

THE COLORADO WICKIUP PROJECT VOLUME II:
Cultural Resources Class II Reconnaissance Inventory
for the
Gunnison Gulch Area of Mesa County, Colorado



Prepared by
Curtis Martin, Principal Investigator
Carl E. Conner and Nicole Darnell

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Abstract

Dominquez Archaeological Research Group (DARG) was awarded a grant in 2004 from the Colorado State Historical Fund with matching funds from the Bureau of Land Management to begin the first phase of a comprehensive, long-range project to document ephemeral and endangered aboriginal wooden structures and features throughout Colorado. The purposes of this work are to conduct a series of field reconnaissance and documentation projects involving known, but insufficiently recorded Protohistoric/Historic aboriginal wickiup locales, and to establish, implement, and field test a hypothetical model for the mitigation documentation of wickiups and other wooden structures.

The Gunnison Gulch Cultural Resources Class II Reconnaissance Inventory is the first of these field projects. The field work was initiated during the spring of 2004 and completed in the spring of 2005 by a crew consisting of DARG personnel, employees from the Uncompahgre and Durango Field Offices of the Bureau of Land Management (BLM), and other qualified volunteers. An area of approximately 237 acres of BLM administered lands was surveyed in Gunnison Gulch as part of this reconnaissance inventory.

Although the presence of wickiups in the Gunnison Gulch area had been alluded to by local residents and validated by professional archaeologists in the past, none had been adequately recorded. As a result, this inventory project documented two wickiup villages (5ME14258 and 5ME14260), four isolated wickiups or pairs of wickiups (5ME14259, 5ME15282, 5ME15283, and 5ME15284), three additional isolated wooden pole features consisting of one or two poles leaning on standing trees (5ME14256, 5ME15280, and 5ME15281), a petroglyph panel and associated rock shelter (5ME15279), and a possible Protohistoric crevice burial site (5ME14257). All the sites were field evaluated as eligible for listing on the NRHP.

Due to the relatively well-preserved nature of the numerous aboriginal wooden structures, the presence of rock art and a possible human burial site, and the area's potential to yield additional important information regarding the Protohistoric/Historic Era, a National Register Archeological District nomination should be prepared for this portion of Gunnison Gulch. The District boundaries could possibly extend as far west-northwest as the Big Dominguez Canyon area, as there are undoubtedly additional sites of a similar nature in the surrounding area (as evidenced by the fact that only one cultural resources inventory has been conducted within a one-mile radius of the project area and the only previously recorded site is another wickiup village).

In addition, this initial project was utilized as a testing and proving ground for intensive recording techniques. As part of that a Colorado State Historical Society form previously known as the "Conical Wooden Structure Component Form" was updated and expanded to include a wide variety of wooden features and is now called the "Aboriginal Wooden Structure Component Form."

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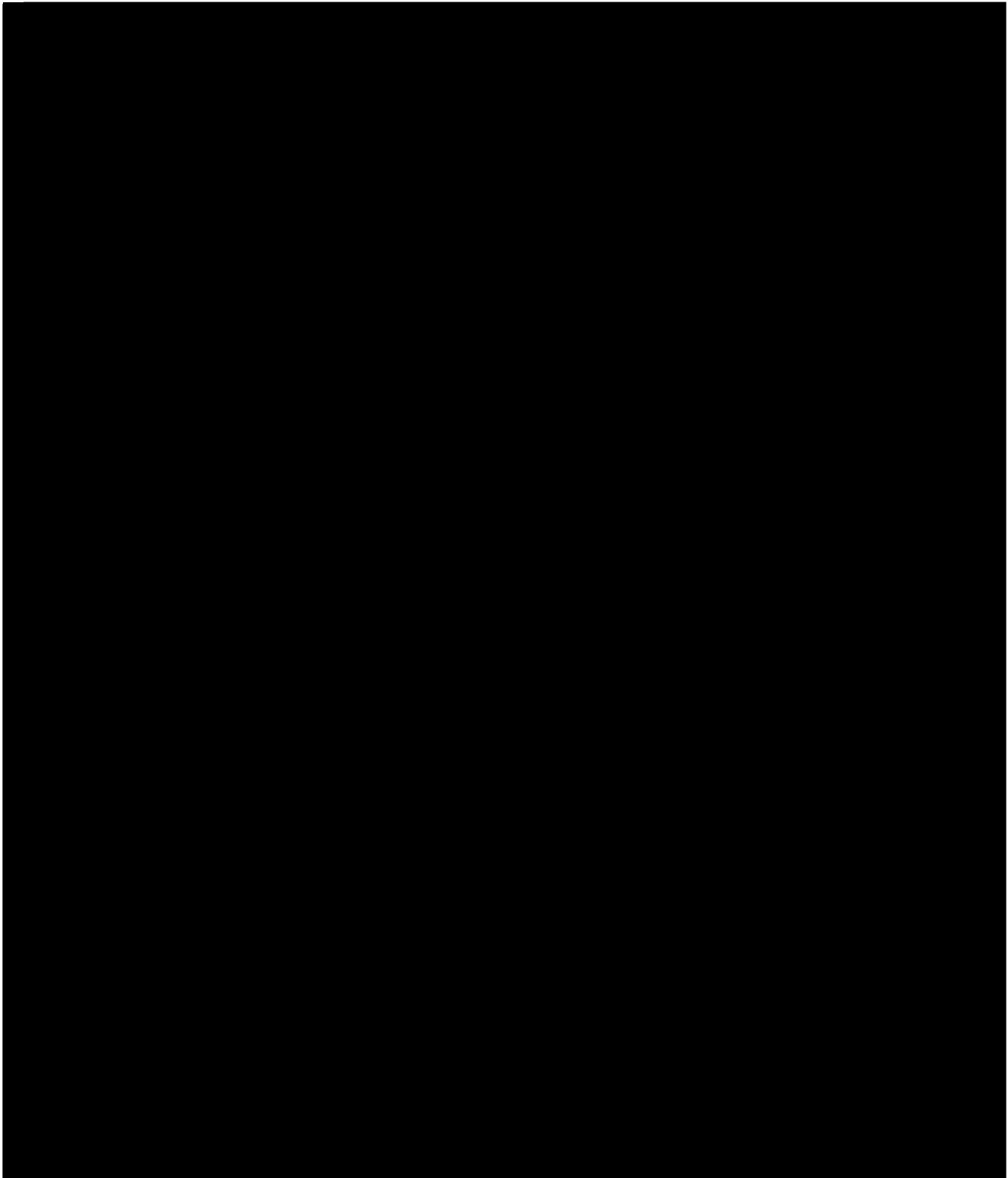
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Colorado Office of Archaeology and Historic Preservation
CULTURAL RESOURCE SURVEY MANAGEMENT INFORMATION

Please complete this form and attach a copy behind the Table of Contents of each survey report.



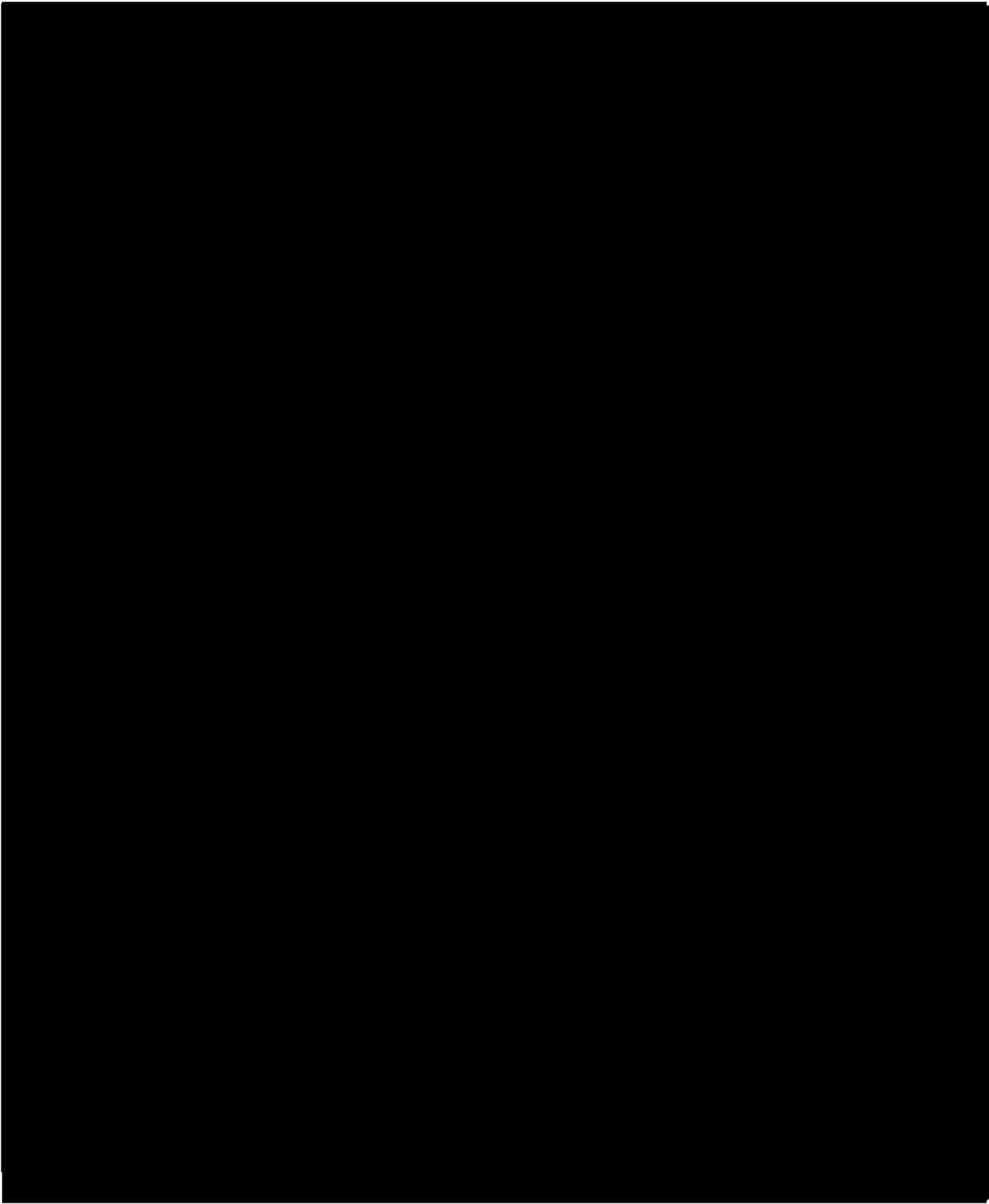


Figure 1. Project resource location map for the Class II Reconnaissance Inventory for the Colorado Wickiup Project in the Gunnison Gulch Area of Mesa County, Colorado for the Colorado Historical Society and the Bureau of Land Management. [DARG # 2404, 10/12/2005]

Introduction

In 2004, Dominquez Archaeological Research Group (DARG) began the first phase of a comprehensive, long-range project to document ephemeral and endangered aboriginal wooden structures and features throughout the State of Colorado. In general, goals of this project are to record, compile and disseminate “preservation quality” documentation of critically threatened archaeological resources. The purposes of this work are to fully record some of the preeminent Protohistoric/Historic aboriginal sites and to establish, implement, and field test a hypothetical model for the mitigation documentation of wickiups and other wooden structures (Martin et al. 2005).

The costs of field work, laboratory services, and specialized analyses required that DARG have financial assistance in this effort, as well as administrative support. Toward that end, a State Historical Fund Grant (Project # 2004-02-045) was obtained in 2004 with matching funding supplied through Bureau of Land Management Assistance Agreement No. 1422CA30007.

As part of the Colorado Wickiup Project, a series of field reconnaissance and documentation projects involving known, but insufficiently recorded wickiup locales has been proposed in various BLM districts. The Gunnison Gulch Cultural Resources Class II Reconnaissance Inventory is the first of these field projects to be undertaken. It was conducted under a Department of Interior/Bureau of Land Management (BLM) Archaeological Resource Protection Act (ARPA) Permit No. C-67009 (expiration date 6/20/08). The field work was completed in two phases on the 18th and 19th of May 2004 and on the 24th and 25th of May, 2005 by a crew consisting of DARG personnel, employees from the Uncompahgre and Durango Field Offices of the Bureau of Land Management (BLM), and other qualified volunteers. Curtis Martin of DARG served as Principal Investigator. Field crew, under the direction of Martin, consisted of Julie Singer, Frank Stipe, Kristie Arrington from the BLM, Dana Archuleta from DARG, contract archaeologist Carol Patterson, and volunteers Jessica Clarke (an archaeology student from Western State), and David Singer.

Location of the Project Area

The project area is located in Mesa County, Colorado approximately 18 miles west of the town of Delta between the Little Dominquez canyon to the northwest and Escalante Creek to the southeast. A total of approximately 237 acres of BLM administered lands was surveyed in Gunnison Gulch. That area is within T. 15S., R. 99W., Sections 25 and 36, and T. 15S., R. 98W., Sections 30 and 31, 6th Principal Meridian (Figure 1).

Environment

This section provides a brief overview of the environment of the study area. At the time of the inventory there were no significant environmental constraints. The present land

use in the project area is primarily recreational activities such as hiking, camping, hunting, and exploring with off-road vehicles.

The project area is near the northern end of the Uncompahgre Plateau, a southeast-to-northwest structural uplift on the northeast margin of the Colorado Plateau physiographic province. The Colorado Plateau is characterized by nearly horizontal geologic formations, deeply incised vertical-walled canyons, high elevations and sedimentary rock formations (Fenneman 1931). The Uncompahgre Plateau is a remnant of a late Paleozoic mountain range, the Uncompahgria, which covered most of Western Colorado. It reached its present elevation after several reactivations, the last of which occurred during the Cenozoic Era. The geologic formations were deposited on the resistant Precambrian gneiss, schist, granite and pegmatite (Young and Young 1977:61-63). In the study area, erosion has removed the overlying rocks down to the Cretaceous-age Dakota Sandstone and Burro Canyon Formation.

In this part of the Uncompahgre Plateau, many streams have cut northeast-flowing valleys and canyons including Gunnison Gulch itself and the two major streams mentioned above: the Little Dominguez and the Escalante. These are all tributary to the Gunnison River. Soils formed on the sandstone bedrock are generally shallow (15 to 30 centimeters), tan, light-brown, and reddish-brown, loams and sandy loams, and primarily occur as pockets on top of the bedrock, which is often exposed.

