

Archaeological Investigation of Pigeon's Ranch, Year 2

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Introduction

The second stage of archaeological research at Pigeon's Ranch in the Glorieta Unit of Pecos National Historical Park funded by a grant from WNPA is complete. The work accomplished this year consists of metal detection and shovel tests in the portion of the property west of Glorieta Creek, and the excavation of 10 test units northeast of the remaining building. A final report entitled *Archaeological Investigations at Pigeon's Ranch, Pecos National Historical Park, Year 2* was submitted to the park along with photographs of the excavation units and selected artifacts, maps, excavation forms, and other associated project documents.

Research Questions

There were two main goals for the archaeological work for this season. The first was to attempt to locate foundations of structures visible in historic photographs from the early part of the 20th century that are no longer present. Park staff has expressed an interest in showing visitors where the structures stood in future efforts to interpret the changes to the property over time to the public.

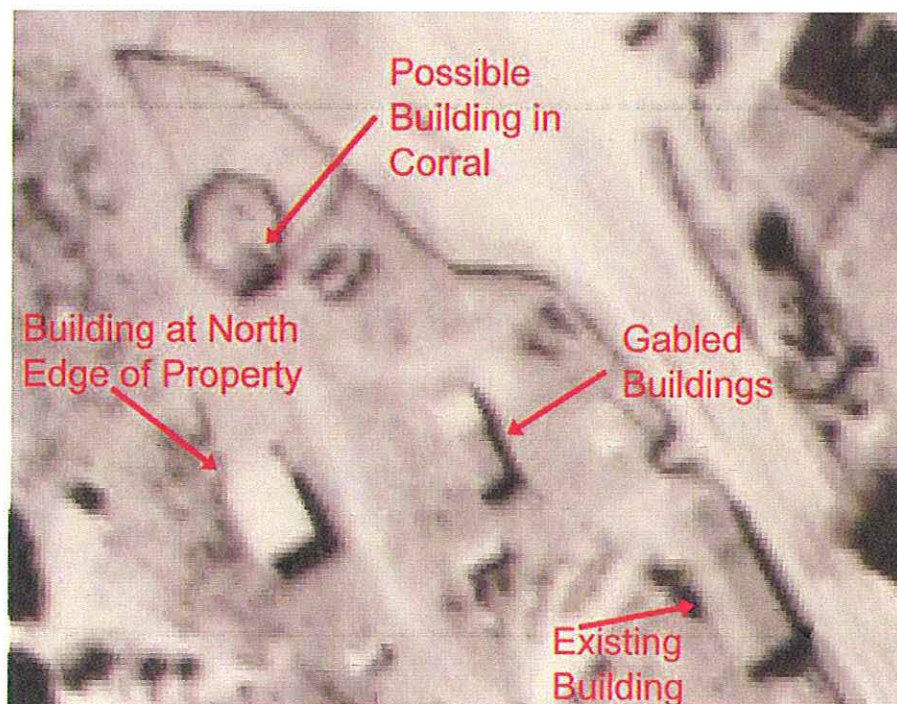


Figure 1: Aerial photograph from 1970 showing additional buildings at the site.

The second research goal was to attempt to locate the foundation of an adobe wall found in many accounts of the Civil War Battle of Glorieta that was used for cover by Union troops during the battle and which is also no longer present. The location would be of great interest to military historians and visitors interested in the Civil War.

Methods

Excavations were accomplished by Dr. Emily Brown and Claire Long. The metal detection and shovel testing were conducted by Dr. Emily Brown and volunteer military historian Rich Higgins. Metal detecting was conducted using a Minelab Eureka Gold detector and a Tesoro Lobo detector. All fieldwork was conducted in June and July of 2009.

The Structures

Because John Wilson had used probing with such success during his research of the property in 1983 (Wilson 1984), we attempted to use the same method to locate the additional building foundations. Using metal probes, we attempted to identify continuous stones or concrete in areas we suspected the buildings to have been situated. We then placed excavation units in such a way as to maximize exposure of the hard surfaces we thought we could identify with the probe. Because identification of architecture was the goal, we did not always dig down to sterile soil as is the common practice in archaeological excavation. Each unit was dug in 10-cm levels and screened through a quarter-inch screen. In addition to the probing and excavation, we superimposed an aerial photograph from the 1970s with a more recent one in an attempt to identify where on the ground the structures might have been.



Figure 2: Overlay of two aerial photographs.

