2016 Documentation of Selected Ephemeral Wooden Features in Colorado National Monument, Mesa County, Colorado



COMPLETED FOR NATIONAL PARK SERVICE, COLORADO NATIONAL MONUMENT AND THE COLORADO NATIONAL MONUMENT ASSOCIATION



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2016 DOCUMENTATION OF SELECTED EPHEMERAL WOODEN FEATURES IN COLORADO NATIONAL MONUMENT, MESA COUNTY, COLORADO

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SUBMITTED TO

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ABSTRACT

At the request of Colorado National Monument archaeologist Matthew Marques, Dominguez Archaeological Research Group, Inc. conducted supplemental documentation of previously recorded wooden features found at four sites in the Colorado National Monument. These structures are located in sites: 5ME60, 5ME13174, 5ME20741 and 5ME20779. Field work consisted of a review of the sites' attributes, detailed mapping of the wooden structural features, and photographing those features with a high quality digital camera. For two of the revisited sites where conical features were recorded (5ME60 and 5ME20741), 3D reconstructions were made of the collapsed wooden features. Site reevaluation forms and aboriginal wooden feature forms were completed, as applicable.

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1.0 INTRODUCTION

At the request of Colorado National Monument (CNM), Dominguez Archaeological Research Group, Inc. (DARG) conducted supplemental documentation of previously recorded wooden features found at four sites: 5ME60, 5ME13174, 5ME20741 and 5ME20779. This project was conducted under Section 110 of the National Historic Preservation Act (NHPA, 16 U.S.C. § 360), which sets out the broad historic preservation responsibilities of Federal agencies and is intended to ensure that historic preservation is fully integrated into the ongoing programs of all Federal agencies. It was initiated as part of CNM's commitment to pursuing projects and programs that further the purposes of the NHPA, and in so doing was conducted to further evaluate historic properties located within the Monument's boundary for their protection and preservation. The fieldwork and report preparation portion of the project was completed by Carl E. Conner (Principal Investigator), Masha Conner (Photographer and Graphic Artist), Barbara Davenport (Archaeologist), Nicole Inman (Historian), and Thuong Pham (Archaeologist).

Dominquez Archaeological Research Group, Inc. (DARG) is a 501(c)(3) non-profit corporation established in 2003 to serve as a catalyst for innovative and collaborative archaeological and anthropological research, preservation, and education in the northern Colorado Plateau. Functioning as a consortium of research associates and technical advisors, DARG's operational focus is to coordinate research, raise and administer funding, and manage projects that advance our shared values and mission.

Our research strategy is focused on 1) intensive documentation of endangered and ephemeral archaeological resources and indigenous cultural landscapes, 2) poorly recorded and under-studied archaeological resources and neglected research themes, and 3) cross-disciplinary studies which integrate and synthesize information from multiple perspectives, including those of Native Americans. Our preservation goals are targeted foremost on improving the scope and quality of archaeological data, and on development of information systems that facilitate efficient, parity access across the professional research community, Native American stakeholders, and cultural resource managers. We proactively seek opportunities for collaborative public outreach and education, and have established on-going working relationships with numerous local, regional, and state-wide organizations supporting preservation and appreciation of cultural resources and heritage landscapes.

DARG has successfully conducted several major on-going projects that have significantly expanded baseline knowledge of western Colorado archaeology, notably including the Colorado Wickiup Project (CWP), the Colorado Radiocarbon Database Project, and the Ute Trails of Mesa County Project. In recognition for our work on the CWP, we received the 2014 Governor's Award for Historic Preservation. Our Ute ethnohistory and ethnobotany studies have opened important new channels of communication with Ute consultants and research partners, and through a series of recently conducted bison studies we have revealed a more complete picture of the occurrence of this important resource during the Early Numic and Historic Ute periods in western Colorado.

2.0 LOCATION INFORMATION

The four sites are situated within the bounds of the Colorado National Monument, Mesa County.

