TRADITIONAL CULTURAL PROPERTIES

The 1994 Southern Paiute Consortium cultural resource studies in the *Colorado River Corridor* also sought to identify and document expressed concerns for places other than rock art sites in the study area. The purpose of this chapter is to consider *traditional cultural properties* (TCPs) and to provide a site-by-site discussion of six potential Southern Paiute TCPs located within the *Colorado River Corridor*. Five of the six sites were visited during the two 1994 river trips. Four of the locations were visited both in 1992 and 1993 and are discussed in *Piapaxa 'uipi* (Stoffle, Halmo, Evans, and Austin 1994). This chapter summarizes all the information known about each of the six sites and their significance as a TCP. The chapter is divided into three major sections. The first two sections discuss, respectively, (1) the concept and definition of traditional cultural property, from both a legal and intellectual perspective, and (2) a site-by-site description of each of the six potential Southern Paiute TCPs in the *Colorado River Corridor* study area, categorized as landmarks and ecoscapes.

The protection of TCPs as historic properties under Section 106 of the National Historic Preservation Act, as amended, is a relatively new endeavor in cultural resource management (Parker 1993). Consequently, there remains some confusion, given several pieces of legislation, as to how best to protect and manage TCPs. The third section of the chapter presents a conceptual analysis and discussion of TCPs and how such properties can best be protected given the current legislative and regulatory environment. The chapter then concludes with recommendations for protecting and managing Southern Paiute TCPs in the study area.

DEFINING TRADITIONAL CULTURAL PROPERTIES

This chapter is concerned specifically with properties that have *traditional cultural significance*. In this context, *traditional* refers to:

those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice (Parker and King 1990:1).

Parker and King (1990:1) provide the following definition of a TCP:

A traditional cultural property...can be defined generally as one that is eligible for inclusion in the National Register because of its association with cultural

practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community.

TCPs as defined above have thus been absorbed into the legal definition of historic property contained in the National Historic Preservation Act, as amended (NHPA). The concept of TCP thus broadens the "real estate" perspective inherent in the NHPA definition of an historic property as an object, site, place, or structure (Downer and Roberts 1993:12). TCPs can differ from other types of cultural resources by lacking associated artifacts that can be used to define their use and cultural significance. For example, a TCP maybe a location associated with the traditional beliefs of a Native American group about its origins or where Native American religious practitioners have historically gone and continue to go today to perform ceremonial activities are TCPs.

Because they may not have any evidence of human modification or use, TCPs are often difficult to recognize, and their traditional cultural significance may be subtle in that they visually may only reflect topography or other inherent natural environmental characteristics (e.g., a mountain or river). Consequently, the best method to document the "existence and significance of such locations" is "only through interviews with knowledgeable users of the area, or through other forms of ethnographic research" (Parker and King 1990:2).

The TCPs discussed in this chapter are places that have special religious, sacred, or historical meaning to Southern Paiute people. For each TCP, the site description, Southern Paiute interpretations of the site, and the significance of the site to Southern Paiute people are provided. These discussions are followed by ethnographic commentary, based on secondary sources and information collected during previous studies regarding the role of similar places and resources to Southern Paiute people. The voices of Southern Paiute representatives play a large role in this chapter, for it is their voices, expressing oral tradition, that imbue these locations with their historic and cultural significance.

Much of the existing information concerning Southern Paiute TCPs in the *Colorado River Corridor* study area must still be considered preliminary. The research was not specifically designed to record the boundaries, UTM coordinates, and acreage of the potential TCPs, but rather to provide Southern Paiute representatives the opportunity to *identify* potential TCPs. Nevertheless, additional information has been elicited from Southern Paiute representatives that indicates approximate boundaries, the period of significance, and the continuity of cultural significance in contemporary Southern Paiute belief and practice. For some locations, sufficient data exists that substantiate the role of the place in Southern Paiute cosmology, traditional belief, history, and practice. For others, representatives expressed the desire to return to their reservations and consult with elders before making general comments on a place. For still others, some question remains as to whether the place is a solitary landmark or a complex of locations that form a larger ecoscape (see Chapter Four and below). All six locations discussed in this chapter, however, have been identified as potential TCPs by Southern Paiute representatives.

The data for each of these places strongly suggest that further analysis is needed for the six potential TCPs in the study area, and the Southern Paiute Consortium is seriously considering engaging in more formal TCP studies in the *Colorado River Corridor*, especially to record boundaries, UTM coordinates, and acreage of each location. Such a study could perhaps be dovetailed with the survey trip planned for FY 1996. The data on Southern Paiute TCPs is presented in this report to assist National Park Service managers and Glen Canyon Environmental Studies personnel with their missions of management, monitoring, and consultation.

SOUTHERN PAIUTE TCPs IN THE *COLORADO RIVER CORRIDOR*: LANDMARKS AND ECOSCAPES

This section of the chapter presents the site descriptions for those locations that have been identified by Southern Paiute representatives as TCPs. The discussion is divided into two subsections which describe (1) TCPs that are *landmarks*, and (2) TCPs that are larger *ecoscapes* (see Chapter Four).

As mentioned in Chapter Four, landmarks are discrete physical places that are bounded and are topographically and culturally unique. There appear to be four landmarks with very high cultural importance to Southern Paiute people in the *Colorado River Corridor*. These landmarks are (1) the Salt Cave, (2) Vulcan's Anvil, (3) the Hematite Cave, and (4) perhaps Pumpkin Spring. Each of these landmarks appear to have been jointly used by Southern Paiutes and other Indian peoples, primarily Hopi and Hualapai, in the study area.

Salt Cave Landmark

Culturally sensitive information held at the office of the Southern Paiute Consortium.

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Salt Cave Landmark - Box Continued

Salt Cave Landmark - Box Continued

Vulcan's Anvil Landmark

Culturally sensitive information held at the office of the Southern Paiute Consortium.

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Vulcan's Anvil - Box Continued

