NewsMAC

Newsletter of the New Mexico Archeological Council
PO Box 25691
Albuquerque NM 87125

2013-4

Historical Archaeology in New Mexico

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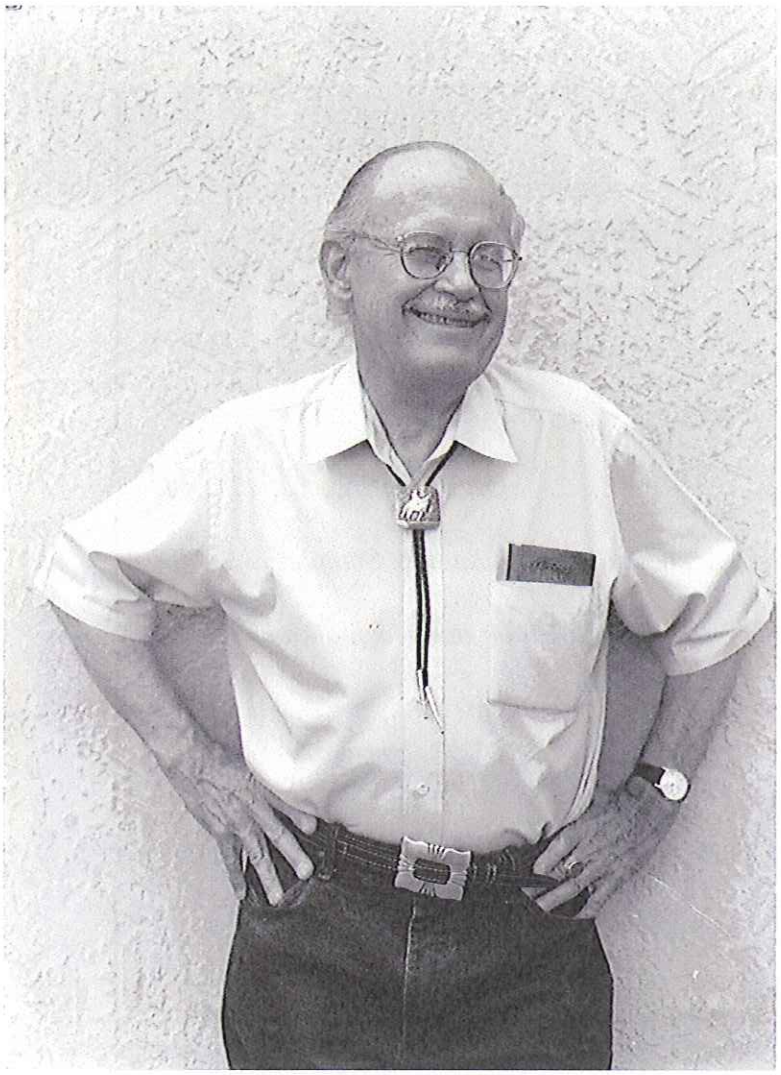
IN MEMORIUM

DAVE BRUGGE



INTRODUCTION

Bradley Vierra, Editor
Statistical Research Inc.

As a hunter-gatherer archaeologist, I'm probably the last person that should be writing an Introduction to an issue of NewsMac on historical archaeology. However, as many of you know I did delve into this period with my research on the Coronado campsite. That seems so long ago. Back then you could probably count the number of dedicated researchers focusing on historical archaeology on one hand. I used the excitement of identifying the Coronado site to bring attention to what seemed like a neglected period of Southwestern archaeology. The result was a symposium on the Protohistoric of New Mexico and the first in a series of publications by the New Mexico Archaeology Council. It is wonderful to see that those days are long gone, and that so many new researchers are illuminating such a rich and dynamic part of New Mexico's heritage. In fact, a second symposium on the Protohistoric was recently hosted by the New Mexico Archaeological Council. This conference covered a range of topics and is being submitted to the University of Utah Press by Deni Seymour. Various other studies include those by Preucel and Liebmann which have changed our perspective on the effects of Spanish colonialism on Post- Pueblo Revolt society in New Mexico. Eiselt's studies on the Jicarilla Apache have revealed the intricacies and dynamic nature of Apache, Pueblo and Hispano community relationships. Seymour and Beckett's studies of Apache, Mansos and Suma archaeology has helped us identify and understand the archaeological record of mobile people; whereas, Haecker, Adams and Laumbach have employed new technologies to unlock the details of Apache battlefield sites. Towner's work on Navajo Pueblitos has provided a fresh perspective on these defensive citadels. There are of course many other studies that focus on various aspects of New Mexico's heritage including Ackerly's review for preserving acequia systems, or Merlan's historic context on homesteads and ranching in New Mexico. Or, studies of ethnographic landscapes like Anschuetz and Merlan's for the Valles Caldera National Preserve that have opened our eyes to the nature and scope of traditional land use. These are just a few examples and I apologize to all those other New Mexico archaeologists who are currently involved in similar studies (e.g., Polks' historic artifact guide Ver. 7.1). It is exciting that a new generation of Southwestern archaeologists have found their calling in studying the historical archaeology of New Mexico, and are discovering how important these links are to the traditional communities in our state. This issue provides a very small taste of this research and I hope it hungers you to read more.

NEW MEXICO HISTORICAL ARCHAEOLOGY: A JUDGMENTAL SAMPLE

Kelly L. Jenks
Fort Lewis College

It would be impossible to cover all of the recent developments in New Mexico historical archaeology in just two pages (with references), so I won't attempt it. Instead, I will describe the research topics and projects that are most relevant to my work, and hope they will also be of interest to you. I've organized this research into three themes—identity, landscapes, and economy—even though the projects that I describe often engage with multiple topics.

Generations of New Mexican archaeologists have studied the creation, expression, and evolution of ethnic and other social identities, and these topics continue to be relevant today. Research on Pueblo responses to Spanish colonialism have been taken in an interesting direction by Matt Liebmann (2012), who applies the concepts of revitalization movements and hybridity to understand changes in the social organization and materiality of Puebloan groups during the Pueblo Revolt period. There has also been renewed interest in considering the effects of colonialism on more mobile indigenous populations in the Southwest—particularly the Jicarilla Apaches and Comanches. Sunday Eiselt (2012) has published on

the Jicarilla Apaches, arguing that were able to thrive at the margins of colonial settlement by participating in trade with Hispanic and Pueblo communities. Archaeologists also have begun to investigate the Comanche presence in New Mexico, though most of this work focuses on rock art as Comanche camp sites are notoriously difficult to identify.

Recently, a group of archaeologists has begun to focus on the colonial side of these cultural changes and exchanges, considering emergent and evolving social identities among Hispanic colonists. Much of this work focuses on *vecinos*, colonial settlers who occupied land grant communities along the colonial frontier. Many of these settlers were Genízaros, meaning that they were of indigenous ancestry but had been incorporated economically and socially into the colonial system. Jun Sunseri and Heather Atherton have studied the archaeological remains of two communities established in the late colonial period, El Rito and San Jose de las Huertas, in part to understand what it meant to be Genízaro during this period (Atherton and Rothschild 2008; Sunseri 2009). Sunday Eiselt, working in the plaza at Ranchos de Taos, has focused instead on the creation of a Hispanic *vecino* identity during the 19th and 20th centuries. I have approached the Hispanic villages of San Miguel del Vado and Los Ojitos from a slightly different perspective (Jenks 2013), looking at the *vecindad* as a civic identity that developed in the late 18th century and changed in the 19th century as *Hispanos* adapted to the American legal system. All of these projects track the development of multiethnic colonial settlements into the Hispanic communities we find today, a process that could be thought of as *Hispano* ethnogenesis.

Research on cultural landscapes often is concerned with social change, and thus overlaps with identity research. Mark Lycett (in press) and Phil Leckman (2012) have applied a landscape perspective to understanding cultural persistence and change at Pa'ako, a 17th-century Pueblo *visita* site east of the Sandia Mountains. Liebmann also investigated the organization of space at Pueblo sites around Jemez in order to understand the effects of the Revolt on Pueblo social organization. Elinore Barrett (2012) puts these Pueblo studies in context in her recent publication on 17th-century Spanish colonial landscapes, a book that complements her earlier works on Pueblo geography. Other studies consider Hispanic and American landscapes in the late colonial, Mexican, and American periods. Bonnie Clark (2012) and Minette Church (2002) contrast the landscape ideologies and land laws of Anglo-Americans and New Mexican *Hispanos* in southeastern Colorado and consider how these shaped the material record in that region. Their studies provide a useful background for my work at two Hispanic villages—one formed through a Spanish community land grant, the other comprising American-period homesteads—both situated along the Pecos River. Differences between these villages provoke interesting questions about how American land tenure systems affected Hispanic landscape ideologies in New Mexico.