3.0 ENVIRONMENT

The four sites considered by this project are situated in the northeast portion of the Uncompahgre Plateau, an uplift that is a prominent physiographic feature of the Colorado Plateau. It extends for about 100 miles from the San Juan Mountains of Colorado into eastern Utah. It is a 25 to 30 mile wide anticlinal structure that is part of the western side of the old Uncompahgria, a late Paleozoic mountain range. This portion of the old mountain mass was reactivated in Late Jurassic time and again during the Laramide where the uplift occurred between two major fault lines. It reached its present elevation in the late Cenozoic. In most places the rocks were warped and stretched to form steep monoclines over the faulted rocks at depth, but in places these faults have broken through the overlying rocks, such as does the Redlands fault near Grand Junction. Erosion stripped off thousands of feet of Tertiary and Late Group retarded the downcutting, and as a result much of the Plateau now consists of Dakota rocks capping a thin section of Jurassic and Triassic rocks which, in turn, rest unconformably on Precambrian rocks (Young and Young 1977:61).

The Plateau exhibits a trellis drainage pattern. Numerous streams have cut the uplifted surface of the Uncompahyre Plateau to create deep canyons, steep slopes and rugged topography. The tributary streams have formed long, broad, interfluvial ridges and flats which are dip-slopes of the Burro Canyon and Dakota Sandstone Formations. In the Monument, this erosion has created spectacular canyons that are cut deep into the Entrada, Kayenta, Wingate, and Chinle Formations, and even into the oldest rocks of the Early to Middle Proterozoic gneiss and schist.

Soils in the general area are classified as Ustollic Haplargids with outcrops of the above geologic formations (USDA SCS 1978:244). Ustollic Haplargids are moderately deep to deep, light colored, well drained soils that usually contain less than 35% fragments. They occur on gently sloping to steep valley side slopes, dissected plateaus, and mesas. Depth to bedrock may range from zero to 150 centimeters with the majority being less than 65 centimeters. Within the project area they are primarily manifested as tan to light reddish brown sandy loam and clay loam, mixed with sandstone talus, cobbles, and pebbles. In areas near shale outcrops they may range from a light gray clayey sand to a dark gray sandy clay. The amount of talus and pebbles present is dependent upon the degree of deflation and/or slopewash present within a given area.

Elevations within the project area range from 5300 to 6600 feet. These altitudes are host to a cool semiarid climate where temperatures can drop to -15 degrees Fahrenheit during the winters and summer temperatures may reach 100 degrees Fahrenheit. There is a maximum of 120 frost-free days and the annual precipitation is about 16 inches (USDA SCS 1976). The nearby higher elevations are characterized as cooler and moister. Annually, the temperatures at these upper elevations could average 5 degrees cooler, and the precipitation as much as 14 inches greater, than the surrounding low elevations.

This is an area of high desert land with pinion and juniper forests and open sagebrush parks. Because the soils are sandy, goosefoot (*chenopodia*), Indian ricegrass, western wheat grass, needle and thread grass, Fendler three awn, galletta grass, and cheat grass are common. Besides sagebrush, shrubs present include antelope bitterbrush, rabbitbrush, and broom snakeweed. Prickly pear cactus is very common. Isolated riparian habitats occur in canyon bottoms and near springs.

These biomes support a variety of wildlife species. Mule deer, elk, bighorn sheep, coyote, and black bear are locally common as are jack rabbits, cottontail rabbits, and various other rodents. Mountain lion, bobcat, fox, beavers, skunk, badger, and weasel are also area inhabitants. Observed bird species include the pinyon jay, raven, red-shafted flicker, red-tailed hawk, golden eagle, bald eagle, and various other raptors.