The study area lies between 6720 and 7030 feet in elevation, which occurs within the Upper Sonoran plant zone. Vegetation is primarily pinyon/juniper forest. Mule deer and coyote are common, as are cottontail rabbits and various rodents. Mountain lion, bobcat, black bear, elk, fox, skunk, badger, and weasel are also likely inhabitants. Bird species observed in the area include the jay, raven, magpie, red-shafted flicker, long-eared owl, golden eagle and various other raptors.

Presently, the project area has a cool semiarid climate where temperatures can drop to -10 degrees F during the winters and summer temperatures may reach 100 degrees F or more; there is a maximum of 160 frost-free days and the annual precipitation is about 12-16 inches (USDA SCS 1978: 6).

Paleoclimate

Relatively small changes in past climatic conditions altered the exploitative potential of an area and put stress upon aboriginal cultures by requiring adjustments in their subsistence patterns. Therefore, reconstruction of paleoenvironmental conditions is essential to the understanding of population movement and cultural change in prehistoric times (Euler et al. 1979). To interpret whatever changes are seen in the archaeological record, an account of fluctuations in past climatic conditions must be available or inferences made from studies done in surrounding areas. Generally, only gross climatic trends have been established for western North America. These data sources have been summarized for the Northern Colorado River Basin by Reed and Metcalf (1999:20-30).

Summary of Files Search

A files search for known cultural resources in the project area was made online at the Office of Archaeology and Historic Preservation (OAHP) website. This review indicated that within one mile of the project area there had been one cultural resources project conducted and, independent of this inventory, there was one previously recorded site. Tables 1 and 2 summarize these results. Location information for that site is presented in Table A-1 in Appendix A.

**Table 1: Previously Recorded Cultural Resources
Within One Mile of the Study Area**

Smithsonian Number	Type of Site
5ME7378	Wickiup Village

**Table 2: Previously Conducted Cultural Resources Inventories
Within One Mile of the Study Area**

State Reference No.	BLM Reference No.	Report Title
ME.LM.R237	00UB030	<u>Title:</u> Class III Cultural Resource Inventory of Cattle Concentration Areas- Dominguez Allotment #14001, Mesa County, Colorado. (#00UB030) <u>Author:</u> Lazorchak, David <u>Date:</u> 07/18/2000 <u>Contractor:</u> Bureau of Land Management Uncompahgre Field Office

Cultural resource investigations in the region have yielded surface diagnostic artifacts and excavated cultural materials consistent with the regional cultural history and prehistory. Evidence of the Paleoindian, Archaic, Formative, and Protohistoric Eras has been found in the area. Historic records suggest occupation or use by Euro-American trappers, settlers, miners, farmers, and ranchers as well. Overviews of the prehistory and history of the region are provided in documents published by the Colorado Council of Professional Archaeologists entitled Colorado Prehistory: A Context for the Northern Colorado Plateau (Reed and Metcalf 1999), and by the Colorado Historical Society entitled Colorado Plateau Country Historic Context (Husband 1984).

Study Objectives

As part of Dominquez Archaeological Research Group's (DARG) ongoing Colorado Wickiup Project, the Gunnison Gulch Cultural Resources Class II Reconnaissance Survey is the first of a proposed series of field inventory, reconnaissance and documentation projects involving known, but insufficiently recorded wickiup locales. In addition to fully recording some of the preeminent Protohistoric sites in the state, the purpose of the field work is to establish, implement, and field test a hypothetical model for the mitigation documentation of wickiups and other wooden structures.

As with all cultural resources inventories, the objectives of this project were to locate, identify, and describe archaeological sites and/or districts, to evaluate these surface finds for inclusion on the National Register of Historic Places (NRHP), to determine the potential effect of the project on all NRHP-eligible resources, to evaluate the effects of increased visitation on the cultural resources, and to make recommendations for the mitigation of the adverse effects on those cultural resources.

The presence of Protohistoric (and/or early Historic) aboriginal resources in the project area was already known to the BLM. Those known and additional cultural manifestations were expected to be documented.

Field Methods

All work was performed according to the guidelines set forth by the Office of Archaeology and Historic Preservation (OAHP) of the Colorado Historical Society and the BLM. The pedestrian, Class II reconnaissance cultural resource survey of the study area was conducted by a crew of six persons who walked zig zag transects throughout the project boundary. A total of 237 acres were included in this inventory.

Cultural resources were sought as surface exposures to be characterized as sites, districts, or isolated finds (IF). Sites were defined as the locus of previous human activity at which the preponderance of evidence suggests either one-time diagnostically interpretable use or repeated use over time, or multiple classes of activities. This would include isolated thermal features such as hearths, single element rock art panels, isolated human burials, wooden features, or loci exhibiting ground stone and/or flaked stone. Isolated finds were defined as one or more culturally modified objects not found in the context of a site as defined above that apparently represent a single event, such as a single core reduction. All cultural resources were recorded as they were encountered to standards set by the BLM and the OAHP.

Sites were recorded using the following methods of mapping and note taking. Mapping of site boundaries, and the location of individual artifacts, features, and IFs was conducted using a BLM certified Trimble GeoExplorer XT GPS unit and USGS 7.5' series topographic maps. Site boundaries were determined by the extent of surface artifacts and features and/or a protective buffer zone. Crew members mapped and photographed the sites,

and made notes regarding their micro-environmental and cultural attributes. Field notes and photo negatives are on file at DARG, while the photographs have been submitted to the BLM and OAHP. Eighteen artifacts, five bulk soil samples, and a dendrochronological sample, were collected and will be curated at the Anasazi Heritage Center in Dolores, Colorado.

Included in the Colorado Wickiup Project's Context report (Martin et al. 2005) are samples of completed BLM forms from the Gunnison Gulch project (a Colorado Cultural Resource Survey Management Data Form, a Prehistoric Archaeological Component Form, and an Aboriginal Wooden Structure Component Form) that were used as models for the current methodology standards for survey phase recording. [The Aboriginal Wooden Structure Form was developed by DARG archaeologists Brian O'Neil and Curtis Martin. It was based on attribute lists drawn from Sanfilippo (1998), and on their personal field experience and those of the consulting BLM archaeologists. It has evolved from the former Conical Wooden Structure Form to include all types of ephemeral wooden features in archaeological contexts.]

Study Findings

As expected, cultural resources were encountered during the intensive inventory. Although the presence of wickiups in the area had been alluded to by local residents and validated by professional archaeologists in the past, none had been formally recorded. Plate 1 (p.6) provides an overview of the Gunnison Gulch study area and a specific view of one of the wickiups at the base of a collapsed tree.

This survey resulted in the documentation of 11 newly recorded sites: two wickiup villages (5ME14258 and 5ME14260), four isolated wickiups or pairs of wickiups (5ME14259, 5ME15282, 5ME15283, and 5ME15284), three additional isolated wooden pole features consisting of one or two poles leaning on standing trees (5ME14256, 5ME15280, and 5ME15281), a petroglyph panel and associated rock shelter (5ME15279), and a possible Protohistoric crevice burial site (5ME14257). One isolated find, a projectile point (5ME15285.IF), was also recorded.

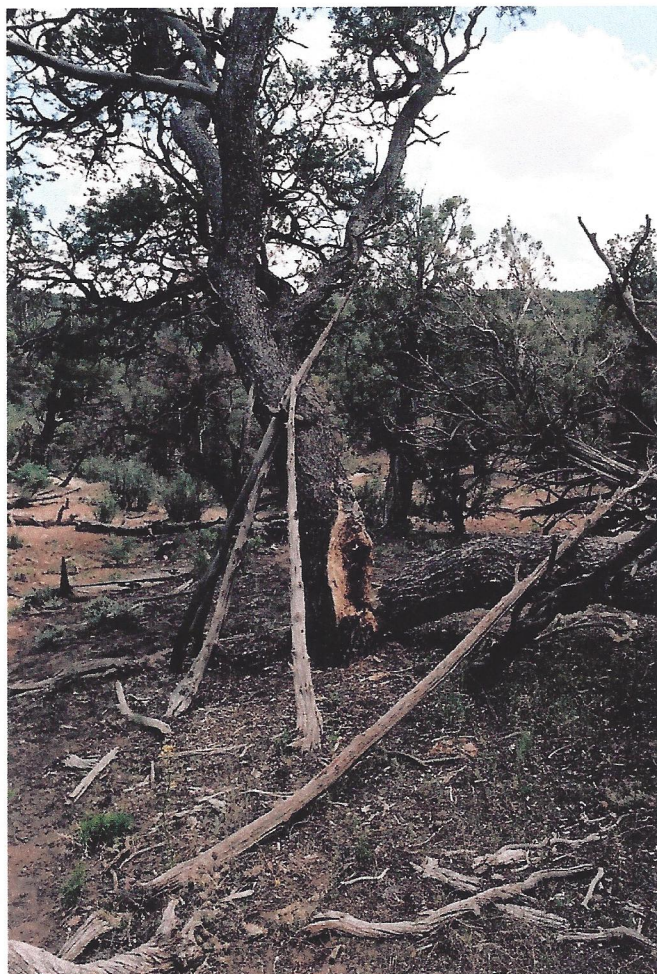
A total of 29 wooden features were documented including 21 wickiups, a brush corral, an apparent windbreak, a culturally scarred juniper, a limbed tree (apparent wickiup pole production site), a juniper pole cache, and a two-pole and two single pole features that most likely served as hide processing or meat drying racks. Field work involved surface mapping of all sites, completion of Aboriginal Wooden Structure Component Forms, drawings of plan and elevation views of each structure, photography, metal detection activities, and collection of significant surface tools.

This portion of the report presents a discussion of site significance evaluation and describes the sites. The UTM data for the cultural resources is found in Appendix A: Site Location Data. Figure A-1 in Appendix A presents a map that shows the site locations in relation to the project area. Appendix B contains a list of the collected artifacts including location data. Detailed information is provided in Appendix C: OAHP Forms.



a: Description: Overview of Gunnison Gulch project area looking upstream. Wickiup sites are in wooded areas on both sides of valley floor.

Photo No.: DARG 2404 2:1A Date: 5/24/2005 Looking: South



b:

Description: Structure 6 in site 5ME14258, the Coyote Skull Wickiup Village, after the collapse of the north half of the support tree. Note fallen wickiup pole in foreground.

Photo No.: DARG 2404 1:15A

Date: 5/24/2005

View: SSW

Plate 1

Site Significance

The National Historic Preservation Act of 1966 (NHPA) directs federal agencies to ensure that federally-initiated or authorized actions do not inadvertently disturb or destroy significant cultural resource values. Significance is a quality of cultural resource properties that qualifies them for inclusion in the NRHP. The statements of significance included in this report are field assessments to support recommendations to the BLM and State Historic Preservation Officer (SHPO). The final determination of site significance is made by the controlling agencies in consultation with the SHPO and the Keeper of the Register.

The Code of Federal Regulations was used as a guide for the in-field site evaluations. Titles 36 CFR 60, 36 CFR 800, and 36 CFR 64 are concerned with the concepts of significance and (possible) historic value of cultural resources. Titles 36 CFR 65 and 36 CFR 66 provide standards for the conduct of scientific data recovery activities. Finally, Title 36 CFR 60.4 establishes the measure of significance that is critical to the determination of a site's NRHP eligibility, which is used to assess a site's research potential:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and **a)** that are associated with events that have made a significant contribution to the broad patterns of history; or **b)** that are associated with the lives of persons significant in our past; or **c)** that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or **d)** that have yielded, or may be likely to yield, information important in the prehistory or history.

A moderate approach was used in making the site significance evaluation. This approach reflects a restraint in the interpretation of the evaluative criteria while not allowing common pitfalls to occur. Any archaeological resource is potentially eligible if one can legitimately argue that it is likely to be associated with a cultural pattern, process, or activity important to the history or prehistory of its locality, the United States, or humanity as a whole, provided its study can contribute to an understanding of that pattern, process, or activity. Pitfalls occur when sites are judged significant by their size, complexity, and age; that is, those that are large, multi-component, older sites are considered more significant than the small single component variety.

Site Descriptions

Site **5ME14256** consists of a single long juniper pole leaning onto the southeast side of a living juniper support tree and a nearby possible hearth. The site is situated at an elevation of 6800 feet in a pinyon/juniper forest with an under story of big sagebrush, serviceberry, prickly-pear (*Opuntia fragilis*), and sparse bunch grasses. Soils consisted of light brown rocky colluvium.

The pole measures approximately 4.7m in length and 16cm in diameter. No evidence of axe or saw marks are visible on either the leaning pole or the support tree. The possible thermal feature consists of a concentration of ashy soil and charcoal that measures approximately 50cm in diameter and is situated approximately 17 meters to the east-southeast of the leaner pole. No other cultural materials are present on the site. It is possible that neither feature is of cultural origin.

Evaluation and Management Recommendation

Due to the rare, fragile, and ephemeral nature of this aboriginal wooden structure and the site's potential to yield valuable information regarding the area's prehistory, protohistory, and early history, it is field evaluated as eligible for listing on the National Register of Historic Places (NRHP). Protection and preservation are recommended.

Site **5ME14257** consists of a possible crevice burial and fire hearth that are situated within vertical cracks or crevices in an isolated outcrop of sandstone at an elevation of 6770 feet. Vegetation on the site consists of pinyon and juniper trees and very sparse bunch grass. Deposits of shallow, very rocky, reddish-brown residual soils exist in the bottoms of the numerous crevices in the bedrock outcrop.

The possible burial itself consists of a series of 25 or more large cobble to small-boulder sized sandstone rocks that rest within and across the upper opening of a vertical crevice. The crevice measures approximately 8.5m in length, east-west, averages approximately 25cm in width, and is approximately 1m deep at the west end of the crack, 1.5m deep near the boulder concentration (possible burial), and 3.2m deep at the east end. The boulders, which are possibly man-u-ports, and possibly associated with a human burial, lay in the western-most 3.5m of the crevice. These boulders are lichen covered on their upper surfaces and range in size from 35 by 14 by 7cm to 62 by 40 by 12cm.

