

**2016 SURVEY OF THE PITCHFORK RANCH
GRANT COUNTY, NEW MEXICO**

Evan Giomi
Archaeology Southwest
300 North Ash Alley
Tucson, Arizona 85701



Report submitted to A.T. and Cinda Cole
Pitchfork Ranch
1515 Separ Road
Silver City, New Mexico 88061

Project Background

In June 2016, students and staff from the Archaeology Southwest/University of Arizona Upper Gila Preservation Archaeology Field School performed an intensive pedestrian survey of portions of the Pitchfork Ranch in Grant County, New Mexico. The survey was conducted as a non-collection cultural resources inventory of the ranch property as a means to train students in archaeological survey methodology, while collecting data that could be of future use for the landowners, A.T. and Cinda Cole.

The survey was conducted exclusively within the private land holdings of A.T. and Cinda Cole with their permission. The work completed during the 2016 field season contributes new data on New Mexico history, including information on Archaic and Mimbres period settlement and land use. While the area around the Burro Ciénaga and the surrounding Burro Mountains was an important part of the landscape used by Native Americans in the past, relatively little work has been done to document such land use patterns. The data collected by field school students and staff provides updates to previously recorded sites, as well as documentation of newly recorded sites on the Pitchfork Ranch.

Existing archaeological information on the Pitchfork Ranch property

The primary source of archaeological information on the Pitchfork Ranch and the surrounding Burro Mountains region is a seven-page report of a pedestrian survey conducted by James E. Fitting in 1967, now on file with the New Mexico Laboratory of Anthropology in Santa Fe. The survey report contains brief descriptions for 46 archaeological sites in the immediate region of the Burro Ciénaga, including a qualitative description of site size (small, medium, or large) and the primary types of artifacts observed. The site locations are approximated using the Public Land Survey System (PLSS), describing the location within the associated township, range and section to the nearest 40-acre area. Fitting's data has since been entered into the New Mexico Cultural Resource Information System (NMCRIS) and each site has been assigned a Laboratory of Anthropology (LA) number.

While Fitting's report provides baseline data on the archaeology of the Burro Ciénaga, the brevity of the descriptions and locational information limit the usefulness of the data. Furthermore, the 46 sites reported reflect only a representative sample of sites encountered by Fitting and his crew, rather than a full inventory.

More recently, an intensive pedestrian survey of proposed grade control structures in Burro Ciénaga drainage was completed by staff from Desert Archaeology, Inc. (Diehl 2015). The survey was conducted within the active drainage channel and recorded no archaeological sites.

Upper Gila Preservation Archaeology Field School

Preservation Archaeology Field School Background

The Preservation Archaeology Field School, a joint venture between Archaeology Southwest and the University of Arizona, has been a major component of Archaeology Southwest's research since 2008 and has included test excavations at three archaeological sites as well as archaeological survey on the Gila National Forest and on private land in the area. Beginning in 2014, the field school's excavation component has focused on fourteenth-century Salado villages near Cliff, New Mexico.

The preservation archaeology field school provides integrated training in archaeological methods, site preservation, and community outreach. The primary components of training include excavation methods, artifact analysis, survey methods, and experimental archaeology. Students also complete an outreach project that is geared toward disseminating their research to a broad audience. This multi-faceted program is meant to provide not only valuable training for students, but increased interaction and awareness of archaeological resources within the local communities.

The results of the work conducted with field school students also contribute to Archaeology Southwest's research on the formation and dissolution of prehistoric communities. In the upper Gila River drainage area, Salado villages are the latest in a series of alternately aggregated and dispersed occupations by prehistoric farmers in this region. Residents of southwest New Mexico became increasingly reliant on farming through the Pithouse period and subsequent Classic Mimbres period, when villages of sedentary farmers were common throughout the area. Around 1130, residents left these villages, and local populations remained small and scattered for the next 150-200 years. In the 1300s, large villages again began to form in the region. While people in the Upper Gila area were aggregated in large communities in the late 1300s, much of the rest of the southern Southwest was experiencing population decline. Our work examines the effects of these long-term population and settlement changes, including the 14th century influx of residents to the Upper Gila. How did migrants from diverse cultural groups form cohesive villages? How did they structure social relationships with existing communities in their new home? How were social and natural resources affected by the long-term patterns of human population aggregation, dispersal, and re-aggregation?

Survey data provides information on settlement history and land-use strategies employed by residents of the Burro Ciénaga and other areas within the upper Gila drainage area over time, and can be compared to data collected from excavations in the region to address some of these questions.

Survey Methods

The 2016 survey took place between June 13 and June 27. During this time, students and staff performed a cultural resources inventory of the land surrounding the Burro Ciénaga within the portion of the Pitchfork Ranch property north of Separ Road. Work was conducted by small groups of three to four students at a time working with one or more archaeologist staff members. The survey crews performed intensive pedestrian survey, primarily of the first terrace above the

Burro Ciénaga floodplain where present, as well as outer portions of the active floodplain. Areas adjacent to the access road running through the property were also surveyed. Crew members walked transects spaced 10 meters apart to ensure full coverage of the desired areas, unless the terrain only permitted more compact transect spacing. Transects variously ran north-south or parallel to fence lines, depending on the terrain and location within the ranch property.

When a site was encountered, the crew delineated the perimeter of the associated artifact concentration and flagged any features and diagnostic artifacts. The site perimeter (or limits of distinct artifact concentrations) and features were digitally mapped using a Trimble Geo XH handheld GPS unit (NAD83). Additional hand-drawn maps were prepared for a sample of sites using measuring tapes and compasses, primarily for teaching students principles of hand-mapping. Site data for the encountered sites were recorded on standardized LA forms. Site observations include the location and size of the site, a description of surface artifacts and features, and notes on the site condition. No artifacts or samples were collected, and recording equipment (such as pin flags and mapping nails) was removed prior to leaving the property.