A third area of historical archaeological research focuses on local, regional, and international economies. Archaeologists working in 17th-century contexts have investigated household and mission economies, the *encomienda* system, and interactions with the silver mining districts northern Mexico (e.g., Trigg 2005). In 18th century contexts, more attention is paid to the *Hispanos'* development of tinworking, textile, and other industries as well as their trade with neighboring nomadic tribes (e.g., Eiselt and Darling 2012). New Mexico experienced Spanish colonial, Mexican, and American territorial rule during the 19th century, and these shifts in administration were accompanied by major changes in the economy. A newly independent Mexican nation opened its borders to international trade in 1821, leading to the creation of a vibrant trade between the U.S. and northern Mexico along the Santa Fe Trail and Camino Real. Archaeological evidence of this trade can be seen throughout New Mexico, but especially in villages located along trade routes (e.g., Jenks 2013). American conquest in 1846 paved the way for the American military outposts and cattle ranching enterprises of the 1860s and 1870s, both of which have been documented by archaeologists. Finally, the construction of the AT&SF Railroad in 1880–1881 improved New Mexico's connections to markets in the Midwest and Pacific, which, in turn, led to developments in the mining and milling industries. These industries also have been the subject of some archaeological study, especially within cultural resource management settings.

One brief final note: many of the projects described above draw heavily on ethnohistorical and oral historical data, and there appears to be growing interest among researchers in collecting oral histories. It seems a fitting tribute to Dave Brugge that his work continues to inspire scholars today, both within and outside of his specific area of research.

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DAVID M BRUGGE, THE NAVAJO LAND CLAIM AND HOS DIK'ANI

Ronald H. Towner
Laboratory of Tree-Ring Research

Dave Brugge spent much of his career looking at small sites in obscure places. An important part of his career was spent in the employ of the Navajo Nation working with J. Lee Correll and others documenting the Navajo occupation outside the 1868 reservation boundaries as part of the Navajo Land Claim. Dave traveled all over the Colorado Plateau recording sites and using multiple lines of evidence—ceramic, architectural, dendrochronlogical, and oral historical—to try to understand the development and expansion of the Diné across this vast area. This paper discusses a site Dave never visited (as far as I know), but represents the kind of site he used to make important inferences about the protohistoric and historic periods.

Hosh dik'ani

Hosh dik'ani (NA3990; NLC-S-MLC-CD-E) is a multi-component fortified hilltop site located on the Coconino Plateau in northern Arizona (Figure 1). . It has never been recorded in detail, but was first noted in 1940 by Milton Wetherill (Wetherill 1940) who indicated it was a PIII site with seven masonry rooms and Tusayan Gray and "Sunset" sherds; it was minimally recorded by the Navajo Land Claim (Wilmeth and Clark1953) who assigned it a Navajo cultural affiliation based on information from a local informant who remembered hogans below the mesa rim, although there were no structures present in 1953; the site was re-visited by Pilles (1989) who assigned it an Elden Phase Sinagua and Navajo affiliation.

The majority of the site is a Sinagua hilltop site consisting of at least seven masonry structures surrounded by a massive enclosing wall constructed of basalt boulders. The "Navajo" component of interest here includes two loci. The first of consists of a conical hogan- or wickiup-like structure (Figure 2) built adjacent to the enclosing wall and a living juniper tree; there are also four additional brush/log wall segments surrounding the conical structure. No artifacts are present inside the enclosing walls. The second locus consists of a crevice covered with ax-cut juniper beams, which Pilles inferred were Navajo storage facilities.

The nature and history of research at Hosh dik'ani generated multiple research questions about the wooden elements at the site. Of particular interest here is the temporal placement and cultural affiliation of the structures on the mesa top and covered crevice on the north side. Are these elements contemporary? Do they relate to the Navajo use of the area, possibly during the Carson campaigns of the pre-Bosque Redondo incarceration, or do they relate to Apache use of the area during the Apache Wars of the 1880s?

Tree-ring Sampling and Results

In order to address the research questions, I collected 35 tree-ring samples from various architectural elements (see Figure 1). The 25 samples from Locus A include 12 juniper and 13 pinyon pine samples. All but two of the samples exhibit broken proximal ends indicating procurement of dead wood elements; the two exceptions are metal ax-cut limbs in the living juniper that supports the conical structure. Several of the timbers in the wall segments also exhibit root flares indicative of dead wood use. The 10 samples from Locus B consist of 8 juniper and 2 pinyon pine samples. Most beams exhibit broken ends, although at least one shows a metal ax-cut end. Three of the timbers exhibit burned or charred ends indicative of timber harvesting by burning.

The samples yielded only three dates, all from Locus A, and none from the conical structure itself. Wall segment A4 yielded noncutting dates of 1779+vv and 1978++vv, and wall segment A5 yielded a noncutting date of 1936vv.

Discussion

The paucity of artifacts and dates from Hosh dik'ani presents a challenge in terms of determining temporal and cultural affiliation—the type of challenge Dave Brugge would have relished! The metal ax-cut ends indicate both loci were constructed sometime during the historic period. That assignment is the best that can be determined for Locus B. Locus A was constructed sometime after 1779, and possibly as late as 1978. Interestingly, there is no mention of the conical structure and its associated wall segments in any of the previous documentation of the site, including Pilles 1989 site form, although Pilles (pers communication) indicates the structure was present. The conical structure resembles an Apache wickiup much more than a Navajo Hogan, and in my experience, the extensive use of dead wood is not typical of Navajo wood use practices. I infer, therefore, that the structure is related to Apache use of the area—maybe then augmented by 20th century hunters watching for game from the mesa top. As Dave would say, "additional data will probably show I'm wrong, but that's the nature of research!"

Acknowledgements

This project was funded, in part, by a grant from the American Philosophical Society. Peter Pilles, USFS Coconino NF archaeologist extraordinaire and Vince La Motta of the University of Illinois also helped in numerous ways for which I am grateful.

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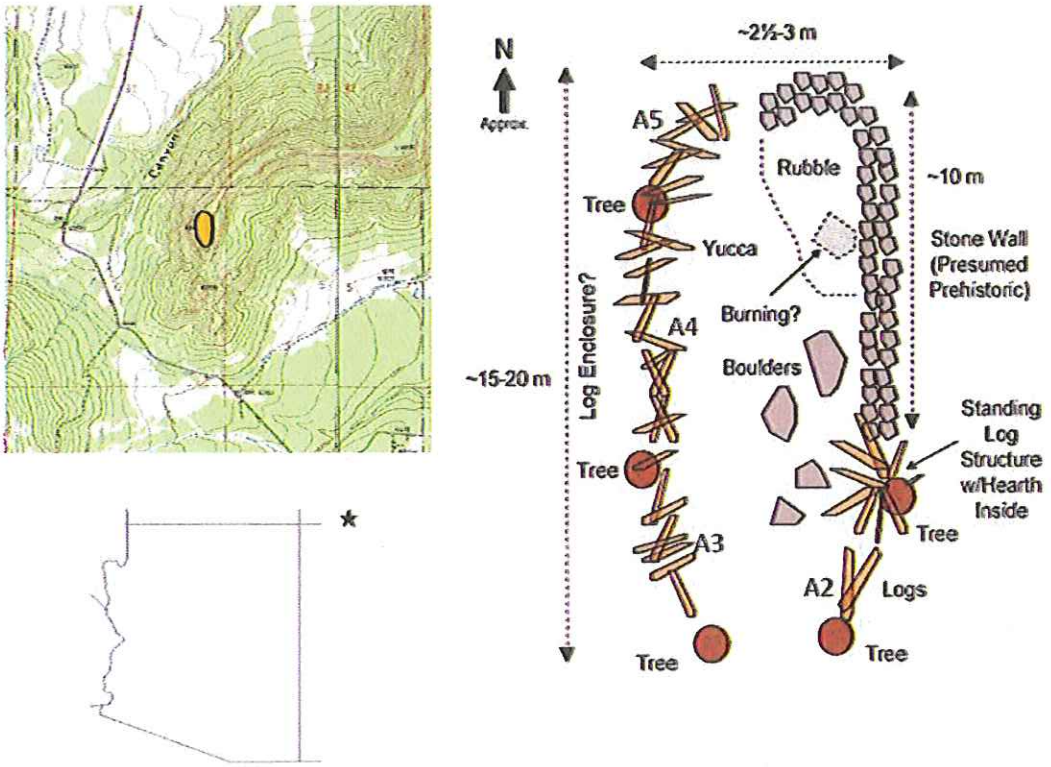

Figure 1. Location of Hosh dik'ani and schematic map of Locus A.