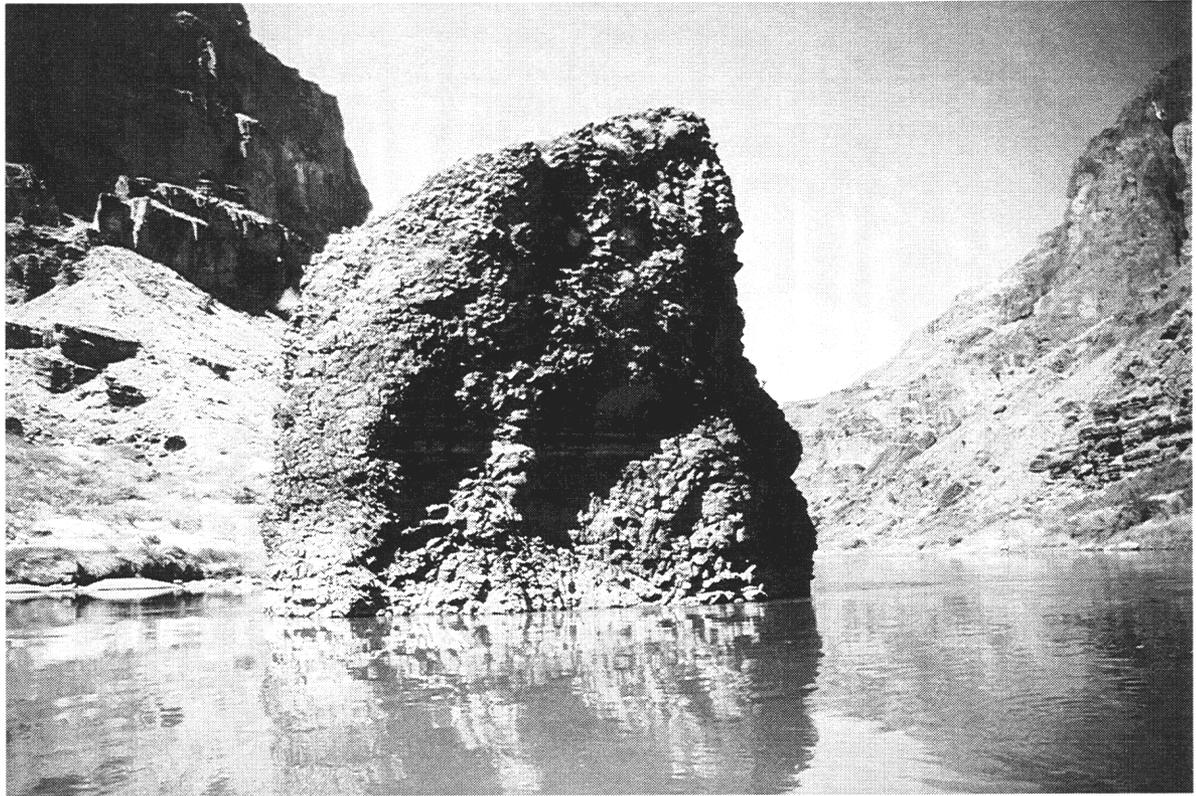


Figure 7.1. Vulcan's Anvil

Vulcan's Anvil - Box Continued

Vulcan's Anvil - Box Continued

The Vulcan's Anvil-Lava Falls Complex: An Ecoscape TCP?

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Vulcan's Anvil-Lava Falls Complex - Box Continued

Vulcan's Anvil-Lava Falls Complex - Box Continued

Ompi (Hematite) Cave

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Figure 7.2. Overview of Hematite Cave Site.

Ompi (Hematite) Cave - Box Continued

Ompi (Hematite) Cave - Box Continued

Pumpkin Spring Landmark

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Figure 7.3. Pumpkin Spring.

Pumpkin Spring - Box Continued

Pumpkin Spring - Box Continued

Deer Creek Valley and Falls Ecoscape

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Deer Creek Valley and Falls Ecoscape - Box Continued



Figure 7.4. Overview of Deer Creek Valley (note burn scars from unintentional tourist fire).

Deer Creek Valley and Falls Ecoscape - Box Continued

Deer Creek Valley and Falls Ecoscape - Box Continued

Deer Creek Valley and Falls Ecoscape - Box Continued

Deer Creek Valley and Falls
Ecosystem - Box Continued

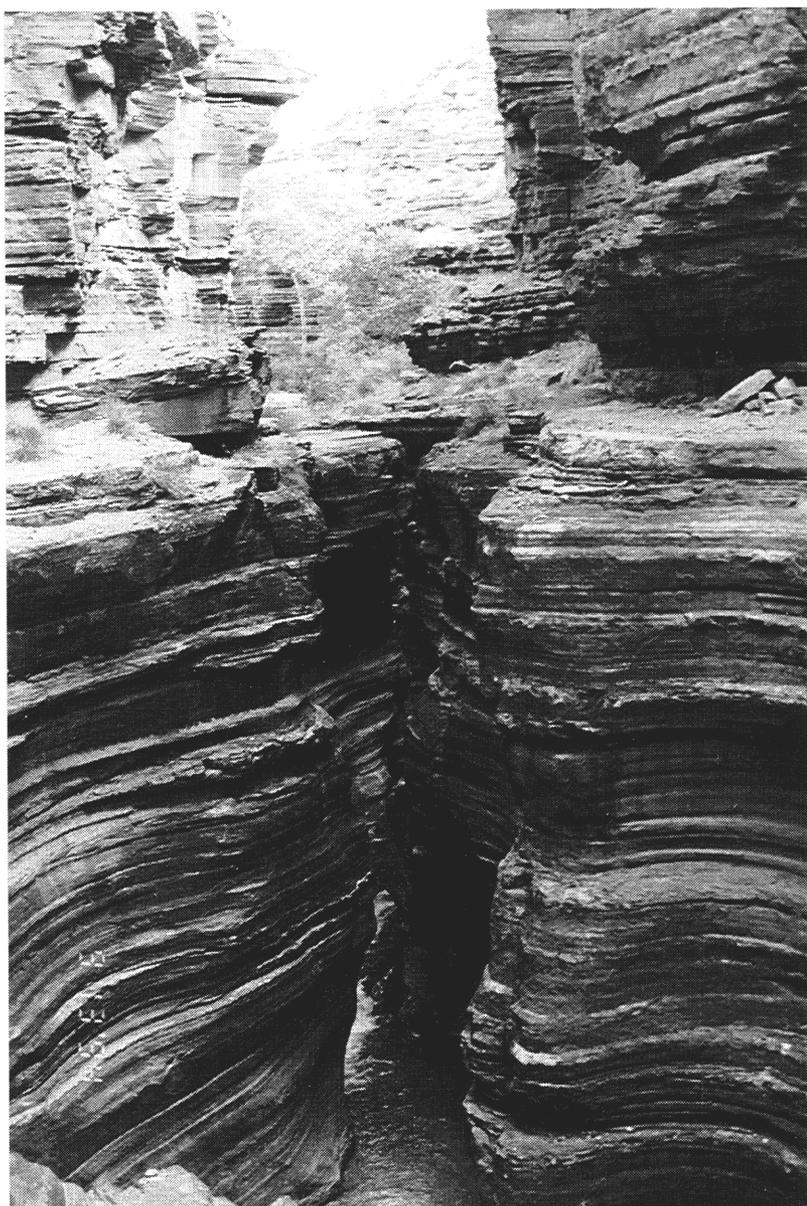


Figure 7.5. The Deer Creek Gorge.

Deer Creek Valley and Falls Ecosystem - Box Continued

Granite Park Ecoscape

Granite Park is an extensive site of Native American occupation and use located near mile 209. Granite Park was first officially noted as a potential TCP by Southern Paiute representatives in July 1992, during the first Southern Paiute raft trip through the *Colorado River Corridor* (Stoffle, Halmo, Evans, and Austin 1994:172-173, 199). During 1992 and 1993, Granite Park was visited to elicit Southern Paiute concerns for archaeological and botanical resources.

The identification of Granite Park as a potential TCP with historic cultural significance among Southern Paiute people emerged in the context of these other studies. Granite Park was, however, not visited during the 1994 studies. Consequently, not as much is known about this place in specific terms as about the other potential TCPs discussed in this chapter.

Southern Paiute Interpretations

During previous study visits to Granite Park, one Southern Paiute representative noted that Granite Park was one of the likely locations of refuge on the Hualapai side of the river where Shivwits people stayed in the mid-1800s. There is an abundance of Paiute pottery present at the location. Numerous grinding stones, as well as bedrock mortars, are also present throughout the location.

Ethnographic Commentary

Granite Park has clear historic and cultural significance to Southern Paiute people. The period of significance for this site extends back to the mid-1800s. In addition, the giant old Goodding's willow tree (*Salix gooddingii*) is a well known historic marker that is frequently mentioned as the tree to which Powell tied his boat and rested under during one of his expeditions down the river.

Current data on this potential TCP do not permit an approximation of boundaries. Granite Park is a large area. Additional research is needed to more fully determine the extent and significance of this area as a TCP.



Figure 7.6. Overview of Granite Park.