4.0 LITERATURE OVERVIEW

Local and regional archaeological studies indicate nearly continuous human occupation of west-central Colorado for the past 12,000 years. The prehistory of the region is outlined in the Colorado Council of Professional Archaeologists' Colorado Prehistory: A Context for the Northern Colorado River Basin (Reed and Metcalf 1999), and in the Archaeological Monitoring and Data Retrieval for the Collbran Pipeline Project (Conner et al. 2014). Discussed therein are manifestations of the Paleoindian Era big-game hunting peoples (ca. 11,500 - 6400 BC); Foothill-Mountain Tradition (ca. 9500-6500 BC); Paleoarchaic transition period (ca. 7500-5500 BC); the Archaic Era (Early, Middle, Late) hunter/gatherer groups (ca. 6500 - 400 BC); the Formative Era horticulturalist/forager (Fremont, Anasazi, Avonlea) cultures (ca. 400 BC- AD 1300); the Early Numic and Athabaskan hunter/gatherers (ca. AD 1300 - AD 1650); and, the early historic horse-riding nomads (Late Numic, Athabaskan, Plains cultures, ca. AD 1650 - AD 1920). Overviews of the history are found in the Colorado Historical Society's publication entitled Colorado Plateau Country Historic Context (Husband 1984) and in the Bureau of Land Management's publication Frontier in Transition (O'Rourke 1980). Also, a relatively new historical context has been published by the Colorado Council of Professional Archaeologists entitled Colorado History: A Context for Historical Archaeology (Church et al. 2007).

5.0 METHODS

The purpose of the inventory was to revisit and potentially reevaluate four previously recorded sites through assessments of their wooden structural features. Fieldwork consisted of a review of the sites' attributes, detailed mapping of the wooden structural features, and photographing those features with a Canon Rebel 6D full frame camera (20.2 megapixal). The wooden features were mapped, by setting up a grid with units measuring one meter by one meter, based on true north. Control points (north and south) were recorded using a handheld Trimble unit (*Geo7x*). The features were then drawn to scale on graph paper. The resulting sketch was scanned and imported into Adobe Illustrator to be traced for a feature map. For two of the revisited sites where conical features were recorded (5ME60 and 5ME20741), the Illustrator file was imported into Blender or Autodesk Maya and used for 3D reconstructions of the collapsed wooden features. The resulting rendered images were exported in JPEG format. Site reevaluation forms and aboriginal wooden feature forms were completed, as applicable.

6.0 FINDINGS

Members of DARG conducted supplemental documentation of previously recorded wooden features found at four sites (5ME60, 5ME13174, 5ME20741 and 5ME20779) in the Colorado National Monument. Fieldwork consisted of a review of the sites' attributes, detailed mapping of the wooden structural features, and photographing those features with a high quality digital camera. For two of the revisited sites where conical features were recorded (5ME60 and 5ME20741), 3D reconstructions were made of the collapsed wooden features. In general, these investigators found the previous recordings to be of high quality and very thorough. The following presents an assessment of the sites' wooden features couched through many years of similar recordings by the Principal Investigator.

Site **5ME60** was previously recorded as a multi-component prehistoric/historic camp with wood remains that were possibly associated with a Ute lean-to or pole cache. This site was previously recorded by Stroh and Ewing in 1963 as an "open campsite, 75 m in diameter, with grinding stones and lithic chips and flakes." It was later revisited in 1999 by CNM volunteers, and again in 2013 by CNM personnel. The revisit in 1999 described the site as 40m in diameter, apparently focusing on the ridge top section and the main concentration area. A juniper branch leaning against a pinyon tree and campfire ring were also noted at that time.

The 2013 recording expanded the previously recorded site boundary and noted a larger number and greater diversity of artifacts and features, and an historic component. The CNM archaeologists documented "a large lithic scatter, a small number of [Uncompahgre] Brown Ware ceramics, three eroding hearths, and wood remains possibly associated with a Ute lean-to or pole cache. Seventeen tools were identified within the overall site assemblage and include an unknown arrow point base (collected), two bifaces, a uniface, three retouched flakes, two utilized flakes, a metate, an unknown ground stone fragment, and five cores. The lithic scatter contains an estimated 1000+ artifacts. For the most part, the debitage is widely dispersed

across the landscape, except for one very dense, discrete concentration on the ridge top (Concentration 1) and a few scattered higher density areas (e.g., west-central portion of the site, northeast area near rim, and a portion of the northern slope)." The historic component consists of three features (small fire ring, fencing material, and a galvanized metal pole) and three recent historic artifact scatters (Eininger et al. 2013).

