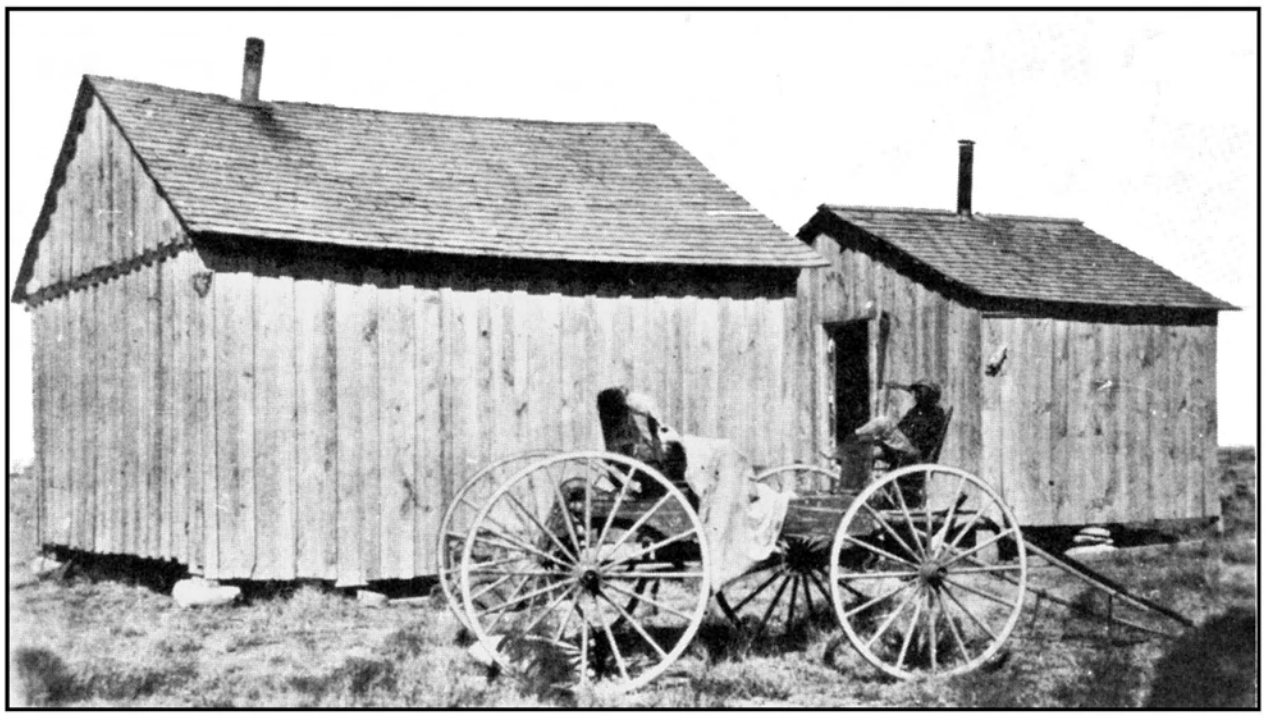
Glimpses of Late Frontier Life in New Mexico's Southern Pecos Valley: Archaeology and History at Blackdom and Seven Rivers

Regge N. Wiseman



Museum of New Mexico
Office of Archaeological Studies

Archaeology Notes 233
2001

MUSEUM OF NEW MEXICO

OFFICE OF ARCHAEOLOGICAL STUDIES

Glimpses of Late Frontier Life in New Mexico's Southern Pecos Valley: Archaeology and History at Blackdom and Seven Rivers

by
Regge N. Wiseman

with contributions by
Maisha Baton
Guadalupe A. Martinez
John R. Roney
Janet E. Spivey
Henry Walt
Natasha Williamson

Submitted by
Yvonne R. Oakes
Principal Investigator

ARCHAEOLOGY NOTES 233

SANTA FE 2000 NEW MEXICO

ADMINISTRATIVE SUMMARY

In the summers of 1996 and 1997, the Office of Archaeological Studies conducted archaeological and historical investigations at five sites along U.S. 285 between Roswell and Carlsbad for the New Mexico State Highway and Transportation Department. The sites involved two highway projects, NH-285-1(27)50 (CN 2097) and SD-WIPP-285-2(210)78 (CN 2783). The current report presents the results of data recovery investigations for the historic sites on those projects.

The sites include the Isaac W. Jones homestead (LA 89153) in the former Blackdom Community near Roswell, and the Rock Schoolhouse (LA 116473) and historic components at sites LA 38264 (four trash dumps), LA 8053 (house foundation and rock quarry), and LA 112349 (trails/roads associated with a river crossing) of the former Seven Rivers community located half-way between Artesia and Carlsbad.

Prehistoric Native American sites and components were also investigated by the Seven Rivers and Roswell-South projects. These sites—LA 8053, LA 38264, and LA 112349 of the Seven Rivers Project, and LA 44565, LA 44583, LA 116467, LA 116468, LA 116469, LA 116470, and LA 116471 of the Roswell-South Project—are reported in separate volumes.

Land status of all excavated areas of the sites covered in this report is NMSHTD right-of-way and CMEs. Funds for the excavation phase of this project were provided by the New Mexico State Highway and Transportation Department.

Seven Rivers Project:
MNM Project No. 41.614
NMSHTD Project No. NH-285-1(27)50
CN 2097
J 00343
CPRC/SHPO Archaeological Excavation Permit SE-114

and

Roswell-South Project:
MNM Project No. 41.647
NMSHTD Project No. SD-WIPP-285-2(210)78 (CN 2783)
CN 2783
C 03541/98
CPRC/SHPO Archaeological Excavation Permit SE-127

ACKNOWLEDGMENTS

Office of Archaeological Studies

The sites discussed in this report were part of two separate projects for the New Mexico State Highway and Transportation Department. Regge N. Wiseman directed both projects and Yvonne R. Oakes was principal investigator. Field staff involved in the historic studies, in addition to Wiseman, included Byron T. Hamilton, Natasha Williamson, Guadalupe A. Martinez, and David J. Hayden. Williamson, Martinez, and Hayden performed some of the artifact analyses in the field. Janet Spivey conducted archival research and interviewed knowledgeable local people in both Roswell and Carlsbad.

At the OAS facilities in Santa Fe, Williamson analyzed the Jones artifacts, and she, Spivey, and Martinez wrote their sections of the report. Warren Lieb photographed the artifacts, and William J. "Bill" Blanchard prepared the artifacts for storage at the repository. The report was edited by Robin Gould, and Anne Noble drafted the figures. Cameron Cunningham, Delinda Andermann, and Melissa Avila did the myriad payroll and administrative chores that permit the organization to function within the State of New Mexico system.

Wayne Vigil of the New Mexico State Highway and Transportation Department Archives provided the old highway project maps and drawings.

Archival Sources and Interviewees—Rock Schoolhouse and LA 8053

The following individuals and staffs of institutions and agencies provided invaluable information and assistance during the archival search and informant interviews for the Rock Schoolhouse and the historic remains at site LA 8053:

Interviewees: James Moutray, Jed Howard, Mrs. Earl (Tina) Bowers, Barbara Buckner, Bernice Boyd, and Mary Ellen Brunt
Carlsbad LDS Family History Library, especially Rick Williamson, Josephine Hendley, and Verna Reed.
Eddy County Clerk and Tax Assessor's offices, especially Karen Robinson.
Staffs of Carlsbad Public Library
Staff of Brantley State Park
Staff of U.S. Bureau of Reclamation
Artesia Historical Museum
University of New Mexico Earth Data Analysis Center
Staff at University of New Mexico Special Collections Library
Museum of New Mexico History Library
New Mexico State Records Center and Archives
National Archives, Washington, D.C.

Archival Sources and Interviewees—Isaac W. and Mollie Jones Homestead

The following individuals and staffs of institutions and agencies provided invaluable information and assistance during the archival search and informant interviews for the Isaac W. Jones homestead:

University of New Mexico African-American Studies, especially Natasha Howard and Maisha Baton
Interviewees: Hazel Parker, Florence Hamilton, Max Odell Wagoner, Ernestine Chesser-Williams, Elvis Fleming
Chaves County Clerk and Tax Assessor's offices
Historical Center for Southeast New Mexico, especially Annette Lucero

Roswell LDS Family History Center
Dr. David Gradwohl of Iowa State University, Ames
Jackie E. Shane, Patent Librarian, UNM Centennial Library
Russell Young, Dave Fazenbacker, and Jack Heath, artifact identifications
New Mexico State Library, Interlibrary Loan Department
Artesia Historical Museum
University of New Mexico Earth Data Analysis Center
Staff at University of New Mexico Special Collections Library
Museum of New Mexico History Library
New Mexico State Records Center and Archives
Ronald Scraggs, consultant on animal dung
National Archives, Washington, D.C.
Dr. Andrew Wall
Virginia Wulfkuhle, Public Archeologist, Kansas State Historical Society

CONTENTS

Figures

Tables

INTRODUCTION

Regge N. Wiseman

The need to improve U.S. 285 for the shipment of materials to the Waste Isolation Pilot Project east of Carlsbad, New Mexico, led to a series of archaeological and historical projects along the route (Levine 1996; Marshall 1997) (Fig. 1). The New Mexico State Highway and Transportation Department (NMSHTD) contracted with the Office of Archaeological Studies (OAS), Museum of New Mexico, to investigate 12 archaeological sites for two highway projects between Roswell and Carlsbad. Five of the sites had components dating to the late Territorial-early Statehood period and required historical research and interviews with local people as well as archaeological data recovery.