Figure 2. Conical structure in Locus A, view southwest.

EARLY NAVAJO OCCUPATION IN CHACO CANYON

Peter J. McKenna
Tom Windes

NMAC has generously provided a grant for the completion of graphics on this paper and the authors appreciate both the grant and quality of graphics produced by Clay Mathews without which the presentation would have suffered. The following provides a synthesis of a recent study of early Navajo settlement and tree-ring dates in Chaco Canyon, New Mexico (McKenna and Windes n.d.).

The study accounts for 42 eighteenth century site locations in Chaco Canyon, the vast majority of these occurring on Chacra Mesa which forms the south side of the canyon (Figure 1). Though sites west of Pintado Pass were the focus of reexamination, tree-ring information and general site location from known sites east of the Pass strongly contributes to the pattern of occupation. Brugge (1986) accounts for the most detailed work on Chaco's early Navajo settlement to date, but our study has doubled the number of tree-ring dates available in the mid-1980s and provided more intense scrutiny of structural wood profiles from targeted sites (Figure 2); we agree with Brugge that the Chaco Navajo occupation begins about AD 1720. In a similar vein we have rexamined the nature and distribution of early Navajo sites and noted several changes through time (Figure 3). In sites where tree-ring dates are not available, and those sites largely occur down canyon from the eastern Park boundary, architecture, site configurations and material culture have been used to place them in the Gobernador phase.

Contrary to earlier suggestions, Chaco's Navajo occupation does not appear to be part of the original Dinétah settlement system, though it is more akin to the Dinétah system than roughly contemporary occupations south and west of Chaco. Chaco's Gobernador phase occupation is generally smaller and less complex than in the Largo-Gobernador area 30km north. This is reflected in the strong role of less elaborate Pueblitos in initial site choices emphasizing extreme defensive locations; these Pueblitos often act as anchor-buildings for small masonry and forked-pole hogans in the area. Pastoral

features have not been confidently associated with these 1700s occupations. Like the Dinétah area, wood use reflects local stands and the woodland environment of the site area including use of remnant stands of ponderosa pine when available. Because of a wood harvesting strategy that includes beam reuse, use of dead wood and live trees in a resource-diverse milieu, a more complete sampling of Navajo sites is required to capture construction dates than sampling approaches that simply target the "best", e.g. largest, structural wood on a site. Complete inventories and broader sampling of structural wood at three sites investigated in the 1990s have revised site dating, solidified the initial occupation as being during the 1700s, and assisted in seeing temporal trends in site construction and settlement shifts as running from early to late down the Chaco/Chacra in an east-to-west direction. This temporal shift, if not perfect, can be seen as occurring in our Section III (Figure 1) if the most recent dates are emphasized (Table 1). In keeping with this temporal shift from east to west the extreme defensive character of sites and settlements decreases through time which likely reflects a decline in the perceived threat of (Ute) raids (Figure 3).

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Table 1. Latest tree-ring dates from early Chaco/Chacra Mesa Navajo sites.

East from the east side of Tachii' Canyon to beyond Burning Bridge Canyon, Section IV

1. CM-18: 1717vv, 1725v, 1739vv, 1748+v (1 forked stick hogan?)
2. CM-35: 1751vv, 1751+vv, 1751rG, 1758G, 1758+v (1 collapsed structure, site's south end)
3. CM-38: 1738rG, 1738rGL, 1738rLG, 1739+v, 1739vL, 1739rL (1 pueblito)
4. CM-139: 1725, 1725, 1739c (1 pueblito, 1 forked stick hogan, 1 unknown)
5. CM-142: 1717vv, 1741+G, 1741+rG, 1743r, 1743GB (1 pueblito, 1 forked stick hogan)
6. CM-143: 1724vv, 1728vv (1 pueblito)
7. CM-150: 1707+vv (1 forked stick hogan)
8. 29Mc797: 1771rB (1 cavate storage room)
9. 29Mc798: 1674vv (1 forked stick hogan)
10. 29Mc801: 1605++vv (1 forked stick hogan)

West from west side of Tachii' Canyon, to Chaco Culture NHP, Section III

1. CM-4: 1780+vv_v, 1781++vv_v, 1782+$vv_{v/r}$, 1782+vv_{rG}, 1784+vv_v (2 forked stick hogans)
2. CM-8: 1779+vv, 1780vv, 1786vv, 1790vv, 1790++vv, 1798vv (2 forked stick hogans)
3. CM-17: 1785++rG, 1793+rGB (2 masonry hogans)
4. E5: 1740vv, 1756+vv, 1769++vv (1 masonry hogan)
5. E6: 1772G, 1776+vv_v, 1778+vv, 1781++$vv_{vv/v}$, 1784vv, 1798 (2 forked stick hogans, 1 windbreak)
6. E7: 1766+vv, 1772vv, 1776vv, 1778+vv (3 forked stick hogans)