As part of the present project the site was revisited to examine and assess the potential lean-to or pole cache. The suspected feature was found to be the collapsed, deteriorated remains of a once free-standing wickiup consisting of 4 poles (two broken and a part of one leaning against a branch of a nearby pinion tree; Plate 1). No axe cuts could be discerned and at least two of the pole bases indicated they were simply collected from surrounding debris. The area of the remains was gridded (1m units) and the distribution of the poles and pole fragments was mapped (Figure 5). The 4-pole superstructure was common for an average-sized wickiup. Other poles could have been leaned into the four others, and the covering would have been animal skins or brush and bark, or – during the late Historic period – canvas.



Plate 1. View north of pole distribution of free-standing wickiup in 5ME60. Note that a broken portion of a structural pole has come to rest against the limb of an adjacent tree.

In the lab, the mapped poles were digitized in photoshop and a reconstruction was undertaken through 3D imaging. The reconstructed image was completed by using two of the pole base locations for scale and the implied floor plan (Figure 6).



Figure 5. Scale drawing of the remnant wickiup pole distribution, site 5ME60.

Figure 6. 3D rendering of the wickiup at 5ME60. The reconstructed image was completed by using the base locations of the two largest poles for scale and the implied floor plan.



It is doubtful that this wickiup's remains are older than 200-250 years. The presence of the Uncompahgre Brown Ware suggests the site had at least two occupations, because all the luminescent dates processed so far place the Ware's use before AD 1650. Post ca. AD 1350 marks the appearance of Uncompahgre Brown Ware ceramics. Though once thought to date back into the Formative Period, luminescence dates on sherds from sites in northwest Colorado indicate the appearance of Uncompahgre Brown Ware generally postdates that time [5ME4970, AD 1508 - 1644; 5ME16097, AD 1400 - 1520; 5GF620, AD 1450 - 1528; 5RB144, AD 1510 - 1590; and 5RB2929, AD 1470 - 1530]. Reed et al. (2001:41-49) provide additional luminescence dates that generally support this observation, though an early date of AD 1300 cannot be ruled out.

Evaluation and Management Recommendation

The site was previously field evaluated as eligible for listing on the National Register of Historic Places. No change is recommended. Further work at the site is suggested in the form of collection of an Uncompany Brown Ware sherd and adjacent soil for thermoluminescence dating. (This should be submitted to the University of Washington, Dr. James Feathers.) This technique is the only physical means of determining the absolute age of pottery presently available.

Site **5ME13174** was recorded as a multicomponent site by CNM personnel in 2014. It "is bisected by Old Gordon Trail and located along the southern edge of a large sandstone monolithic. It was previously recorded by RMC Consultants (2002) as a prehistoric open camp that consisted of two charcoal stain features, two tools, and several concentrations of artifacts. The site was revisited for the current [2014] inventory and updated to correct the site location and to expand the prehistoric component and add a historic component" (Stavish et al. 2014a).

"The prehistoric component is an open camp with two features, five lithic tools, and an estimate of over 500 pieces of lithic debitage. The features associated with this component (Features 1 and 2) are both amorphous soil stains with flecks of charcoal. The lithic tools include two chert biface fragments, a multidirectional chert core, and two chert utilized flakes. Lithic debitage were sampled in two areas. Sample Area 1 is an 8-x-8-m area in northern most portion of the site. This sample resulted in 30 pieces of debitage, including one primary, four secondary, and 25 tertiary flakes. Three pieces of micro-debitage are identified. Lithic raw materials include various colors of chert and chalcedony. Sample Area 2 is a 4-x-4-m area located in the west-central portion of the site. Within it are 61 pieces of debitage, including six primary, three secondary, 49 tertiary flakes, and three pieces of shatter. One pressure flake was identified. Lithic raw materials include white chalcedony, gray siltstone, and various colors of chert. No diagnostic tools are identified in association with this component though there is potential for buried cultural materials in the features and in deeper sediments, particularly on the east side of the site" (ibid.).