The archaeological fieldwork at the prehistoric as well as the historic components and sites was conducted by R. N. Wiseman, B. T. Hamilton, N. Williamson, G. A. Martinez, D. J. Hayden, and local laborers during the periods May 27-October 4, 1996, and December 2-6, 1996, for the Seven Rivers Project (LA 8053, LA 38264, and LA 112349) and July 7-October 31, 1997, and May 5-8, 1998, for the Roswell-South Project (LA 89153 and LA 116473). Janet Spivey conducted archival research and interviews periodically throughout the summer of 1996 and the summer and fall of 1997. Artifact analyses and report writing took place at the OAS facilities in Santa Fe during the winter and spring of 1998. Even though two different highway projects, Seven Rivers and Roswell-South, were involved, authorization to combine the reports of the historic sites into this volume was granted by the NMSHTD and the State Historic Preservation Office.

Land ownership and jurisdiction for the historic sites and components included New Mexico State Highway and Transportation Department (LA 89153, LA 116473) and private (later, NMSHTD; LA 8053, LA 38264, LA 112349). The last three sites are partly within construction and maintenance easements (CMEs).

Five sites are described and interpreted here using both archaeological and historical formats. One site, the Isaac W. Jones homestead (LA 89153), is near the old Blackdom townsite just south of Roswell. The other four sites are along the South Seven Rivers drainage between Artesia and Carlsbad and include: (1) the Rock Schoolhouse at Seven Rivers (LA 116473), (2) the historic component at LA 8053, (3) four trash dumps at LA 38264, and (4) a network of wagon roads associated with a river crossing at LA 112349. The work plan and research questions are described in two documents (Wiseman 1996, 1997). Certain introductory sections from those reports were modified for inclusion here. The wagon ruts and crossing were a fortuitous discovery during the fieldwork and are not reflected in the planning documents or excavation plans.

Readers accustomed to papers and reports authored by historians will find minor differences in the focus, content, and organization of this report. Some of the differences are required by the rules and regulations pertaining to the nation's cultural resource management and compliance program under which this work was required and guided. Other differences have to do with excavation data and the need to deal with them from the archaeological perspective. To this end, the historical research by Spivey collected information in an attempt to correlate the actual physical remains with the historical records, people, places, and events, as well as to provide contextual information in general.

One of the more unsatisfactory differences embodied in this report derives from a shift in philosophy about the more appropriate place to conduct the analysis of historic artifacts—in the field or in the laboratory. Martinez and Hayden were required to do their analyses in the field. Williamson, at a later date, was permitted to bring most of her materials back to the laboratory. There can be little doubt that the laboratory is preferable to field analysis because it allows greater attention to detail, reexamination of items where necessary, and consultation with recognized authorities. The results are therefore more meaningful.

Other differences (manner of resource citations, for instance) are due to the fact that this is fundamentally an archaeological project, conducted and written by archaeologists and ethnohistorians in the manner in which these disciplines do their business.

But most importantly, the reader will notice that archaeologists approach their subject from a different direction than do historians; they ask different questions and search for similar, yet different answers. This is in part dictated by the fact that the sites investigated are not chosen by intellect or interest. Rather, they lie within a highway corridor or a reservoir and must be investigated as a matter of applicable federal, state, and local laws.

The thrust of these laws and regulations is to preserve the information in these sites as part of our nation's past. This often leads to investigations of ordinary people and only rarely to the people of history—the ranchers, the financiers, the inventors, the community leaders—the people whose vision and position in society guided the nation and who are most often treated by historians.

In our work, as in so much cultural resources man-

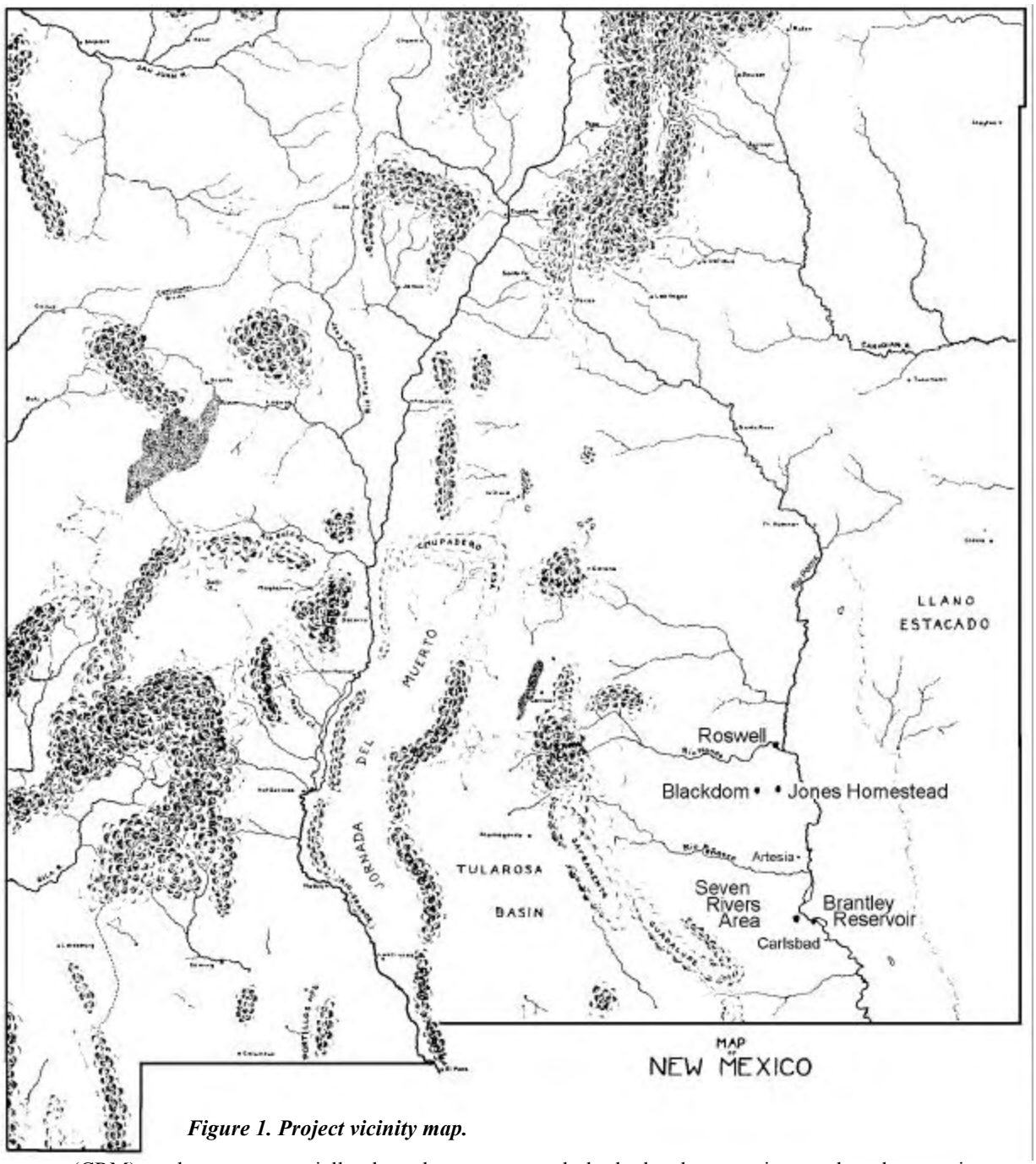


Figure 1. Project vicinity map.

agement (CRM) work, we are especially pleased to record the lives and experiences of ordinary citizens. They were the ones who provided the muscle to build the nation and the blood to protect it. And they are the ones whose lives and experiences are at greatest risk of being lost.

One of the stronger desires of the authors is to make this report available to the larger audience of historians and interested persons, rather than consigning it to the difficult-to-find "gray literature" of the CRM field. Toward this end, a deliberate attempt has been made to exclude the burdensome jargon that characterizes American archaeology of the late twentieth century. The authors welcome comments and suggestions from read - ers.