Sites were assigned numbers post-hoc, relative to their distance from Separ Road, beginning with “Pitch 1” closest to the road. No sites have as of yet been confidently associated with any recorded by James Fitting in 1967.

Environmental and Cultural Context

The Pitchfork Ranch is located in Grant County, New Mexico. The property is bisected by Separ Road, which runs 30 miles between Highway 90 and Interstate 10. The ranch lies within the rugged Burro Mountains region, surrounded by undeveloped BLM, State, and private ranch lands. At approximately 5000 feet in elevation, the ranch consists primarily of Chihuahuan Semidesert Grassland and Interior Chaparral biota, dominated by local grasses, sotol and yucca, prickly pear, and mormon tea. The Burro Ciénaga runs approximately north to south through the ranch. The watercourse was once a perennial source of water fed by Whitetail Canyon, Walking X Canyon, C Bar Canyon and Ciénaga Spring. It is now perennial only in the incised, historic ciénaga in the first two miles of the nine-mile reach of the Burro Ciénaga on the ranch, and ephemeral for the balance of the 48-mile long watercourse, which becomes riverine riparian habitat (Cole and Cole n.d.; Diehl 2015).

Evidence of human habitation of the Burro Ciénaga region dates back to the Paleoindian period (ca. 9,500 – 6000 B.C.). Paleoindian groups were small and mobile, hunting large game and collecting other wild resources, and left little evidence of their presence within the landscape. Stone tools dating to the Paleoindian period are the primary evidence of their occupation. A Clovis-style projectile point dating to this period was found in the northern end of the Pitchfork Ranch Property (A.T. Cole, personal communication). With the extinction of many large land mammals at the end of the Paleoindian period, Archaic period (ca. 5500 B.C. – A.D. 200) inhabitants of the Southwest increasingly incorporated plant resources into their diets. Archaic groups continued to live a mobile lifestyle and hunt game. Paleobotanical evidence suggests maize was being cultivated in parts of the Southwest by approximately 2200 B.C. (Diehl 2015).

The Mogollon-Mimbres tradition was established within southern New Mexico by ca. AD. 200. During the Early Pithouse period (A.D. 200 – 550), small pithouse villages were constructed primarily on high ground overlooking riverine environments. An increased use of cultivated crops for subsistence and ceramic technology developed during this period. Ceramic assemblages from this period consist primarily of plain and red-slipped brownware. By the Late Pithouse period (A.D. 550 – 1000), Mogollon-Mimbres villages were constructed more frequently along first terrace and outer floodplain contexts. Pithouse construction became increasingly formalized, transitioning from round to more rectangular and square layouts over time. Decorated ceramics dating to this period include (from earliest to latest styles) San Francisco Red, Three Circle Red-on-white, and Boldface Black-on-white. With the transition to the Classic period (A.D. 1000 – 1150), Mimbres-Mogollon groups somewhat abruptly shifted from constructing semi-subterranean pithouse architecture to above ground masonry pueblos. Classic Mimbres period pueblos were often constructed immediately over Late Pithouse period villages (Anyon and colleagues 1981; Hegmon 2002). Diagnostic ceramics from this period include Classic Mimbres Black-on-white. During the Late Pithouse and Classic Mimbres period, populations grew and agricultural practices were intensified. Interregional interaction and long-distance trade networks flourished during this period (Diehl 2015). After approximately A.D. 1150, large villages were depopulated and Mimbres groups reorganized on the landscape. Smaller villages were inhabited for shorter periods of time as groups became more mobile (Hegmon 2002).

By the sixteenth century, small bands of mobile hunter-gatherer groups were spread throughout southwestern New Mexico, eastern Arizona, and northern Mexico. Southwestern New Mexico is associated with the Chiricahua Apache by this time. Often referred to as Gila Apache or Gileños, in Spanish records, bands of Chiricahua Apache were known to gather mescal and hunt in the Burro Mountains. After unsuccessful attempts to missionize the Apache, Spanish forces led military campaigns into the western New Mexico, including the Burro Mountains region in the late eighteenth century, during which the Apache yielded little territory (Opler 1979:403). Not until 1872 were the Apache forcibly removed from southern New Mexico, when the Chiricahua Apache reservation was established in southeastern Arizona (Opler 1979:405). The region saw increased settlement of Anglo-Americans and a growth of the ranching and mining industries.

Survey Results

Five sites and five isolated occurrences were recorded during the 2016 field season (see Tables 1 and 2, and Figure 1). All site locations are given as UTM coordinates in NAD 1983 (Zone 12).

Table 1 – 2016 Survey Sites	
Site Name	Description
Pitch 1	Single masonry room and water control features
Pitch 2	Classic period Mimbres habitation site
Pitch 3	Masonry roomblock bisected by road; light artifact scatter (lithics and groundstone)
Pitch 4	Moderately dense sherd and lithic scatter (plain redware)
Pitch 5	Mesa-top, Early Pithouse habitation site; dense artifact scatter (plain brownware, lithics, and groundstone)

Table 2 – 2016 Isolated Occurrences	
IO Name	Description
Pitch IO 1	Large biface, approximately 9-10cm in length, possibly Paleoindian (ca. 15,000 - 8,000 B.C.) or Archaic (8,000 B.C. - A.D. 200)
Pitch IO 2	Pinto Projectile Point (middle Archaic, ca. 6000 - 2000 B.C.)
Pitch IO 3	Boot heel repair from tire tread and nails
Pitch IO 4	Early Archaic (8,000 - 6,000 B.C.) Stemmed Projectile Point
Pitch IO 5	One-handed mano