The historic component of the site was described as having a possible brush structure and a small scatter of trash. As part of the present project the site was revisited to examine and assess the potential brush structure. The feature was relocated (Plate 2), and consists of three limbed poles of small diameter – the longest being 2.13m. The feature area was gridded and mapped (Figure 7). Two of the poles were found to be placed horizontally in the lower branches of a juniper tree about 50cm above ground surface. The third was on the ground. A Im long piece of baling wire is tied to the grounded pole. Based on these finds, the feature appears to be a recent historic setup for trapping bobcats. Often remnants of such traps are found in small overhangs and consist of a piece baling wire tied on one end to either to a rock or wood limbs and the other to a steel trap. In this case, the trapper found an animal's shelter at the base of the large old juniper, and set a trap that was tied by bailing wire to a horizontal laid pole in the lower branches of the tree.



Plate 2. View north of remnant poles and wire of a bobcat trap situated at the base of a large old juniper tree. (Yellow tape indicates north.)



Figure 7. Scale drawing of the remnant poles of the bobcat trap.

Evaluation and Management Recommendation

The site was previously field evaluated as eligible for listing on the National Register of Historic Places; no change is recommended. Further work at the site is suggested in the form of recovery/testing of the hearth feature that lies adjacent to the existing trail.

Site **5ME20741** was recorded as an historic open architectural site by CNM personnel in 2014. It "is located north of a large sandstone monolith and consists of a collapsed lean-to (Feature 1) and a small trash scatter. Feature 1 is a collapsed lean-to or free-standing structure that consists of seven juniper branches that range from 4" to 6" in diameter and 6'11" to 9'8" in length. Four of the branches are wedged together at the top and are resting on a juniper trunk, which itself is resting on a living juniper tree. Three other branches are lying on the ground between two of the wedged branches and they appear to have once been part of the construction. All of the branches have rough, snapped ends. In total, the feature would have been approximately 9'8" high and 9'7" in diameter. The trash scatter consists of six artifacts, including a lard pail, sardine tins, one hole-in-top can, and three sanitary cans. There is potential for buried cultural components within and around Feature 1" (Stavish et al. 2014b).

As part of this project, the site was revisited to determine the type and potentially the ethnic origin of the collapsed structure. The suspected feature was found as described - to be collapsed, but in relatively good condition (Plate 3). Large poles make up the structure including the previously described juniper tree trunk, which had been displaced for its role in the building. It was a free-standing structure that had collapsed to the northwest tipping into its largest pole, the tree trunk.



Plate 3. Overview of collapsed wooden habitation feature at site 5ME20741.



The feature area was gridded (1m units) and the distribution of the poles was mapped (Figure 8). In the lab, the mapped poles were digitized in photoshop and a reconstruction was undertaken through 3D imaging. The reconstructed image was completed by using the pole base locations for scale and the implied floor plan (Figure 9).

Figure 8. Mapped distribution of poles in the collapsed wooden structure at 5ME20741.



Figure 9. 3D renderings of the superstructure of the habitation feature at 5ME20741. Left image is view west, and right image is view southeast.

Based on the large size of the poles and the use of a forked pole (Plate 4), the structure was likely built and occupied by a Navajo. These conical features are called forked-stick hogans, and were the first dwellings used by the Navajo in the Southwest. The "forked stick" or male hogan is usually constructed by three interlocking poles which form the frame, with the fourth pole leaned against them making a conical structure. Other poles are added to hold the covering, which in the larger of such includes branches and mud, or in smaller, expedient structures, skins or canvas. Comparative examples of the



Plate 4. View south of the pole superstructure of the habitation feature at 5ME20741, showing forked-stick use to interlock poles.

expedient type have been recorded at Old Fort Ruin, an archaeological site in northwestern New Mexico (Plate 5). Eight conical structures occur at this National Register site, which also has the ruins of a Navajo pueblito and associated artifacts.



Plate 5. Photograph of a forked stick wooden structure at the Old Fort Ruin site in northwestern New Mexico. Photograph by Sarah Schlanger, New Mexico Bureau of Land Management.

The few cans (3 keyless sardine, 1 sanitary, 1 solder dot, 1 tea or spice, and 1 lard) distributed around the north side of the structure indicate a date of use ca. AD 1910 (Wilson et al. 1921).