Natural Environment of the Project Region

In some ways the physical appearance of the Pecos Valley, excluding the towns and farms, has not changed much over the past 100 years, especially to the casual eye. It was, and still is, a plains-like environment with

broad expanses of grass and scrubland, and trees that are limited to water courses.

But to the scientist, the changes have been profound. As attested by reports of pioneers (Shinkle 1966), the biotic wealth of the land prior to 1900 was remarkable. Specifics about the Pecos Valley environment, documented by casual observers and scientists between the 1880s and the present, are summarized below.

The Jones homestead (LA 89153) is situated on a gentle alluvial slope of the Sacramento Plain more than a kilometer from any drainage. The nearest drainage is so small that it remains unnamed. Site elevation above mean sea level is 2,000 m (3,600 ft).

The Rock Schoolhouse (LA 116473) and LA 8053, LA 38264, and LA 112349 are situated on both the north and the south terraces of the South Seven Rivers about 3 km upstream from the confluence with the Pecos. Elevations average 1,000 m (3,300 ft) above mean sea level.

The surface geology of the overall project area consists of mixed alluvial sediments deposited by the Pecos River. In the south (Seven Rivers) project area, outcrops of the Seven Rivers and the Queens formations (Permian) occur southwest, west, and northwest of the sites (Dane and Bachman 1965).

Soils in the Blackdom area belong to the Calciorthids association (Maker et al. 1974). These thermic calcareous soils are shallow to relatively deep depending on the topographic situation. They are derived primarily from limestone but can be productive in plants and crops if sufficient moisture is present. In southeastern New Mexico, that means irrigation. Modern commercial farming in the Pecos Valley is on these soils. In the vicinity of the north project sites, the deeper soils that have farming potential are in the limited drainage bottoms next to the sites.

Soils in the Seven Rivers area belong to the Calciustolls-Rock Land association near the boundary with the Calciorthids association just described. These thermic soils are shallow and rocky and occur on "strongly sloping and rolling to very steep uplands underlain mainly by limestone bedrock" (Maker et al. 1974). Very limited acreages of soils belonging to the Pachic Calciustolls, Pachic Haplustolls, or Cumulic Haplustolls occur along the course of the South Seven Rivers, but these tracts are too small for any but garden farming.

According to pioneer accounts (Shinkle 1966), the vegetation of the Pecos Valley at the time of Euroamerican settlement consisted of a grama-dominated grassland with trees common only along certain watercourses such as the Rio Hondo. Kuchler (1964) posits that the potential natural vegetation of the north project area was creosote bush-tarbush (Larrea-Flourensia) association. Many of the minor species of this association (i.e., yucca, agave, sotol, and some species of cactus) that would have been most useful to man either do not occur or do not occur in useful numbers this far north.

Blackdom lies within Dick-Peddie's (1993) desert grassland association (mainly black grama and soaptree yucca), and the south project sites are within his Chihuahuan desert scrub association (mainly creosote and tarbush). However, he notes in his discussion (1993:131ff) that the Chihuahuan Desert in southern New Mexico has spread at the expense of desert grassland over the past 150 years, mainly because of grazing pressure. Because a very slight climatic shift also occurred during the past 150 years, the changes brought on by overgrazing could not be reversed to normal vegetative conditions (i.e., desert grassland). Whether this particular problem involves any of the individual project site locales is uncertain at this time.

In the Seven Rivers area, the potential natural vegetation is the trans-Pecos shrub-savannah (Flourensia-Larrea) association (Kuchler 1964). This association contains many of the same species as the creosote bush-tarbush association, but species patterning varies. Perhaps more importantly, the proximity of the foothills of the Guadalupe Mountains provides a greater variety and abundance of certain plant (and animal) species in the oak-juniper association (Quercus-Juniperus) to the inhabitants of the south project sites.

Prior to intensive agricultural development in the late 1800s, surface and underground water sources in the Roswell-Carlsbad region were especially productive. As far as we can tell today, the occupants of the Blackdom area lacked permanent surface water, though reliable water was available at the Pecos River 4 km to the east. The Seven Rivers sites are better situated for water because of their proximity to the Pecos River and the South Seven Rivers.

The Pecos River has several dams and water storage reservoirs between its head in the Sangre de Cristo Mountains of northern New Mexico and the project area. In the driest months today its surface water flow can cease for short periods, but in the past its flow was probably perennial.

The South Seven Rivers drains the north end of the Guadalupe Mountains. In addition, artesian springs once added significant quantities of water to this system and probably provided water to the lower reaches most of the year. Today, with the lowering of the water table, the lower South Seven Rivers channel carries water only after episodic rainstorms.

Another natural attraction of the Pecos Valley in the late 1800s was the variety and abundance of wildlife. Early pioneers describe large herds of antelope, cotton-

tails, jackrabbits, and an abundance of fish (Shinkle 1966). The Pecos River formed the western boundary of the range of the great bison herds that frequented the southern Great Plains, though small herds and individuals moved west of the river as well.

The Pecos River is also a natural flyway for migratory birds. The Bitter Lakes Wildlife Refuge is a modern-day example of brackish-water wetlands that occur all along this stretch of the Pecos River. These wetlands harbor an abundance of ducks, geese, and other species, especially during the spring and fall. The north project sites are several kilometers west of this important resource zone, but the south project sites are adjacent to the zone along the Pecos and the lower reaches of some of the larger tributaries.

The climate of Roswell and Carlsbad today is characterized by mild winters and hot summers. The mean January temperature ranges from 3.3 degrees C to 5.5 degrees C (Roswell and Carlsbad, respectively); that of July is 25.5 to 27.2 degrees C; and the yearly mean is 14.7 to 17.0 degrees C. The average frost-free season is in excess of 200 days (Tuan et al. 1973).

Today, precipitation occurs mainly in the summer. The mean normalized annual amount is 11.6 inches (295 mm), with 8.3 inches (210 mm) falling in the growing season of April through September (U.S. Department of Commerce 1965). However, as will be seen in a later section of this report, year-to-year differences in total precipitation can be extreme.

Outline of Regional History

From Spanish contact until after the American Civil War, roaming Apaches, Comanches, Kiowas, and other Plains tribes kept Euroamerican settlement of southeastern New Mexico in abeyance. Following the Civil War, westward mass movement of Americans and eastward drifting of small groups of New Mexico Hispanics led to settlement of the region. Cattle-ranching was the first economic activity to start up, but by about 1890, drought had reduced its effectiveness and overall importance.

Farming, especially in the Roswell area, provided an increasingly important base for the local economy, especially after the discovery of artesian water. Development of an irrigation system based on this water promoted widespread farming throughout the valley between Roswell and Carlsbad and resulted in a rapid influx of people.

The railroad reached Carlsbad in 1891 and Roswell in 1894, opening the region to the world. By the end of the century, the region's economy was firmly based in agriculture and stockraising. In the twentieth century, potash mining, the production of oil and gas, and for a time the military base at Roswell, brought more prosperity.

Recommended readings for more details about the history of the southern Pecos Valley within New Mexico are Fleming and Huffman (1978), Larson (1993), Shinkle (1966), and the publications referenced in each of these books.

Research Design and Data Recovery Plan

This section combines information from the two original planning documents (Wiseman 1996, 1997). The paragraphs that follow are mostly verbatim from those documents. However, certain adjustments and minor additions had to be made for readability.

Problem Orientation

Katz and Katz (1985), following on the work of Southern Methodist University (Henderson 1976; Gallagher and Bearden 1980), studied two dozen historic sites at Brantley prior to construction of the reservoir. Virtually all of these sites were Euroamerican and date to the late 1800s and early 1900s. Ranches, farms, commercial-irrigation projects, and the old town site and cemetery of Seven Rivers were investigated.

It is clear that, at least in the days prior to 1900, ranchers and farmers within a 30-km radius of the townsite of Seven Rivers considered themselves to be part of that community. LA 8053, LA 38264, LA 116349, and LA 116473 lie within 5 km of the original Seven Rivers townsite but well outside the town plat. By way of contrast, project site LA 89153 is situated "in the country," well outside any community, past or present. The artifacts are believed to represent a trash dump that presumably derived from a homestead somewhere in the vicinity. [Author's note: In the planning stage, LA 89153, the Jones homestead, was not known to be a homestead. This fact was one of the discoveries of the project research and is a good illustration of the value of archaeological investigations to historic research.]

In investigating these five sites, we are interested in methodological possibilities as well as in historical data. The ranching economy was the mainstay of late nineteenth-century southeastern New Mexico. When drought struck in the late 1880s, ranching was reduced to a role secondary to farming. In the early 1890s, the railroad entered the region, providing access to a nationwide market and opening the region to widespread land speculation and settlement. A major factor in all of this was the concurrent discovery of artesian water. J. J. Hagerman, Pat Garrett, C. B. Eddy, and others undertook an ambitious, privately funded, commercial irrigation project that, although it eventually failed, provided the impetus for commercial development of the region during the

present century.