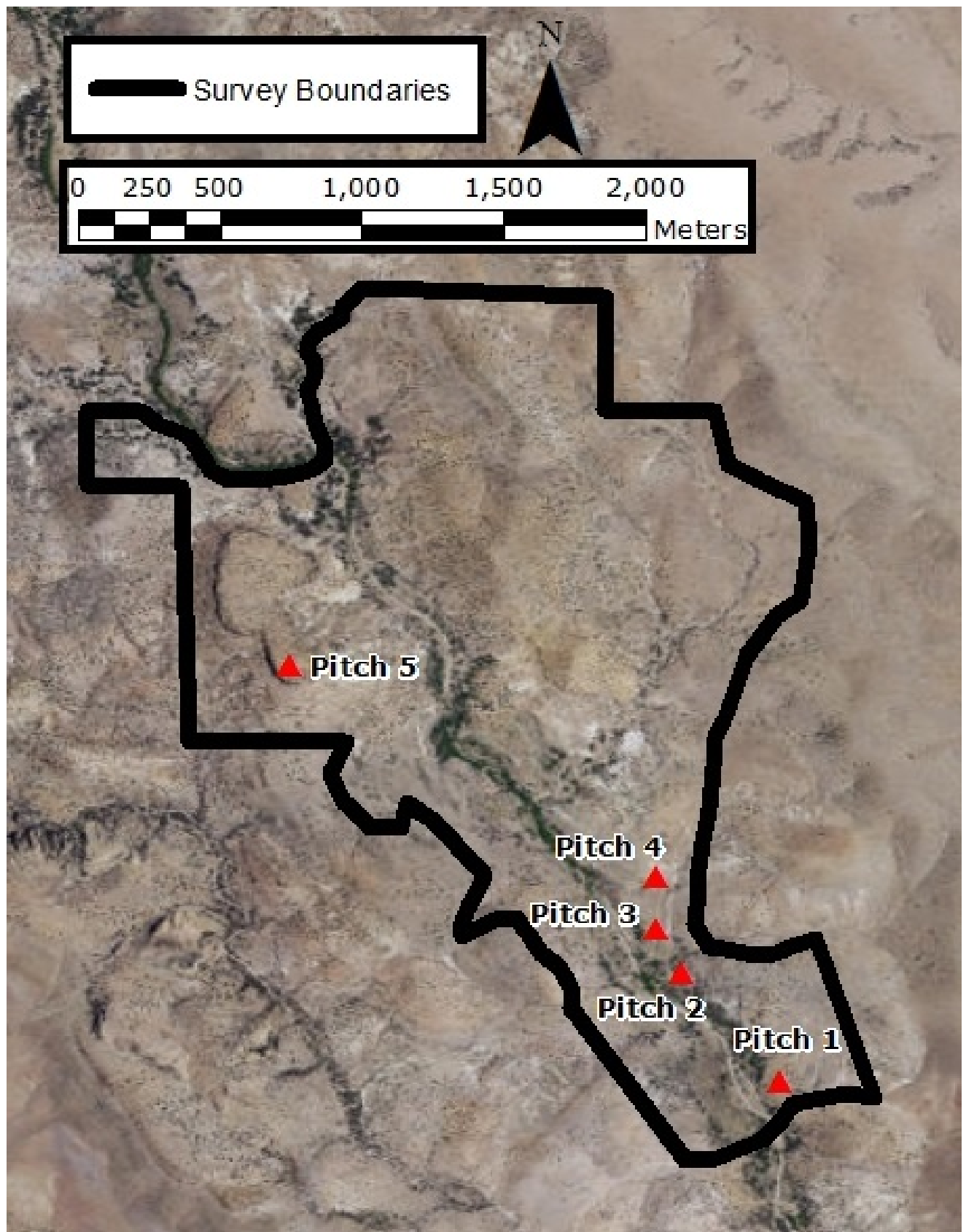


Figure 1 - Overview of 2016 survey results. Note: southern boundary of the survey area is Separ Road.