Two unidentified mammal bones were noted in the bottom of the crevice beneath the boulders, but appear to be non-human. Other than three artifactual flakes that were located on the upper surface of the bedrock within four meters to the north of the crevice, no cultural resources were noted with the exception of a hearth feature situated approximately 24 meters to the southwest of the possible burial at the juncture of two similar crevices. The concentration of boulders within the crevice fits the description of various Protohistoric Ute burials in Utah and Colorado, however, without further investigation it is impossible to determine whether this feature is, indeed, a human burial and, if so, its cultural and temporal affiliations.

The hearth to the southwest, on the other side of the bedrock outcrop and at the bottom of a vertical crevice, consists of two small boulders of sandstone resting against the base of a bedrock wall that meet at their outer ends to form a triangular receptacle. Three smaller cobbles have been set atop these to form a crude "chimney" at the back of the hearth against the west wall of the crevice. Two additional small sandstone slabs are leaned against the outer, south, edge of the feature as wind blocks and two more pebbles rest atop the back of the

northern most base stone. The feature overall measures 75cm north-south by 61cm east-west by 25cm high. The wall of the crevice is approximately 100 to 120cm high.

Within the hearth were found six or more small slabs of sandstone along with several fragments of wood charcoal, and unburnt pine needles and twigs. All of the hearth stones are heavily lichened on their upper surfaces. Beneath the “cap” rocks, where they rested on the lower stones, there is no lichen. Although the hearth is quite possibly of recent origin, the feature’s age is undetermined.

Evaluation and Management Recommendation

Due to the fact that the site represents a possible human burial site, and the site’s potential to yield valuable information regarding the area’s prehistory, it is field evaluated as eligible for listing on the National Register of Historic Places (NRHP). Protection and preservation are recommended.

Site **5ME14258**, the **Coyote Skull Wickiup Village**, consists of the remains of seven wooden wickiup structures, an apparent windbreak, a culturally-scarred tree, and an associated lithic artifact scatter. The site is located in a saddle on a gently southeast-sloping inter-canyon bench on the northwestern talus of Gunnison Gulch at an elevation of 6880 feet. It measures approximately 170m northeast-southwest by 90m northwest-southeast and is situated in a pinyon/juniper forest with an under story of big sagebrush, serviceberry, narrow-leaf yucca, prickly-pear (*Opuntia fragilis*), mustard, *Haplopappus*, and sparse bunch grasses. Soils consist of light reddish-brown colluvium.

A scatter of 200 or more flakes of chert, quartzite, and chalcedony is located primarily in the northeastern portion of the site, however debitage is present throughout. A concentration of 40 or more flakes in an area measuring approximately three meters in diameter exists between Structures 6 and 7. Cores, cortical cobbles, and angular shatter of local gray quartzite and gray chert are present in abundance indicating local sources for both materials. A stemmed or corner-notched projectile point (5ME14258.s1) was found on the site and collected (Plate 3, p. 33).

Structures 1, 2, and 3 are clustered near the center of the site (Figure 2). **Structure 1** consists of a lean-to type wickiup (“leaner”) with seven collapsed poles and eight standing poles leaning onto the southeastern side of a pair of living pinyon support trees, utilizing both trunks and several unbroken limbs for support. All of the poles but one appear of have been broken off at the base; the end of one appears to have been possibly steel-axe cut. One of the upright poles, the largest, is forked at the top. The wickiup poles, all of which are juniper, range in length from 1.2 to 3.2m and from 5 to 21cm in diameter. The interior height of the structure is 1.4m and the elliptical floor area measures approximately 4.0m northeast-southwest by 1.6m northwest-southeast, and encloses an area of approximately 5 square meters. No evidence of a covering, floor treatment, or entryway remains. A single sandstone block was found on the ground surface between Structure 1 and Structure 2 which possibly could have served as a support for the base of a pole or a covering. No lithic debitage was found in the

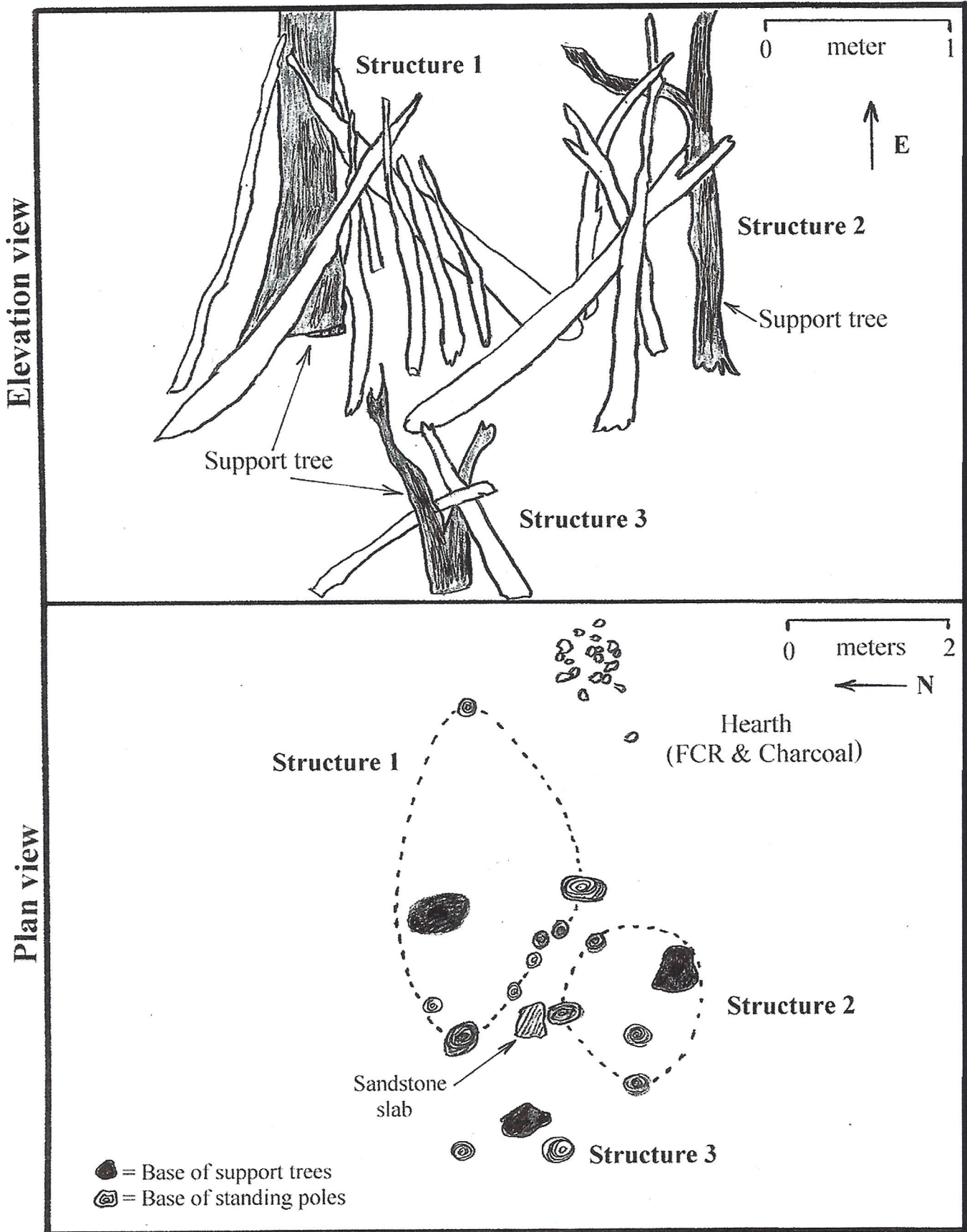


Figure 2. Site 5ME14258, Structures 1, 2 and 3, elevation and plan view.

immediate vicinity of these three structures, however a thermal feature in the form of a 70cm diameter concentration of fire-cracked rock and charcoal fragments was recorded 2.9m to the northeast of the structure.

As in excavation situations where cultural fill is left *in situ* for potential future investigations utilizing unforeseeable analytical techniques, these authors have recommended in their Colorado Wickiup Project's Strategic Plan for the Future report (Martin et al. 2005) that materials from ephemeral Protohistoric structure sites such as those in Gunnison Gulch should be collected and stored for similar potential developments. With this in mind a 570 gram bulk soil sample was collected from the center of the wickiup floor area of Structure 1 for archival purposes (5ME14258.s2).

Structure 2, less than a meter to the southwest of Structure 1, consists of a lean-to type wickiup ("leaner") with four collapsed poles and four standing poles leaning onto the west-southwest side of a living pinyon support tree, utilizing the trunk and an unbroken limb for support. All of the poles are juniper and appear of have been broken off at the base; one was uprooted. Some of the poles exhibit possible axe scars on the bases but are too decomposed to be certain. Three of the poles are forked. The wickiup poles range in length from 92cm to 3.4m with an average pole diameter of approximately 30cm. The interior height of the structure is 1.9m. The exact shape and size of the floor is unclear but appear to measure approximately 2.1m northeast-southwest by 1.0m northwest-southeast, and enclose an area of approximately 1.6 square meters. Smaller juniper branches on the ground near the base of the upright poles provide possible evidence of secondary branches used as cross bars to add support and braces for cover materials. No evidence of floor treatment remains, however a possible entryway, 1.4m in width, exists in the southeast portion of the feature.

Structure 3, approximately one meter to the west of Structures 1 and 2, consists of a standing dead juniper trunk remnant with a fork in the trunk 85cm above the ground surface. Two juniper poles are leaned into this crotch, one from either side, forming a rude frame approximately 1.6m in length north-south. The poles appear of have been broken off at the base although axe marks are evident on the shafts of the poles themselves. The poles measure 1.6m and 2.7m in length with pole diameters of 8 to 16cm. The function of Structure 3 is unclear, however it is hypothesized that it could have served either as the framework for a windbreak for the occupants at Structures 1 and 2, or a hide-processing or meat-drying frame.

Structure 4, which was found approximately ten to twelve meters to the northeast of Structures 1 and 2, consists of what appears to be the partially collapsed remains of a lean-to type wickiup ("leaner") with 10 to 12 collapsed poles and two standing poles leaning onto the northeast side of a living juniper support tree, utilizing the trunk and limbs for support. One of the leaner poles is a juniper trunk leaning against the support tree and the second is a smaller juniper branch resting on the first leaner pole. All of the poles are juniper and appear to have been broken off at the base. The wickiup poles range in length from 1.7m to 3.5m with mid-pole diameters of 6 to 13cm. The nature of the wickiup itself, if indeed this is a collapsed shelter, is no longer discernable.

The juniper support tree, to the southwest of the concentration of collapsed poles, exhibits approximately 25 to 35 or more of what appear to be horizontal cut marks extending circumferentially around the trunk and main upper branches. The cuts are incised into the tree bark and have been partially grown over by subsequent bark growth (their appearance is very similar to the familiar marks left in tree bark when the trunks grow over fencing wire). They are also very similar to the horizontal rows of holes created by sapsucker woodpeckers in their search for insects that are common in juniper trees (indeed the scars in question are full of these holes). These scars range from nine to 68cm apart from each other and it is hypothesized that they are the remaining evidence of Protohistoric bark collecting activities by the occupants of Structure 4 and the rest of the wickiup village.

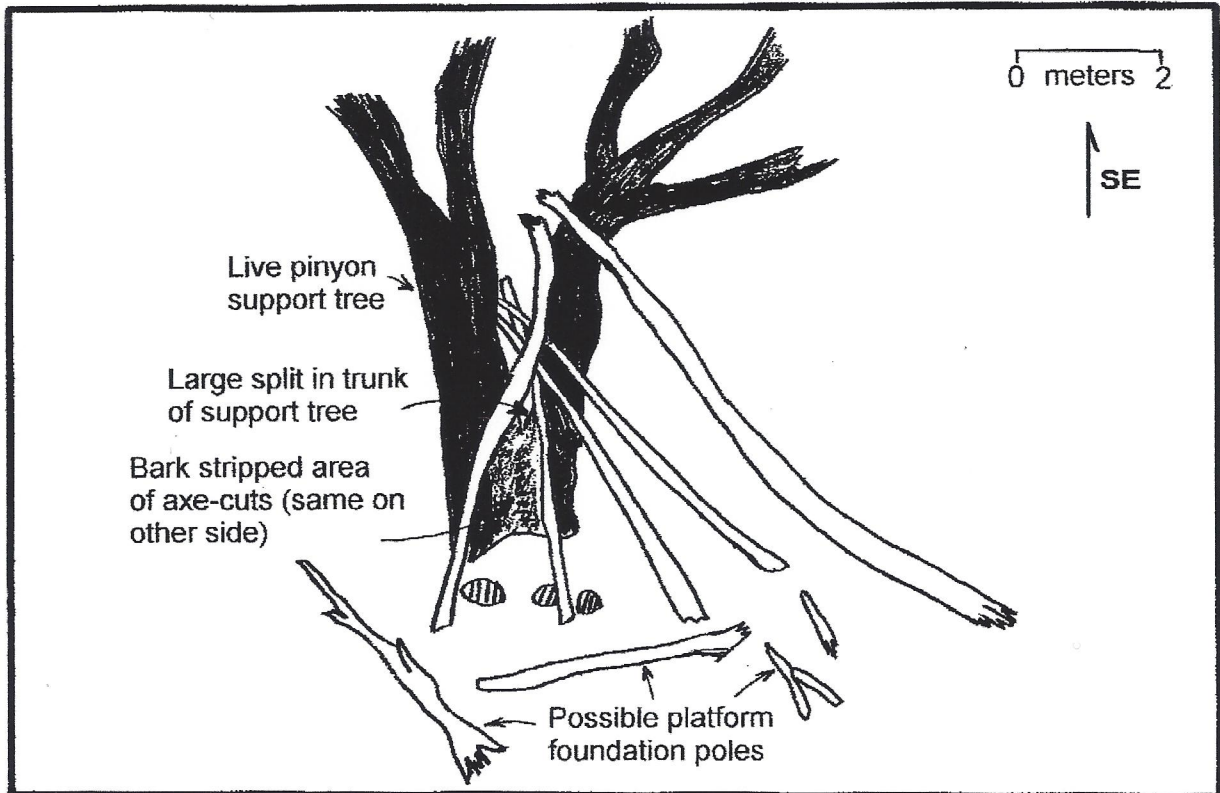
Structure 5, which is located approximately 20 to 25m to the east of Structure 4, consists of a lean-to type wickiup (“leaner”) with four standing juniper poles leaning onto the northeastern side of two support trees – a living pinyon and a dead juniper – utilizing the trunks and unbroken limbs for support. One of the poles is unusual in that its upper branch end is resting on the ground and its butt end is suspended in a fork of the trunk of the juniper support tree. All of the poles but one appear to have been broken off at the base; however steel-axe cut marks are evident on the mid-section of one of the poles. The poles range in length from 1.3 to 2.7m and from 3 to 9cm in diameter. The interior height of the structure is 1.7m and what remains of the floor area measures approximately 1.7m northwest-southeast by 50cm northeast-southwest, and encloses an area of less than one square meter. No evidence of a covering, floor treatment, or entryway remains.