Evaluation and Management Recommendation

The site was previously field evaluated as eligible for listing on the National Register of Historic Places. There is no change to that evaluation; protection and preservation remain the recommendations.

Site **5ME20799** was recorded as an historic open architectural site recorded by CNM personnel in 2014 (Stavish et al. 2014c). It consists of three features: two rockshelters that have the partial remains of brush and pole lean-to walls, and an apparently unassociated fire hearth made up of stacked rocks. The shelter features are set on both sides of a deep pour-off on the side of a bench rim. The features were well described as follows:

Feature 1 is a brush shelter constructed in a granite boulder outcrop located on the west side of a deeply incised drainage cutting through the north-facing cliff face of a mesa bench above Ute Canyon. The structure consists of pinyon and juniper trunks and branches and granite cobbles, all of which have been strategically layered over the opening of a "nook" within the stacked granite boulders. On the northwest side of the structure there is one main support post (tree truck) wedged upright between the slope and a boulder. To the southeast, approximately 6' away, there is a second tree post wedged upright between two boulders. These form a support for a third tree post cross-beamed across the top of them. All together these three posts form the main frame and opening of the structure. Behind the cross-beam frame are additional tree trunks wedged and laid across boulders, creating a frame for the roof. Small branches are layered on top of the roof beams to fill in the spaces. On the northeast side of the structure is a wall formed out of loosely-stacked granite cobbles, on top of which are the supported ends of the roof beam branches. Inside there is up to 5 cm of finegrained, light orangey-brown sandy silt with decomposing granite gravels and exposed granite bedrock. While there is no material evidence for campfires inside the feature, there is modern trash, indicating recent use. There are no observed artifacts associated with the feature. However, with clear evidence of recent use, there may have been unauthorized collection of artifacts. Dimensions of the feature are as follows: The outside of the feature measures 19.5' long by 10'10" wide, with a maximum height of 19', while the inside of it is 13'3" wide by 4'6" long, with a maximum head space of 4'8". The stacked granite cobble wall is 6'8" long by 3'3" wide and 2'1" tall. The wall is comprised of approximately 32 cobbles stacked 2-4 courses high, ranging in size from 1' by 6" by 3" to 1'4" by 1'6" by 8". The upright tree trunk posts are 9" in diameter by 11'5" tall and 6" in diameter by 8'6" tall, and the crossbeam post is 8" in diameter by 8' long. There is no evidence of axe or saw cuts at the ends of the posts. [Figure 10 is an illustration of Feature 2 by DARG graphic artist Masha Conner.]



Figure 10. Illustration of the brush and pole structure of Feature 1, 5ME20799. Notably, the piled brush on the superstructure probably was once part of the roof covering. Illustration by Masha Conner.

Feature 2 is a small, 10'2" long by 6'2" wide, brush and wall enclosure located on a small ledge on the north-facing side of a granite cliff face near the top of the bench. It is on the east side of the deeply incised drainage, opposite Feature 1. The low-lying rock wall, 12" maximum height, is along the exterior edge and supports two main upright pinyon or juniper posts, one of which still touches the upper edge of the overhanging cliff face, creating a maximum head space of 58" high. Pinyon and juniper beams appear to have been woven horizontally between the upright posts. At least six beams remain intact. In addition, there are pinyon and juniper branches lying in the interior, perpendicular to the rock wall, and woven beams and uprights, possibly indicating there may have been a "roof" wedged between the overhang and the wall. Several ephedra branches appear to have been woven into the wall and the collapsed roof. The interior of the enclosure is sloped, approximately 8-10°, with three small boulders taking up a portion of the floor space. The rock wall is 9'2" long with a maximum width of 16". It is constructed of 30 granite rocks stacked 1 to 3 courses high, ranging in size from 6" by 3" by 2" to 19" by 12" by 4". All of the wood appears to be salvaged fallen trees and limbs with no evidence for axe or saw cuts. There is less than 1 cm of sediment sporadically located across the floor. [Figure 11 is an illustration of Feature 2 by DARG graphic artist Masha Conner.]



Figure 11. Illustration of the brush and pole structure of Feature 2, 5ME20799. Illustration by Masha Conner.