Site Descriptions

Pitch 1

12S 749816 3588586 UTM

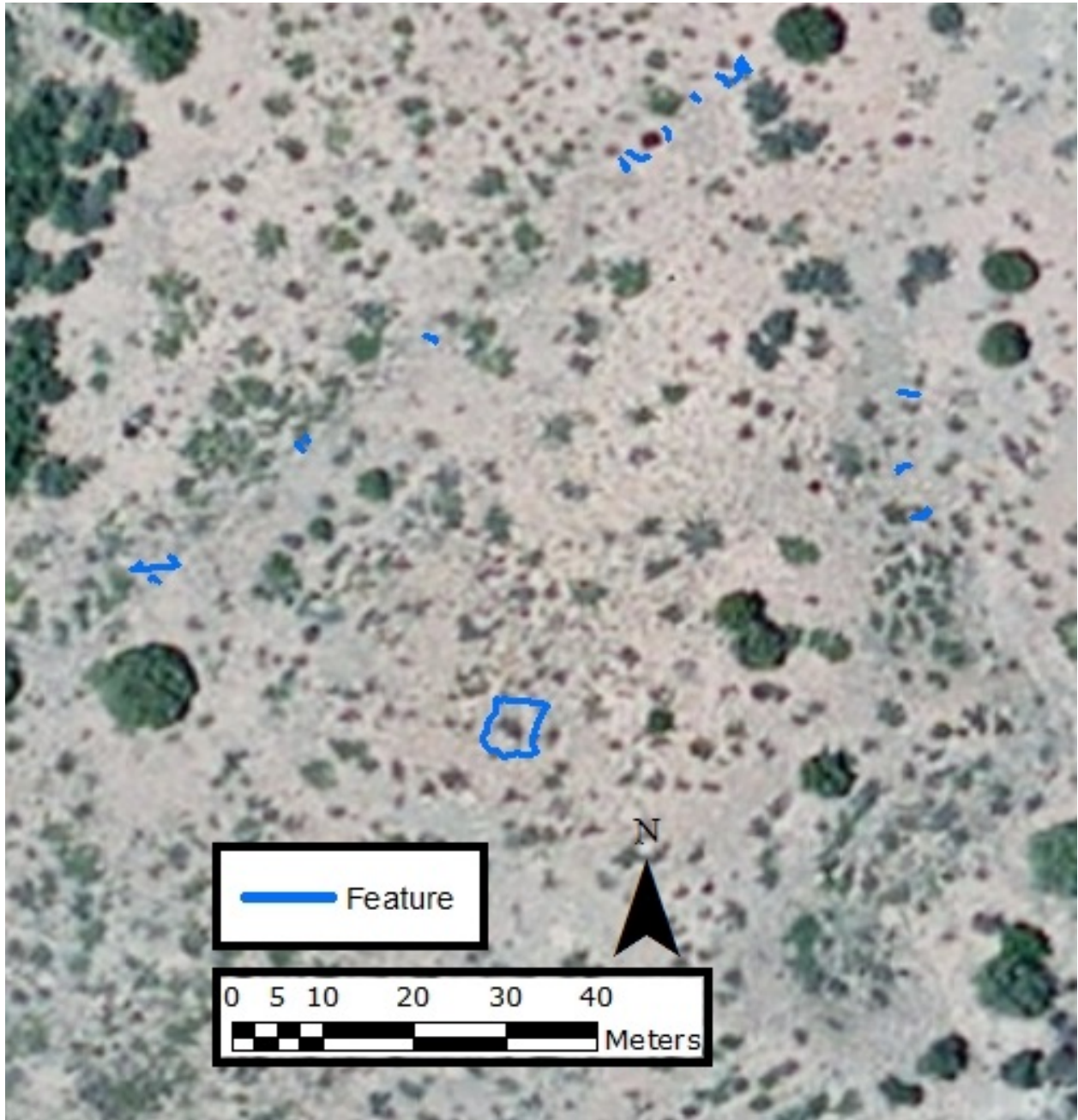


Figure 2 - Map of Pitch 1, including masonry feature (center) and water control features (left, right, and above).

The site designated Pitch 1 consists of a single masonry room on top of a low, wide bench just north of Separ Road and a series of check dams in two washes running through the bench. A single large biface was the only artifact located on the site, despite good surface visibility through the sparse desert grasses that comprise the primary vegetation covering the site. The biface is approximately 6cm in length and was formed through soft-hammer percussion. The site measures approximately 97m by 91m. Due to the lack of diagnostic artifacts, dating the site is difficult, but the masonry cobble architecture suggests an Early Pueblo (A.D. 1000-1300) period of occupation. A Classic Mimbres period habitation site just to the north across a large hillside (Pitch 4) constructed with similar masonry architecture suggests the two may be contemporaneous.

Feature 1. A single masonry room, this feature consists of a low mound of architectural rubble. Manual looting in the center of the room has exposed some of the wall architecture, especially the westernmost wall (see Figure 3). The masonry consists of stacked courses of large, unshaped cobbles. The architectural mound measures approximately 7m by 5.5m. Despite evidence of looting disturbance within the room, no artifacts were found on the architectural mound.

Feature 2. Feature 2 consists of a series of cobble check dams built within a narrow wash running roughly northeast to southwest through the bench for approximately 96m to the north of Feature 1. Twelve to 13 check dams were identified in the wash, although the erosion of large noncultural cobbles into the wash made distinguishing between cultural and natural dams difficult in some cases. However, a number of clearly cultural dams were identified, supporting the identification of less obvious cases. The check dams are constructed as single courses of small, unshaped cobbles. The check dams of Feature 2 and Feature 3 are associated with the



masonry room of Feature 1 only by proximity, since no artifacts were recovered from either wash.

Feature 3. Like Feature 2, Feature 3 consists of a series of cobble check dams built within a wide wash running roughly north-south through the bench for approximately

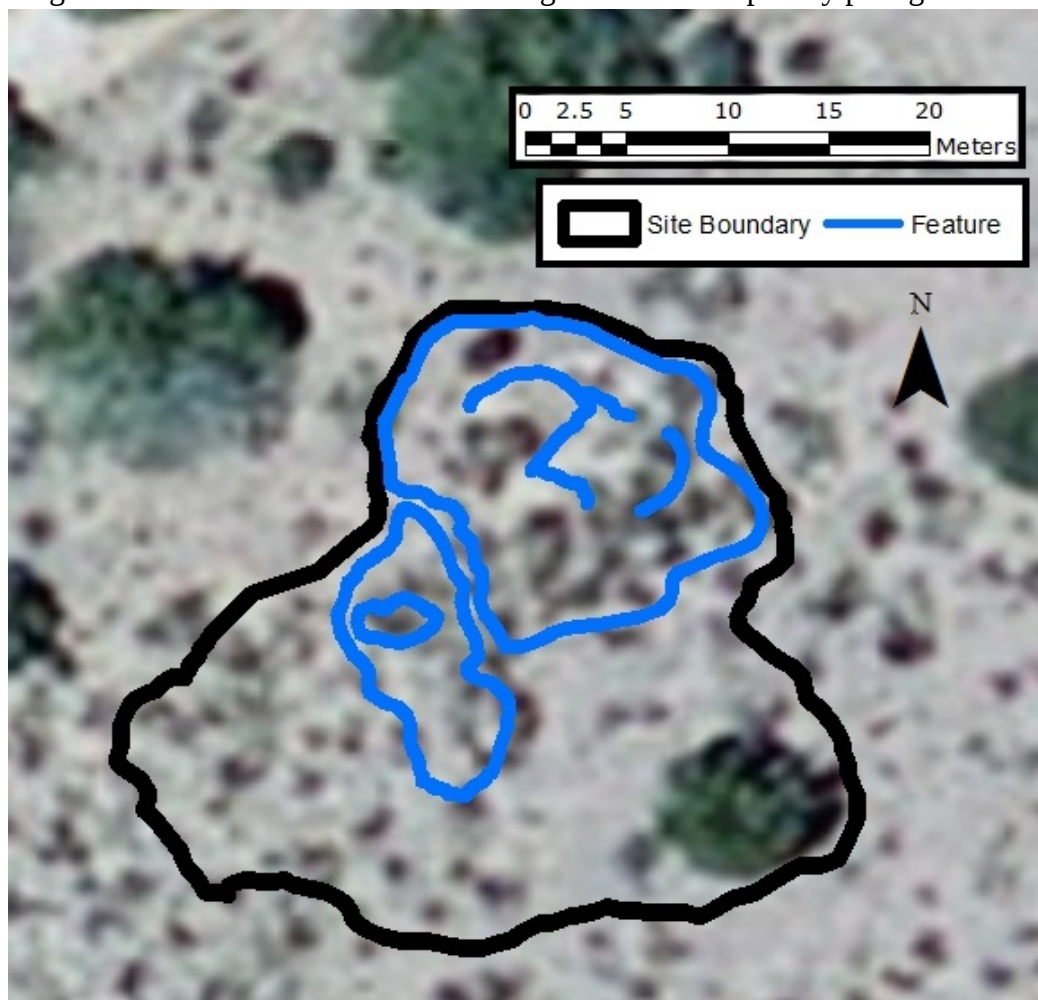
Figure 3 - Exposed masonry wall of feature 1, Pitch 1. East-facing view of the western wall of the structure. Interior of room is exposed.