SUMMARY

Six locations have been identified by Southern Paiute representatives as traditional cultural properties. More information is needed before these locations can be evaluated fully as TCPs. It must be noted, however, that much of the needed information is with regard to boundaries, UTM coordinates, and acreages covered as required by the Section 106 process to more fully determine the eligibility of and document Southern Paiute traditional cultural properties for inclusion in the National Register.

The National Register of Historic Places

One way to try to increase the protection of a place is to have it included in the National Register of Historic Places (National Register). The National Register was created under the National Historic Preservation Act (NHPA) and is a record of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture (16 U.S.C. 470(a)(1)(A)). Places are included in the National Register if they meet the criteria specified in the National Register's *Criteria for Evaluation* (36 CFR § 60.4).

Places that are included in or eligible for inclusion in the National Register must be considered in planning Federal, federally assisted, and federally licensed undertakings that might affect those places (NHPA, 16 U.S.C. 470f). For example, the NPS must pay special attention to TCPs located within national parks. Consultation about such places must include the groups for whom the property is considered especially significant.

Eligibility for Nomination to the National Register

Determining eligibility for the National Register requires formal ethnographic studies that are carried out by a professionally qualified cultural anthropologist to include (1) background research about the area's history, ethnography, sociology, and folklife, and (2) fieldwork to consult with knowledgeable individuals and to inspect and record the locations (Parker and King 1990). Relevant information can be kept confidential when it is considered culturally inappropriate to reveal certain information about a place or when revealing the information would compromise the integrity of the property or the associated cultural values, such as by encouraging tourists to intrude upon traditional cultural practices.

There are four steps in determining whether a property is eligible for inclusion in the National Register (Parker and King 1990). (1) The entity under consideration must be a *property*; a site can be so defined as long as it was the location of a significant event or activity, regardless of whether there is any evidence of its occurrence. "A natural object such as a tree or a rock outcrop may be an eligible object if it is associated with a significant tradition or use" (Parker and King 1990: 9). (2) The property must have an *integral relationship to traditional cultural practices or beliefs* and must be in a condition that permits the relevant relationship to survive.

(3) The property must meet at least one of the *four basic National Register Criteria* set forth in the National Register regulations (36 C.F.R. Part 60). These criteria are (a) association with events that made a significant contribution to broad patterns of Southern Paiute history, (b) association with the lives of individuals significant in the Southern Paiute past, (c) embodiment of distinctive characteristics of construction, possession of high artistic values, representation of the work of a master, or representation of a significant and distinguishable entity whose components may lack individual distinction, and (d) having yielded or being likely to yield information important in prehistory or history.

(4) The property may not possess characteristics that make it *ineligible for inclusion* in the National Register. These characteristics are (a) ownership by a religious institution or use for religious purposes, (b) relocation of the property, (c) birthplaces or graves, (d) cemeteries, (e) reconstructed properties, (f) properties constructed to commemorate a traditional event or person, and (g) significance achieved within the last 50 years. These characteristics have been carefully analyzed for their relevance to Native American TCPs (Parker and King 1990).

Documentation of TCPs must include (1) presentation of the results of interviews and observations that systematically describe the behavior, beliefs, and knowledge germane to

understanding the property's cultural significance and analysis of these results, (2) documentation of the visible and non-visible characteristics of the site including the contemporary physical appearance and, if known, historical appearance of the site and the way the site is described in traditional belief or practice, (3) the period of significance for the site, defined in the terms of the group to whom it is important, and (4) the boundaries of the site.

Several properties may be nominated as a multiple property TCP. Mt. Shasta was so documented and included on the National Register. Large multiple property areas can also be nominated as a district (NPS 1991).

THE CURRENT STATE OF TCP RESEARCH AND PROTECTION

Currently, TCPs can range from a single object to a relatively large, albeit arbitrarily bounded, geographical area. The Section 106 process is currently the only legal framework for protecting such properties backed up by specific law and regulation (Sebastian 1993). Recently, however, the politics of Section 106 protection for Native American TCPs has become a hotly debated issue.

Properties are nominated to the National Register if they meet one or more of these criteria. However, another significant characteristic of potential TCPs is that they cannot be *ineligible* because of one or more criteria. For example, a property that meets one or more of the above criteria but has been adversely effected in terms of its condition - thus destroying its integrity - could be excluded from nomination to the National Register. In addition, it is important to remember that establishing a property as eligible for inclusion in the National Register does not necessarily mean that the property must be protected from disturbance or damage; if the public interest demands that a property be sacrificed to the needs of a proposed undertaking, nothing in the NHPA prohibits that.

Loss of integrity is the issue in the current conflict over the Mt. Shasta nomination to the National Register in California (Henn 1993; Rogers 1994; Miller 1994; Buckskin, Carpelan, and Berditshevsky 1994; Keepers of the Treasure 1994; Irion 1995). In this case, the former Keeper of the Register reopened the public comment period following a determination by the current Keeper that all of Mt. Shasta, from the summit to the 4,000 foot contour, was eligible as a TCP. The U.S. Forest Service argued that only the area from the summit to the 8,000 foot contour was eligible because of major disturbance by logging and forest roads in the area from 4-8,000 feet, thus destroying the historic integrity of condition. Indian people have responded that such disturbance has not compromised either the integrity or the significance of the entire mountain. Moreover, the lower areas are precisely the ones used for traditional purposes, and the summit is not visited because it is the home of deities. Indian people have initiated a program of cultural restoration, in terms of reforesting lower areas at the 4,000 foot contour as part of continuing their traditional association with the mountain, and argue that restoration is explicit in the historic preservation process. While the issue has not been permanently resolved, this recent reversal of an eligibility decision regarding a major Native American TCP has serious

implications for the Section 106 process with regard to TCPs and raises the fundamental question: how can traditional cultural properties be best defined and protected?

Historic, Cultural, and Ethnographic Landscapes

Anthropologists involved in historic and cultural preservation research, practice, and policy making, as well as archaeologists studying sacred sites, have recently advocated a more inclusive frame of reference for protecting places important to Indian people (Downer and Roberts 1993; Carmichael 1994; Carmichael, Hubert, and Reeves 1994; Carmichael, Hubert, Reeves, and Schanche 1994; Kelley and Francis 1993, 1994; NPS 1994; Chapter Four). This framework views cultural resources, traditional cultural properties, plants, animals, water, and physiographic features in a geographic space that was and is used, occupied, or culturally significant to Indian people as integral components of a *cultural landscape*. The NPS has included cultural and ethnographic landscape planning and management as part of its cultural resource management guidelines since 1984 (NPS 1994:93-117). The inclusiveness of the cultural landscape concept appears to be analogous to *ecosystem management*, a model adopted by such agencies as the Forest Service and the Bureau of Land Management (Hadley, Warshall, and Bufkin 1991; Hadley, Ahlstrom, and Mills 1993).

According to the NPS guidelines, "all cultural landscapes are to be managed as *cultural resources*, regardless of the type or level of significance" (NPS 1994:93, emphasis added). The concept incorporates all of the other various cultural resource terms such as TCP because the landscape reflects human adaptation in terms of cultural values, traditions, and uses of biotic systems and resources in time and space, thus implying historic significance. A particular type of cultural landscape, termed an ethnographic landscape, is associated with contemporary human groups who use and value such a landscape in traditional ways (NPS 1994:94). Research, preservation, treatment/management, and preservation are important goals entailed in the policy and guidelines. The cultural landscape approach also recognizes that physical changes may be important in continuation of use without destroying a landscape's integrity. Restoration and monitoring are also key components of cultural landscape management as defined by the NPS.