Feature 3 is a fire ring of unknown age, possibly modern, located on the bench top west of Feature 1. The feature is roughly circular in shape, consisting of granite rocks stacked 4 to 6 courses high, with exterior dimensions of 36" by 27" and interior



dimensions of 18" by 20", and a maximum height of 18". It is constructed of approximately 40 stones ranging in size from 4" by 3" by 2" to 17" by 10" by 6". Three stones in the north exterior of the feature stand particularly upright and were possibly used as a wind break. Inside of the feature there are sparse charcoal specks and ash from a small, single burn. [Plate 6 was taken as part of the 2016 project.]

Plate 6. Feature 3, fire ring made of stacked rocks. (Yellow tape is scaled to one foot.)

Interesting additions were found at the site: a bottle cache of turn of the 20th Century soda bottles found in the northeast portion of the site; and, a slab metate found downslope of Feature 1. The bottle cache contained two soda bottle types: Torpedo and Codd (Plate 7); both of which were imported from England (Appendix A). They are of styles used infrequently by American soda bottlers, and are found even less frequently on American historic sites. The potentiality of the camp being occupied for a short period in the early 1900's by English tourists is supported by the style of construction of the stacked-rock hearth feature, which is unusual for the region.



Plate 7. Bottle cache found at site 5ME20799.

Enclosing rockshelters was likely practiced throughout prehistory. Such is indicated in the cultural deposits in the overhang of 5GF741, excavated by DARG in 2011 (Berry et al. 2013). There, due to the presence of the storage units in three Middle Archaic levels, the shelter-centered positioning of their thermal features, and the height of the roof during those periods, the shelter was likely used for winter habitations and was probably enclosed with a wall of wood poles leaned against the overhang's ledge. An artist's interpretation of this concept is shown in Figure 12.



Figure 12. Artist's rendering of possible pole wall superstructure that enclosed the McClane Rockshelter during Middle Archaic occupations.

Building in large rockshelters was clearly undertaken by the Anasazi at Mesa Verde. A local example of pole structures inside of a large rockshelter can be found at 5ME901, located in a tributary canyon of the Colorado River (Plate 8). At that site limbs and poles were woven together to form walls. A bone from a hearth feature in the pictured structure was AMS dated 980±40 BP, or about AD1030 (Beta-218199).



Plate 8. Intertwined poles and branches forming walls inside of a large rockshelter, 5ME901. This site was dated ca. AD1030.

Evaluation and Management Recommendation

The site was previously field evaluated as eligible for listing on the National Register of Historic Places. No change is recommended. The wood branches and poles at 5ME20799 are old and have no metal axe cuts. As they are standing, their preservation could be extended for many hundreds of years. Since diagnostics are not present, collection of dendrochronological samples is recommended for the purpose of dating the site's wooden features. It is notable that the modern plastic water bottles found stuck in the wood structure of Feature 1 and in the rocks near Feature 2 probably indicate the site was vandalized during the past 10 years.

7.0 SUMMARY AND MANAGEMENT RECOMMENDATIONS

Collapsed and deteriorating poles at 5ME60 were determined to be the remains of a free-standing Ute wickiup. In site 5ME13174, small-sized, short, trimmed branches were found horizontally laid into the lower portions of a juniper tree. A piece of baling wire was attached, so that the overall appearance is one of a recent historic trap set-up. The collapsed wood structure at 5ME20741 consisted of large-sized poles and use of a forked pole, characteristics that compare well with forked-stick hogans of New Mexico and Arizona, which

were commonly built by Navajos. Site 5ME20779 proved to be a multi-component camp consisting of an historic camp potentially used by English tourists around the beginning of the 20th century, and a prehistoric camp consisting of two rock shallow shelters that were enclosed by juniper and pinyon branches.

Site revisit/reevaluation forms and aboriginal wooden feature forms were completed (as necessary) for the sites (Appendix B). No changes are recommended to the field evaluations of the previous, excellent recordings. Suggested future work at the sites includes the luminescent dating of Uncompany Brown Ware at 5ME60, and the dendrochronologic dating of the wooden features at 5ME20799.