40m, located to the east of Feature 1. Three check dams were identified in the wash, but as in Feature 2, erosion of cobbles into the wash made distinguishing cultural from natural dams difficult in some places. Alluvial erosion in this wash appears to have impacted the dams more greatly than the dams in Feature 2 (perhaps due to the steeper grade of the wash), further decreasing the visibility of cultural dams in comparison with natural dams.

Pitch 2

12S 749515 3588965 UTM

Pitch 2 consists of two architectural mounds and an associated artifact scatter located on a level section of a steep hill slope rising out of the east side of the Burro Ciénaga. The site and the hill slope below it are densely covered in prickly pear and a moderately dense gravel slag eroding down the side of the hill slop from the hill top. The site is approximately 37m by 32m. Although two architectural mounds were identified, lack of surface visibility due to dense prickly pear cover made visual assessment of the ground surface difficult, and consequently the two mounds may be part of a single roomblock or architectural feature no longer visible under the vegetation. While estimates are difficult given the dense prickly pear ground cover, the site is



likely made up of 6 to 7 masonry rooms.

Two manually excavated looter's pits in the northern portion of Feature 1 have exposed two rooms constructed with cobble masonry architecture. Fill from the looting appears to have been deposited on the eastern exterior of Feature 1. A moderate density of artifacts on the

Figure 4 - Map of Pitch 2.

surface of the fill suggests significant subsurface deposits within undisturbed room fill. The only other threat to the site is potential erosion off the northern edge of the site, where some architectural cobbles are already beginning to erode down the steep hill slope below the flat ridge on which the site is located. However, these cobbles may have been disturbed by the looting in Feature 1, adjacent to the hill slope on which they are now located. Beyond these disturbances, the site surface has been largely stabilized by the dense root systems of the prickly pear covering the site.

The surface assemblage at the site consists primarily of sherds and lithic debitage. Fifteen sherds were counted on the surface of the site, including 7 Mimbres B/w sherds (style 3 or indeterminate style), 4 plain Mogollon brownware sherds, and 4 corrugated Mogollon brownware sherds. Approximately 30 flakes of primarily local material made up the lithic assemblage apart from two pieces of turquoise. The turquoise consisted of a single grain of turquoise and a single turquoise disk bead (Figure 5). The disk bead was located within the disturbed room fill deposited on by earlier manual looting the eastern exterior of Feature 1, and is now in the possession of A.T. and Cinda Cole. The masonry roomblock architecture and Mimbres B/w sherds indicates an occupation dating to the Classic Mimbres period (A.D. 1000-1130).

Feature 1. This feature consists of a single, linear architectural mound running roughly northwest to southeast. The two northwestern-most rooms have exposed masonry walls due to manual excavation during looting in the past. The walls are built with large, unworked cobbles. A third possible room remains unlooted on the southeasternmost portion of the mound. The mound measures 17m by 15.7m.

Feature 2. This feature consists of a single linear architectural mound running roughly northwest to southeast. One room is highly visible at the surface on the northwestern portion of the mound, but the remaining rooms in the block are much less visible. Visual inspection of surficial wall alignments suggests that the block contains 3 to 4 rooms. The mound measures 15m by 6m.



Figure 5 - Turquoise disk bead (left) and turquoise fragment (right).