The researchers cited above have all advocated the adoption of a cultural landscape approach for the protection of inclusive Native American cultural ecosystems. While there are no Federal laws or implementing regulations that serve as the foundation for such a landscape approach, such an approach is explicitly outlined in agency policy and management guidelines.

CONCLUSION

Now that TCPs have been identified in consultation with the Southern Paiute Consortium, the task will be to collect this information and begin the process of determining the eligibility of the locations for National Register protection. This work should occur as soon as feasible, as the integrity of these places is in jeopardy due to human tourist impacts (see Chapter Eight). The most striking example of this is the tourist-ignited fire in Deer Creek Valley that burned virtually all the vegetation, including the rare agave (*Agave palmeri*). Consequently, the

viewshed has been adversely impacted. The sheer numbers of tourists who visit Grand Canyon National Park each year ultimately threaten these places and the resources present at these places. The Mt. Shasta case illustrates that integrity, as perceived by various contending interests, can be a major criteria. On the other hand, the Mt. Shasta case has not been finally resolved.

By virtue of legislation and executive orders which establish national park units, those units are automatically placed on the National Register of Historic Places under the provisions of the NHPA. Grand Canyon National Park and Glen Canyon National Recreation Area are thus currently on the National Register. In addition, the Grand Canyon has the status of being a World Heritage site as determined by the International Union for the Conservation of Nature (IUCN).

The NPS units do not entail the entire *Colorado River Corridor* study area. Consequently, places of religious, historic, and cultural importance to Southern Paiute people can best be protected under Section 106 and the provisions of the American Indian Religious Freedom Act (AIRFA; 42 U.S.C. §1996, see Chapter Eight) regarding Indian religious freedom of access and use of places and resources essential to the conduct of traditional religion, as well as by NPS policy regarding the management and protection of cultural and ethnographic landscapes. As Chapter Four has documented, ecoscapes as components of regional and cultural landscapes clearly fall within this concept. Kanab Creek, Deer Creek, the Vulcan's Anvil-Lava Falls Complex, and Granite Park have all been identified as Southern Paiute ecoscapes within the *Colorado River Corridor* cultural-ethnographic landscape.

For present purposes, the NPS and Bureau of Reclamation should ensure that these locations receive some form of special recognition, management, and monitoring as ecoscapes within a cultural landscape as provided for in NPS cultural resource management policy, until they can be formally documented as TCPs through the Section 106 process. In the meantime, AIRFA stipulates protection in order that Southern Paiute people are able to fulfill their desire to have continued access to these places for religious purposes.

The spirit of Federal legislation, as well as agency policy and guidelines that emphasize holistic ecosystem management, including accounting for historic and cultural landscape values embedded within such ecosystems, should guide the management and monitoring of these spatial areas in the *Colorado River Corridor*.

CHAPTER EIGHT

MANAGEMENT RECOMMENDATIONS

This is a study of Southern Paiute cultural concerns in the *Colorado River Corridor* and its encompassing canyons. Like other American Indian studies, the primary purpose is to incorporate the Indian voice to provide additional direction to management and protection of cultural resources. Past projects of this kind suggest that in order to protect American Indian cultural resources in a culturally appropriate way, four things need to occur: (1) identification, (2) evaluation, (3) recommendation, and (4) co-management. Indian people need to identify the various types of cultural resources that are located within the area of study, whether these be plants, animals, minerals, water sources, archaeology sites, rock art, or power places. As part of this process Indian people explain why combinations of these cultural resources go together to produce geographically larger areas of cultural importance. Such areas have been termed in this report cultural landscapes, regional landscapes, ecoscapes, and songscapes. Landmarks are equated with Traditional Cultural Properties (TCPs) in this report until it is certain that these larger geographical units accurately can be included under the TCP rubric.

Evaluation of cultural resources is only required when it is not possible for some reason to equally protect all of the cultural resources. In general, complete protection of all cultural resources, or what is called holistic conservation, is possible only when the areas containing the resources can be completely isolated from human contact. If it is not possible to equally protect all cultural resources, then some resources must be selected to receive the highest levels of protection possible while other resources will receive less protection. The choice of where to prioritize the application of protection has been termed *cultural triage* (Stoffle and Evans 1990). It is important that Indian people develop the criteria for triaging cultural resources. If they do not, the resources will be triaged in terms of science or other established policy criteria.

Recommendations regarding the protection of cultural resources reflect the extent to which (1) the Indian people believe the resource is threatened, (2) the resource is seen as a priority for receiving protection, and (3) the resource can be protected with available procedures. Indian people normally suggest recommendations for protection without regard to other factors such as the impact on tourism, the legal regulations that govern the use of the resource, and the current availability of protection resources. In other words, initial Indian recommendations should not be hampered by limitations but should instead reflect what Indian people think ideally should be done. As a result, it becomes necessary to translate ideal sets of recommendations into the real world of multiple use demands, natural resource laws, and limited agency resources.

Co-management is a goal increasingly sought by Federal and state land managers. Co-management involves the agency sharing the decision making with outside groups like American Indians who are culturally affiliated with the natural resources administered by the agency. National parks, national forests, Bureau of Land Management lands, Department Of Energy facilities, and Department of Defense installations are being co-managed with American Indian input. All Federal and state land management agencies are governed by laws that regulate the use of and assess to the natural and cultural resources found on administered lands. American Indian concerns must be weighed against these laws and conflicting user demands. Few agencies provide land use managers exact guidelines for deciding which course of action they should take. As a result, it behooves American Indian people involved in these studies to be as complete as physically and culturally possible when they present their cultural resource concerns.

The next section of this chapter discusses some of the major laws that influence the management of American Indian cultural resources. These laws are discussed without an implication that one is better than another for protecting cultural resources. Instead, it is hoped that these leave the impression that many laws call for the protection of American Indian cultural resources, so this should become the goal of every state and Federal agency. A basic question then arises as to how to study and manage these cultural resources. It is suggested in this study that the larger the units of management, the more likely they will be managed as Indian people view them.

Following this discussion of cultural resource laws is a section containing Southern Paiute recommendations. There are two levels of recommendations: (1) individual and (2) tribal. The individual recommendations were produced when Southern Paiute representatives were asked what they thought should be done to protect the rock art sites along the *Colorado River Corridor*. Each interview included a discussion of what the Indian representatives perceived was occurring to the rock art sites and what should be done to protect them. The recommendations primarily derive from these interviews; some additional recommendations were recorded at other points during the raft trips. Tribal recommendations were provided by the Southern Paiute Consortium as representative of the Kaibab Paiute Tribe and Paiute Indian Tribe of Utah.

LAWS FOR PROTECTING CULTURAL RESOURCES

Many Southern Paiute cultural resources within the *Colorado River Corridor* presently receive some protection because they are located within the Grand Canyon National Park. All national parks have clear regulations regarding the protection of natural and cultural resources. However, Southern Paiute representatives have expressed concerns that many sites are being damaged despite these laws and regulations. Therefore, several means of affording additional legal protection to the Southern Paiute cultural resources are discussed in this section.

The following historic preservation legislation and regulations that govern Native American cultural resource management have been discussed in detail in previous studies (Stoffle, Halmo, Evans, and Austin 1994), so only a brief review and discussion are presented here.

National Historic Preservation Act

On October 15, 1966, Congress passed the National Historic Preservation Act (NHPA, PL 89-665, 80 Stat. 915, 16 U.S.C. 470 et seq.). The 1980 amendments to the Act directed the Secretary of the Interior to study the means of "preserving and conserving the intangible elements of our cultural heritage such as arts, skills, folklife, and folkways..." and to recommend ways to "preserve, conserve, and encourage the continuation of the diverse traditional prehistoric, historic, ethnic, and folk cultural traditions that underlie and are a living expression of our American heritage" (PL 96-515, 94 Stat. 2989, 16 U.S.C. 470a). The amendments are explicit in the requirements for the protection of the confidentiality of the location of sensitive historic resources.