In what ways are episodes of hopes, dreams, successes, and failures reflected at any one time in the archaeological record? As time capsules, like ship wrecks, the LA 89153 refuse, the trash dumps at LA 38264, and perhaps Midden 1 at LA 116473 should provide us with information on the activities and materials available during short slices of time during those fast-paced changes. More specifically, the dumps should reflect the goods and materials available to local residents prior, during, or after one or more of the major events of the region (end of the reign of the ranching industry, coming of the railroad, advent of commercial irrigation, movement into the modern period).

Problem Domains to Be Investigated

Problem Domain I: Confirmation of Site Function and Inventory of Remains

Before we can proceed with determining how each site fits into and informs us on the history of the region, we must document the identification or function of each. This can be accomplished by answering several questions.

LA 8053. The rock outline at this site is reminiscent of a common structure type around turn-of-the-century Roswell. There, some wooden frame buildings had skids and were moved from location to location as needed for schools, dwellings, and the like (E. C. Williams, pers. comm., 1997). The scant trash associated with this component indicates a short occupation, unless of course, some of the materials were hauled off and dumped elsewhere. The presence of purple (amethyst) glass indicates turn-of-the-century occupation.

Was this a structure foundation? Was it a homestead, or was it a structure related to the nearby conglomerate quarry? What is the full range of artifacts? Are the items reflective of a domestic or commercial source? Do the items, both individually and as a group, indicate a local subsistence economy, a wage economy, or an economy tied into the national system through the railroad?

LA 38264. All four historic components at LA 38264 are trash dumps. They are so circumscribed that they may have been dumped from wagons or early trucks. All four components have purple glass, indicating turn-of-the-century activities.

Our investigations at LA 38264 will focus on each dump as a time capsule of information. Although we cannot correlate any of the dumps with known historic habitations, we can document each dump in terms of cultural content, infer function represented at the source location, and date each dump. These data can then be correlated with the culture history of the Seven Rivers community as outlined by Katz and Katz (1985).

LA 89153 historic trash. This site is enigmatic for its size, shape, and location. The OAS team believes that it is a trash dump scattered over a long, linear area through road construction, maintenance, or safety improvements in the distant past. Our investigation will seek to determine its nature, but proving its origin, if indeed it is a trash dump, may not be possible. However, working on the idea that trash dumps are time capsules of information, we can still learn about human experience in the region through a study of this site.

Is LA 89153 a trash dump? If not, what evidence can we find to tell us what kind of site it is? What is the full range of items? Are the items reflective of a domestic or commercial source? Do the items, both individually and as a group, indicate a local subsistence economy, a wage economy, or an economy tied into the national system through the railroad?

LA 116473, Seven Rivers School. Was the site a schoolhouse? When was it established and abandoned? How wide a community did it serve? Who were the key figures (backers, teachers, etc.) in its founding and operation? Why did it cease to function? [Author's note: Project research found that this site was actually known locally as the Rock Schoolhouse.]

Part of the identification of site function will be accomplished by an inventory of the artifacts and other physical remains. Since only Midden 1 of the site lies within the highway project, most of the work will focus on it. Key questions include: What is the content of the midden (what types of artifacts and in what ratios)? Does the midden contain items that one might expect at a school? Finding items such as ink bottle fragments, chalk board fragments, childrens' items, and the like would help establish such a function. Their absence, especially if artifacts associated with other kinds of activities are present, would point to another site function and might negate a school function altogether.

In order to assure that Midden 1 belongs to the school and is not the result of trash fortuitously dumped there from some other location, it will be necessary to make at least a perfunctory assessment of the middens closer to the structure foundation. This, of course, means examining the area outside the highway project zone to a limited degree. However, that part of the site lying outside the project zone is on private land and will require written landowner permission for the work to be done. If the requisite permission is obtained and the evidence indicates that Midden 1 does not belong with the rest of site (i.e., is a trash dump), then the questions and lines of reasoning discussed for LA 89153 (below) will be applied.

The identification of LA 116473 as a schoolhouse is based on a document written by a long-time resident of

Carlsbad. While this in itself is a valuable piece of evidence, it is always necessary to check other archival sources and to interview other knowledgeable area residents for confirmation and, if necessary, reassessment.

Problem Domain II: What do the sites tell us about the regional economic situation? Were most or all goods found in the project sites produced in the region (New Mexico and Texas), or were wider markets (Midwest, East Coast, etc.) accessed? If so, what goods and regions were involved? Can we ascertain why certain goods and the produce of specific regions were accessed and others were not?

Wealthy people, no matter where they are, often have the money and connections to buy expensive, "exotic" goods from remote sources. Information about these people and their connections are often the stuff of local and regional histories. But the situation of the common man—90 percent or more of the people comprising any region—often goes unexplored and unrecorded. Thus, a vital part of the human story of a region and a nation is lost simply because it lacks the flash and pizzaz of the lives of the wealthy. Yet, we maintain that the life of the ordinary person provides the truest, and most important, view of the success or failure of a society, whether looking at the local, regional, or national level.

One way of learning about the success of the ordinary citizen is to use the same criteria by which we gauge the success of the wealthy. What kinds of goods do they obtain, where were the products made, and how difficult and expensive were they to obtain? Does the archaeological record of the average man stay the same or change for the better or worse through time? Obviously, the fortunes of any one person can change over time, and this will probably be reflected in the archaeological record. But the fortunes of that individual may not accurately reflect what happened to the local society as a whole. Consequently, in order to get an accurate picture of the trends through time, we must accumulate information on a number of sites. Thus, the information gained from the historic sites in the current project will provide pieces to a larger puzzle. However, we will not know to what degree they reflect the overall condition and course of the average person's life, but they will provide an invaluable start in the process.

Artifact Preparation for Analysis and Sampling Considerations

All items except bone will be washed in water. Animal and human bone will be dry brushed to remove clods and grains of dirt but will not be washed.

All collections from all proveniences will be sorted to general artifact type (lithic debitage, sherds, formal artifacts, etc.), tabulated, and scrutinized for rare or unusual artifact types and materials. If the items in a particular artifact class number in the tens of thousands, a 40 percent sample will be drawn for detailed analysis. Otherwise, all items from each site will be analyzed.

Where sampling is necessary, primary consideration will be given to items from critical proveniences—structure floors, bottom fills of other types of features, use surfaces, stratified contexts, datable locations, and proximity to features. The types of proveniences most likely to be excluded from the analysis are excavations for ascertaining site peripheries (for example, backhoe trenches), exploratory excavations that have negative results (do not locate activity areas, culturally meaningful deposits, or features), and surface collections.

The Analyses

Artifacts

As discussed in an earlier section, the historic artifacts will be inventoried in the field, but only those requiring further identification will be collected. The historic artifact assemblage will help date the components and permit determination of areas of manufacture. Because of the short time periods represented, especially by the trash dumps, the historic assemblages may provide insights into shifts in quality, quantities, or origins of goods made available after the railroad entered southeastern New Mexico.

Animal Bone

The animal bone analysis will provide several types of information pertinent to answering research questions. Paramount for our purposes, it will inform us about the species present, the relative proportions of species taken (the "mix"), hunting strategies, and seasonality.

Faunal remains will be analyzed for species, age, season of death, taphonomy, and evidence of butchering, cooking, and consumption. An attempt will be made to determine which elements were used by the occupants of the sites and which were post-occupational intrusives.

Plant Materials

Plant remains, as documented through pollen, microscopic plant fragments from flotation samples, and macroremains (large enough to be seen with the unaided eye), will also provide several other types of information pertinent to answering the research questions. They will inform us on wild species collected, domesticated species grown, the relative proportions of wild and

domestic species used (the "mix"), wild-plant collecting strategies, and seasonality.

The floral materials will be analyzed to lowest taxonomic order possible and plant part represented. An attempt will be made to determine which remains were used by the prehistoric occupants of the sites and which were post-occupation intrusives.

Data Integration and Interpretation

Once all of the analyses have been completed, the results will be synthesized and used to address the research questions. Pertinent sites in the region, as reported in the archaeological literature, will be compared to the project sites to gain perspective on regional culture dynamics.

Research Results

The final report will be prepared and published in the Archaeology Notes series of the Office of Archaeological Studies, Museum of New Mexico.

All collections, paper records, and photographs were submitted for permanent curation to the appropriate units of the Museum of New Mexico, in Santa Fe.