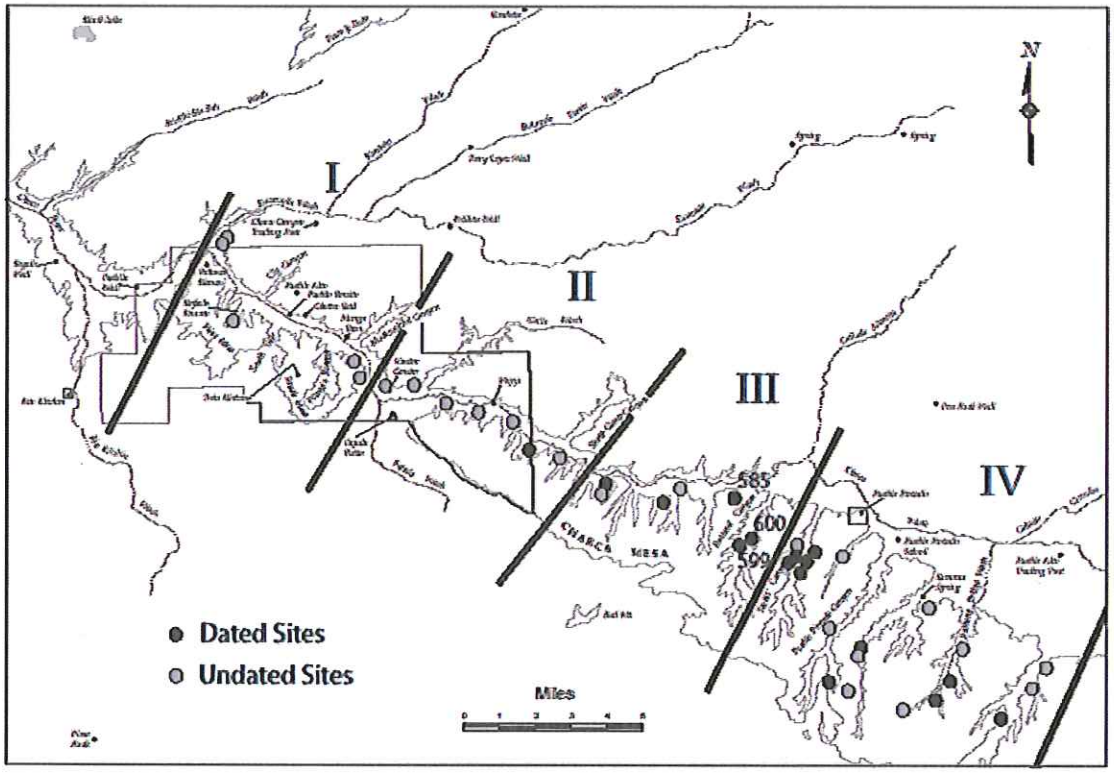

Figure 1. Chaco Dated and Undated Sites

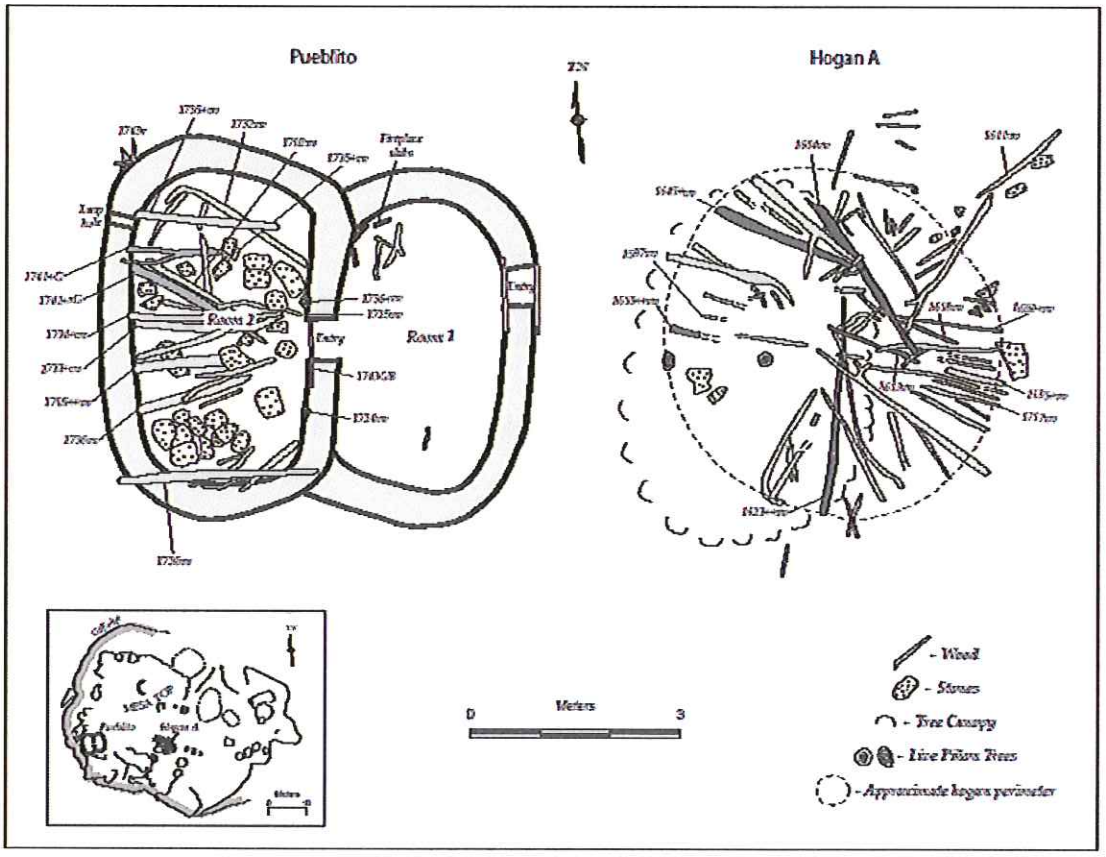

Figure 2. Dated Hogans

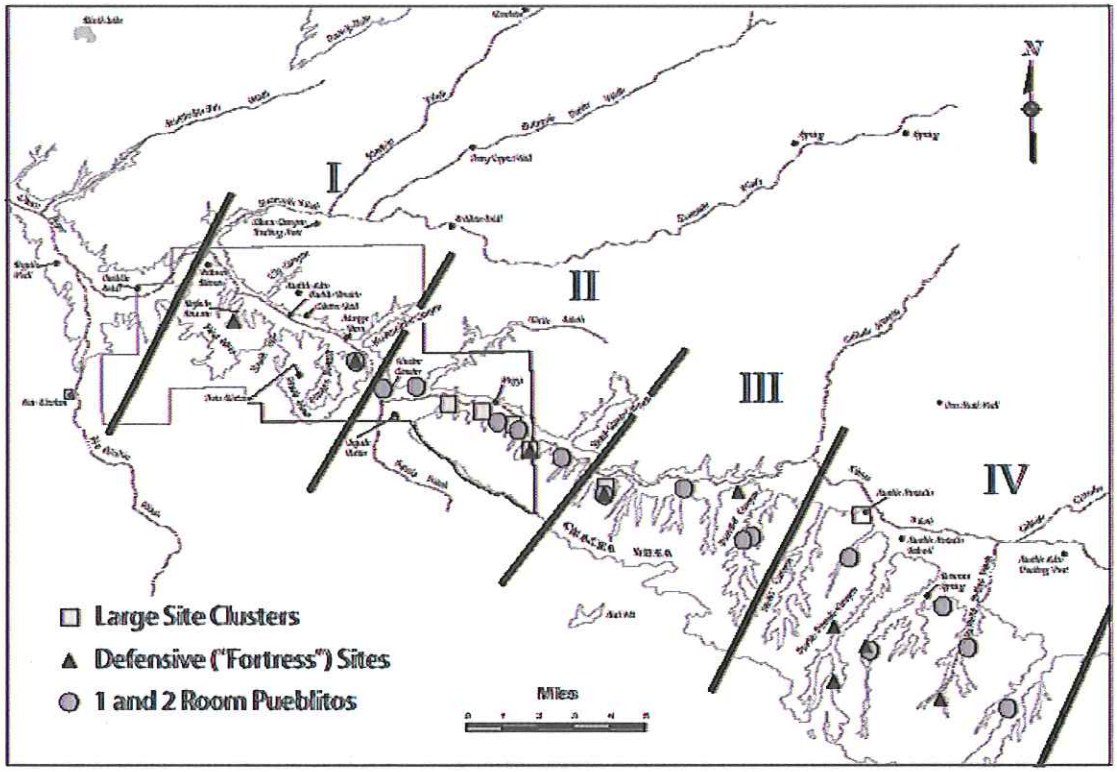

Figure 3. Chaco Combo Sites

HISTORICAL LANDSCAPE ASSESSMENT OF UPPER LARGO CANYON

Carrie J. Gregory
Statistical Research Inc.

Located in the southwestern corner of Rio Arriba County in northwestern New Mexico, upper Largo Canyon is one of the largest dry washes in the world and a major tributary to the San Juan River. Upon award of this assignment—conducting a historical landscape assessment of upper Largo Canyon— I went to Google Earth to check out the project area. An area of vast oil and gas development, it looked like a moonscape. I must now admit how wrong my initial assessment was. Upper Largo Canyon, the most historically important and predominant natural feature of the region, is no moonscape but instead a magnificent canyon of high marled sandstone cliffs, expansive piñon-juniper woodlands, stunning views, and historical landscapes that time had almost forgotten.

Historical-period land use within upper Largo Canyon in northwestern New Mexico began with incursions by the Spanish military in their pursuit of the Navajo. Use of the region increased with the establishment of the Old Spanish Trail in 1829 and waned after the last homestead patent in the vicinity was granted in 1943. Permanent settlement in upper Largo Canyon began as early as 1869, peaked during the 1920s, and began to decline in the 1930s. Of the cumulative population of 187 residents—across 216 square miles—68 percent were Spanish American, 31 percent were Anglo-American, and 1 percent was Navajo. Settlers resided in upper Largo Canyon along Largo Wash and in branch canyons. Reliable water sources were few, and residents eked out a subsistence living by growing corn, beans, chiles, tobacco, onions, garlic, and squash and raising sheep, goats, cattle, and mules.

Settlement was spatially discontinuous, and there was no coherent village center. Current place names in upper Largo

Canyon are predominantly Anglo-American and are often descriptive of natural or cultural features in the vicinity or reflective of regional family names. Community structure was flexible and members adapted to changes within the natural, social, and political environments. Homestead properties were often arranged in a C shape facing Largo Wash, and there was a separation of space between residential use and ranching and farming activities. Homesteads typically included a dwelling; water conveyance and catchment structures; ranching and farming structures; and perhaps small outbuildings. Settlers constructed homesteads primarily from available local resources, such as stone, piñon, and cottonwood, and primary building techniques consisted of *jacal* and/or stacked-stone construction with *viga*-and-*latilla*-style roofs. Original house forms were linearly arranged rooms that were modified over time through additive construction. Although there was little commerce in upper Largo Canyon, three trading posts served local residents. Specialized properties in upper Largo Canyon include a stacked-stone residential building that served as a part-time church, a trail that climbed almost 600 feet from the canyon floor to the mesa top, an isolated cemetery, a Navajo complex associated with a trading post, and a school.