As explained above in the description of Structure 1, for the sake of potential future investigations a 465 gram bulk soil sample was collected from the center of the wickiup floor area of Structure 5 (5ME14258.s3).

Structure 6, is located approximately 16m to the northeast of Structure 5, and consists of a lean-to type wickiup (“leaner”). The feature was initially recorded on May 18th, 2004. At this time it consisted of two collapsed poles and five standing poles leaning onto the east-northeastern side of a living pinyon support tree, utilizing the trunk and a partially broken limb for support (Figure 3). Approximately 70 to 80cm above ground level the support tree’s trunk bifurcated into two main forks or branches and the standing poles rested on both forks of the trunk. The wood of the trunk was split vertically between these two forks, apparently due to old age and weakening of the core of the tree, and collapse of one or both halves of the tree, and the wickiup, appeared imminent.

A plan for potential stabilization was devised with the use of heavy duty threaded eye-bolts and a turnbuckle between the two halves of the split trunk to forestall the further splitting and inevitable collapse of one or both of the forks. However, on May 24th, 2005, a year later, the site was revisited to find that, unfortunately, during the winter of 2004-2005, a season of above average snowfall, the northern fork of the support tree succumbed and toppled to the ground, bringing with it one of the five standing poles (Plate 1 shows the structure after the tree’s collapse). This partial destruction of Structure 6 dramatizes the paramount importance and urgency of locating and thoroughly recording these ephemeral Protohistoric wooden

Elevation view



Plan view

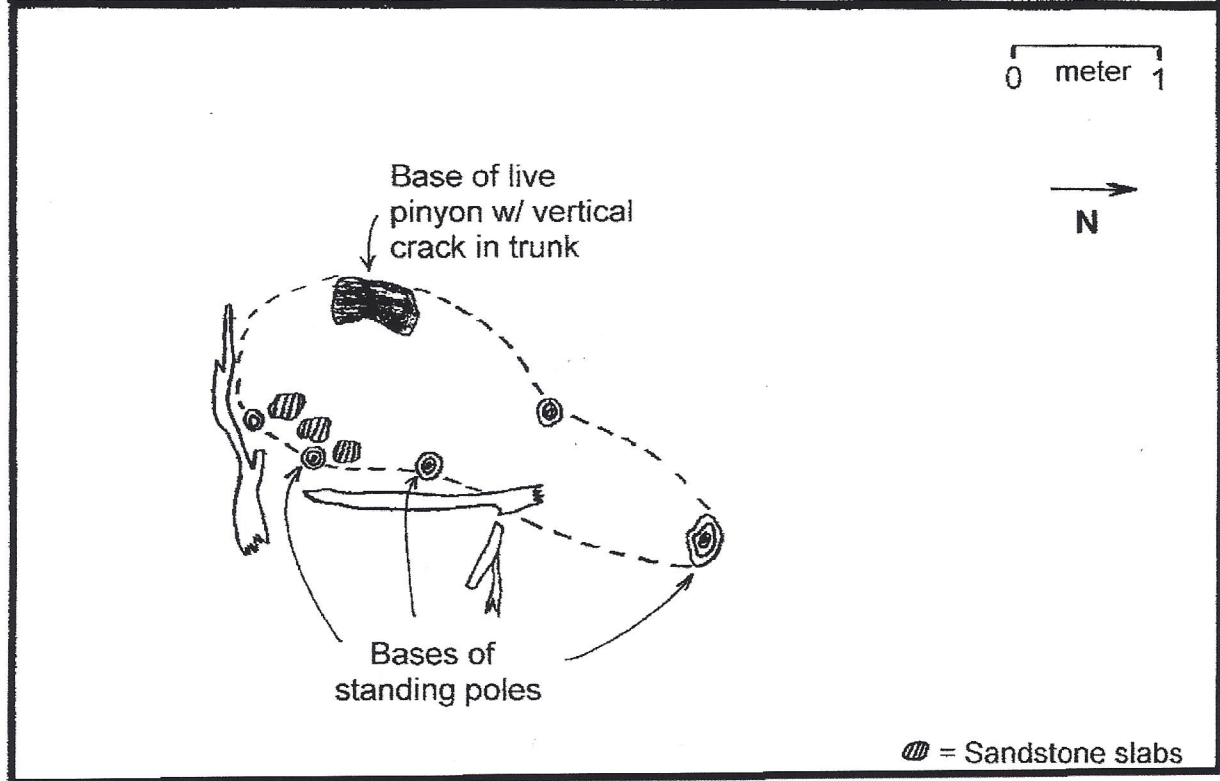


Figure 3.

Site 5ME14258. Structure 6, prior to collapse of north half of support tree, elevation and plan view.

structures while the last vestiges of them remain. The severe damage to the support pinyon, possibly due to weakening from ips beetle infestation, will undoubtedly hasten the eventual collapse of the other half of the tree.

Due to the natural deterioration of the bases of the poles it was difficult to ascertain whether they had been originally cut or broken off. None of the poles are forked poles, however two appear to represent trees that had been uprooted. The wickiup poles, all of which are juniper, range in length from 84cm to 3.6m and from 6 to 10cm in mid-pole diameter. The interior height of the structure is 1.6m and the semi-circular floor area measures approximately 2.3m north-south by 1.1m east-west, and encloses an area of approximately 2 square meters. The two initially collapsed poles of Structure 6 are situated in a roughly “L” shaped pattern at the base of the standing poles and the soil and duff have piled up behind these to form a level “floor” or low platform on which the standing poles rest. It is possible that these poles were originally additional upright poles, as part of the wickiup’s framework, or that they were intentionally placed on the ground as they now lay in order to create this platform foundation, or as weights for the wickiup’s cover. The newly collapsed pole, that came down as a result of the tree’s downfall, remains partially supported above the ground by the fallen trunk.

The vertical face of the lower portion of the support tree that faces into the enclosure of the shelter has been stripped of bark apparently culturally and evidence of steel axe cutting is present in the peeled area. Additional axe marks are present on the opposite, west, side of the trunk as well. The soil of the interior floor of the structure has possibly been artificially packed. Gaps between the upright poles exist in the north and southwest portions of the feature that possibly represent original entryway locations. These measure 67 and 80cm in width respectively. Three sandstone slabs were found on the interior of the wickiup in the southeastern portion of the floor. These may have been supports for pole bases, hearth stones, or for some undetermined purpose.

As explained above in the description of Structure 1, for the sake of potential future investigations a 700 gram bulk soil sample was collected from the center of the wickiup floor area of Structure 6 (5ME14258.s4).

A stemmed or corner-notched projectile point fragment (5ME14258.s1) was located approximately 10m to the east of Structure 6 (Plate 3, p. 33), a core approximately 8m to the northeast, and a concentration of 40 or more quartzite and chert flakes approximately 17m to the north-northeast. It is difficult to assign a temporal or cultural affiliation to the projectile point due to the incomplete nature of the hafting element other than to say that it is comparable to styles within the generalized Elko series and Uncompahgre Complex of the Archaic era (O’Neil 1993: 302 and Buckles 1971: 1220).

Structure 7, is approximately 32m to the north-northeast of Structure 6, and in the densest area of lithic scatter. It consists of a lean-to type wickiup (“leaner”) with eight collapsed poles and five standing poles leaning on a branch on the southwestern side of a living juniper support tree. None of the poles rest against the trunk of the tree, but instead have been placed against both sides of the horizontal branch. All of the poles but one appear to have been

broken off at the base; the other appears to be an uprooted tree. Four of them are forked sticks. The wickiup poles, all of which are juniper, range in length from 2.1 to 2.9m and from 5 to 7cm in diameter. The interior height of the structure is 1.3m and the roughly circular floor area measures approximately 2m in diameter, and encloses an area of approximately three square meters. No evidence of a covering, floor treatment, or entryway are discernable. A moderately dense lithic scatter exists in the vicinity of the structure, including a biface and a uniface several meters to the southwest.

Structure 8 is situated in the extreme southwestern portion of the site, approximately 75m to the east-southeast of Structures 1, 2, and 3. It consists of a single large juniper pole leaning onto the south-southwestern side of a live juniper tree. The pole appears to have been broken off at the base and measures 3.9m in length with a mid-pole diameter of 15cm. The function of Structure 8, if indeed it is of cultural origin, is unclear, however it is hypothesized that it could be the remnants of a wickiup or could have served as a hide-processing or meat-drying pole.

Evaluation and Management Recommendation

Due to the rare, fragile, and ephemeral nature of these aboriginal wooden structures and the site's potential to yield valuable information regarding the area's Prehistory, Protohistory, and early History, it is field evaluated as eligible for listing on the National Register of Historic Places (NRHP). Protection and preservation are recommended.

Site **5ME14259** consists of the remains of two wooden wickiup structures (Structures 1 and 2), a hearth, and an associated lithic scatter. The site is located on the southeast-sloping northwestern talus of Gunnison Gulch at an elevation of 7000 feet. It measures approximately 10m east-west by 8m north-south and is situated in a pinyon/juniper forest with serviceberry, *Coreopsis*, and sparse bunch grasses. Soils consist of rocky, light brown colluvium.

A scatter of 15 flakes of chert and tan quartzite and two quartzite cores was noted in the vicinity of the wickiups, primarily downslope, to the south. Two additional features were recorded on the site; a live juniper tree immediately to the northwest of Feature 1 that appears to have been culturally peeled of its bark on one area of the lower trunk, and a hearth that consists of an 80cm in diameter concentration of fire-cracked rock (FCR) approximately 2.5m to the southwest of the center of collapsed Structure 2.

Structure 1 consists of a lean-to type wickiup ("leaner") with three collapsed poles and four standing poles leaning onto the southwest side of a horizontal section of the trunk of a dead juniper tree. The bases of the poles are weathered but appear to have been broken off as opposed to sawn or axe cut. The wickiup poles, all of which are juniper, range in length from 2.3 to 2.8m and from 5 to 17cm in diameter. The interior height of the structure is 81cm and the visible floor area measures approximately 1.8m east-west by 1.3m north-south, and encloses an area of approximately 1.8 square meters. No evidence of a covering, floor treatment, or entryway remains. Three sandstone slabs were found on the exterior ground

surface near the base of the poles which possibly could have served as a support for the poles or a covering.

Structure 2, which is located approximately 7m to the east of Structure 1, consists of the collapsed remains of what was possibly a freestanding wickiup of nine collapsed poles. All of the poles appear to have been broken off at the base. Two of the poles are forked at the top. The wickiup poles, all of which are of juniper, range in length from 1.6 to 3.2m and from 4 to 9cm in diameter. No evidence of a covering, floor treatment, original height of the structure, or entryway remains. A single sandstone block was found on the ground outside of the structure to the west which possibly could have served as a support for the base of a pole or a covering. A thermal feature in the form of an 80cm diameter concentration of FCR was recorded 2.5m to the southwest of the center of the collapsed poles.

One of the juniper branches, the one furthest to the south and downslope, lies perpendicular to the slope and somewhat separate from the other poles. Soil has built up behind this pole and it appears possible that it served as an erosion-control footing or foundation for a floor platform for the wickiup, or as a weight for the wickiup's cover, similar to that at Structure 6 on site 5ME14258.

Evaluation and Management Recommendation

Due to the rare, fragile, and ephemeral nature of these aboriginal wooden structures and the site's potential to yield valuable information regarding the area's Prehistory, Protohistory, and early History, it is field evaluated as eligible for listing on the National Register of Historic Places (NRHP). Protection and preservation are recommended.

Site **5ME14260**, the **Brush Corral Wickiup Village**, consists of the remains of eight wooden wickiup structures (Structures 1 through 4, 6 through 8, and 10), a limbed juniper tree (Structure 5), a brush corral (Structure 9), a cut pole stockpile (Feature A), and an associated sparse lithic artifact scatter. The site is located on a gently northeast-sloping inter-canyon bench at the end of a broad prominence that forms a portion of the northwestern talus of Gunnison Gulch. The site is at an elevation of 6820 feet. It measures approximately 120m northeast-southwest by 40m northwest-southeast and is situated in a pinyon/juniper forest with an under story of big sagebrush, serviceberry, Mormon tea, mustard, prickly-pear (*Opuntia fragilis*), and sparse bunch grasses. Soils consist of light brown rocky colluvium.

A very sparse scatter of 50 or more flakes of chert and quartzite is located throughout the site and a single crudely-made, low side-notched, Archaic projectile point of striated light and dark gray chert (Plate 3, p. 33) was found on the site and collected (5ME14260.s1).

Structure 1, situated just north of the center of the site, consists of a lean-to type structure; possibly the remains of a wickiup ("leaner"), or possibly of a hide-processing or meat-drying rack or other feature. The structure consists of three collapsed poles and two standing poles leaning onto either side of a horizontal branch on the north side of a living juniper support tree. The base of the trunk of the support tree has been burned and the stubs of

two steel-axe cut limbs remained in the burnt area. The two standing poles form an “A”-shaped frame centered on the support limb. The three collapsed poles lie on the ground to the southwest of the standing poles. All of the poles appear to have been broken off at the base. One of the upright poles, the largest, is forked at the top and the other standing pole is notched at the very end. The crotch of this small notch rests against the upper end of the first upright. The poles, all of which are juniper, range in length from 1.2 to 1.9m and from 5 to 11cm in diameter at mid-pole, and the height of the structure at the horizontal support limb is 192cm. The distance between the bases of the two upright poles is approximately 2.2m. No evidence of a covering, floor treatment or floor shape, or entryway remains. Four sandstone slabs were found on the ground surface beneath the A-frame and support limb which possibly could have served as supports for the base of poles or for a covering.