Pitch 3

12S 749431 3589116 UTM

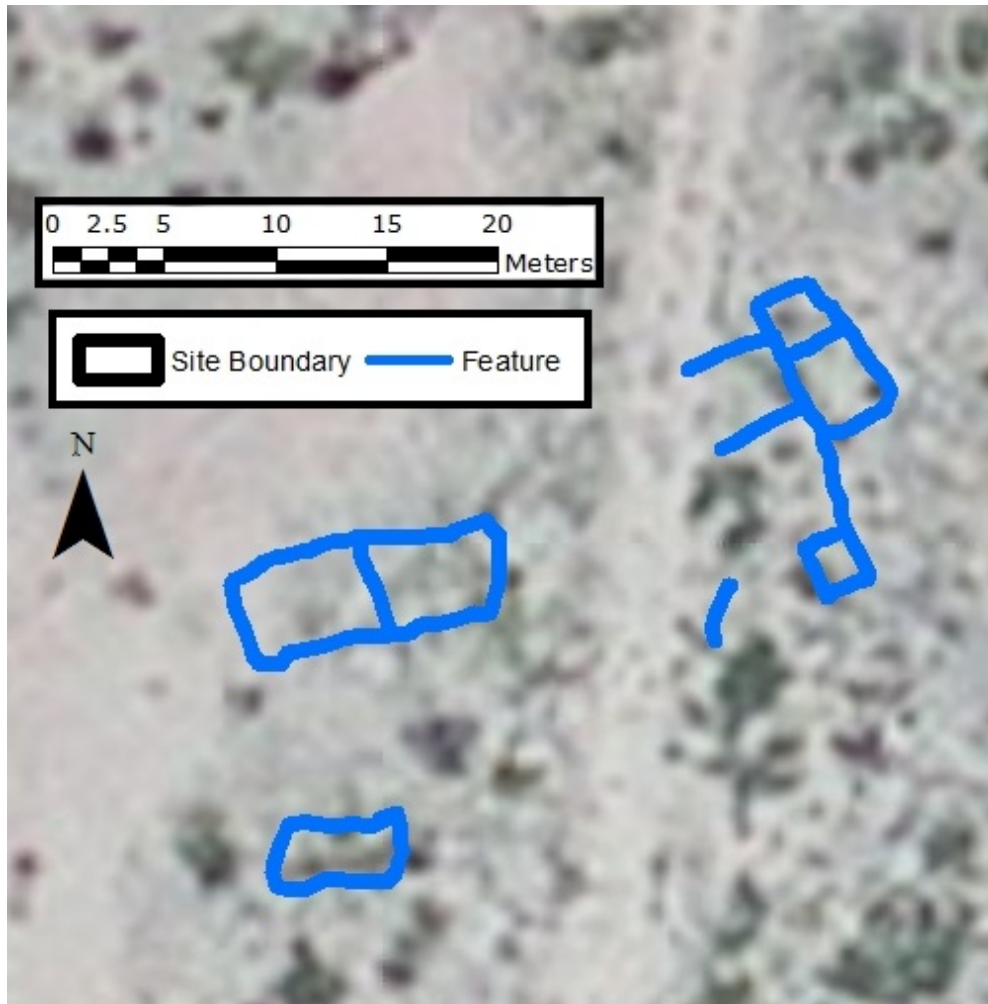


Figure 6 - Map of Pitch 3.

Pitch 3 consists of a masonry roomblock, or roomblocks, bisected by an unpaved road. The site is located on the first terrace above Burro Ciénaga on the east side of the drainage, just west of a large ravine running roughly north-south along the base of several hills. The site measures approximately 33m by 35m. Three architectural features were identified on the site, but these may represent individual parts of a single

masonry roomblock disturbed by the road running north-south through the center of the site. The masonry of all three features is constructed from large, unworked, rounded cobbles.

The surface assemblage is characterized by a low density lithic scatter immediately on top of the masonry architecture, and a single metate fragment. No sherds were identified on the site. A scatter of plain redware sherds and lithic debitage was identified on another site immediately to the north (Pitch 5), and a large quantity of Mimbres B/w and Mogollon Brownware were noted at a second habitation site across a large wash immediately to the south (Pitch 4). The presence of cobble masonry architecture at both Pitch 3 and Pitch 2, along with their proximity to each other, suggests they may have been relatively contemporaneous.

Feature 1. This feature is a low mound of masonry rubble approximately 12m by 5.5m, and includes two rooms. The easternmost room has a large pit in the center, exposing some of the

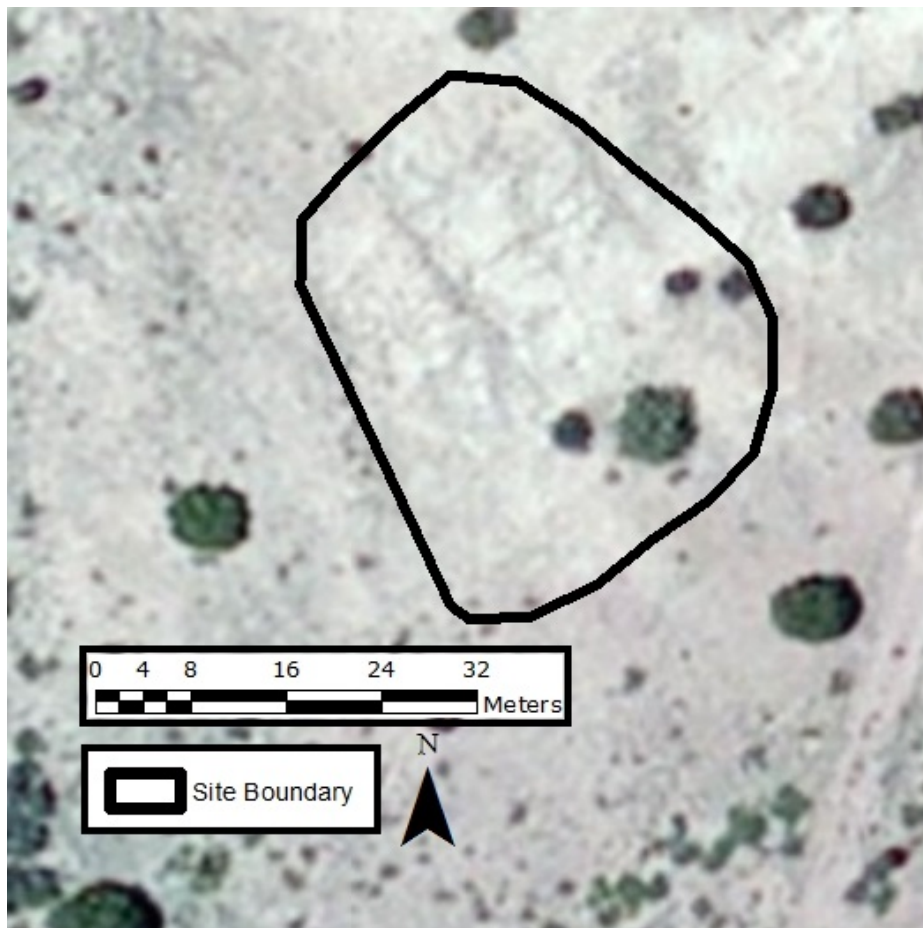
wall masonry, probably the result of manual looting. Clearly identifiable wall fall is visible along the southeast and southwest corners of the mound. The only ground stone identified at the site, a single large metate fragment, is located in the wall rubble along the southeast side of the mound.