Activities of the upper Largo Canyon settlers left imprints on the landscape. Consisting of processes and components, these vestiges reveal how people interacted with and adapted to the cultural and natural environment. Cultural and natural characteristics of the vernacular landscape often reflect the day-to-day traditions of ordinary people, representing how they made a living or occupied the land. Natural systems and features and topography are reflected in the location and setting of the sites and in the use of local materials for construction. Land uses are reflected in the vegetation, spatial organization, construction techniques and materials, archaeology, and historical documentation. Spatial organization is expressed through the clustering of cultural features and the divisions of space by natural and cultural features. Circulation is conveyed by the spatial organization of the site's transportation features, such as two-track roads, pedestrian trails, and stock trails. Former buildings and structures are in various states of preservation, but most remain only as archaeological features and include the remains of residences, a residence/part-time-church, trading posts/residences, a school, hogans, sweat lodges, outbuildings, retaining walls, corrals, and trails. Constructed water features are represented by springboxes, piping, check dams, water-conveyance channels, a seep, a metal tank, a cistern, and an earthen dam. Small-scale features include pens, rock alignments, fences, posts, burial markers (only at the cemetery), a drying rack, a hearth, and a natural tinaja. The larger sites have cluster arrangements associated with water-control and -conveyance, ranching and farming, and/or domestic activities. Cultural traditions are recognizable in the construction techniques, features, and layout of the sites, and in the headstone iconography and Spanish-American surnames at the cemetery. Views from the sites are up, down, across, and overlooking upper Largo Canyon; they often include other homesteads, the main road, and nonextant cultivation and grazing areas. While most of the properties include historical-period artifact scatters that indicate domestic use, one homestead/trading post site includes refuse deposits representing both commercial and domestic use, and two sites include historical-period petroglyphs and pictographs. Several properties are cultural landscapes in their own right, but all of them contribute to the greater Historical-Period Rural Landscape of Upper Largo Canyon, Rio Arriba County, New Mexico, 1829–1943.

Primary historical-period activities in upper Largo Canyon included homesteading, ranching, farming, commerce, and transportation. Settlers developed the infrastructure to support these endeavors in direct response to local geography, topography, vegetation, and access to water, interacting and adapting to the natural and cultural environments. The result of these activities is a historical-period rural landscape that is important in New Mexico's history, as it is symbolizes rural settlement, homesteading, trade, transportation, and cultural traditions. Today, most of the land is administered by the Bureau of Land Management (BLM), who is tasked with balancing natural resource procurement—oil and gas development—and cultural resource conservation. The BLM has been actively preserving the few architectural and structural remnants of the historical period in upper Largo Canyon; however, I hope that this historical landscape assessment will provide the BLM with a greater understanding of the extant historical landscape, which may be a means for additional preservation, conservation, and interpretation in the future.

The following references were critical resources for this project and served as the foundation for additional archival research.

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NATIVE AMERICANS AS HISTORIC PEOPLES

Deni J. Seymour

"the Apache are not a historic people"

--Joe Joseph, 2008, editor Historical Archaeology, Journal of the Society for Historical Archaeology

Many Apaches, such as Geronimo, Cochise, and Victorio, are icons of the American West; they represent its essence. Their descendants are alive today and have been here since the Spaniards arrived, which means that they were here in the historic period and therefore, they are a historic people. Nonetheless, they have been deemed inappropriate for study among many historical archaeologists who see them as a people who are somehow not historic, as quoted above (Joseph 2008; regarding Seymour 2009, 2010a, 2013a and others). In such thinking, Native American sites are relevant to historical archaeology "only when their basic cultural and ecological patterns have been altered by contact and when this is displayed in the archaeological data" (Schuyler 1978:28). There is a long and deep history of considering that historical archaeology should should focus on post-colonial societies rather than on indigenous groups (Deetz 1967) and that it is "the history of white men in North America" (Harrington 1978:3). The primary consideration is said to be the concern with differentiating the discipline of historical archaeology from that of archaeology in general, of defining turf, and opening new realms of distinct inquiry.

Native Americans continued to co-exist with those of European descent in America and their historical archaeology is relevant to scholars for many reasons. Among these reasons is because the historical archaeology of Native Americans may be informed by historical documents and it contributes to general theoretical and methodological topics of interest to the archaeological profession as a whole. Lightfoot and others (1995; Rubertone 2000, Scheiber and Mitchell 2010) have already commented on the artificial and disadvantageous nature of the split between historical and prehistoric archaeology with respect to Native Americans in historic site contexts.

Most of us in the West do not think much about this, especially in culturally diverse New Mexico, because for us the time flows uninterrupted between prehistory and history, with many of our settlements, including the colonial capital of Santa Fe, having been occupied continuously for many thousands of years. Fortunately, many historical archaeologists in the West study Native Americans as well as other groups as an integral part of our brand of historical archaeology. For decades I myself have dealt with the archaeology of Native Americans, assuming it was a legitimate course of inquiry in historical archaeology, focusing on the natives in the shadows of the monuments of colonialism (missions, presidios and ranchos). Yet, those East of the Mississippi continue to abide by, even promote, the long outdated notion that Indigenous occupants are not in themselves appropriate for study in historical archaeology. The quotes at the beginning of this article are not the only ones, but these are the ones that continue to guide a substantial segment of our profession.

I am not one to quibble about definitions, especially in light of the many captivating avenues of research available to historical archaeologists. Yet continued epistemological developments relating to the nature and basis of historical archaeology require attention owing to their constrictive nature and far-reaching consequences. This issue of definition is by default a designation of legitimate research directions and so is made even more salient and timely. Many within the region may not be aware that historical archaeology has narrowed its area of concern even more, focusing on capitalism as the appropriate concentration of study (references too numerous to cite here). What is really a research domain has taken over as the guiding definition of historical archaeology, at the exclusion of other aspects of a broader more inclusive historical archaeology. Yet, this is more than an academic concern, for as Kelly (2005:1124) notes "the emphasis on capitalism overlooks or even denies the ability of people in [other parts of the world] to engage actively in alternative strategies." This narrow and oppressive view is hostile to contemporary groups who to this day struggle for their place in the American and world political systems. As anthropologists, we should all recognize the biases of this position and not ignore this important issue simply because we do not subscribe to it. By ignoring it we are condoning it.

Equally relevant is the fact that there is an intermediate domain of history that is accepted by neither prehistoric nor historic archaeology. It has become common practice in historical archaeology to exclude an entire area of investigation that involves use of historic documents, about people who did not themselves write the documents but who were in many ways profoundly affected by European expansion, but whose stories are not all about this expansion or influence. Even though peoples, such as the Apache and O'odham, were here in A.D. 1300s (perhaps earlier) and undoubtedly influenced the end of prehistory (Seymour 2010b, 2011a, 2011b, 2012a, 2013b, 2014a), discussion of them is specifically excluded from prehistoric conferences in our state. Thus, the people whose land was divided by the incursion of Europeans have been excluded from discussion by artificial divisions within the discipline.

This is an unfortunate extension of the outmoded view that only those who "make history" [read: write history] are the subject of historical discourse and only the deeds and doing of "great men" belong in our accounts. As Little (1992:1-2) notes, "approaches that insist that the focus of historical archaeology is on European expansion and influence are somewhat ethnocentric, tending to treat all people only in terms of their relationships with Europeans."

When the first Europeans put pen to paper as they trudged through the Southwest they were astonished at some of the things they saw. While this began the historic period, nothing of consequence changed for most of the people they encountered. The Europeans were just another visitor and while some indigenous occupants were degraded by these visitors, others kidnapped or killed, it was not until many years later that they began to die of diseases, their social and political structures substantially altered, and so on. Consequently, it is not the act of committing observations to paper by these bearded light-skinned people that is of relevance in the larger scheme of things. Instead, it would be useful to explore how the European experience of colonization is different from that of other indigenous groups moving into and colonizing other indigenous groups. In this sense, everyone has been colonized and so this process is not unique to Europeans or to the modern world.

One series of responses to this problem includes efforts to decolonize historical archaeology, to seek solutions and think within a postcolonial framework. Yet, the focus on postcolonialism and decolonizing further assumes that the colonial experience was the most important fact about the subjects of study and it continues to force us to view indigenous culture through the lens of Europeans. All too often, historical archaeology becomes an unknowing servant of colonialism, as archaeologists unwittingly replicate the colonial agenda. This problem exposes the fallacy that the effects of colonization are over and fails to consider successive forms of hegemony that result directly from colonialism.

A case in point involves the way tribal governmental structure—imposed by the colonizing culture—guides archaeological inquiry, structures the colonized realities, and determines the form of cultural specialist knowledge. Typically the inclusion of an indigenous perspective involves working within the constructs acceptable to the centralized tribal authority. Yet, historically and traditionally, the groups I deal with here in the Southwest did not have a centralized authority. Because the current tribal structure is in itself an inherited colonial construct (Seymour 2012b, 2014b) by enmeshing our research framework within these colonial remnants we are contributing to, validating, and extending the colonial agenda, a view my indigenous informants share. In doing so, our a priori assumption is that the larger political body can effectively and accurately speak for the group as a whole with regard to issues of history and tradition, despite the fact that traditional family and community knowledge are being systematically supplanted by tribe-wide knowledge and pan-indigenous perspectives.