Structure 2, which is situated approximately six to eight meters to the southwest of Structure 1, consists of the remains of what was possibly a freestanding wickiup; 11 collapsed poles. The poles appear to have been broken off at the base and axe cut with the exception of one, which has been uprooted. Three of the poles are forked. The possible wickiup poles, all of which are juniper, ranged in length from 1.9 to 3.5m and from 6 to 12cm in base diameter. No evidence of a covering, floor treatment, original height of the structure, or entryway remain. A large, non-portable sandstone boulder is situated at the south edge of the collapsed poles.

Structure 3, approximately 16 to 17m to the east-northeast of Structures 1 and 2, consists of the remains of an apparent lean-to type wickiup (“leaner”) with three collapsed poles and four standing poles leaning onto several limbs on the south-southwestern side of a living juniper support tree. The poles appear to show evidence of having been broken off at the base, steel-axe cut, and possibly even sawn. One of the upright poles is forked. The wickiup poles, all of which are juniper, range in length from 1.5 to 2.2m and from 5 to 12cm in base diameter. The interior height of the structure is 1.3m. The remaining standing poles appear to indicate a circular floor area that measures approximately 2.1m in diameter, and enclose an area of approximately 3.5 square meters. No evidence of a covering, floor treatment, or entryway remain. Two sandstone blocks were found on the ground surface near the base of the standing poles which possibly could have served as a support for the poles or for a covering. One of the “collapsed” poles rests in a north-south orientation along what would have been the eastern edge of the structure and possibly could have been intentionally placed in this position to serve as a foundation for a low floor platform.

Structure 4 is situated at the north end of the site approximately 26m to the north-northeast of Structure 3. It is a classic, well-preserved, conical lean-to type Ute wickiup leaned on to the west side of a live juniper support tree. It consists of four collapsed poles and seven standing poles utilizing the trunk and a large unbroken limb of the juniper for support. Two of the standing poles and two of the collapsed poles show evidence of having been axe cut; the bases of the other poles are deteriorated and it is uncertain as to whether they too were cut by axes. One of the poles is a forked stick. The wickiup poles, all of which are of limbed juniper, range in length from 1.6 to 3.1m and from 6 to 13cm in base diameter. The interior height of the structure is 1.8m and the semi-circular floor area measures approximately 3.1m north-south by 1.8m east-west, and encloses an area of approximately four square meters. No evidence of a

covering or floor treatment remain, although the floor area is covered with duff which possibly masks its original surface. A 1.7m wide gap between the northern-most standing pole and the support tree is possibly an indication of a northeastern entryway.

Structure 5 is approximately 28 to 29m to the southeast of Structure 4. It was initially recorded as a collapsed wickiup however, upon further investigation, has been re-evaluated as simply a limbed live juniper tree. Four steel axe-cut, un-limed juniper branches lie at the base of the living source tree with their cut bases near the limbed trunk. These branches range in length from 2.7 to 4.2m and from 6 to 18cm in diameter. Because of the other examples of steel axe-cut wickiup poles present on this site and others in the vicinity, and the juniper pole stockpile (Feature A), it is quite possible that this feature represents a production stage in the manufacture of wickiup poles.

Because these branches, and other steel axe-cut poles associated with the wickiups themselves, were quite likely cut while living, it is inferred that these would make excellent candidates for dendrochronological dating. As opposed to the long-dead wood that is typically used in pre-steel Protohistoric shelter construction, these specimens could possibly provide very accurate dates for what is apparently a very late Ute encampment (based on the presence of steel axes and another trade good in the form of the metal disk found at Structure 6). With this in mind, a 16.5cm diameter section of one of the axe-cut limbs from Structure 5 was collected. The sample was sawn from the base of a 3.7m long limb lying to the south of the source tree with the butt end resting against the trunk of the tree. The stump of this limb remains visible above, 2.6m high in the living source tree. This sample (Dendro Sample SME14260:Struc 5.1) is awaiting dendrochronological analysis. The freshly sawn cut face on the limb was marked with the specimen number on a write-on aluminum tag.

Structure 6, approximately 40m to the southwest of Structure 2 near the southwest end of the site, consists of a lean-to type (“leaner”) wickiup leaned on to the southeast side of a live juniper support tree. The unique aspect of this shelter is that it is not a conical structure, but is more typical of an historic-style lean-to or windbreak. It consists of three collapsed poles and thirteen standing poles that rest against both sides of a large, unbroken, horizontal branch of the juniper for support. Several of the poles show evidence of having been axe cut; the bases of the other poles are deteriorated and it is uncertain as to whether they too were cut by axes. Three of the poles are forked sticks and three are uprooted trunks. The wickiup poles, all of which are of limbed juniper, range in length from 2.2 to 3.7m and from 5 to 23cm in diameter at mid-pole. The interior height of the structure is 1.4m and the semi-circular floor area measures approximately 3.0m north-south by 2.8m east-west, and encloses an area of approximately six square meters. No evidence of a covering or floor treatment remains, although the floor area is covered with a thick layer of duff which masks its original surface. The arc-shaped wall of the lean-to would have provided the occupants with shelter from the elements to the west and south and could have accommodated a significant number of individuals. The three “collapsed” poles, situated along the north and east side of the structure, are possibly soil retention beams to aid in the establishment of a low floor platform.

A trade good was found 3m to the northeast of Structure 6 by using a metal detector to scan the surface of the site. Specimen 5ME14260.s2, a perforated copper disk, was found in the upper 2cm of soil. The circular, flat disk has been cut from a flat sheet of copper with “tin snips”; an indentation and scar from the snip blades is evident on one edge (Plate 3, p. 33). It is manufactured from 1/50th inch (0.5mm) thick stock and measures 13/16th inch (2.1cm) in average diameter (the disk is somewhat uneven in outline). Although the purpose of the artifact remains unknown, no utilitarian purpose can be ascertained for the object and it is therefore inferred to be a decorative item.

At a distance of 3m to the east of Structure 6 a ceramic object, Specimen 5ME14260.s3 was found on the site surface. This object consists of a small, curved, section of light gray (10YR 7/2) clay rope or coil that is flattened and bifurcated at one end (Plate 3, p. 33). It measures 4.1cm in length, 0.6 to 0.8cm in diameter, and 1.2cm wide at the flared or flattened end. Once again, the exact function or purpose of the object is unknown. It is possible that it is simply a piece of pinched off coil that was discarded during the manufacture of a coiled vessel, however the two-lobed flare appears to be an intentional element and suggests that the specimen (broken off at the end opposite the bifurcated flare) is possibly a fragment of ceramic applique, such as from a figurine.

As explained above in the description of Structure 1 at site 5ME14258, for the sake of potential future investigations a 1150 gram bulk soil sample was collected from the center of the wickiup floor area of Structure 6 (5ME14260.s4).

Structure 7, situated approximately eight to nine meters to the north-northeast of Structure 6, consists of the remains of a partially collapsed lean-to type wickiup (“leaner”) with seven collapsed poles and three standing poles leaning onto a limb on the eastern side of a living juniper support tree. The poles had been broken off at the base. The wickiup poles, all of which are of juniper, range in length from 1.5 to 2.3m and from 6 to 9cm in diameter. The interior height of the structure is 1.0m. No evidence remains in terms of a covering, floor shape, floor treatment, or entryway.

Structure 8, which is situated approximately 26 to 27m to the south-southeast of Structure 6, consists of the remains of a collapsed freestanding wickiup. An arrangement of nine or more juniper poles lie on the ground surface to the west of a large isolated outcrop of sandstone. The largest of the poles remains crossed on the ground in a rude “star” pattern, and it is easy to visualize the standing structure from the pattern of collapsed poles. These poles, all of which are of juniper, appear to have been broken off at the base, and range in length from 1.3 to 3.8m and from 6 to 22cm in diameter. No evidence of a covering, floor treatment, floor plan, original height of the structure, or entryway remains.

A thick, crudely-made, re-worked Archaic projectile point (5ME14260.s1) was found, and collected, approximately 2.3m to the southwest of the center of the collapsed poles (Plate 3, p. 33). It is possible that this artifact is from the original floor area of the wickiup. The specimen has been heavily re-worked using alternate beveling which has created a shortened, blunt, and spiraled blade. The broad, low corner-notches and slightly concave basal edge can

be compared to Middle to Late Archaic specimens such as Buckles' Roubideau Phase Type 24 that dates to ca. 3000 to 500BC (Buckles 1971:1185, 1220), and had possibly been collected by the Ute inhabitants of the site and re-used.

Structure 9, in the center of the wickiup village and approximately 18m to the southeast of Structure 2, consists of a brush enclosure presumably a corral for livestock (horses? cattle? sheep?). The external measurements of the corral are approximately 9m east-west by 7.5m north-south, while the internal dimensions of the enclosure are 7.5 by 5.5m encompassing an area of approximately 32 square meters. The roughly circular feature consists was constructed so as to connect a series of six still living juniper trunks and a living pinyon trunk that have been used for stability and support (Figure 4). The fence corral is constructed of numerous un-limbed juniper and pinyon trees and branches stacked atop one another. From the manner in which a number of the fence elements remain partially suspended and leaned onto the living support trees, it is clear that the fence originally stood significantly higher than at present. In one section the brush remains stacked between two juniper support trees to a height of nearly two meters. Some of the bases of the branches appear to have been broken from their sources while others have been axe cut and possibly even sawn.

Structure 10, situated approximately 15m to the northwest of Structure 3 on the northwest edge of the site, consists of the remains of a collapsed lean-to type wickiup ("leaner") with seven collapsed poles lying on the ground with the collapsed pinyon support tree lying partially atop several of the structure poles. Several of the bases of the wickiup poles, all of which are of juniper, indicate that they were steel axe cut. They range in length from 1.8 to 3.4m and from 9 to 15cm in diameter. No evidence remains in terms of the height or diameter of the shelter, a covering, floor shape, floor treatment, or entryway. Immediately to the east of this structure is Feature A, described below.

Feature A, a stockpile or cache of juniper poles that was located at the base of a living juniper tree approximately 1m to 3m east of Structure 10. It consists of a pile of 11 to 13 limbed juniper trunks and branches that measure from 50cm to 1.5m in length. The bases of the branches appear to have been broken from their original sources. It is conceivable that this pile of poles is contemporaneous with the Protohistoric structures on the site and represents a production stage in the manufacture of wickiup poles, as also seen in Structure 5, the limbed juniper tree.

Evaluation and Management Recommendation

Due to the rare, fragile, and ephemeral nature of these aboriginal wooden structures and the site's potential to yield valuable information regarding the area's prehistory, protohistory, and early history, it is field evaluated as eligible for listing on the National Register of Historic Places (NRHP). Protection and preservation are recommended.

Site **5ME15279**, consists of a small petroglyph panel on an isolated boulder and an associated scatter of lithic artifacts within and outside of a shallow overhang. The site measures 30m northwest-southeast by 15m northeast-southwest. It is located on top of a small

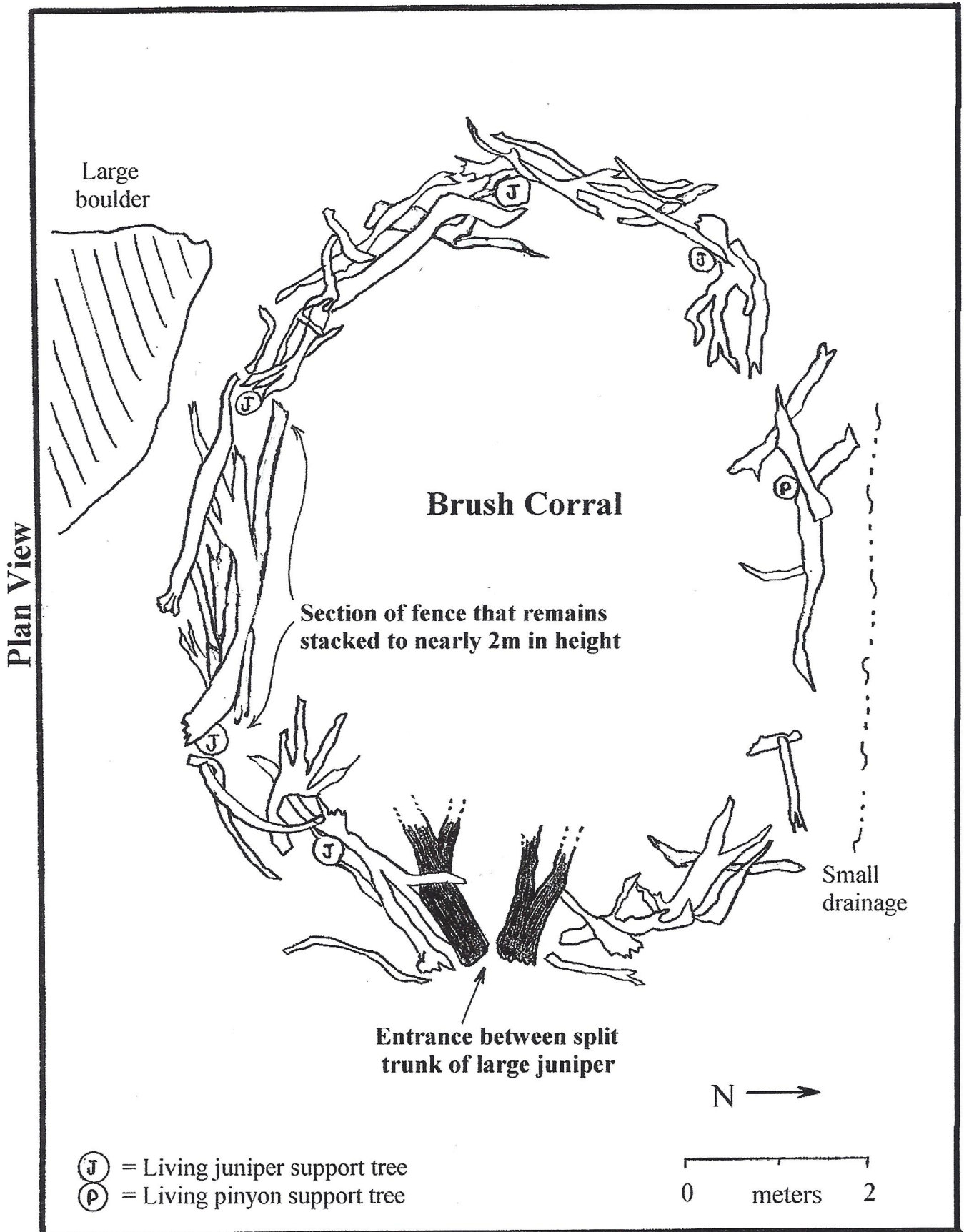


Figure 4. Site 5ME14260, Structure 9, plan view.

hill that forms a prominence on the end of a southeast-running ridge that extends onto the valley floor on the northwestern side of Gunnison Gulch. The site is at an elevation of 6770 feet. A sparse pinyon/juniper forest exists on the site as well as an under story of big sagebrush, serviceberry, rabbitbrush, and sparse bunch grasses. Residual soils on the ridge top consist of light brown, rocky, sandy loam.