National Register Bulletin 38, *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, fulfilled that purpose with specific inclusion of Indian Tribes (Parker and King 1990:2). That bulletin is significant for preservation of Native American cultural resources because the policies and procedures of the National Register can be interpreted by Federal agencies and others to exclude historic properties of religious significance to Native Americans from eligibility for inclusion in the National Register (Parker and King 1990:3).

On October 30, 1992, the National Historic Preservation Act was again amended, providing considerable greater authority and assistance to Native Americans. The 1992 amendments specifically mention the need for Federal agencies to contact and consult with Indian tribes. Properties of traditional religious and cultural importance to an Indian tribe may be determined to be eligible for inclusion on the National Register, and a Federal agency must consult with any tribe that attaches religious or cultural significance to such properties. In addition, Indian tribes are to receive assistance preserving their particular historic properties. Coordination among tribes, State Historic Preservation Offices (SHPOs), and Federal agencies is to be encouraged in historic preservation planning, and in the identification, evaluation, protection, and interpretation of historic properties. Additional language is also included in the amendments regarding confidentiality. Tribes are also eligible to receive direct grants for the purpose of carrying out the Act. The amendments also provide for tribes to assume part or all of the functions of a SHPO with respect to tribal lands.

In response to the 1992 NHPA amendments, a new policy statement, "Consultation with Native Americans Concerning Properties of Traditional Religious and Cultural Importance," was adopted by the Advisory Council on Historic Preservation (ACHP) on June 11, 1993. That policy provides explicit principles for application of the amendments, including particularly that Native American groups who ascribe cultural values to a property or area be "identified by culturally appropriate methods" and that participants in the Section 106 process should learn how to approach Native Americans in "culturally informed ways" (ACHP 1993:3-4). Consultation with Native Americans must be conducted with sensitivity to cultural values, socioeconomic factors, and the administrative structure of the native group. Specific steps should be taken to address language differences and issues such as seasonal availability of Native American participants as well. According to this policy, Native American groups not identified during the

initial phases of the Section 106 process may legitimately request to be included later in the process. The Advisory Council's policy statement also reaffirms the U.S. government's commitment to maintaining confidentiality regarding cultural resources and states that participants in the Section 106 process "should seek only the information necessary for planning" (ACHP 1993:3).

American Indian Religious Freedom Act

Additional legislation which affects tribes and cultural resources includes the American Indian Religious Freedom Act (AIRFA) of August 11, 1978 (PL 95-341, 42 U.S.C. 1996). AIRFA reaffirms the First Amendment of the United States Constitution rights of American Indian people to have access to lands and natural resources essential in the conduct of their traditional religion. In Section 2, Congress asks the President of the United States to direct various Federal departments and agencies to consult with native traditional religious leaders to determine appropriate changes in policies and procedures necessary to protect and preserve American Indian religious practices. The Act requires the Bureau of Reclamation (BOR) and National Park Service (NPS), like other Federal agencies, to evaluate policies and procedures with the aim of protecting the religious freedoms of Native Americans including "access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites." During the twelve years since AIRFA was passed by Congress, all Federal agencies have developed means of interacting with American Indian tribes having cultural resources potentially impacted by agency actions. The BOR has established an Office of Native American Affairs that helps to facilitate interactions between tribes and facilities. The NPS also has published specific policies concerning American Indians.

INDIVIDUAL PAIUTE RECOMMENDATIONS

Southern Paiute people made a number of recommendations to protect the rock art panels and sites. A few examples will illustrate the range of concerns and mitigation recommendations. The representatives observed that some of the panels had already been significantly impacted by erosion and tourism. Both sources of impacts are associated with water release policies. As the water from Glen Canyon Dam erodes more and more beaches, tourists are forced to camp and stop for lunch at fewer and fewer places. When tourists camp or stop for lunch, they walk to rock art panels. The Southern Paiute representatives recognized that their own recommendations, like restricting access to certain rock art sites, could further concentrate tourists and potentially increase damage to other rock art sites. The relationship between water release policies, tourist behaviors, and rock art sites is complex, but it is one the Indian people perceived is critical to understand so places of cultural significance can be protected.

PERCEIVED IMPACTS

The results from previous research indicate that Southern Paiutes view impacts due to natural forces differently from those that are the result of human activities (Stoffle, Halmo, Evans, and Austin 1994). Therefore, Southern Paiute representatives were specifically asked to

describe the impacts they perceived were the result of natural activities and their recommendations for protecting the rock art panels and TCPs from those activities. They were also asked to describe the impacts they perceived were the result of human activities and their recommendations for protecting the panels and TCPs from those activities. The results of those inquiries are described in the following sections.

Impacts from Natural Elements

The Southern Paiute representatives perceived that the rock art panels were being affected by wind, blowing and shifting sand, rain, falling rocks, sun, heat, and past flooding. The site-by-site responses are shown in Table 8.1.

The most common response to the question of what could be done to protect the rock art panels from natural activities was nothing. Southern Paiute representatives expressed two general reasons for this response. First, individuals believe it would be *wrong* to interfere with a natural process.

There may be a reason for it to deteriorate naturally. (D2001)

It would be unnatural. If it has to go, it has to go. I would like to see it natural. (R2001)

You cannot protect nature from nature without ruining something that is natural. (R504)

Just leave it like that. (DA2002)

God gave us the wind and rain. We need it. So do the animals. So it is okay if they fade away. (D503)

In addition, some individuals noted that it would be *difficult* or *impossible* to protect the panels from natural elements.

You can't tell Mother Nature what to do. (D501)

It is hard to protect [something] from natural elements. (DA502)

There is no way to protect from the wind. (R503)

Some individuals who did not believe there should be any interruption of natural processes suggested that the panels should be recorded for educational purposes.

Let the elements take care of it. But, take pictures - videotape - so Indian people have a record of it. (R2002)

Table 8.1. Perceived Natural Impacts to Rock Art Panels

Site Number	Are the Panels Being Impacted by Natural Elements? (Proportion of Representatives)	
	Yes	No
1	0.73	0.27
2	0.75	0.25
3	0.89	0.18
4	0.91	0.11
5	0.91	0.09
6	1.00	0.00
7	0.83	0.17
8	0.83	0.17
9	0.71	0.29
10	0.92	0.08
11	0.67	0.33
12	0.54	0.46
14	0.78	0.22
15	0.92	0.08
16	0.55	0.45
17	0.50	0.50
18	0.64	0.36
19	0.56	0.44
20	0.67	0.33
22	1.00	0.00
23	0.71	0.29
24	0.64	0.36
25	0.80	0.20

Today, Southern Paiutes are confronted with the challenge of preserving their traditional practices although many of their cultural resources have been damaged or destroyed by non-Indian activities. Although the dominant belief held by representatives was that natural elements should be allowed to operate without disturbance, a concern for protecting panels was also

expressed by some individuals. Rock art panels are important for teaching others about Southern Paiute culture, and some individuals communicated a desire to protect the panels in the *Colorador River Corridor* in any way possible.

That's the way of things. Some may be more significant than others and should be protected, but generally they should be left in the natural state. (D502)

Suggestions for protection from natural elements include wind breaks, water diversions, and stabilization of boulders that contain rock art panels.