The latter (positively) provides control over internal politics and knowledge and reinforces a shared group identity, counterbalancing forces of disintegration. Yet, the tribal narrative does not necessarily reflect the types of traditional knowledge archaeologists seek nor does it account for significant variations within the hybridized and diverse tribal

population. Our research methodologies and overarching regulatory frameworks assume there is a cohesive body of knowledge that is historically relevant to all tribal members. A study by Colwell-Chanthaphonh and Ferguson (2004) provide an example of this fallacy, where Tohono O'odham (historically a desert dwelling and mobile group) specialists from Sells were brought to lands on the San Pedro River once occupied by Sobaipuri (Akimel) O'odham (who were sedentary farmers). The strengths derived from this essentialism (the notion of a pan-O'odham or pan-indigenous identity) are counterbalanced by the suppression of local histories. Thus it is worth considering the ways in which the methodological, theoretical, legal, and regulatory structure in which we operate as archaeologists may actually reproduce the hegemonic relationship we wish to minimize and how they negate the voices of many who are most knowledgeable about their community and family histories.

This is but one example of a response to historical archaeology's official and non-inclusive stance. If historical archaeology is about giving voice to the voiceless and redressing unjust power relations then one of these relations in need of study is the unjust limits we impose on legitimate subjects of study. Our friend, colleague, and mentor, David Brugge understood these types of issues and the harm that such seemingly innocuous scholarly positions impose on the indigenous people we study.

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ACEQUIA DOCUMENTATION UNDER THE U.S. ARMY CORPS OF ENGINEER'S ACEQUIA REHABILITATION PROGRAM

Ariane Pinson
U.S. Army Corps of Engineers

As it has for more than four dozen rural acequias in New Mexico, the U.S. Army Corps of Engineers has recently used its authority under the Water Resources Development Act of 1986, Section 1113, Acequia Rehabilitation Program to rehabilitate acequias near Santa Rosa and in Truchas, New Mexico. The act allows the Corps to partner with the State of New Mexico to restore and preserve acequias for their cultural and historical values to the region. Part of this work includes documenting the acequias as cultural resources, completing archaeological surveys of areas impacted by rehabilitation activities and, in some cases, conducting oral history interviews with long-term residents.

Farming the High Sierra

In a region made famous by the books *River of Traps* (deBuys and Harris 1990) and *Mayordomo* (Crawford 1988), acequias have brought clear mountain waters to sheltered bottomland crops for nearly three centuries. Beginning with de Vargas, 18th and 19th Century governors used Sangre de Cristo Mountain communities as a buffer to separate Spanish settlements along the Rio Grande from Native American groups with which they feuded and traded. Settlement by *pobladores* (civilian settlers) was actively encouraged, so long as they created defensible and sustainable communities. IN 1752, pobaldores from Chimayo founded the town of Truchas and immediately established a defensible settlement around a plaza, and constructed irrigation ditches to water their fields. Because the Rio de Truchas is intermittent, they augmented river flows with water captured from an adjoining drainage. When the land grant of Nuestra Señora del Rosario, San Fernando y Santiago was conferred to the settlers in 1754 (Bowden 2013), the eastern boundary was placed at "*la toma de la Acequia de el Río del Pueblo quemado que ha de fertilizer esta Poblazón* (the intake of that acequia from the Rio Del Pueblo Quemado that must enrich this settlement)" (Baxter 1997:11). The dam required for this transbasin diversion had to be raised to a height of at least 60 *varas* (160 feet), and required a ditch of at least a league (2.5 miles) to transfer water to the Rio de Truchas (Rivera 1998:18). As conflict with adjoining Native American groups ceased in the 19th Century, the community expanded east and west along the river building new acequias as the number of fields expanded: the second of these ditches, the Acequia de la Posecion, was constructed in 1852 (Gabin 2010).

Farming the Frontier: Three Acequias on the Rio Puerco below Santa Rosa

The Santa Rosa area was peripheral to 17th and 18th Century Spanish settlement along the Rio Grande, and was only beginning to be settled when New Mexico was transferred by Mexico to the United States in 1848. Consequently, the acequias here are relatively young: the main ditches (Labadie, East Puerto de Luna (EPdL), and West Puerto de Luna (WPdL) Community Ditches) are mid-19th Century excavations.

The 7-mile-long EPdL may have been built as early as 1849, and was definitely in use by the mid-1860s. On the west side of the Pecos River, the WPdL has been pulling water from the Rio Agua Negra, a spring-fed tributary of the Pecos, since 1854. The WPdL's Giddings diversion dam was constructed in 1894, and was destroyed by massive floods in 1942 and 2005. It has since been rebuilt with help from the Corps. Closer to Santa Rosa, the Labadie ditch was constructed between 1869 and 1873to divert water from a perennial spring into a 2.75 mile long ditch. Historical documents show that descendents of the first settlers continue to farm along these three ditches.

USACE Rehabilitation of the Acequias

Traditionally, acequias are earthen and hand dug. The channel sides and bottom are typically porous, allowing precious irrigation water to seep away. Vegetation growth and burrowing animals undermine channel walls, and annual floods destroy diversion dams and other structures. Annually, work crews would clear vegetation, restore and realign channels, and rebuild diversion structures to ensure the flow of water. Such frequent maintenance has become increasingly difficult to accomplish, as farmers are fewer and often share their agricultural endeavors with a full-time job elsewhere.

The U.S. Army Corps of Engineers has used its authority under the Acequia Rehabilitation Program to assist communities reduce acequia maintenance costs and labor. At WPdL, EpdL and Labadie Ditches, in addition to replacing portions of open ditch with buried piping, lining ditch segments with concrete to reduce water loss, and replacing flumes, the Corps replaced diversion structures at EPdL and Labadie, and most recently, the failed WPdL diversion structure on Agua Negra Creek with a 35 foot high, 40 foot wide cement diversion dam and spillway.

At Acequia de la Posecion, segments of the ditch right-of-way run through private land that does not belong to ditch members, hindering access to the ditch for maintenance and greatly adding to the length of ditch each user had to clean. To reduce ditch maintenance costs and labor, USACE replaced 8,496 feet of ditch with a 24" diameter PVC pipeline, ran 825 feet of pipeline to connect to a buried siphon, constructed 1 sluice structure, and installed 23 concrete tapboxes to enable farmers to irrigate their fields.

Cultural Resources Surveys and Oral Histories

Before undertaking acequia upgrades, the Corps conducted surveys under Section 106 of the National Historic Preservation Act in order to document the historical ditch alignment, and remaining gates and other acequia structures (Everhart 2009, Raymond 2007, Van Hoose and Lundquist 2009). These surveys show that while the ditches have been continually remade through use and maintenance, nonetheless the historical alignment is relatively unchanged: mid-19th Century General Land Office Maps that show the Santa Rosa area acequias, and the fields they water, in the same place they are today. There is every reason to believe that the Truchas area acequias, including Acequia de la Posecion, are also approximately in their original alignment.

As part of the work at EPdL, the Corps contracted with Zia Engineering and Environmental Consultants (Brown et al. 2011) to conduct oral history interviews with long-term residents along the ditch or in the central community of Puerto de Luna. In Truchas, limited oral histories were conducted and transcriptions were made of conducted with residents in 1970 by Curtis Frank (Messerli and Eakin 2009).

Both regions showed remarkably similar histories: the traditional way of life persisted into the 20th Century. Towns were large and prosperous, farming was subsistence oriented, and multiple generations collaborated to maintain the ditch. People fondly recalled traveling to regional dances, and attending the local school and church functions.

But World War II fundamentally changed New Mexico. Large numbers of young men traveled overseas for long periods, and got to see much of the U.S. during pre-deployment training, bringing them into prolonged contact with new people and ideas. Jobs at places like Los Alamos drew people away from the communities. After the war, the rapid growth of Albuquerque and programs like the GI Bill encouraged rural residents to move away for educational and job opportunities in Albuquerque, Santa Fe, Los Alamos and elsewhere. Local schools closed, church festivals dwindled in size.