THE ARCHAEOLOGY OF THE ISAAC W. AND MOLLIE JONES HOMESTEAD (LA 89153; ENM20481)

Regge N. Wiseman

LA 89153 was originally believed to be a back-country historic trash dump that subsequently got scattered by highway construction. Survey archaeologist M. Marshall (1997) suggested that the refuse might be related to the former settlement of Blackdom, located a few kilometers to the west. He further suggested that tents or other forms of nonpermanent structures may have been present but states that no direct evidence was noted. The OAS team disagreed, suggesting instead that the site was a trash dump that was later scattered during highway construction (Wiseman 1997). LA 89153 is situated on a gentle, southeast-trending slope of the Sacramento Plain more than 1.5 km from the nearest drainage. The elevation is 3,540 ft (1,079 m) above mean sea level.

At the beginning of the data recovery program, the site appeared to consist only of glass and metal artifacts that were widely but thinly scattered over an area measuring 105 m north-south by 23 m east-west within the existing highway right-of-way (Fig. 2). The ground surface was largely barren, with variable-sized clumps of grass scattered across the site. It was clear from the surface soil characteristics that water would either stand or else sheet-flood across the site during heavy downpours. A single, small tree was present along the highway fence at the south end of the site.

It was not until data recovery excavations began, followed soon thereafter by archival work, that we discovered we were dealing with the partial remains of a homestead, not a trash scatter or brief tent occupation. Spivey (this report) learned that the buildings of two homesteads, one owned by Isaac W. Jones and the other owned by Mack T. Taylor, were placed close to one another in the vicinity of LA 89153. LA 89153 was of the right time period, but we could not be certain from its location which one of the two homesteads it represented. The OAS excavations recovered materials that indicated we were working on the Jones homestead.

During the report-writing phase for this study, the Center for Big Bend Studies at Sul Ross State University published an especially important bibliography of literature on the African-American experience in the American West (Glasrud 1998). While we have been unable to take full advantage of this resource here, it will prove invaluable to future researchers working on the

Figure 2. Excavation at the Isaac W. Jones homestead (LA 89153).

African-American contribution to the building of our nation.

At the present time, the ground surface and vegetation in the vicinity of LA 89153 are strikingly arid in appearance when compared with land only a few miles to the south and to the north. During two years (1996, 1997), when OAS crews passed the site on a twice-weekly basis, this area was the last to turn green after the coming of the summer rains and even then remained poor compared to other areas. Although we have no way of knowing for certain whether this is a short-term or a long-term phenomenon, the extremely dry character of this area may have been a special factor with which the site inhabitants had to contend.

Field Activities

Three tasks were completed at this site: (1) surface counts and collection of selected artifacts from 2,500 sq m of surface area; (2) excavation of 358 sq m (essentially all) within the largest artifact concentration; and (3) excavation and recording of one historic cultural feature. The surface artifacts were inventoried and counted using 5-by-5-m squares as the basic unit. This unit size was selected because of the large area to be inventoried (100-by-25 m) and the initial supposition that the artifacts represented a trash deposit scattered by heavy equipment during an earlier episode of highway construction.

All surface items were piled in the center of each square. Each item was segregated by artifact type, and each category was counted and recorded (glass sherds by color, metal fragments, nails, white ware sherds, coal clinkers, firearm cartridges, etc.). This information was used to create distribution and density plots to document the items by category and to serve as a guide to choose the location and extent of the excavations.

Initially, only those items requiring further identification were bagged for study in the laboratory and eventual curation. Once we realized that the site was a homestead location rather than a trash scatter, we shifted the policy to collecting all nails and a broader selection of other items from the surface as well as the excavations to document the occupation.

The surface artifact distribution and density plot (Fig. 3) revealed a 15-by-10-m area of high artifact density located between 50N and 65N. Two smaller concentrations were defined, one being between 80N and 85N and the other between 10N and 20N. The large area was selected for excavation. An unknown portion of the site extending under the existing highway was unavailable for investigation.

The 358 1-by-1-m squares were shovel-scraped to compact soil at depths varying from 3 to 5 cm below modern surface (Fig. 4). Grass-stabilized soil accumulations were removed, in whole or in part by hand, to the level of the surrounding ground surface. All fill was screened through ¼-inch wire mesh. All artifacts were collected, but coal clinkers were tabulated and discarded.

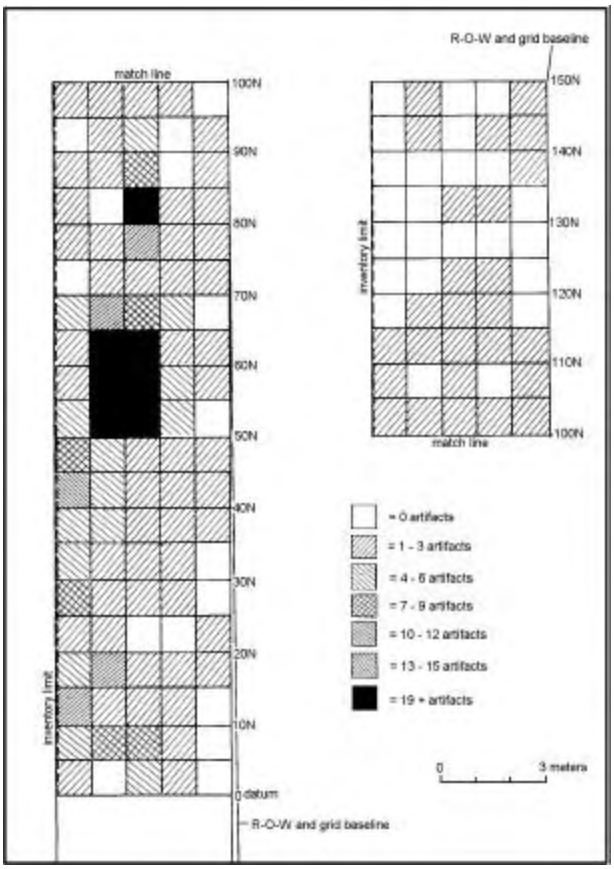


Figure 3. Surface artifact density and distribution map (data from inventory maps, continuation sheets 1-4).

The site matrix consisted of one natural stratum, an eolian deposit of tan fine silty clay. This matrix is over a compact stratum of the same material. Cultural items (white ware sherds, glass sherds, metal fragments, and fragments of formal artifacts) were concentrated on the surface, and lesser numbers of items were contained within the eolian stratum. The one cultural feature (a structure floor, Feature 1) had been laid down on a thin layer of the eolian deposit, and its upper surface was exposed at the modern ground surface at the time of our excavations.

The only deviation in the fill was the presence of a more or less continuous thin layer of gravel in squares 59N/20W, 60N/20W, and 61N/20W, just west of Feature 1. The layer was about 1-m-wide and 3 to 5 cm thick. Given the tendency for water to stand on the site following rain storms, it seems quite likely that these gravels were intentionally placed next to Feature 1 to counter muddy conditions. The use of gravel for this purpose is