Feature 2. This feature is a low mound of masonry rubble approximately 5.5m by 2.5m, consisting of a single room. The walls of the feature are highly disturbed, largely because of a manually excavated looter's pit in the center of the mound, but wall alignments are still visible.

Feature 3. This feature is the largest at the site, at approximately 20m by 9.5m. Four to five possible rooms are visible on the surface, but several identifiable wall segments outside these four rooms indicate that the roomblock contains additional rooms. The unpaved road that bisects the site appears to have impacted this feature the most, possibly scraping away part of a room at the northwest corner of the feature. In this feature, cobble alignments along the ground surface with slight rises indicate walls while slight depressions sometimes indicate rooms, but there is no structural mound indicating the extent of the feature.

Pitch 4

12S 749431 3589299 UTM



Pitch 4 is a moderately dense artifact scatter located on a gently sloping hill on the east side of the Burro Ciénaga, approximately 30m west of the same unpaved road that bisects Pitch 3. The site measures approximately 37m east-west by 53m north-south. The site is located in an area of exposed bedrock and shallow topsoil. Consequently, the site appears to be entirely surficial with no subsurface deposits. The scatter consists primarily of lithic debitage and plain, polished red sherds

with a brown to red core. Some of the sherds are slipped on one or both sides. Lithic materials

consist largely of locally available igneous and metamorphic materials. Sherds were tallied, with a total of 80 sherds identified across the surface of the site. No counts were made for the more abundant lithic debitage, but the assemblage is estimated to be between 100 to 200 flakes and other debitage. The site lacks significant diagnostic features or artifacts from which to assign a date of use, but the presence of plain, red-slipped pottery does indicate use during one of the ceramic periods in the local sequence, from Early Pithouse (A.D. 150-500) to Late Pueblo (A.D. 1275-1450).

Pitch 5

12S 748315 3590015 UTM

Pitch 5 is a large habitation site located at the flat apex of a two-tiered cuesta which gently slopes downward to the northeast, terminating in a second flat area. The cuesta is located at the western edge of the Burro Ciénaga floodplain. The site consists of a large number (20+) of architectural features and an associated artifact scatter which includes lithics, ceramics, and ground stone. The top of the cuesta is covered primarily in sparse desert grasses alongside scattered junipers, cactuses, and yuccas.

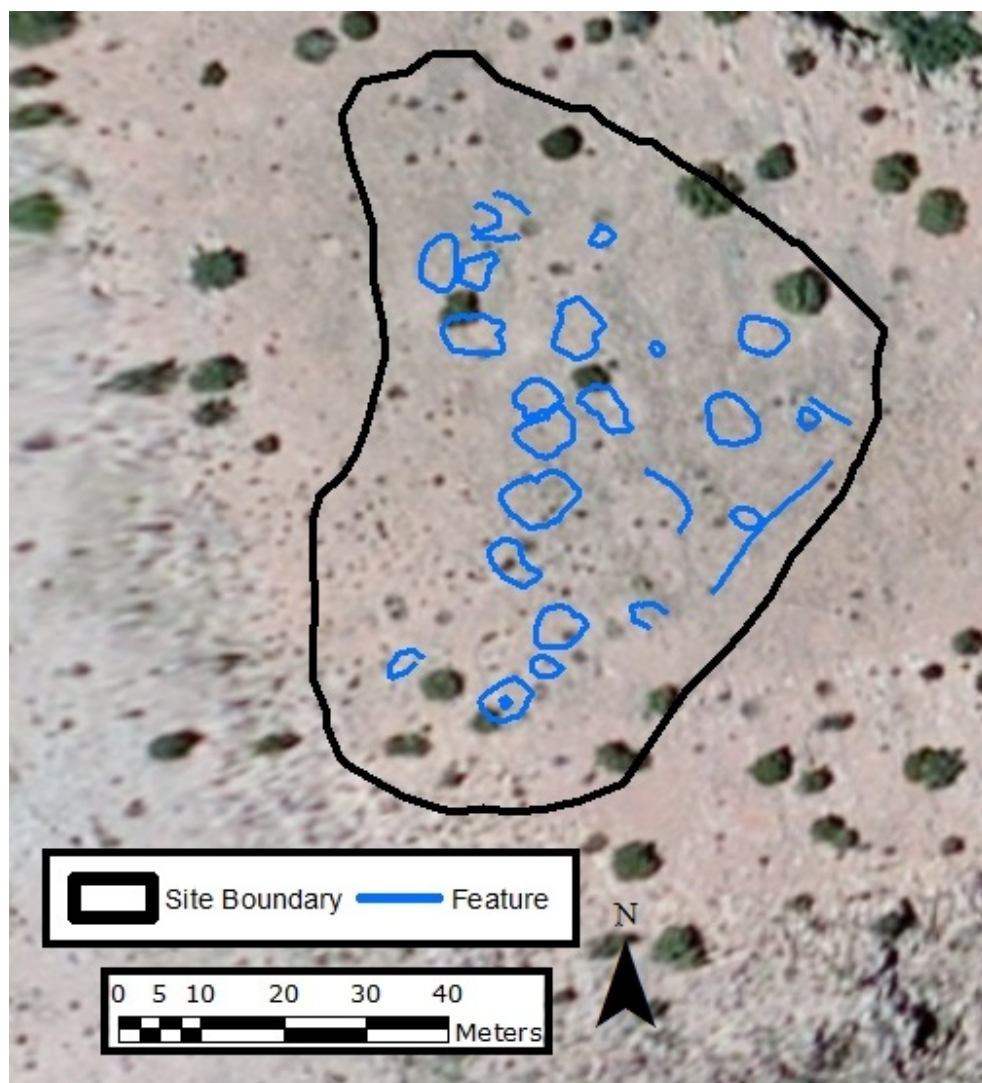


Figure 7 - Map of Pitch 5.