Land has increasingly passed to outsiders. In the 1970s, Anglo-Americans began buying into remote communities to farm or retire. Many locals became weekend farmers, balancing agriculture with homes and jobs elsewhere. As the remaining population has aged, they have started to hire others to farm their fields. Crops are more likely to be grown for cattle feed than food. Long-time residents observed that part-time farmers and absentee owners use ditch water but participate less than full-time residents in acequia maintenance and community activities. The burden of maintaining the ditches seems to

have fallen on progressively fewer individuals who are unable to undertake the activities and bear the costs associated with maintaining the ditches that are the lifeblood of agriculture in the region.
Consequently, long-term residents remaining on the land felt that the acequia improvements are a blessing because they make water delivery more reliable and abundant. Such changes permit the remaining farmers to stay on the land and carry on the acequia traditions. Reliable water may even be helping to revitalize communities: the 2010 Census shows the population of Puerto de Luna has started to grow again.

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ARCHIVAL RESEARCH, MADRID, NEW MEXICO

Toni Goar
Marron and Associates

As part of an on-call contract with the Abandoned Mine Land (AML) Program of the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Marron and Associates (Marron) conducted archival research for Madrid, New Mexico (Goar et al. 2013). Portions of the archival research consisted of reviewing the Oscar Huber papers (Albuquerque and Cerrillos Coal Company Records) which are housed at the University of New Mexico (UNM) Center for Southwest Research (CSWR). The dates of the Oscar Huber papers range from 1880 to 1976, but the majority are from 1924 to 1945. They are housed in 67 boxes, a number of oversized ledgers, and three oversized folders. Other sources were reviewed as part of the archival research and are presented below.

Coal Mining in the Madrid Area

Despite a long history of mining various ore deposits in the area, it was the coal mining industry that proved to be the most lucrative for the people of Madrid. The Madrid Coal Mines (located in the Cerrillos Coal Field) are particularly unique, as they produce both anthracite (hard coal) and bituminous coal (soft coal); this field is one of only a few in the world where this phenomenon occurs (Huber 1963:1; Mock 1976:2).

Small-scale coal mining in Madrid occurred as early as the 1830s, but it wasn't until the late 1880s when the railroad increased coal demand as a result of westward expansion that mining in Madrid became industrialized (Hovey 2005:13; Mock 1976:2). Steam engines require bituminous coal to burn, but steel production requires coke made from anthracite and the mines in Madrid produced both. In 1892, the Cerrillos Coal Company was created, and purchased land to build a small settlement for coal miners; this settlement was named Madrid after some of the original settlers to the area (Hovey 2005:13).

Coal production in Madrid peaked in 1928 when the mines employed 725 men; at which time 87,148 tons of anthracite and 97,562 tons of bituminous coal were mined (Hovey 2005:16). During World War II, Madrid experienced a labor shortage as many able-bodied men either joined the military or sought higher-paying jobs (Mock 1976:3). The mines finally closed for good in 1954 when Los Alamos National Laboratory, which was one of the remaining coal contractors, chose to use natural gas over coal (Hovey 2005:19).

Four coal beds were exploited in the Madrid area: the White Ash, Cook and White, Peacock, and Ortiz Arroyo (Deyloff and Viklund 1997:196). The White Ash and Cook and White were the two most profitable sources, particularly the White Ash bed, as it produced both bituminous and anthracite coal. The Cook and White seam only produced bituminous coal, and was the deepest seam to be mined in Madrid. The Peacock seam was located approximately 80 feet above the Cook and White seam and 20 feet below the White Ash and had high demand because it produced blacksmithing coal. However, this seam was fragile and difficult to mine. Lastly, the Ortiz Arroyo bed was located east of Madrid, and was similar to the Peacock seam in its fragility.

In order to work the beds, multiple mines were opened throughout the years. The larger mines included White Ash, Lucas, and Cook and White. The White Ash coal bed was considered the most valuable mine in the Madrid area, and opened in 1888 to mine bituminous coal. This mine was operational between 1888 and 1899, and was known for being extremely dangerous due to methane accumulation, evidenced by a large explosion that killed 24 miners in 1895. This mine was shut down after numerous rock faults were detected in the main slope and multiple entrances (Deyloff and Viklund 1997:196). The Lucas mine (renamed Anthracite 28 in 1902) was operational between 1893 and 1929, and was connected by railway to several nearby anthracite mines. This mine was known for its "Pennsylvania Style" breaker of impressive size and capability. The Cook and White mine opened between 1896 and 1897 and after a series of fires (the largest of which killed 14 men in 1905) was subdivided into a series of smaller mines. Due to physical hazards and geological faults none of these mines lasted longer than a few years, with the exception of the "new" Cook and White and Blacksmith mines, which each lasted eight and nine years, respectively (Deyloff and Viklund 1997:197).
Mining methods changed as new techniques and technologies were introduced throughout the years. The main new method of mining involved the room-and-pillar system, which is summarized as blocking-out the coal into large squares by tunneling into the coal on a grid, which leaves "pillars" to support the mine roof during initial operations. As the mining advances, only the pillars were left standing, at which point the pillars are then mined until they collapse, and that portion of the bed is abandoned. Coal was loaded into mine carts pulled by mules, hoisted to the surface, then dumped

into rail cars and taken to the tipple or breaker. After the coal was processed in the tipple or breaker, it was then shipped out for sale.

Madrid as a Company Town

Madrid was a "company town" planned, built, and originally run by the AT&SF Railroad. In 1906, the Albuquerque and Cerillos Coal Company took over running Madrid (Figure 1). The company owned all of the buildings, operated all businesses, and oversaw the government, schools, and police.
In 1899, Madrid consisted of a general store, school, two churches, and a city hall; by the 1930s it had grown to include a hotel, barber shop, beauty parlor, car dealership, hospital, and athletic fields. Houses were also available for the miners to rent, and generally consisted of two-to-four room models. Many of the houses were initially built in other mining towns, and were later cut apart, moved to Madrid from Carthage, and re-assembled as the other mines shut down.
Madrid became well-known for the Madrid Miners minor-league baseball team, their famous town-wide Christmas celebration, annual Easter-egg hunt, and the lavish events organized by the Employee's Club (Deyloff and Viklund 1997:202). Perhaps most directly associated with this company town was Oscar Huber, the mining superintendent that went on to purchase Madrid in 1948. Huber ran Madrid until the Los Alamos contract was lost in 1954, at which time he put the town up for sale.

Oscar Huber Papers

Information from the Huber Papers is related to the various mines, invoices, purchase orders, payroll, accounts payable, bank statements, accident reports, worker's compensation claims, telegrams and other correspondence, correspondence between Oscar Huber and George Kaseman, lease agreements and house rents, receipts and information on Huber's house in Albuquerque, insurance policies, vehicle leases and sales receipts for the Huber Auto Dealership in Madrid, receipts, correspondence and information on the Christmas Lights Pageant, catalogs, journals for the various mines that include the amount of coal extracted, and blueprints of mine profiles and mine machinery. Some interesting information is described below.

Correspondence letters between Oscar Huber and George Kaseman were reviewed and most were about the management of the various mines, the growth of the mines, accidents, and machinery approvals. From the amount of correspondence, it appears that Kaseman was very "hands on" with the management of the mines, as there were almost daily letters between the two. It appears that the letters were dictated to secretaries and were typed up with carbon copies.
A 1932 newspaper clipping described that a widow with eight children was compensated the highest amount for the death of her husband, Juan Acosta. The award was for $3,384.00; Mr. Acosta earned $37.60 a week at the time of his death. Other widows were awarded compensation from the mine disaster (Box 41, Folder 19).
In Box 35 house rent receipts were found. In an example of a house in 1947 (House No. 102 which burned down), the rent was $21.41 per month and included electricity and water. House No. 106, in 1947, was $16.92 per month with electricity and water. In 1950, House No. 1, which had five rooms and a bathroom, was $35.25 per month (Box 35, Folder 243).

In 1918, according to the age schedules, boys were employed at the mines as hoist man, electrical apprentice, rope rider, and car switcher. Wages for these positions ranged from $3.04 per day to $70.00 per month. Men were predominantly the miners and were paid by the yards mined. One wage in 1918 was for $1.15 per yard (Box 20, Folder 12).