The Adobe Wall

Historic accounts of the Battle of Glorieta and early historic photographs gave us guidance on potential locations for the adobe wall, and we chose to metal detect an area across Glorieta Creek to the west of the rest of Pigeon's Ranch and north of Hwy. 50. Our hypothesis was that given that Union troops used the wall for cover for most of a day during the battle, there should be a linear alignment of more dense metal detection hits at the place it stood. Vegetation was dense, but we were as systematic as possible in the areas that were passable. The fill from each shovel test was screened through an eighth-inch screen. Due to the high amount of modern debris in the area associated with Hwy. 50, some of our shovel tests exposed modern metal trash. All modern

objects were reburied. Only historic objects were collected, and of those, only those with relevance to the battle or with fairly unique characteristics were collected; broken glass, nails, and other objects with lower information potential were noted and then reburied in situ.

Project Findings

The Structures

While we did not locate the foundations of the structures we hoped to find, our excavations did result in new information and some guidance for future research. First, the two low mounds originally thought to be the remains of adobe structures east of the standing building were shown not to be piles of melted adobe, but fill. It is important to recognize that the two low mounds represent past earthmoving activities rather than deteriorated architecture, as it speaks to the degree of surface disturbance that has occurred at the site since the late 1800s.

Second, while the true locations of the structures visible in historic photographs still remain to be determined, our probing efforts failed to locate any foundations other than those associated with the 1800s-era structures. It now appears unlikely that the two other buildings we attempted to locate had stone or concrete foundations; it is more likely they were erected on pilings. While time and budget did not permit additional excavation, we were able to propose possible locations for these two other buildings based on work using superimposed aerial photographs, but there are still some issues with scaling and orientation, and the locations should be taken as suggestions rather than certainties.

Remote sensing would be a logical next step in continuing research in this section of the property. Ground penetrating radar would identify any pilings that still exist, but even if they were removed, the technology should be able to locate some of the informal paths visible in the aerial photograph that lead to doors of the various structures. Excavation could then be directed to specific locations that would help pinpoint the structures, leaving interior deposits intact for future researchers with specific research questions related to structure function and household economy.

The Adobe Wall

To begin with, our attempts to identify the wall location based on surface survey and aerial photographs proved unsuccessful. The historic accounts cited above are clear that it is an adobe wall that stretched across the canyon, but no such wall is visible in any of the historic photographs we examined, though some of them do show a fence of logs beyond the last of the corrals and outbuildings to the west. Because the firsthand accounts are so clear, the best interpretation we can put forth of the lack of photographic evidence of the wall and the absence of any sign on the ground of its existence is that it was so damaged during the Battle of Glorieta that it was torn down and replaced with an inexpensive and quick to construct pole “snake” fence sometime between 1862 and 1880. Indeed, Alberts asserts that Scurry ordered two Confederate howitzers to steadily fire on the wall and demolish it for the purpose of discovering the locations of the Union forces taking cover behind it (1998:103). While Valle does not specifically mention the wall in the complaint he wrote to the United States Congress following the battle, he does refer to damage to structures on his property, including walls:



...I further declare that I do not include in my foregoing account and claim, any damage or losses sustained, or for property destroyed by the fortunes of war, through war necessity, or for damage to property or losses sustained by the enemy in battle, or otherwise by them; that it is true that by occupation and possession of my said farm and premises by the said Army of the United States, and the rage of Battle with the Rebels, on and near the same, I sustained serious damage and losses to my farm improvements, and premises, by the wear, breakage and destruction of inclosures [sic], fences, walls, doors, gates, water tanks, cisterns or wells, timbers, fence line, clothing, relics, jewelry, motor carriages, &c, and amounting to fifty four thousand dollars... (from scan of handwritten document in Spude 2008:179).

While Valle's account is sometimes viewed as somewhat inflated in its estimate of the dollar value of his loss (Spude 2008:5 fn. 31), it is a very real possibility that the Confederate cannon fire actually did damage this wall so severely that replacement was more expedient than repair.

Given the extensive amount of subsurface metal objects of various ages and origins in the area and given the degree of ground disturbance that likely has taken place, ground penetrating radar or another remote sensing technique would be the most effect way to proceed with future attempts to locate the actual adobe wall foundation.