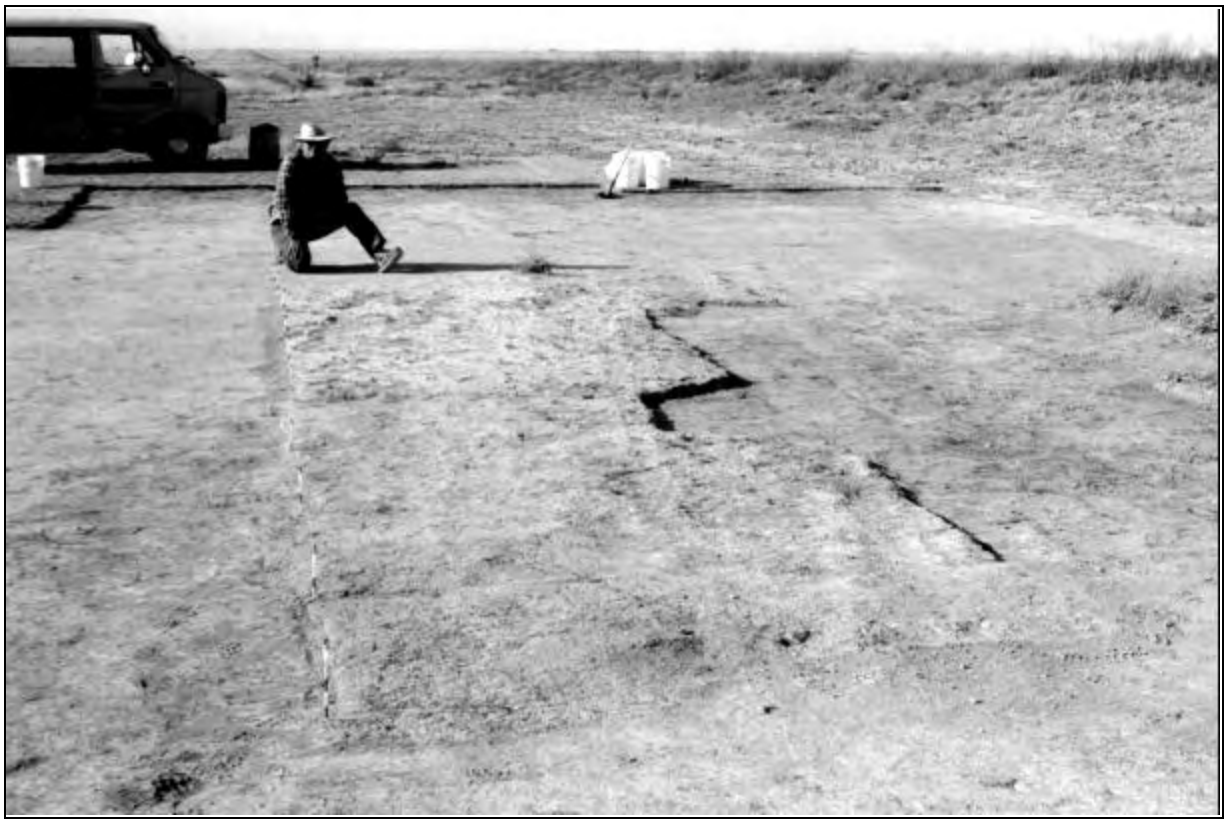


Figure 4. Nearing completion of excavation of floor of Feature 1, Jones homestead.

clearly demonstrated at LA 68189 in Roswell where large quantities were laid down to form raised pedestrian paths across low-lying ground (report in preparation).

One small, deep test was excavated in the eastern half of 59N/22E. The purpose was to explore beneath a large, dense patch of grass immediately west of Feature 1. It was felt that the fill of a storm cellar or dugout might have provided conditions conducive to the growth of this comparatively luxuriant grass. The test measured 1-by-0.5 m and was excavated to a depth of 35 cm below modern surface.

The degree of compaction of the soil increased with depth and required the use of a pick and shovel to excavate. The soil color also became lighter with depth. Both the compaction and the color indicated that we were in natural, culturally sterile soil. None of the fill was screened, but careful spreading of the fill on the backdirt pile revealed an absence of artifacts, soil staining, and other cultural indicators. The virtual absence of artifacts in this test and in the adjacent excavated squares and the presence of the gravel "pad" between the grassy area and Feature 1 suggests that this part of the site was not used much by humans, perhaps because water collected in the area after rains.

Feature 1, Structure Floor

A 1-cm-thick, irregular patch of caliche-like material laid directly on loose soil probably represented a structure floor (Fig. 5). It measured approximately 24¼ ft (7.4 m) north-south by 8½ ft (2.6 m) east-west. A slight outward bulge toward the north end of the east side probably represented the door location and measured about 4 ft (1.2 m) by about 1½ ft (40 cm).

The irregular shape, or deviation from a rectangular form, probably is the result of weathering over the intervening decades since the removal of the superstructure and abandonment of the location. The interpretation of Feature 1 as a structure floor is buttressed by the artifact, clinker, and animal dung distributions discussed below.

The description of the Isaac Jones house in the Homestead Proof (see Spivey, this report) mentions a "box" house measuring 12-by-20 ft. Allowing for attrition of the edges of the caliche through weathering, Feature 1 is the approximate size of the described house and is therefore a reasonable candidate for the floor. The term "box" presumably refers to a wood frame house, and a shingle roof is specifically mentioned. A few shingle fragments were recovered in the excavations.

However, if the Jones house was set on rocks as was

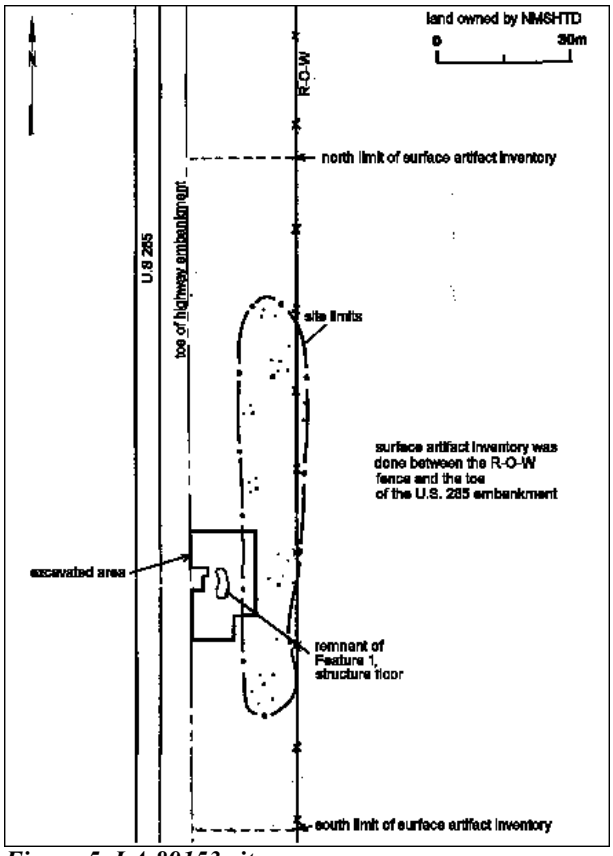


Figure 5. LA 89153 site map.

the "typical" Blackdom house shown in Figure 17, it would have had a wooden floor raised above the ground. The word sequence in the Homestead Proof includes "cellar" in a position suggesting that it was under the box structure. In either case, Feature 1 does not seem to fit the description of the Jones house. Possibly Feature 1 was part of the barn or one of the other outbuildings mentioned in the Proof. However, given the size of Feature 1 and the shapes of the trash scatter and espe - cially of the clinker concentration (discussed below), the possibility that Feature 1 was part of the house remains viable, though certainly not proven.

One other find at LA 89153 requires mention. A long bolt was found sunk vertically into the ground to its full length in 50N/20W. One of the more likely explana - tions is that it functioned as a peg to fasten down a tent or tarpaulin. This interpretation is supported by the recovery of a "hurricane" fastener and several large diameter grommets, all of which probably came from a large tarpaulin (see artifact discussion by Williamson). However, we cannot be certain just when this tarpaulin cover or "structure" was in place relative to Feature 1; did it precede Feature 1 as a temporary house while Feature 1 was under construction, or was it an add-on to Feature 1 (an extra room)?

Distribution and Patterning of the Excavated Artifacts

A wide range of artifacts were recovered from the site and are described and discussed in the chapter by Natasha Williamson. In addition, coal clinkers, generat - ed from cooking and heating were very common in cer - tain areas of the site. Numerous pieces of desiccated ani - mal dung were an unexpected find. Figures 6-9 show the density and distribution of all artifacts, nails only, coal clinkers only, and dung plotted by 1-m squares. It was hoped, and realized, that these maps would delineate the location of various activities at the site and aid in the interpretation of Feature 1. It had also been hoped that the positions of windows could be determined by the window glass distribution, but any patterning in these fragments was disturbed by the surface artifact invento - ry process since all but a few were found on the surface.

The total artifact distribution forms a large crescent that defines the north, east, and south sides of Feature 1. Although we did not fully excavate the area west of Feature 1 because of the heavy grass turf, we did exca - vate enough to suggest that the artifact density next to the west side of the feature was considerably lower than to the north, east, and south. This suggests that human activity in the immediate vicinity of Feature 1 took place primarily on the north, east, and south sides of the struc - ture and much less so on the west side.

This interpretation is buttressed by the small, east - ward bulge in the Feature 1 floor material (in Grid Square 60N/16W). We believe that this bulge represents the position of the door to the structure. Although the edges of Feature 1 are irregular because of weathering, this bulge is about 3 ft wide, an appropriate width for a door. All other "bulges" in the floor material are much larger (unless at the corners). Perhaps more telling, the distribution of the coal clinkers (Fig. 7) forms a crescent starting near this bulge and stretching southeastward, as if thrown in an arcuate pattern with the sweep of an arm. South calls this the Brunswick Pattern of Refuse Disposal (South 1977, 1979).

The coal clinkers are concentrated in a small cres - cent-shaped configuration extending southeastward from the presumed door location on the east side of Feature 1. If correct, the relationship and direction indicate that the door, from the inside, was hinged on the left (north) side and swung open in a counter-clockwise direction. Thus, standing in the doorway, the toss direction would natu - rally be toward the southeast.