Many of the representatives, although responding to the question about natural elements, moved into discussions about how to protect panels from human activities.

Put a cover over it. It would help protect it from rain and create a barrier so people only go so far to look. (D2002)

It could be moved elsewhere and fenced off so people could see, if they are moveable. (D2011)

[The only thing you could do would be to] move it somewhere. If you do it may even become worse with people marking it. (R2006)

Human impacts to the rock art panels were of significant concern to the Southern Paiute representatives and are discussed in the following section.

Impacts from Human Activities

The Southern Paiute representatives perceived that many of the rock art panels were being affected by human activities (see Table 8.2). The human impacts that were noted include vandalism, trampling, trailing, the creation of collection piles and picking up artifacts from sites, throwing trash, fire building, picnicking and camping near the panels, and the roads at Lees Ferry. Activities that were considered vandalism are scratching the rock, touching the panels, and putting graffiti on the rocks and moving or removing artifacts from the sites. The removal of pots and burials, whether by archaeologists or tourists, is considered vandalism by the representatives. Some individuals perceived the bullet holes in the mountain sheep figures located at Site 1 - C:03:006 to be vandalism and others perceived them to have resulted from the use of the panels. The proximity of the picnic area to the rock art panels at that site is of concern to the Southern Paiutes because it concentrates tourists in the area. The recent fire at the site is vivid evidence of the potential damage caused by tourists. Though the effect of carving and scratching are obvious to anyone looking at the panels, the representatives also commented on evidence that the panels had been impacted by touching. Touching is a problem both because of the direct impacts of human hands on the panels and also because of the perception that individuals who are willing to touch a panel may also be likely to carve or scratch on the rock.

The ones closest to the trail are actually touched by hands. The acid in the hands washes the pigment away. (R2015)

It looks like someone rubbed something on them. It is in an area on rock that we would know better not to touch. It could be new agers. The trails allow a lot of Anglo tourists to come here. (D519)

If they know they're here they'll continue to touch them and look at them. Eventually it will lead to initials. (DA2022)

In addition, some of the human impacts to the rock art panels and the TCPs are intangible. For instance, representatives perceived that the presence of tourists at some sites negatively influenced the atmosphere at the panels. One individual commented on the change that occurred at Site 2 - C:02:038 when tourists arrived in the midst of a visit by the Southern Paiutes during the study.

There was a different feeling in the air when Indian people were alone at this place. This changed when the tourists came. (R504)

Similarly, the representatives commented on the impact of the attitudes of individuals who view the panels.

I didn't like the interpretation made by the day trip boat guide. There was no physical damage - spiritual damage. If someone talks about it and doesn't believe in it, it would be bad. (R503)

Tourists rummaging through the caves, moving rocks. The rocks have feelings and are thrown off balance when they are moved. (D2015)

Another intangible affect of the human activities is the impact to the viewscape.

Table 8.2. Perceived Human Impacts to Rock Art Panels

Site Number	Are the Panels Being Impacted by Human Activities? (Proportion of Representatives)	
	Yes	No
1	1.00	0.00
2	1.00	0.00
3	0.30	0.70
4	0.33	0.67
5	0.27	0.73
6	0.25	0.75
7	0.42	0.58
8	0.75	0.25
9	0.29	0.71
10	0.42	0.58
11	0.67	0.33
12	0.92	0.08
14	0.56	0.44
15	0.25	0.75
16	0.27	0.73
17	0.25	0.75
18	1.00	0.00
19	0.22	0.78
20	0.22	0.78
22	0.33	0.67
23	0.71	0.29
24	0.55	0.45
25	0.90	0.10

The Southern Paiute representatives expressed their lack of faith in tourists and visitors to the *Colorado River Corridor* in their discussions of what to do to protect the rock art panels and TCPs from human impacts.

Put up a sign - No Trespassing, Keep Out. Or just don't tell the tourists or whoever where this place is. They'll find it and put their initials and stuff all over it.

They also acknowledged the difficulty of protecting their cultural resources from such impacts.

I am not sure how you can protect from people like this. (D510)

I wouldn't want to see them covered. They should stay natural and go the way they are supposed to go - naturally deteriorate. (DA509)

The most common recommendations to protect the panels from human activities can be organized into two basic groups. First, for those sites that are perceived to have received little impact from humans (see Table 8.2 above), most representatives recommended keeping the location of the panels hidden. Some representatives believe it will be impossible to prevent the site locations from being disclosed and therefore recommended either that tourists be educated about appropriate behavior at the sites and/or that they be accompanied by a ranger during their visits to the sites.

There is not much activity up here. People don't come up here very often. Just don't tell them about it. (DA2007)

I don't think too many people know about it. A good guide would protect it. If people figured out it was there, maybe fence it in. (DA506)

It is far up river enough that there is not much access, but it should be monitored by rangers. No hiking with fishing license. Fine those who disobey. (D505)

Second, for sites that are perceived to already have been impacted by human activities, representatives recommended restricting access to the site and educating the tourists about appropriate behavior. The methods of restricting access include placing sites off-limits, putting fences around panels, and covering trails to the sites. However, representatives expressed an awareness that it would be impossible to successfully accomplish any of those goals at some of the most well-known and heavily visited sites. Some individuals perceived the entire process of constructing a fence or barrier to be problematic. Yet, despite recommendations for public education, the representatives communicated that they were also aware of the potential limitations of public education efforts.

Do not let people hike all over. You cannot cover it up. Signs would attract people more to it. [Without signs] people would walk right over it and not see it. (R513)

Educate people. You cannot set it in a cage. It would ruin the whole meaning of this canyon. It ruins the setting. How to educate? Signs or brochures - some people follow signs such as "Please do not carve on walls." (R502)

Keep the panel off limits, but now we are not in a position to keep [people out]. Public education - allow access, but just to look, not touch. (D2001)

By telling people to pray about it. When they are praying they could have the feeling of the place. Then they could learn about the place. (R503)

You have to educate people. I believe some of the signs did good, but people are going to do what they're going to do regardless. (DA503)

Several individuals objected to the efforts to eradicate the graffiti at Site 1 - C:03:006 by chipping out the top layer of the panel. Those efforts appear to have increased the rate the panel is eroding.

Still, the Southern Paiute representatives were not unanimous in their beliefs that access to the sites should be completely cut off. They struggled to balance their belief that the rock art sites should be visited for spiritual or educational purposes with their distress over the impacts that tourists are causing to the sites.

To me I don't think it would be right to [make] this water source [off-limits] because to me it's like a spiritual thing. You need it to cleanse your body and you need it to help plants grow. Mostly your body needs it. If you put something on it then. Somebody that believes this water is sacred and they need that to help them spiritually [wouldnt be able to get it]. (DA2039)

It is alright for people to come up and look at it and try to study what it means. (DA511)

People hike through that place. It is a pretty place and people want to go there, but they don't know they are walking through a place my people used to live and were buried. (DA524)

I recommend for tourists to come and see areas but try and protect them as they would do their own values at home. They should not touch or destroy like they do at home. (R525)

**SOUTHERN PAIUTE CONSORTIUM RECOMMENDATIONS FOR
PROTECTING AND MANAGING CULTURAL RESOURCES IN THE
COLORADO RIVER CORRIDOR**

Specific sites and areas significant to the Southern Paiute people are primarily those sites that can be destroyed through the carelessness of humans in a very short time. For this reason,

it is imperative that the Southern Paiute Nation be a decision maker in processes that affect resources in the *Colorado River Corridor*.