8.0 REFERENCES

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APPENDIX A: SODA BOTTLE TYPES FOUND AT 5ME20799

SODA BOTTLE TYPES FOUND AT 5ME20799 by Nicole Inman

Two types of unique bottle styles were located at the site: a Torpedo bottle and a Codd bottle. Both of these were used for soda water and both were imported from England; they are of styles used infrequently by American soda bottlers, and are found even less frequently on American historic sites.

Torpedo bottles:

Torpedo bottles are commonly referred to as round bottom sodas or ballast bottles since it is believed that many, if not most, of these type bottles



were imported from England as "ballast" in ships returning to the United States. Torpedo bottles were manufactured with a round bottom to prevent them from being stored upright. This kept the wired down cork from drying out and shrinking, resulting in lost carbonation and/or evaporation (Riley 1958). They were first patented in England in 1809. The finish on the majority of round bottom sodas is a thick heavy blob which allowed for the wiring down of a cork closure, though other finishes are occasionally noted including a crown cap finish (post-1900) and rarely, a Codd's ball stopper. A large majority of mouth-blown, round bottom/torpedo soda bottles date from the 1870s to the 1910s. Most were imported, although there are some American made torpedo bottles (Eastern Seaboard) that date back as early as the 1840s in the U.S. The style can go back as early as 1809 in England, having first been patented by William F. Hamilton (and as such they are also referred to as "Hamilton's") (McKearin & Wilson 1978; Baltimore Bottle Club 2002). The bottles found at the site have an applied blob finish. The majority of these type of bottles found in the United States were imported from Great Britain and frequently embossed with company names and cities from England and Ireland. These bottles were imported by the millions into the U.S. from the mid-19th to the early 20th century and are commonly found on historic sites dating that date to that time frame, though they can also date back to the 1870s (Lindsay 2016).

Embossing found on the four torpedo bottles include: *A&J Colquhoun* with *Trade Mark* in the center and *Brook's Bar* under the logo; *Townsend Salford* on one side and *Trade Mark* with logo on the other (blob style finish); *Townsend*, embossed vertically along the body of the bottle with logo; and *Manchester*, also embossed vertically.

Codd bottles:

The Codd's ball stopper soda water bottle style was patented by Hiram Codd in England in 1870 with patents for the most commonly seen types granted in 1872 and 1873; it was first patented in the United States in 1873 (Munsey 1970; Goodacre 1995). Similar to round bottom sodas, this closure and bottle style was infrequently used by American bottlers. The Society for Historical Archaeology website reports the following: The mouth-blown bottles were produced as follows: "After being mold blown the bottles were sheared at the neck and allowed to cool. Then a glass marble, made from glass of a hardness twice that of the bottle was dropped into it. The bottle was then re-heated and the neck welded on (finish applied), so containing the marble [Goodacre 1995]" (Lindsay 2016). This type of internal ball closure was self-sealing via a rubber gasket mounted inside the bore of the bottle against which the marble was firmly held in place by carbonated contents. The contained beverage was accessed by pushing down on the marble to release the pressure after which the marble dropped to the constriction ridges in the lower part of the neck. Indentations in the neck of the bottle held the marble in place when pouring out the contents after opening, keeping it from impeding the flow (Fowler 1986).

The Codd bottle is embossed with the following: Jones Brothers (top) Oxford and Reading (bottom). The logo in the center depicts an Oxford rowing crew/coxswain. The bottom of the bottle is embossed with a B and the numbers 313. The neck and finish (applied oil/mineral style) are missing, but found nearby. Codd bottles manufactured in the U.S. date between 1884 and 1898 (Elliot and Gould 1988). However, this type, when compared with others that are similar, were manufactured in Great Britain and date later, between 1900-1915. By 1914, the crown cap was dominating the market and the Codd bottle went out of use. This particular style of bottle is seldom seen on historic sites in the U.S.

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1958 Organization in the Soft Drink Industry - A History of the American Bottlers of Carbonated Beverages. American Bottlers of Carbonated Beverages, Washington, D.C. APPENDIX B: SITE REEVALUATION AND ABORIGINAL WOODEN FEATURE FORMS