Architectural features at the site consist primarily of linear rock alignments, various jumbles of stone, and shallow depressions that are likely the remnants of pit structures. Although the rock alignments are evenly distributed across the site, the rock



Figure 88 - Metate fragment in rock jumble.



Figure 9 – Likely pit structure with rock ring.

jumbles are concentrated primarily along the site's southern end. It is not immediately obvious that some of the identified features are actually cultural, particularly the rock alignments and jumbles. While the rock alignments and jumbled stone piles are made almost entirely of the same sedimentary material that the cuesta is composed of, loose stone on the top of the cuesta is restricted entirely to these alignments. The lower portion of the cuesta, where no features or artifacts were identified, is almost entirely devoid of loose stones, especially relative to the apex of the cuesta. The identification of a metate fragment within one of the rock jumbles (see Figure 8) further strengthens the case for these alignments as cultural features. #



Figure 9 - Metate fragment with kill hole.

bases for fairly substantial superstructures that were necessary to compensate for the relatively shallow depth of the pits themselves. Some of the depressions are quite clearly cultural, others are less so, but all the identified depressions were recorded. Thirteen possible pit structures were identified, but only 3 depressions were confidently identified as cultural.

A fairly low density artifact scatter corresponds with the area occupied by the architectural features, falling off in density very quickly away from the architectural features.



Figure 10 - Bedrock mortar in cuesta-top outcrop.

The other major architectural component at the site is a number of shallow depressions, often ringed by a single course of stones (see Figure 9), which primarily cluster at the northern edge of the site. These depressions are likely the remnants of pit structures. The topsoil on the cuesta is relatively shallow at about 30cm at the deepest, and with bare stone exposed in several areas. Consequently, the rock rings at the edges of most of the depressions may be the

Ceramics at the site consisted entirely of unslipped brownwares, some of which were polished on the exterior. Approximately 47 sherds were counted on the surface of the site. Lithic materials were largely composed of rhyolites and other local materials, though one obsidian nodule was located on the site. Lithic debitage is estimated at between 100-200 flakes across the entire site. Several (3) damaged projectile points were identified all on the northwest edge of the site, eroding downhill towards the lower tier of the cuesta. These points were largely of the same size and morphology,

but some variation exists. Materials varied, but all were of probable local provenience. Several metate fragments were located on the site, including half a metate with a kill hole in the bottom of its basin (see Figure 10). No manos were identified. All ground stone was made from porous igneous stone, none of which is found in the survey area. A single bedrock mortar was identified in an outcropping on the south side of the site (see Figure 11).

The presence of probable pit structures alongside unslipped, undecorated brownware suggests an occupation in the Early Pithouse period of the Mimbres sequence, between A.D. 200 and 600. The site appears to have suffered no significant disturbances other than slight erosion along the natural slope of the cuesta at the northwest edge of the site. Lack of depositional activities on the cuesta-top have left most of the site exposed, but otherwise in good condition likely due to the relative difficulty of scaling the landform on which the site is located.

Isolated Occurrences



Figure 11 - Pitch IO 1: Possible Paleo-Indian or Archaic biface.

Five Isolated Occurrences (IO's) were identified and are summarized in Table 2. Each IO was numbered in the order in which they were found, and given the designation Pitch IO #. Three of the artifacts (Pitch IO 2, 4, and 5) were located either in the unpaved road running through the property (and which also bisects the site Pitch 1) or in the berm on the sides of this road. When an artifact was encountered in the road itself or in the road berm, the artifact was moved off the road to prevent any damage from vehicle traffic. Pitch IO 1 is currently in the possession of A.T. and Cinda Cole (see Figure 12).

Summary and Conclusions

Five sites were documented by the UGPA field school students and staff during the 2016 field season. All but one site (Pitch 4, an artifact scatter) were small to large habitation sites with masonry structures or pit-structures. Sites were predominantly located on the first bench above the flood plain, or on ridges overlooking the flood plain, with the exception of Pitch 5 which is located at the apex of a mesa overlooking the western side of the flood plain. The Mimbres habitation sites located on this survey tended to be smaller than those identified during the 2015 UGPA survey of the southern portion of Pitchfork ranch, likely due to the constriction of the flood plain in the northern portion reducing the availability of arable land. Tellingly, all identified sites contained either significant amounts of pottery, masonry architecture, or both. Paleolithic and Archaic habitation of the northern portion of the ranch seems to be limited to a few isolated projectile points, with the rest of the occupation consisting of agricultural sites. The same is not true of the southern portions of the ranch.

Due to the time constraints of the field school and limited size of each crew that participated, only part of the northern portion of the Pitchfork Ranch property was surveyed. Additional work is needed to inventory the archaeological resources of remaining portion of the ranch, at the northernmost end of the property.

Resources

Anyon, Roger, Patricia A. Gilman, and Steven A. LeBlanc

1981 A Reevaluation of the Mogollon-Mimbres Archaeological Sequence. *Kiva* 46(4):209–225.

Cole, A. T. and Cinda Cole

N.D. About the Pitchfork Ranch.

Diehl, Michael W.

2015 *Pitchfork Ranch Cultural Resources Pedestrian Survey Near Burro Ciénaga Wash, Grant County, New Mexico*. Desert Archaeology Project Report No. 14-127, Desert Archaeology, Inc., Tucson, Arizona. Report submitted to A. Thomas Cole, Silver City, New Mexico.

Fitting, James E.

1967 An Archaeological Survey of the Burro Ciénaga, Grant County, New Mexico. Manuscript on file, New Mexico Laboratory of Anthropology.

Hegmon, Michelle

2002 Recent Issues in the Archaeology of the Mimbres Region of the North American Southwest. *Journal of Archaeological Research* 10(4):307–357.

Opler, Morris E.

1979 Chiricahua Apache. In *Handbook of North American Indians*, Vol. 10, edited by Alfonso Ortiz, pp. 401–418. Smithsonian Institution, Washington, D. C.