The sandstone boulder containing the rock art, which measures 7.3m northeast-southwest by 3.4m northwest-southeast, is pedestaled atop remnants of an underlying alluvial deposit of sand and gravel which forms a shallow overhang beneath much of the boulder. A projectile point was found within the deepest portion of this overhang; that facing to the northeast and measuring 2.8m deep and 2.0m in height above the present ground surface. The fill within the shelter consists of rocky sandy soil similar to that of the surrounding site, and appears to be shallow in depth; possibly no more than 20cm.

The projectile point (5ME15279.s1), consists of a small, triangular point. Although the stem and much of the hafting element are missing, one of the tangs remains as evidence that the specimen was corner notched (Plate 3, p. 33). The artifact is comparable to Rose Spring Corner-notched arrow points within the Rosegate Series (O'Neil 1993:308) that date from the Formative Era of approximately 400BC-AD1300 in west central Colorado (Reed and Metcalf 1999:98-145). However, this comparison does not rule out the possibility of the arrow point being of Ute manufacture and of an age contemporary with the wickiup sites so prevalent in the surrounding valley. Three flakes were also found just outside of this shelter; two of quartzite and one of chalcedony. In addition, a concentration of 18 artifactual flakes of chalcedony, quartzite, and chert (many with cortical surfaces), a chalcedony core, and an end scraper are located 20m to the southeast of the boulder on the end of the prominence.

The petroglyph panel is situated on the southeast-facing vertical face of the sandstone boulder and 1.4m above the pgs. The two elements of the panel consist of an apparent anthropomorph and, 15cm to the left, a small, non-descript figure that is possibly a crude representation of a quadruped such as a bighorn sheep. The petroglyphs appear to be expedient and were created with a large blunt hammerstone that left relatively large, round impressions. They were not executed with the care and detail typical of other rock art in the region. Evidence of re-patination within the peck marks indicates a certain amount of antiquity.

Evaluation and Management Recommendation

Due to the presence of rock art on the site, and the site's potential to yield valuable information regarding the area's Prehistory, it is field evaluated as eligible for listing on the National Register of Historic Places (NRHP). Protection and preservation are recommended.

Site **5ME15280**, consists of a two pole leaner structure. One juniper pole remains leaning onto the south side of a living juniper support tree and the other has collapsed onto the ground surface in a manner to suggest that the two juniper poles originally rested side-by-side while leaning into the support tree. The site is located near the bottom of Gunnison Gulch approximately 60m to the southeast of the entrenched channel. The site is at an elevation of

7020 feet. A site area of 20m in diameter has been defined around the structure which is situated in a pinyon/juniper forest with an under story of big sagebrush, serviceberry, Mormon tea, mustard, prickly-pear (*Opuntia fragilis*), and sparse bunch grasses. Soils consist of light brown, rocky colluvium.

The standing pole is unusually long and measures approximately 6m in length and up to 20cm in diameter at mid-pole. The collapsed pole is somewhat deteriorated but was considerably shorter and narrower. The function of the structure is unclear, and, although it is possibly the remains of a wickiup it more likely served as a pair of hide-processing or meat-drying poles.

No evidence of axe or saw marks is visible on either the leaning pole or the support tree, however several axe-limbed trees (of undetermined age or cultural affiliation) were noted in the area. No other cultural materials were found directly in association with the structure, however an occasional artifactual flake was noted in the general area.

Evaluation and Management Recommendation

Due to the rare, fragile, and ephemeral nature of this aboriginal wooden structure and the site's potential to yield valuable information regarding the area's Prehistory, Protohistory, and early History, it is field evaluated as eligible for listing on the National Register of Historic Places (NRHP). Protection and preservation are recommended.

Site **5ME15281**, consists of a one pole leaner structure. The site is located near the bottom of Gunnison Gulch approximately 130m to the southeast of the entrenched channel at an elevation of 7030 feet. A site area of 20m in diameter has been defined around the structure which is situated in a pinyon/juniper forest with an under story of big sagebrush, serviceberry, Mormon tea, mustard, prickly-pear (*Opuntia fragilis*), and sparse bunch grasses. Soils consist of light brown, rocky colluvium.

The feature consists of a single juniper pole leaning onto the southwest side of a pinyon support tree that has only recently died. Browned needles remain on the tree branches; possibly as a result of attack by ips beetles. The pole measures approximately 2m in length and 13cm in diameter. The function of the structure is undetermined however it likely served as a hide-processing or meat-drying pole. No other cultural materials were found directly in association with the structure, however a sparse artifactual flake scatter exists in the general area.

Evaluation and Management Recommendation

Due to the rare, fragile, and ephemeral nature of this aboriginal wooden structure and the site's potential to yield valuable information regarding the area's Prehistory, Protohistory, and early History, it is field evaluated as eligible for listing on the National Register of Historic Places (NRHP). Protection and preservation are recommended.

Site **5ME15282**, consists of a partially collapsed leaner wickiup. The site measures 30m in diameter and is located on a relatively level area on the talus that forms the southeastern side of Gunnison Gulch at an elevation of 6840 feet. Vegetation on the site consists of a juniper/pinyon forest with an under story of mountain mahogany, yucca, and sparse bunch grasses. Soils consist of shallow (less than 20cm?), brown, rocky, sandy loam.

The feature consists of three juniper poles leaning against the north, northeast, and southwest sides of a live juniper support tree and an additional seven collapsed poles on the ground surrounding the tree, primarily to the north. The poles measure from 1.4 to 4.1m in length and from 7 to 13cm in diameter at mid-pole. The standing pole on the south side of the tree is supported by the trunk and a branch of the support tree. The other two still standing poles both lean onto a major horizontal branch of the support tree. The interior height defined by these poles is approximately 1.7m and the their bases rest on the ground surface at 2.3m, 2.2m, and 0.9m distance from the base of the tree.

A single large, utilized flake was found at the base of the north side of the support tree within the wickiup, and two additional concentrations of chert, chalcedony, and quartzite flakes (12 total) are to the northeast and west of the structure. One additional artifact, a large bifacially-thinned quartzite flake butchering tool was located approximately 20m to the north.

The ground cover within the wickiup floor area is of highly organic loam and duff and the remains of what was apparently a juniper bark floor covering. As explained above in the description of Structure 1 at site 5ME14258, for the sake of potential future investigations, a 310 gram bulk soil sample was collected from one meter to the north of the base of the support tree (5ME15282.s1). It was collected from both above and below the bark flooring or mat.

Evaluation and Management Recommendation

Due to the rare, fragile, and ephemeral nature of this aboriginal wooden structure and the site's potential to yield valuable information regarding the area's Prehistory, Protohistory, and early History, it is field evaluated as eligible for listing on the National Register of Historic Places (NRHP). Protection and preservation are recommended.

Site **5ME15283**, the **Hook and Bead Wickiup Site**, consists of the remains of two wooden standing wickiup structures (Structures 1 and 2), a large concentration of charcoal and ash, and associated lithic artifacts and European trade-goods. The site is located on a very small prominence situated on the talus that forms the southeastern side of Gunnison Gulch. The site is at an elevation of 6850 feet. It measures 28m east-west by 21m north-south and is situated in a pinyon/juniper forest with an under story of big sagebrush, serviceberry, Mormon tea, mustard, prickly-pear (*Opuntia fragilis*), and sparse bunch grasses. Soils consist of light brown, rocky colluvium.

In addition to two small fragments of unidentifiable burnt bone near Structure 1, and eight artifactual flakes from throughout the site, the stone tool artifact inventory consists of two manos and a chert drill. One of the manos was found at the base of a large, living juniper tree

one to two meters to the northeast of the wickiup structures and consisted of an unusual “two-hand” specimen formed from a long oval river cobble of reddish-brown quartzitic sandstone (Plate 3, p. 33). It measures 20cm by 7.5cm by 4.5cm, is slightly pecked and ground to shape around the entirety of all edges, somewhat flattened at each end by battering and pecking, ground (but significantly weathered) on the excurvate surface that was facing up, and heavily ground and highly polished on the opposite face, with occasional peck marks. Although two-hand manos are often considered to be indicative of the presence and processing of cultivated foodstuffs (Reed and Metcalf 1999:98), the high polish suggests that the artifact was used to process a soft, pliable material such as an animal hide (Adams 2002:39-41, 96-97). A microscopic examination of the specimen (uncollected) would aid in this determination.

The drill (5ME15283.s1) is made of mottled gray and light gray chert, measures 3.5+cm in length by 2.5cm in width at the base and 0.6cm in thickness (Plate 3, p. 33). It has a roughly triangular base, which possibly served as a hafting element, and a long, narrow point or bit with a diamond-shaped cross section. The bit measures 0.6cm in width and 0.5cm in thickness. The extreme tip of the bit is missing.

A scatter of 24 small drawn glass “seed” beads was located on the ground surface within Structure 1 and immediately to the southeast. Two of the collapsed structure poles that lay across the bead scatter were raised slightly and one bead each was observed beneath each pole. It is obvious that additional beads are present on the site, but not visible on the surface. The beads are white, blue, and red-with-white-cores. A sample of ten of the beads was collected as Specimen 5ME15283.s2 (Plate 3, p. 33). They are irregular in size and shape, range in diameter from 2/16th to 3/16th inch (2.7 to 4.6mm), and from 3/32nd to 5/32nd inch (2.3 to 3.4mm) in thickness. The holes in the beads measure from 1/32nd to 1/16th inch (0.8 to 1.6mm) in diameter. One of the collected specimens is broken in half.

European manufactured glass beads were traded throughout America by trappers and explorers during the 16th, 17th, and 18th centuries. Sewn and woven beadwork utilizing the tiny seed beads was instrumental in replacing the more difficult and time-consuming porcupine quillwork that had existed prior to their introduction (Giese 1996).

Another trade good was found on the site by using a metal detector to scan the surface of the site. Specimen 5ME15283.s3, a small metal hook, was found approximately 2cm below the present ground surface immediately outside of Structure 1, to the east. The rusted iron object is broken off at both ends, S-shaped in overall outline, and formed into a nearly-closed hook at one end. It is manufactured from 5/32nds of an inch (0.4cm) diameter wire that exhibits a roughly diamond-shaped cross section (Plate 3, p. 33). It measures 1-13/16^{ths} inch (4.6cm) in length and 5/8^{ths} inch (1.6cm) wide at the hook end. The hook is virtually identical to a series of S-shaped iron links used to connect an iron ring to a horse bit found as a grave good in a Ute crevice burial from northeastern Utah (Fike and Phillips 1984). The bit is a commercially made Spanish or Mexican-style bit from the 19th century (Plate 2, p.25), and the burial dated from 1860 to 1870. The artifact from the Hook and Bead Wickiup site also somewhat resembles some of the sections of metal bails that were used in the manufacture of

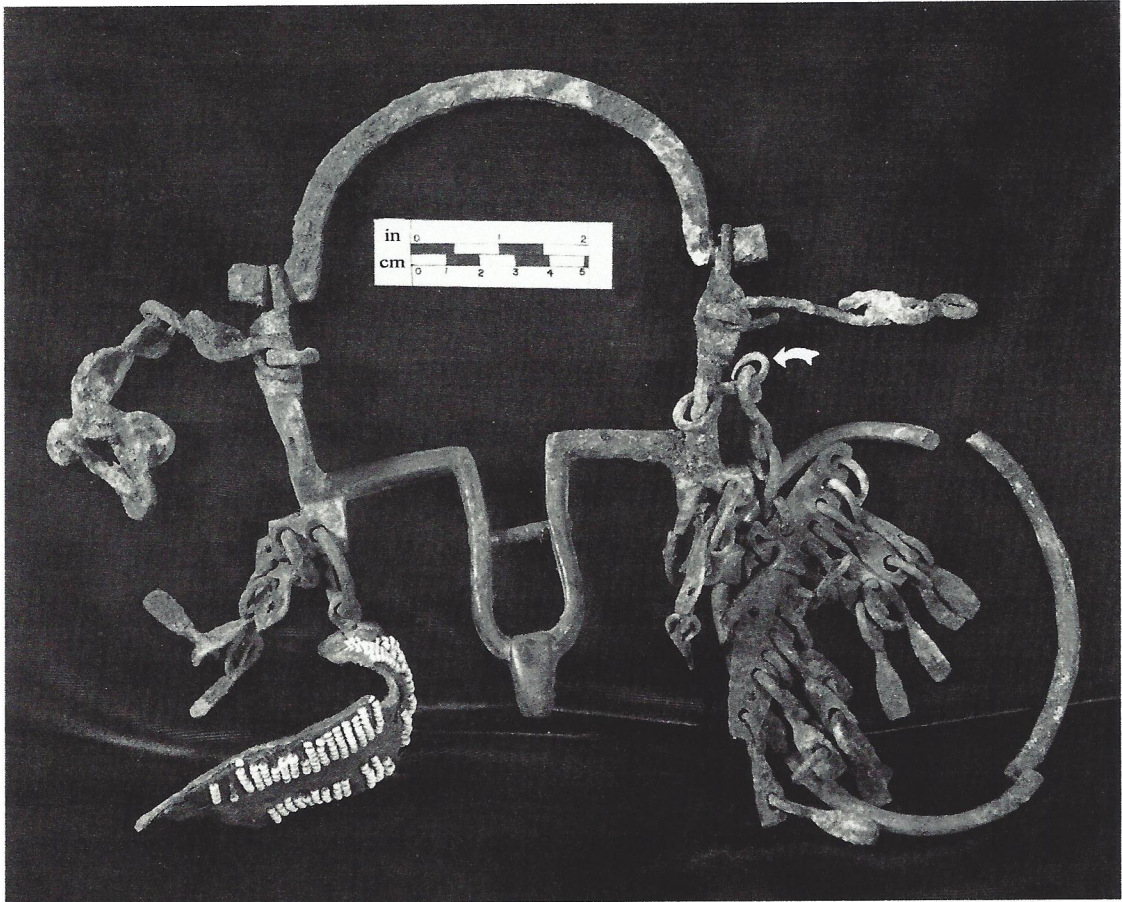


Plate 2. Small white arrow (center right) indicates the S-shaped iron link part of this Spanish-style bit that closely resembles collected artifact 5ME15283.s3 (see Plate 3i, p.33). [Reprinted from Fike and Phillips 1984: Figure 47, p. 51]

canning/fruit jar and carbonated beverage bottle “closures” from the late 19th and early 20th centuries (BLM 2005 and Mechow 2005), however it most likely is a piece of horse tack.