While the metal artifacts found during shovel testing associated with the metal detection efforts did not yield the location of the wall, they do reveal further information about the site generally. It has been suggested by Spude (2007) and others that a blacksmith shop might have been present at the site (none was found during the first year of our research [Brown 2008]), and the small structure on the west side of Glorieta Creek is one candidate for such a facility. Many of

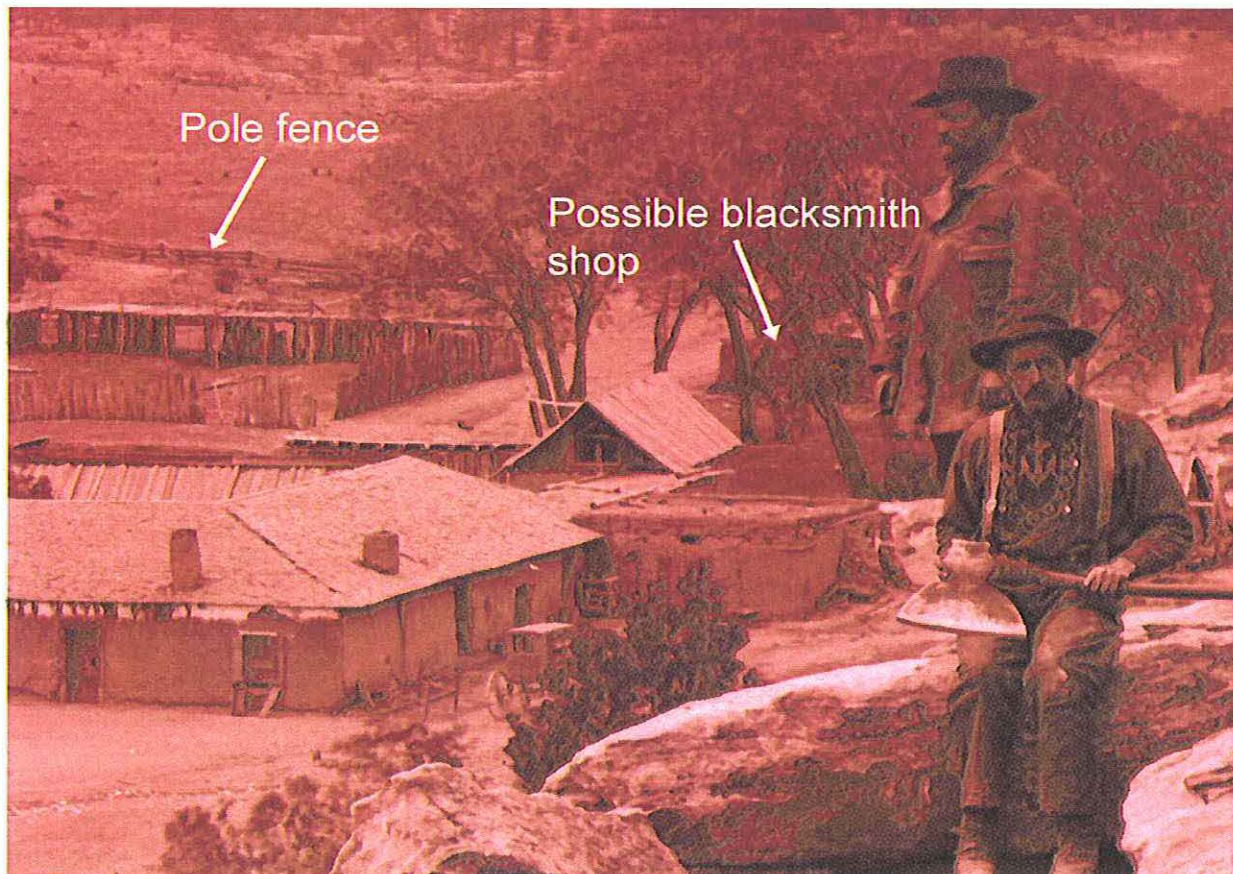


Figure 4: Overview of Pigeon's Ranch from the northeast. Detail of a photograph by Ben Wittick, June 1880. MNM/DCA Negative No. 015782.

the metal objects we found in this area appeared to be scraps such as one might save for reuse at a later time. Other objects were clearly improvised or reworked from something else, such as a hook made from a horseshoe, and it is clear that people at the site worked with scraps of metal to make objects not readily available. Despite the position of the property on the Santa Fe Trail, a well established trade route, metal was a relatively scarce resource. A further indication that there was a forge in this location is the presence of glassy slag of unknown material. Analysis and identification of the material would be helpful (and samples were collected for future analysis), but regardless, it points to the presence of a forge or kiln.

Remote sensing (in the form of soil resistivity testing) could help identify whether the remains of the forge are present by pinpointing any locations where the soil had experienced extreme heat. Resistivity is also good for identifying subsurface metal objects, and might be a good way to deal with the extensive subsurface metal deposits in the area. In the end, it may also turn up the linear cluster we anticipated finding in association with the adobe wall.

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