The original expectation of the nail distribution was that they would conform to the shape and size of Feature 1, thereby confirming the former presence and positions of wood frame walls. The idea was that the majority of them would have been lost during the construction and maintenance of the structure. Instead, the nails were

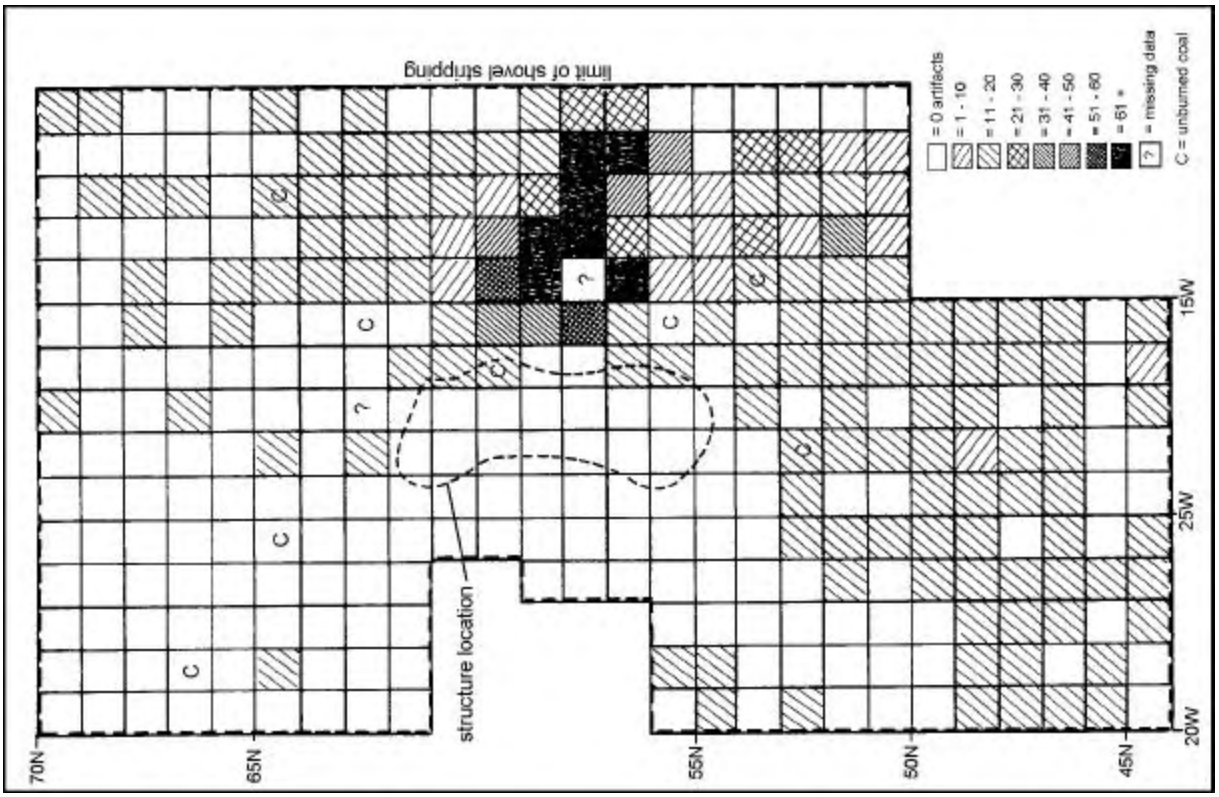


Figure 7. Distribution of coal clinkers in excavation relative to Feature 1 outline.

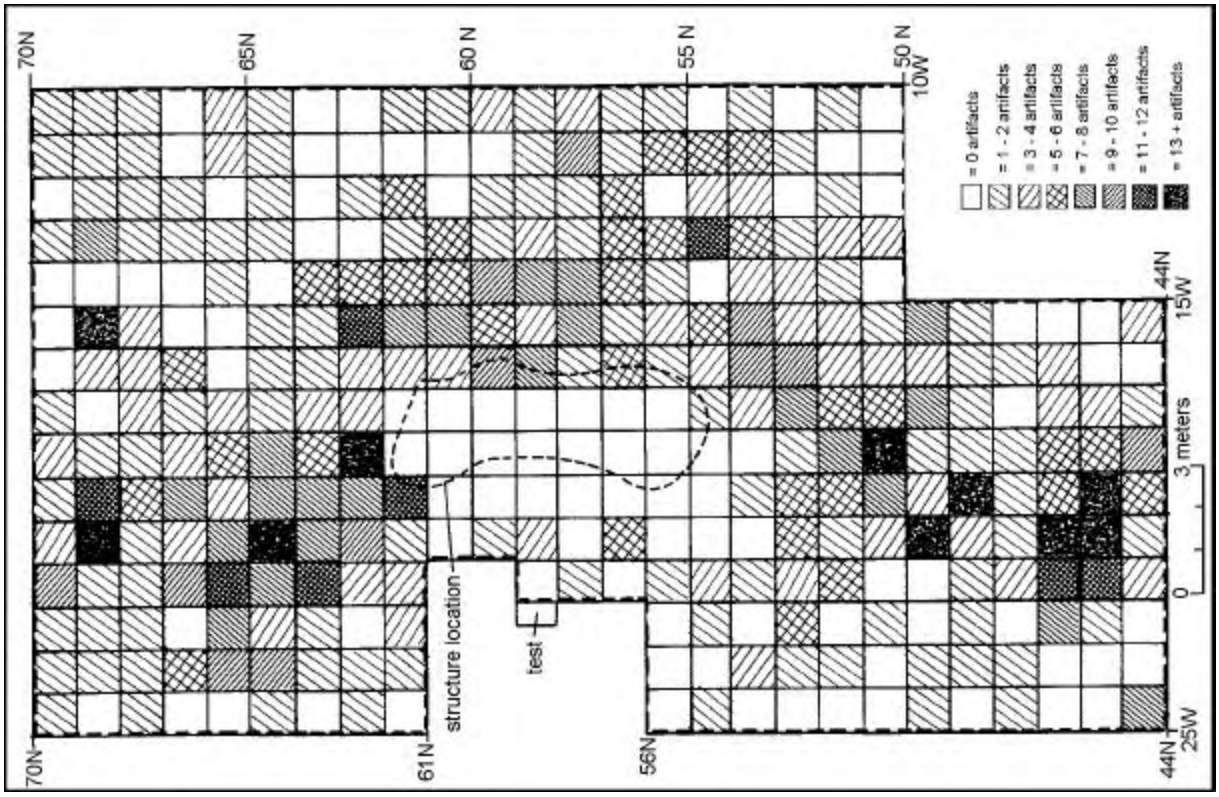


Figure 6. Artifact density and distribution in excavations.

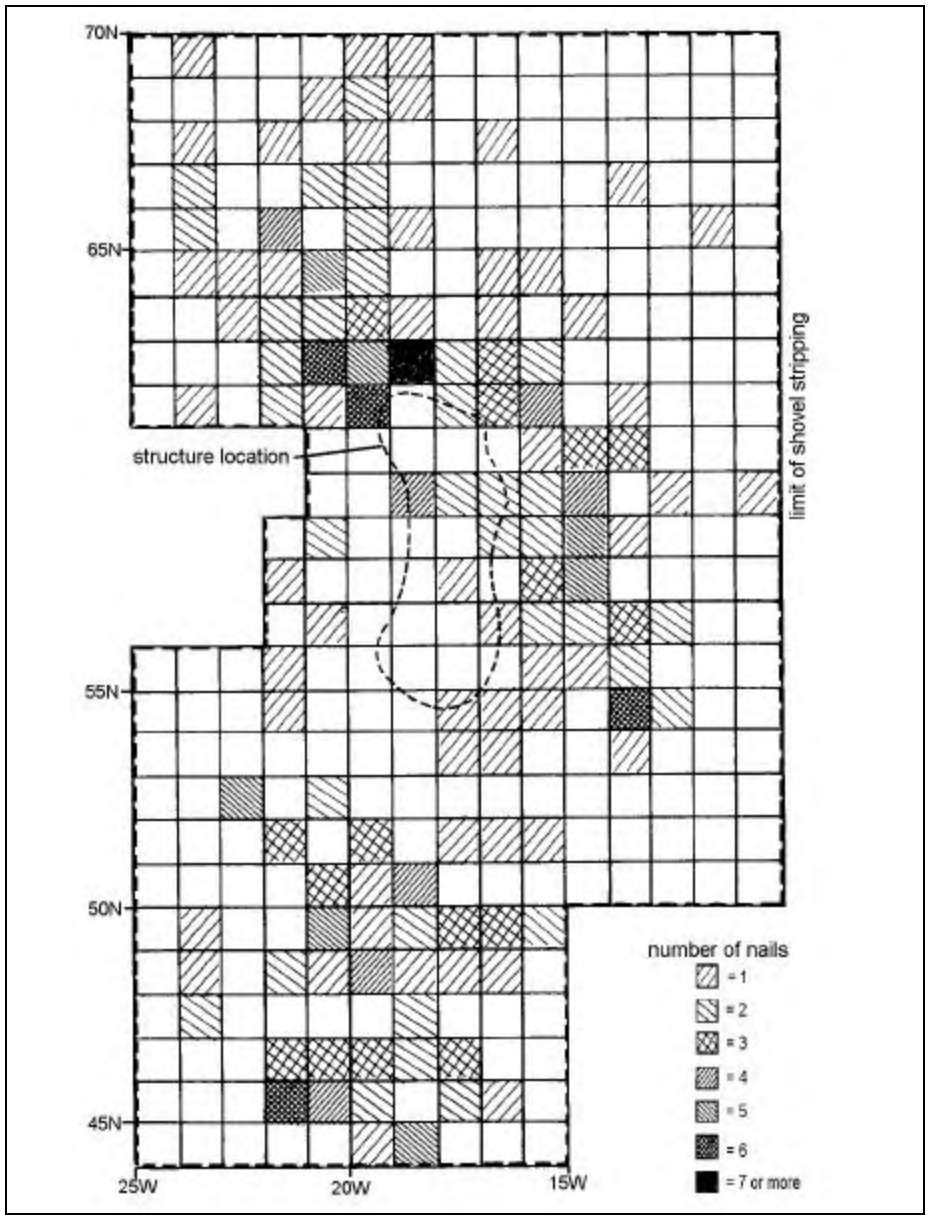


Figure 8. Distribution of nails in relation to Feature 1.