Resources significant to Southern Paiute people have attracted many visitors to the canyons of the Colorado River for decades. Important resources that occur naturally within the corridor may seem to be religiously and spiritually insignificant when judged by their appearance, but they often hold tremendous value within Paiute culture.

Today, native people are afforded the opportunity to express concern over U.S. federal actions that may harm religious and sacred sites through Federal laws that protect our rights and the resources as well. The Southern Paiute Consortium's recommendations for protection of sites in the *Colorado River Corridor* are:

- * The BOR must provide a ongoing forum to promote and enhance the interaction between all the involved tribes and the various other cooperating agencies to achieve consensus on the management of resources within the corridor.
- * The tribes must be financially supported by the BOR so they can remain in the decision making process and have a perpetual voice in making management recommendations.
- * Research capabilities for tribes and other agencies must be strengthened in order to better manage the resources in the corridor.
- * Training and education must be an avenue open to tribal members of the involved tribes thereby making the tribal governments better equipped to technically and professionally conduct research and monitoring of the resources of the corridor.

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APPENDICES

APPENDIX A

ETHNOARCHAEOLOGY - ROCK ART INTERVIEW FORM

1994 ETHNOARCHAEOLOGY-ROCK ART
COLORADO RIVER CORRIDOR CULTURAL RESOURCE ASSESSMENT STUDY
SOUTHERN PAIUTE CONSORTIUM/UNIVERSITY OF ARIZONA

Date: _____ 1. Interview #: _____

Interviewer: _____

2. Respondent's Name: _____

3a. Tribe: _____ 3b. Ethnic Group: _____

4. Gender: (Circle) *I = M* *2 = F*

5a. English Name of site _____ 5b. Site No.: AZ: _____ 5c. River Reach: _____ 5d. River Mile: _____

5e. Quad Name _____ 5f. Compass Orientation _____ 5g. Angle of Inclination _____

6a. Study Area Site # _____ 6b. Ecozone Location: _____ 6c. Topography: _____ 6d. Main Water Source: _____

- | | | |
|-------------------------|--------------------|------------------|
| i. canyon wall | i. delta | i. River edge |
| ii. UDSZ-desert | ii. side canyon | ii. River flood |
| iii. OHWS-old riparian | iii. wash or drain | iii. Side stream |
| iv. REFS-new riparian | | iv. Spring |
| v. side canyon riparian | | v. Rainfall |

7. Did you know that this site was here?

1 = Yes 2 = No 8 = DK 9 = NR

PETROGLYPH SUPPLEMENT

ETHNIC GROUP USE HISTORY

500. In your opinion, was/were (this/these panel(s)) made by Paiute people?

1 = Yes 2 = No 8 = DK 9 = NR

501. Did (respondent's ethnic group) traditionally visit or use (this/these panel(s) / panel(s) like this/these [where?]) ?

1 = Yes 2 = No 8 = DK

9 = NR

502. (IF YES TO #501) What were (this/these panel(s) / panel(s) like this/these) visited or used for?

1 = Ceremony (SPECIFY) 2 = To Seek Knowledge/Power 3 = Communicate w/ Other Indian People 4 = Communicate with Spiritual Beings

5 = Teaching Other Paiute People 6 = Territorial Marker 7 = Decoration 8 = Other (SPECIFY)

503. Who visited or used (this/these panel(s) / panel(s) like this/these) most often?

1 = Men 2 = Women 3 = Both

504. Do (respondent's ethnic group) currently visit or use (this/these panel(s) / panel(s) like this/these [where?]) ?

1 = Yes 2 = No 8 = DK

9 = NR

505. (If yes to #504) What are (this/these panel(s) / panel(s) like this/these) visited or used for? CIRCLE BELOW

1 = Ceremony (SPECIFY) 2 = To Seek Knowledge/Power 3 = Communicate w/ Other Indian People 4 = Communicate with Spiritual Beings

5 = Teaching Other Paiute People 6 = Territorial Marker 7 = Decoration 8 = Other (SPECIFY)

506. Who visits or uses (this/these panel(s) / panel(s) like this/these) most often?

1 = Men 2 = Women 3 = Both 8 = DK 9 = NR

PERSONAL USE HISTORY

507. Did you (or your family) traditionally visit or use (this/these panel(s) / panel(s) like this/these [where?])? 1 = Yes 2 = No 8 = DK 9 = NR

508. (If yes to #507) What were (this/these panel(s) / panel(s) like this/these) visited or used for? CIRCLE BELOW

- 1 = Ceremony (SPECIFY) 2 = To Seek Knowledge/Power 3 = Communicate w/ Other Indian People 4 = Communicate with Spiritual Beings
- 5 = Teaching Other Paiute People 6 = Territorial Marker 7 = Decoration 8 = Other (SPECIFY)

509. Do you (or your family) currently visit or use (this/these panel(s) / panel(s) like this/these [where?])? 1 = Yes 2 = No 8 = DK 9 = NR

510. (If yes to #509) What are (this/these panel(s) / panel(s) like this/these) visited or used for? CIRCLE BELOW

- 1 = Ceremony (SPECIFY) 2 = To Seek Knowledge/Power 3 = Communicate w/ Other Indian People 4 = Communicate with Spiritual Beings
- 5 = Teaching Other Paiute People 6 = Territorial Marker 7 = Decoration 8 = Other (SPECIFY)

CULTURAL TRANSMISSION

511. Have you ever taught anyone about (this/these panel(s) / panel(s) like this/these)? 1 = Yes 2 = No 9 = NR

512. (IF YES TO #511) Who have you taught? (CIRCLE BELOW)

- 1 = Children
- 2 = Grandchildren
- 3 = Other Relative
- 4 = Friend, Neighbor
- 5 = So. Paiute Youth
- 9 = NR

513. What about (this/these panel(s) / panel(s) like this/these) were you teaching to that person? (CIRCLE BELOW)

- 1 = Ceremony (SPECIFY)
- 2 = To Seek Knowledge/Power
- 3 = Communicate w/ Other Indian People
- 4 = Communicate with Spiritual Beings
- 5 = Teaching Other Paiute People
- 6 = Territorial Marker
- 7 = Decoration
- 8 = Other (SPECIFY)

514. Are you currently teaching anyone about (this/these panel(s) / panel(s) like this/these)? 1 = Yes 2 = No 9 = NR

515. (IF YES TO #514) Whom are you teaching? (CIRCLE BELOW)

- 1 = Children
- 2 = Grandchildren
- 3 = Other Relative
- 4 = Friend, Neighbor
- 5 = So. Paiute Youth
- 9 = NR

516. What about (this/these panel(s) / panel(s) like this/these) are you teaching to that person? (CIRCLE BELOW)

- 1 = Ceremony (SPECIFY)
- 2 = To Seek Knowledge/Power
- 3 = Communicate w/ Other Indian People
- 4 = Communicate with Spiritual Beings
- 5 = Teaching Other Paiute People
- 6 = Territorial Marker
- 7 = Decoration
- 8 = Other (SPECIFY)

CONNECTIONS

517. Are there Paiute stories and legends associated with (this/these panel(s) / panel(s) like this/these) 1 = Yes 2 = No 8 = DK 9 = NR

518. Would (this/these panel(s) / panel(s) like this/these) be connected with other sites in the area? 1 = Yes 2 = No 8 = DK 9 = NR

519. (IF YES TO #518) What kinds of sites?

520. How are they connected?

521. Was/Were (this/these panel(s) / panel(s) like this/these) used by other Indian people? 1 = Yes 2 = No 8 = DK 9 = NR

522a. (IF YES TO #521) What other Indian people used (this/these panel(s) / panel(s) like this/these) ?