Structure 1, near the center of the site, is a free-standing wickiup consisting of three poles supported by each other and five associated collapsed poles resting on the ground beneath and nearby (Figure 5). The bases of the poles, that are primarily of juniper but include pinyon limbs as well, are somewhat deteriorated but appear to have been simply broken off from their source trees. One of the standing poles is forked near the upper end, with a short stub of one of the forks acting as the support element for the other two poles, that form a tripod. The poles range in length from 1.5 to 3.0m and from 8 to 24cm in mid-pole diameter. The interior height of the structure is 1.2m and what appears to have been a circular floor area measures approximately 2.7m in diameter and encloses an area of approximately 5.7 square meters. No evidence of a covering or floor treatment remain.

Structure 2 is situated approximately 2m to the northwest of Structure 1. It is a leaner wickiup leaned on to the northeast side of a dead juniper support tree. It consists of four standing poles and seven collapsed poles utilizing the trunk of the juniper for support. The bases of the poles are somewhat deteriorated however they appear to have been simply broken off at the ends by the structure’s architects. The wickiup poles, which are of limbed juniper and pinyon, range in length from 1.5 to 2.5m and from 8 to 20cm in diameter. The interior height of the structure is 1.0m and the 2.0m diameter floor, although indeterminate in terms of original shape appears to have enclosed an area measuring approximately 3.1 square meters. No evidence of an entryway, covering, or floor treatment remains.

In addition to the associated artifacts described above, there is a large, 3.5m diameter, concentration of charcoal and ash that extends from within Structure 2 to outside of the structure to the northwest, that presumably represents the remains of an interior hearth. One of the 8 flakes on the site, of white chert, was found within the floor area of this feature.

Evaluation and Management Recommendation

Due to the rare, fragile, and ephemeral nature of these aboriginal wooden structures, the rare and diagnostic nature of the surface artifacts, and the site’s potential to yield valuable information regarding the area’s prehistory, protohistory, and early history, it is field evaluated as eligible for listing on the National Register of Historic Places (NRHP). Protection and preservation are recommended.

Site **5ME15284**, consists of a leaner-style wickiup with an associated hearth and open lithic scatter. The site measures approximately 80m northeast-southwest by 55m northwest-southeast. It is located in a saddle between two low hills on a bench situated on the southeastern slopes of Gunnison Gulch at an elevation of 6920 feet. The vegetation on the site is pinyon/juniper forest with an under story of big sagebrush, serviceberry, Mormon tea, “potato” prickly-pear (*Opuntia fragilis*), and sparse bunch grasses. Soils consist of brown, rocky, sandy loam.

The two juniper poles are leaning toward each other on either side of a horizontal branch on the south side of a dead pinyon support tree. The standing poles measure approximately 2.2m and 2.3m in length and 12cm and 28cm in diameter. The function of the structure has been interpreted as a wickiup, however it is quite possible that it served as a hide-processing or meat-drying rack. Although there are no additional, collapsed, poles in evidence to suggest a more substantial structure such as a shelter, the feature is notably similar in its design to another 2-pole structure from Rio Blanco County that was determined by excavation to be, indeed, a wickiup the Last Hour Wickiup (Baker 2003). No evidence of axe or saw marks are visible on the bases or limbs of either the leaning poles or the support tree, however they possibly have been obliterated by deterioration over time.

The remains of a hearth, in the form of a concentration of fire cracked rock, was found approximately 12m to the east of the structure. A moderately dense flake scatter is present throughout the prominence and a non-diagnostic projectile point tip (probably an arrow point fragment) was found approximately 10m to the northwest of the wickiup. Adjacent to the structure is a concentration of five chert flakes within 10cm of each other that possibly represents a collector's pile.

Evaluation and Management Recommendation

Due to the rare, fragile, and ephemeral nature of this aboriginal wooden structure and the site's potential to yield valuable information regarding the area's Prehistory, Protohistory, and early History, it is field evaluated as eligible for listing on the National Register of Historic Places (NRHP). Protection and preservation are recommended.

Isolated find **5ME15285** is the only one recorded during the Gunnison Gulch survey. It is a complete projectile point and was discovered on a game trail traversing the steep talus slope that forms the southeastern wall of the drainage. It consists of a large, leaf-shaped projectile point with a straight to slightly expanding stem (Plate 3, p. 33). The basal edge is slightly indented. It is made of semi-translucent brownish gray chert and measures 4.6cm in length by 2.1cm in width by 0.5cm in thickness. The specimen is comparable to Middle Archaic Era Uncompahgre Shavano Phase Type 31 projectile points (Buckles 1971:1220) that date to approximately 3500 to 1000BC and San Rafael Stemmed points that are dated to the Late Archaic, ca. 1000BC to AD0 (O'Neil 1993:306, 310).

Evaluation and Management Recommendation

Due to the isolated nature of this artifact and the apparent lack of potential for the resource to yield additional information regarding the area's prehistory, the find is field evaluated as not eligible for listing on the National Register of Historic Places.

Discussion

A thorough discussion of the Protohistoric era, aboriginal wooden structures, and Ute occupation in western Colorado is presented in *Volume I, Part 1: Archaeological Context*.

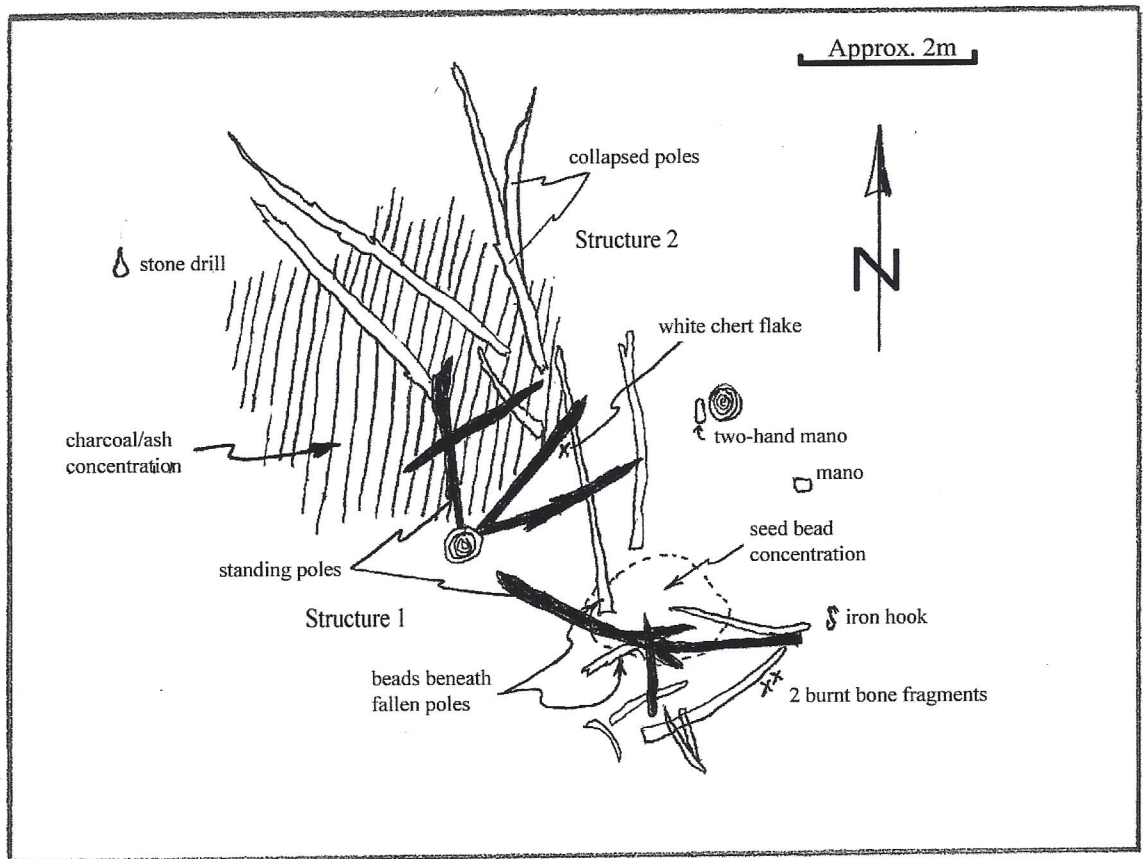


Figure 5.

Site 5ME15283, plan view detail.

Project associated with this report (Martin et al. 2005). In addition, the outline of a plan regarding perceived goals and research objectives for future work concerning aboriginal wooden structures is presented in the Strategic Plan for the Future section of the same report (Martin et al. 2005).

Regarding the Gunnison Gulch locale specifically, perhaps the overriding question concerning the almost unparalleled nature of the sites in this valley is *Why here?* Why is there such a concentration of ephemeral wooden structures in this location and yet they are extremely rare elsewhere? It is well documented that expedient wooden shelters, as well as other features, were constructed by the native peoples of Colorado throughout the state, and for that matter, throughout the entire history of their occupancy (Martin et al. 2005). The initial premise that can be postulated is that, the more recent the structures, the better preserved they will be, and, simply, the more of them will be left standing and recognizable as artifactual constructions.

From the well preserved nature of the wooden structures at Gunnison Gulch, it can be inferred that the features are relatively recent in archaeological terms. This hypothesis is solidly supported by the presence of European metal trade goods on two of the sites (5ME14260 and 5ME15283), glass beads at 5ME15283, evidence of steel axes at three sites (5ME14258, 5ME14259, and 5ME14260), and a corral at 5ME14260 suggesting the presence of livestock. Combined, these factors indicate a late Protohistoric/early Historic age to most or all of the cultural resources in the project area. The artifacts at the sites mentioned above can quite confidently be placed into an age range of from approximately 1600 to 1900AD, and most likely to the latter portion of this date bracket. Artifacts collected from the sites in Gunnison Gulch are presented in Plate 3 (p. 33).

The presence of Archaic aged projectile points on the sites and in the project area (5ME14258.s1, 5ME14260.s1, and 5ME15285.IF) obviously implies pre-Protohistoric occupancy of the valley, however the apparent direct association of two of these specimens with Ute architectural features suggests curation by the Utes and reuse of these artifacts by them as knives.

Later Protohistoric Era components often contain small quantities of Euro-American artifacts obtained in trade such as glass beads, metal tinklers, firearms, food cans, horse tack, metal arrow points, knives, needles, axes, cooking pots, and other goods. Metal and other trade goods became increasingly common in the archaeological record of the western United States after 1600AD and especially after 1750AD (BLM 2005). As of the establishment of Fort Roubideau near Delta at around 1830, Euro American trade goods become more common in western Colorado Ute archaeological contexts (Reed and Gebauer 2004).

Metal quickly began to replace stone tools and arrow points, especially among peoples who had frequent contact with the early Spanish and other Europeans who provided not only pre-made tools and ornaments but also sources of raw iron and other metals. By the middle of the Nineteenth Century “Apache, Navajo, Comanche, Ute and other mobile horse-mounted fighters were using chisels and tin snips to cut out arrowpoints” for hunting and raiding

weapons (Reed and Gebauer 2004) and were most commonly used in the interior west between the years of 1820 and 1881. Both European metal trade points and hand-hammered iron points were common surface finds a few decades ago but most have now rusted away (Frison 1991:123).

Site 15283 produced a number of glass “seed” beads. European manufactured glass beads were traded throughout America by trappers and explorers during the 16th, 17th, and 18th centuries. Glass trade beads were being mass produced in Europe, primarily in Venice, Italy, by 1,000AD. Around 1291 most of the production moved to the Venetian island of Murano where they maintained a near monopoly on beads for nearly 600 years. To increase production volumes, in about 1490 Venetians invented a technique to manufacture beads from long tubes of drawn glass where a molten glob of glass would be drawn out, cooled, cut into beads, and smoothed in metal drums containing water, lime, carbonate, sand, and carbon (Eddins 2005). A glass factory was established near Jamestown, Virginia in 1622 however it was burned down by natives less than a year later and very few of the Jamestown beads are believed to have survived in archaeological contexts (ibid).

European glass beads were popular items to offer in trade to aboriginal Americans from the arrival of Columbus’ ships in 1492 on. Their portability and popularity expedited early European penetration throughout the New World by trappers and explorers during the 16th, 17th, and 18th centuries by offering the natives (particularly the women) a new medium for decorating clothing and other personal effects. Sewn and woven beadwork utilizing the tiny seed beads was instrumental in replacing the more difficult and time-consuming porcupine quillwork that had existed prior to their introduction (Giese 1996).