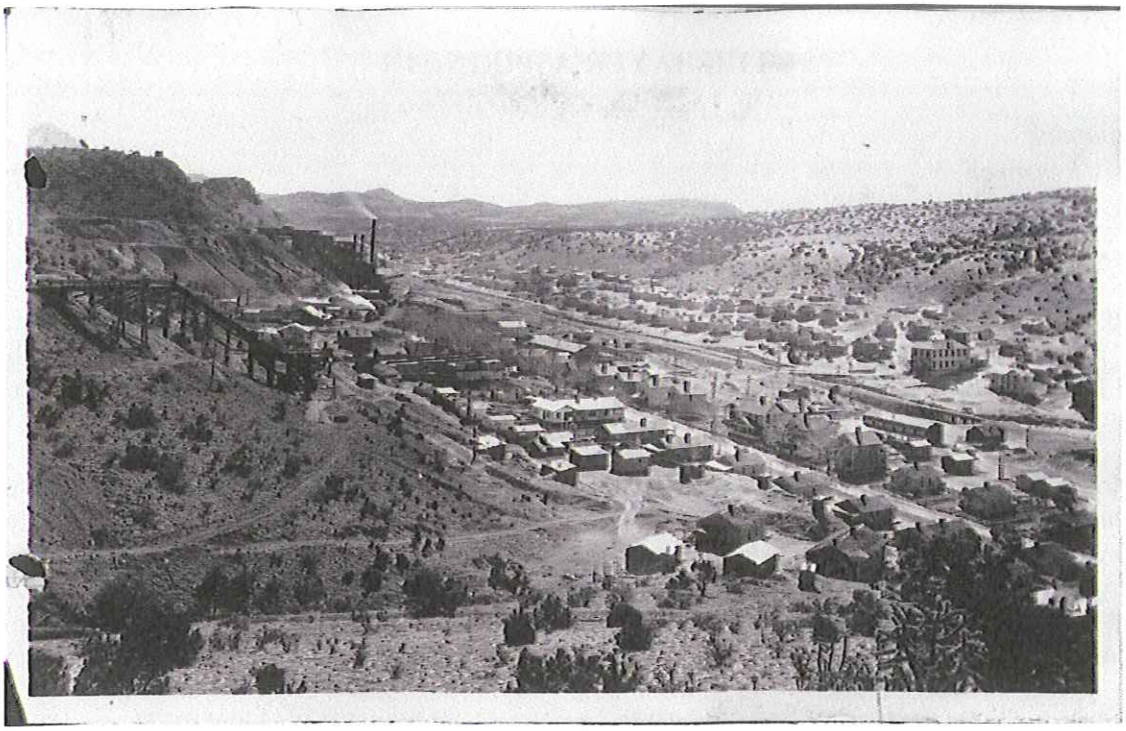

Figure 1 — Madrid, View to Southwest, unknown date (photo image courtesy of AML)

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THE BAYER ASPIRIN TIN

David T. Kirkpatrick
Human Systems Research

Modern Packaging, an industry professional journal (1929-1979), contains articles on the packaging and advertising methods for a wide variety of products. Of special interest are the articles that discuss technological changes in the packaging of a product. These articles provide a "no older than" date for glass, metal, and other containers that can be used to help date sites.

The Bayer aspirin tin, often found in 20th Century trash dumps, is one such artifact. While the paint label may be badly rusted, the technology of the tin manufacture provides a relative date for the site. In May 1940, the Bayer Company introduced a new tin container for their aspirin tablets. Prior to 1940, all the aspirin tins had a wire hinge that connected the top and bottom of the tin (Figure 1 and 2). It was opened by pushing the lid up while holding the bottom. Opening the tin was difficult especially if the lid was very tight or the woman had long finger nails that broke when opening the tin. It was not uncommon for the tablets spilled out while the tin was being opened (Modern Packaging 1941:139).

The new Bayer aspirin tin did not have the wire hinge but a patented lug hinge (Figure 3 and 4). The secret to opening this tin was to press on the red "Press Here" spot on the tin lid. This red dot was either on the top center or upper left and right corners of the lid. The opening design also allowed a more efficient filling method of the tin on the production line. The new design received an award for 1940 All-American Packing Competition (Modern Packaging 1941: 139). Several advertisements suggested buying aspirin in the larger glass bottles and transferring the pills to the tins to carry around in your pocket or purse. The tins were also incorporated into folk jewelry Figure 5).

Because of the patent on the lug hinge, other aspirin company tins continued to use the wire hinges into the 1980s and later (Figure 6 and 7). However, many companies added the instructions to press the corners of the tin to open the lid.

References

Modern Packaging

1941 Award to the Bayer Company, Inc., 1940 All-America Package Competition. *Modern Packaging* 14(6):139.

Figure 1. Pre-1940 Bayer aspirin tin (http://www.etsy.com/listing/156032093/vintage-antique-bayer-tablet-aspirin-tin)

Figure 2. Pre-1940 Bayer aspirin tin with wire hinge (http://www.etsy.com/listing/156032093/vintage-antique-bayer-tablet-aspirin-tin).

Figure 3. Post May 1940 aspirin tin with red "Press Here" (http://oncenewvintage.com/vintage-bayer-aspirin-tin/).

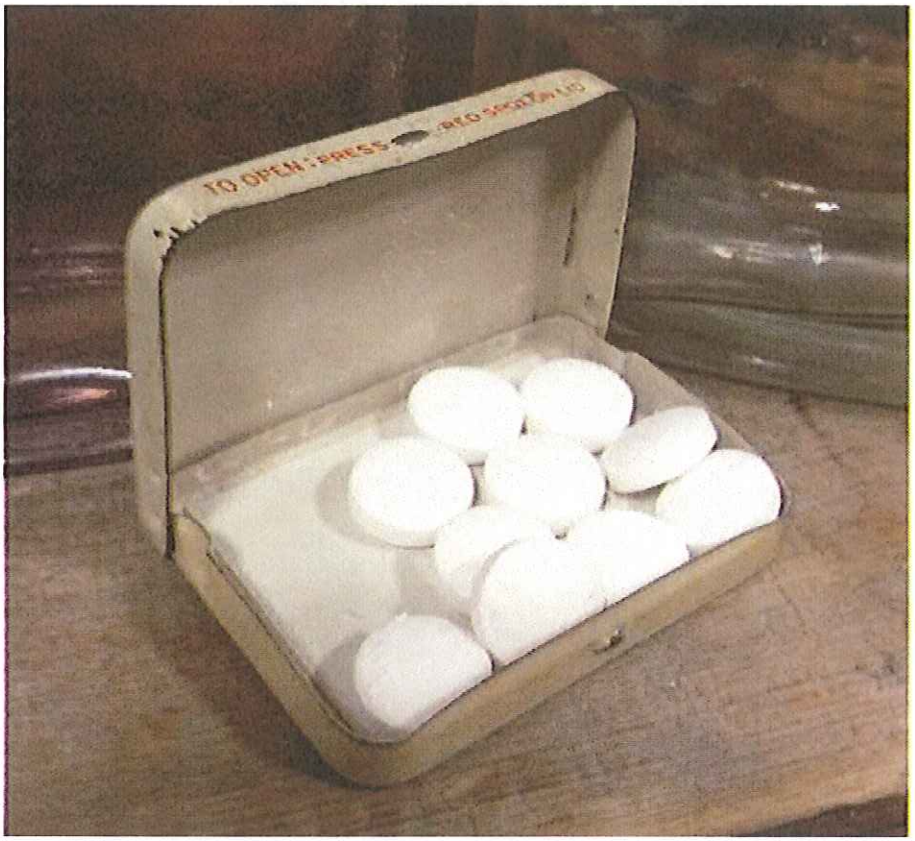

Figure 4. New aspirin tin with post-May 1940 lug (no wire) hinge (http://oncenewvintage.com/vintage-bayer-aspirin-tin/).

Figure 5. Aspirin tin modified into a rhinestone necklace.

Figure 6. 1980 Excedrin tin with wire hinge (Photograph by John Fitch).

Figure 7. Back of 1980 Excedrin tin.
(Photograph by John Fitch)

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2013 NMAC Contacts

Mail: PO Box 25691, Albuquerque NM 87125

Web Site: http://www.nmacweb.org

News Group: nmac-l@list.unm.edu

President: Amalia Kenward
(505) 243-6437
akenward@unm.edu

Vice President/Membership: Toni Goar
(505) 977-0403
tgoar@marroninc.com

Secretary: Mary Quirolo
(505) 255-1441
mrquirolo@msn.com

Treasurer: Steve Rospopo
sdrospopo@msn.com

NewsMac Editor: Bradley Vierra
(505) 323-8300
bvierra@sricrm.com

Grants: Chris Turnbow
(505) 277-5853
Chris.Turnbow@nmgco.com

Legislative: Hollis Lawrence
hlawrence@marroninc.com

Publications: Andrew "JR" Gomolak
(575) 572-3931
Andrew.Gomolak@us.af.mil

Web Master: Deni Seymour
deniseymour@aol.com