522b. Did these people use (this/these panel(s) / panel(s) like this/these) [before, after, same time as] respondent's ethnic group?

1 = Before 2 = After 3 = Same time as 8 = DK 9 = NR

SEASONALITY, USE AND MEANING

523. Is there a special time of the year during which (this/these panel(s) / panel(s) like this/these) were/are used? 1 = Yes 2 = No 8 = DK 9 = NR

524. (IF YES TO #523) What special time of the year?

525. Is there a special time of day during which (this/these panel(s) / panel(s) like this/these) were/are used? 1 = Yes 2 = No 8 = DK 9 = NR

526. (IF YES TO #525) What special time of day?

527. In your opinion, to what other features at this site is/are the panel(s) related?

528. How is/are the panel(s) and the other features you mentioned related?

529. Based on what you see on the panel(s), what does/do the panel(s) mean?

530. Based upon what you see on the panel(s) and on the ground, what activities or events occurred at this site?

531. Does/Do the panel(s) have a personal meaning for you? 1 = Yes 2 = No 8 = DK 9 = NR

532. (IF YES TO #531) What does/do the panel(s) mean to you?

533. How would you evaluate the overall importance of (this/these panel(s) / panel(s) like this/these)? 1 = Low 2 = Medium 3 = High 9 = NR

534. Is the way the drawings on the panel(s) are made an important part of the panel's significance? 1 = Yes 2 = No 8 = DK 9 = NR

535. (IF YES TO #534) How?

536. Do you feel there are any human activities affecting the condition of the panel(s)? 1 = Yes 2 = No 8 = DK 9 = NR

537. (IF YES TO #536) What human activities affecting the condition of the panel(s)?

538. What would be your recommendation for protecting the panel(s) from human activities?

539. Do you feel there are natural elements (wind, rain, erosion) affecting the condition of the panel(s)? 1 = Yes 2 = No 8 = DK 9 = NR

540. (IF YES TO #539) What natural elements are affecting the condition of the panel(s)?

541. What would be your recommendation (if any) for protecting the panel(s) from natural elements?

542. Can you tell me anything else about the importance of (this/these panel(s) / panel(s) like this/these) to (respondent's ethnic group) that we haven't talked about?

OVERALL SITE RECOMMENDATIONS

35. Can you tell me anything else about the importance of (this site / sites like this) to the (respondent's ethnic group/tribe) people?

36. How would you evaluate the overall importance of (this site / sites like this) to Indian people?

1 = Low 2 = Medium 3 = High 9 = NR

37. When you think about this site as a whole, what feature or element stands out in your mind (that makes the site especially significant)?

38. What would be your first recommendation for protecting this site?

39. If this site and its features cannot be preserved in place, what would you recommend in order to best protect these things?

ADDITIONAL NOTES:

APPENDIX B

TERMS THAT INDICATE FREQUENCY OF SOUTHERN PAIUTE RESPONSES

The following four terms are repeatedly used to indicate the frequency of responses given by Southern Paiute representatives:

- (1) *a few* indicates less than one-fourth of the respondents
- (2) *some* indicates between one-fourth and one half of the respondents
- (3) *a majority* indicates between one-half and three-fourths of the respondents
- (4) *the vast majority* indicates between three-fourths and all of the respondents.

APPENDIX C

RELATIONSHIP BETWEEN RATINGS OF IMPORTANCE OF ROCK ART PANELS AND OTHER VARIABLES

Panel Made by SP vs. Importance of Panel

Made by SP	Low	Medium	High	No Response	Missing Data
Yes	4	24	175	1	
No	1	2	10	1	2
Don't Know	2	6	10		
No Response	1		6		
Missing Data			2		1

Visited/Used by SP vs. Importance of Panels

Visit/Use by SP	Low	Medium	High	No Response	Missing Data
Yes	5	24	186		
No	3	5	7	1	2
Don't Know		3	9	1	
Missing Data			1		1

Paiute Stories and Legends by Importance of Panel

Stories & legends	Missing Data	Low	Medium	High	No Response
Missing Data	3			1	
Yes		4	20	178	
No		4	6	13	1
Don't Know			6	11	1

Site Connected by Importance of Panel

Site Connected	Missing Data	Low	Medium	High	No Response
Missing Data	3				
Yes		7	27	180	
No		1	3	13	1
Don't Know			2	10	1

Human Activities Affecting Condition vs. Importance of Panel

Human activities	Missing Data	Low	Medium	High	No Response
Missing Data	3			1	1
Yes		2	8	117	
No		6	24	83	1
Don't Know				2	

Natural Elements Affecting Condition vs. Importance of Panel

Natural elements	Missing Data	Low	Medium	High	No Response
Missing Data	3				1
Yes		3	20	161	
No		5	12	41	1
Don't Know				1	

Importance of Site vs. Importance of Panel

Importance of Site	Missing Data	Low	Medium	High	No Response
Missing Data	2		1		
Low		2		2	
Medium		2	19	6	
High	1	4	12	195	1
No Response					1

APPENDIX D

SOUTHERN PAIUTE RESPONSE TO ROCK ART PANELS BASED ON GENDER

The perceived differences in use of rock art panels based on gender might be reflected in the way males and females interpreted the 23 rock art panels on the river trips. All responses were analyzed for gender differences.

Gender vs. Knowledge a Site was There

Gender	Yes	No	Don't Know
Male	20	110	
Female	12	102	1

Gender vs. Panels Made by Southern Paiutes

Gender	Yes	No	Don't Know
Male	107	10	11
Female	97	6	7

Gender vs. Southern Paiutes Traditionally Visit or Use

Gender	Yes	No	Don't Know
Male	116	11	4
Female	99	7	9

Gender vs. Traditionally Use or Visit for Ceremony

Gender	Yes	No
Male	42	91
Female	52	63

Gender vs. Traditionally Use or Visit to Seek Knowledge or Power

Gender	Yes	No
Male	31	102
Female	4	111

Gender vs. Traditionally Use or Visit to Communicate with Indian People

Gender	Yes	No
Male	65	68
Female	63	52

Gender vs. Traditionally Use or Visit to Communicate with Spiritual Beings

Gender	Yes	No
Male	29	104
Female	32	83

Gender vs. Traditionally Use or Visit for Teaching Paiute People

Gender	Yes	No
Male	9	124
Female	4	111

Gender vs. Traditionally Use or Visit as a Territorial Marker

Gender	Yes	No
Male	4	129
Female	17	98

Gender vs. Traditionally Use or Visit for Decoration

Gender	Yes	No
Male	1	132
Female	2	113

Gender vs. Have Taught About the Rock Art Panels

Gender	Yes	No
Male	55	75
Female	62	52

Gender vs. Currently Teaching About the Rock Art Panels

Gender	Yes	No
Male	73	56
Female	98	16

Gender vs. Rock Art Sites Would be Connected to Other Sites in the Area

Gender	Yes	No	Don't Know
Male	112	14	5
Female	102	4	8

Gender vs. Used By Other Indian People

Gender	Yes	No	Don't Know
Male	78	45	8
Female	87	22	5

Gender vs. Importance of Panel

Gender	Low	Medium	High
Male	7	18	106
Female	1	14	97

Gender vs. Human Activities Affecting Condition of Panel

Gender	Yes	No	Don't Know
Male	53	77	
Female	74	37	2

Gender vs. Natural Activities Affecting Condition of Panel

Gender	Yes	No	Don't Know
Male	92	39	
Female	92	20	1

Gender vs. Stories and Legends Associated With Panel

Gender	Yes	No	Don't Know
Male	111	15	5
Female	91	9	13