The potential end dates for the occupations at the Gunnison Gulch sites are perhaps more intriguing than the beginning bracket of dates. The year 1881 is the year commonly listed for the “final expulsion” of the Ute peoples from western Colorado to the reservations. However, it is known (Stewart, unpublished comments at the Symposium of the Archaeology of the Eastern Ute, Grand Junction, Colorado, 1988) that numerous Ute individuals and families remained in western Colorado and eastern Utah, off reservation, after this date. Utes are known to have been counted in the census records of various communities in the area (for example Collbran, Colorado) as late as the 1920s, and still living in wickiups. We have chosen to refer to these off-reservation, post-1881 occupations as “refugee Ute.” Not only did some Utes not succumb to their removal to reservation lands in the first place, but visitation to non-reservation lands by the reservation Utes after 1881 is well documented (Mehls 1988 and Simmons 2000).

It is the opinion of these authors that most or all of the resources dealt with at Gunnison Gulch date to the terminal years of Ute occupation in Colorado, and possibly to post-1881. The forthcoming results of the dendrochronological sample from Structure 5, the limbed juniper tree at the Brush Corral Wickiup site (5ME14260), will be enlightening.

Evidence concerning the seasonality of the occupations at Gunnison Gulch is scant, however, prehistoric sites identified previously in the region include sheltered and open camps

**Plate 3: Collected Artifacts
from the Gunnison Gulch Survey Project
(shown actual size)**

a	5ME15279.s1	Rosegate Series arrow point (Formative or Ute)
b	5ME14258.s1	Elko Series projectile point
c	5ME14260.s1	Middle to Late Archaic projectile point
d	5ME15285.IF	San Rafael Stemmed projectile point (Middle to Late Archaic)
e	5ME14260.s3	Section of ceramic rope (applique fragment?)
f	5ME15283.s1	Chipped stone drill
g	5ME15283.s2	Glass seed beads
h	5ME14260.s2	Perforated copper disk
i	5ME15283.s3	Iron hook fragment (apparent piece of horse tack)



a



b



c



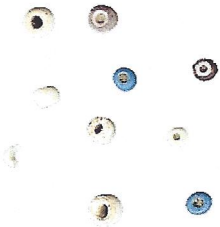
d



e



f



g



h



i

that were most likely occupied seasonally during the late fall to early spring. The nearby tributary creeks of the Gunnison River, both permanent and ephemeral, were the focal points of these occupations and their migrations to and from the river and the higher elevations of the Uncompahgre Plateau (as attested to by the surface archaeological materials located on the ridges above the drainages and the benches within their canyons). It fits that a cluster of shelters such as that found in the project area would indicate an occupation or occupations during times of the year when protection from the elements was crucial.

The wood and rock shelters recorded in the project area were likely inhabited in the fall, winter, and spring months. The elevations represented in this project are at the upper end of those that were occupied prehistorically during migrations between higher and lower elevations. For the prehistoric people of the region who followed a seasonal transhumance/hunter-gatherer life way, the family bands probably moved to the lower elevations above the rivers and streams in the winter to take advantage of comparatively warmer winter temperatures, minimal snow depths, and access to the winter habitat of the deer and elk populations on the mesa tops or open canyon bottoms. In the spring they would move back up toward the higher elevations to take advantage of the emerging floral resources and to follow the retreat of the large game animals.

The elevations below 6500 feet in the Pinyon-Juniper Zone probably served as wintering areas. During other parts of the year, the natives probably resided in seasonal, household-focused, residential base camps that were occupied for short durations, varying from one day to several weeks depending upon the season and the resource being exploited. These short-term camps were then relocated when the desired resources were depleted within the foraging radius and higher concentrations of these resources or newly ripening resources were detected or anticipated elsewhere.

Artifacts recorded on the surface of regional sites indicate activities related to lithic processing, hunting and gathering of foodstuffs, faunal and floral processing, and camping. These camps were supported by the exploitation of a variety of environmental zones and the diverse biotopes within the surrounding 10 or more miles including the riparian in canyons along the main creeks and the Gunnison River, the sagebrush grasslands, the pinyon-juniper forest, and the berry-producing shrub communities situated on the slopes of the higher elevations that would have provided a wide range of seasonal and year-round resources. The Gunnison Gulch survey appears to demonstrate that similar patterns of aboriginal land use and settlement continued into Protohistoric and possibly early Historic times on the Uncompahgre Plateau.

Determinations of Effect and Management Recommendations

The eligibility determination and consultation process is guided by Section 106 of the NHPA (36 CFR 60, 63, and 800). Inventory to identify, evaluate, and mitigate potential effects to cultural resources affected by an undertaking is the first step in the Section 106 process. BLM actions cannot be authorized until the Section 106 process is completed (36

CFR 800.3). Final determinations of National Register eligibility and effect should be sought from the controlling federal agencies in consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation. Table 3 presents a summary of the recorded resources by type and individual NRHP evaluations.

Table 3: Cultural Resources Within the Gunnison Gulch Survey Area.

SITES		
Site Number	Site Type	Evaluation
5ME14256	Protohistoric Open Architectural (Single-pole Leaner)	Eligible
5ME14257	Possible Crevice Burial	Eligible
5ME14258 "Coyote Skull Wickiup Village"	Protohistoric Open Architectural Campsite (Wickiup Village)	Eligible
5ME14259	Protohistoric Open Architectural Campsite (Two Wickiups and Hearth)	Eligible
5ME14260 "Brush Corral Wickiup Village"	Protohistoric Open Architectural Campsite (Wickiup Village)	Eligible
5ME15279	Petroglyph Panel, Rockshelter, and Open Scatter	Eligible
5ME15280	Protohistoric Open Architectural (Two-pole Leaner)	Eligible
5ME15281	Protohistoric Open Architectural (Single-pole Leaner)	Eligible
5ME15282	Protohistoric Open Architectural Campsite (Wickiup)	Eligible
5ME15283 "Hook and Bead Wickiup Site"	Protohistoric Open Architectural Campsite (Two Wickiups and Hearth)	Eligible
5ME15284	Protohistoric Open Architectural Campsite (Wickiup and Hearth)	Eligible
ISOLATED FIND (IF)		
Resource Number	Resource Description	Evaluation
5ME15285.IF	Projectile point	Not eligible

The potential impacts on the cultural resources in Gunnison Gulch are primarily in the form of natural effects such as fire and the eventual deterioration and collapse of the wooden structures due to wind, snow, decay, and disintegration as graphically demonstrated by the partial collapse of Structure 6 at the Coyote Skull Wickiup Village, during the winter of 2004-2005. In addition are the escalated threat of impacts from cattle grazing and vandalism due to the increased visitation to the area. There are cases on record of Protohistoric wooden features having been inadvertently dismantled by modern-day visitors for use as fire wood and use in other camping activities.

It is recommended, foremost, that additional reconnaissance inventories be conducted in a broader area adjacent to the current project area in an attempt to identify additional sensitive and significant wickiup sites and to aid in the establishment of a meaningful boundary for what is obviously an area of relatively well preserved aboral structures. To more effectively safeguard the resources, a National Register Archaeological District designation is recommended to include all of the sites recorded during the current survey, as well as any as yet unrecorded sites of similar importance.

As considered at another site containing numerous extant aboriginal wooden structures, the Rifle Wickiup Site near Rifle, Colorado, it is difficult to ascertain the best means of protecting these ephemeral architectural features from visitors to the area (O'Neil et al 2004). In an area that currently remains as undisturbed as Gunnison Gulch, it is recommended that the sites and structures remain unfenced and unmarked. However, if and when visitation to the valley increases to a level that impacts begin to occur to these valuable resources from innocent and uninformed individuals, or from vandals alike, a program of public education and protection should be implemented as soon as possible.

These authors have not found any references in the literature regarding *in situ* stabilization or reconstruction attempts for ephemeral shelters such as those dealt with in this report. It is implicit that any attempts to shore up or preserve wooden structures in the field would be but a temporary solution, however the same can be said of many other archaeological stabilization efforts, such as those on pictographs. It is beyond the expertise of these investigators to recommend techniques of wood preservation or mechanical stabilization, however, such procedures obviously exist and are being practiced on cultural resources throughout the world. The value, and ethics, of stabilization attempts, such as what was being considered for the support tree at Structure 6 at the Coyote Skull Wickiup Village, is debatable, however the same arguments that have been applied for decades for the stabilization of other archaeological sites, features, and rock art can certainly be said to apply to ephemeral wooden structures as well.

Management recommendations, then, would include additional Class III surveys in the area, the creation of a National Register Archaeological District based on the survey findings, periodic monitoring of the resources, the creation of fire breaks designed to shelter this valley and the surrounding mesa tops, archaeological testing and excavation of selected sites and features to address voids in the current data including additional radiometric and dendrochronological sampling (carefully selected to avoid problems associated with "old

wood”), and the consideration of a district stewardship program in cooperation with local land owners, museums, and amateur archaeological associations.

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Appendix A: Site Location Data

**Table A-1: Location data for the cultural resources
within the Gunnison Gulch Survey Area**

SITES			
Site Number	Site Type	Evaluation	UTM Coordinates
5ME14256	Protohistoric Open Architectural (Single-pole Leaner)	Eligible	
5ME14257	Possible Crevice Burial	Eligible	
5ME14258 “Coyote Skull Wickiup Village”	Protohistoric Open Architectural Campsite (Wickiup Village)	Eligible	
5ME14259	Protohistoric Open Architectural Campsite (Two Wickiups and Hearth)	Eligible	
5ME14260 “Brush Corral Wickiup Village”	Protohistoric Open Architectural Campsite (Wickiup Village)	Eligible	
5ME15279	Petroglyph Panel. Rockshelter, and Open Scatter	Eligible	
5ME15280	Protohistoric Open Architectural (Two-pole Leaner)	Eligible	
5ME15281	Protohistoric Open Architectural (Single-pole Leaner)	Eligible	
5ME15282	Protohistoric Open Architectural Campsite (Wickiup)	Eligible	
5ME15283 “Hook and Bead Wickiup Site”	Protohistoric Open Architectural Campsite (Two Wickiups and Hearth)	Eligible	
5ME15284	Protohistoric Open Architectural Campsite (Wickiup and Hearth)	Eligible	

SITES			
Site Number	Site Type	Evaluation	UTM Coordinates
ISOLATED FINDS (IFs)			
Resource Number	Resource Description	Evaluation	UTM Coordinates
5ME15285.IF	Projectile point	Not eligible	
PREVIOUSLY RECORDED SITE IN NEARBY AREA			
Site Number	Site Type	Evaluation	UTM Coordinates
5ME7378	Wickiup Village	Eligible	

**Appendix B: Collected Artifacts with
Location Information**

Table B-1: Collected Artifacts

<u>Specimen Number</u>	<u>UTM Coordinates</u>	<u>Analysis and References</u>
5ME14258.s1		Triangular blade, corner-notched or stemmed projectile point fragment. Light gray quartzite. 2.3+ x 2.2 x 0.5cm. Tip and basal edge missing. Comparable to styles within the generalized Elko series and Uncompahgre Complex of the Archaic era (O'Neil 1993:302 and Buckles 1971: 1220).
5ME14260.s1		Heavily re-worked projectile point with broad triangular blade and broad, low corner-notches and slightly concave basal edge. Striated black and light gray chert. 3.0 x 2.6 x 0.6cm. Comparable to Middle to Late Archaic specimens such as Buckles' Roubideau Phase Type 24 that dates to ca. 3000 to 500BC (Buckles 1971:1185, 1220).
5ME14260.s2		Perforated circular disk cut from flat sheet of copper with "tin snips". 1/50th inch (0.5mm) thick, 13/16 th inch (2.1cm) in diameter, central hole is 1.3" (0.5cm) in diameter. Purpose of the artifact unknown; inferred to be decorative, such as a strung "bead".
5ME14260.s3		Small, curved, flattened fragment of light gray clay rope. Bifurcated at one end. 4.1cm in length, 0.6 to 0.8cm in diameter, and 1.2cm wide at the flared or flattened end. Function unknown; possibly fragment of pinched off coil discarded during manufacture of a coiled vessel; possibly fragment of ceramic applique, such as from a figurine.
5ME15279.s1		Small, triangular, corner-notched projectile point fragment. Stem and much of hafting element missing. Chalcedony. 2.6+ x 1.4 x 0.3. Comparable to Rose Spring Corner-notched arrow points within the Rosegate Series (O'Neil 1993:308) that date from the Formative Era of approximately 400BC-AD1300 in west central Colorado (Reed and Metcalf 1999:98-145). However Ute manufacture is not ruled out.
5ME15283.s1		Drill with roughly triangular base, which possibly served as hafting element, and long, narrow bit with a diamond-shaped cross section. Mottled gray and light gray chert. 3.5+cm (extreme tip missing) x 2.5cm x 0.6cm in thickness. Bit measures 0.6cm x 0.5cm.

Table B-1: Collected Artifacts

<u>Specimen Number</u>	<u>UTM Coordinates</u>	<u>Analysis and References</u>
5ME15283.s2		Ten glass seed beads. White, blue, and red-with-white-cores. Irregular in size and shape, range in diameter from 2/16 th to 3/16 th inch (2.7 to 4.6mm), and from 3/32 nd to 5/32 nd inch (2.3 to 3.4mm) in thickness. The holes in the beads measure from 1/32 nd to 1/16 th inch (0.8 to 1.6mm) in diameter. One of the collected specimens is broken in half. AD1600 to 1900.
5ME15283.s3		S-shaped rusted iron hook manufactured from 5/32nds of an inch (0.4cm) diameter wire. Exhibits diamond-shaped cross section and measures 1-13/16 ^{ths} inch (4.6cm) in length and 5/8 ^{ths} inch (1.6cm) wide at the hook end. Probably piece of horse tack, most likely a Spanish or Mexican-style 19 th century bit (Fike and Phillips 1984), possibly fragment of metal closure bail from canning/fruit jar or carbonated beverage bottle from late 19 th to early 20 th century (BLM 2005 and Mechow 2005).
5ME15285.IF		Large, leaf-shaped projectile point with straight to slightly expanding stem and slightly indented basal edge. Semi-translucent brownish gray chert. 4.6cm x 2.1cm x 0.5cm. Comparable to Middle Archaic Era Uncompahgre Shavano Phase Type 31 projectile points (Buckles 1971:1220) dating to approximately 3500 to 1000BC and San Rafael Stemmed points that are dated to the Late Archaic ca. 1000BC to AD0 (O'Neil 1993: 306, 310).

Appendix C: OHAP Site and Isolated Find Forms
(Available at CSHF, BLM-UFO and OAHP)