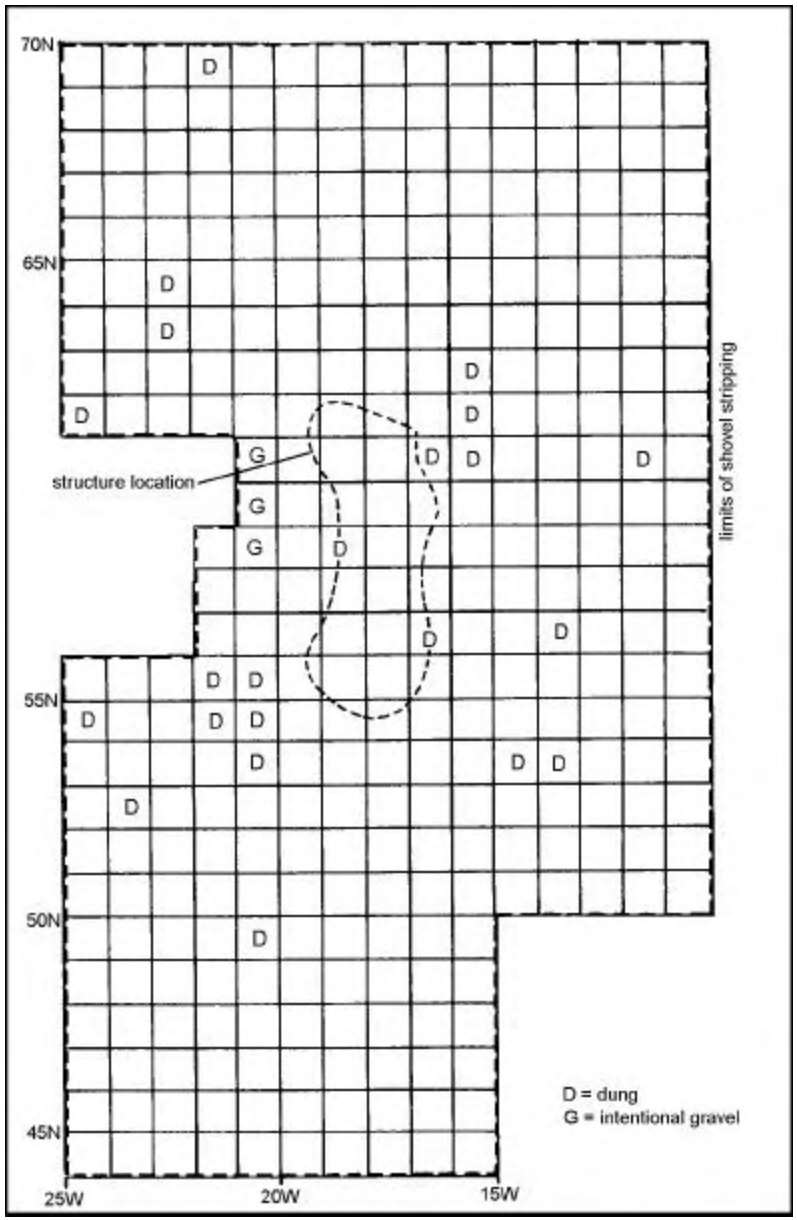


Figure 9. Distribution of dung and gravel in relation to Feature 1.

arrayed in two groups. One was along the north and east sides of the feature where they might reflect our expectations. The other grouping was located several meters to the south (Fig. 8). The size and shape of this second group was more reminiscent of a pile of salvaged lumber than of a standing structure. Few nails were found along the south and west sides of Feature 1.

And finally, several small pieces of coal were recovered in the excavations. We had hoped that their distribution would indicate the position of the coal pile. However, we found that individual fragments were found scattered in all directions except west from Feature 1. Perhaps individual coal deliveries were simply dumped in any convenient spot near the structure.

The dung pellets are the approximate size and shape of a mule's (Ronald Scraggs, pers. comm. to R.N. Wiseman, December 1997). They were concentrated in two areas of the site. The larger concentration was at the southwest corner of Feature 1, a good location for avoiding cold winds out of the north and enjoying the last rays of winter sun in the late afternoons. The smaller concentration was at the northeast corner where a mule would find shelter from the sometimes fierce, hot, sand-scouring spring winds that come from the southwest (Fig. 9). Such is the nature of the plains of Roswell.

PARTIAL DOCUMENTATION OF THE BLACKDOM TOWNSITE AND HOMESTEADS

Maisha Baton, John Roney, Henry Walt, and R. N. Wiseman

Homestead information and a map of the farm fields of the Blackdom Community were assembled as part of a study initiated by Dr. Maisha Baton. The study, entitled "The Community of Blackdom, N.M.: A Site Survey, Oral History, and Historic Review" by Maisha Baton and Henry Walt, was funded in part by a grant from the National Park Service through the New Mexico State Historic Preservation Office (Project No. 35-95-10009.09). Roney mapped the farm fields by means of photogrammetric techniques on 1940 aerial imagery obtained from the U.S. Soil Conservation Service. He then remapped the tracts onto the Peters Lake quadrangle of the U.S.G.S topographic map series. Walt assembled the homestead patents, identified the tracts they pertained to, and provided other information.

Because of time and financial constraints, only 30 homestead patents and the aerial images for that part of the homestead community lying to the west and southwest of the Blackdom townsite were procured for the original study. Nevertheless, the documentation provides a good sense of the land use in the community (Fig. 10, Table 1). At some point, it would be very useful to gather the rest of the patents and aerial imagery for the entire settlement.

The documentation currently in hand indicates that homesteads of the Blackdom community extended at least 4.75 miles west and at least 2 miles south of the townsite. The Isaac W. Jones and Mack Taylor homesteads show that the community extended at least 3.5 miles to the east. Combined, these figures indicate that the Blackdom community of homesteads spanned a distance of at least 8.25 miles east-west and 4 miles north-south. These figures should be considered minimums pending completion of the documentation.

In terms of homestead acreage, the patents in hand indicate that a minimum of 5,280 acres were proved up by Blackdom residents. If we include those farmed tracts in the western-southwestern sector for which we currently lack the patents, this figure is at least 7,040 acres. This latter figure is approximately half of the total estimated acreage for all of Blackdom (E. Flemming, as cited in Baton and Walt 1996).

In terms of land actually brought under cultivation, the figures are understandably much lower. The 19 tracts, as identified through photogrammetry, range greatly in size. The smallest tract measures approximately 200 by 600 ft (120,000 sq ft) and encompasses approximately 2.75 acres. The largest tract evidently combines acreage from two adjacent homesteads into a single field that measures approximately 1400 by 1800 ft; the actual area under cultivation in this combined tract, however, was about 1,890,000 sq ft or approximately 43.39 acres. In total, the 19 tracts represent approximately 10,507,000 sq ft or 241.22 acres of cultivated land.

Another interesting aspect of the west-southwest sector of the Blackdom homesteads is that all of the known farm tracts are restricted to the flatter land situated south of a small drainage; this land has a slope of approximately 0.60 percent. They also lie within 1.5 miles of the townsite. The unnamed drainage generally trends southwest to northeast across the west-southwest sector. The land north of the drainage is somewhat more rolling, with an average slope of approximately 0.85 percent.

Table 1. List of First Owners of Proven Homesteads at Blackdom (Figure 10)

		Legal Description				
Owner on Patent	Map No.	¼¼	¼	Section	Township	Range
Eustace Herron						
Durond (?) Herron						
Clinton Ragsdale						
Exell Ragsdale						
Clinton Ragsdale						

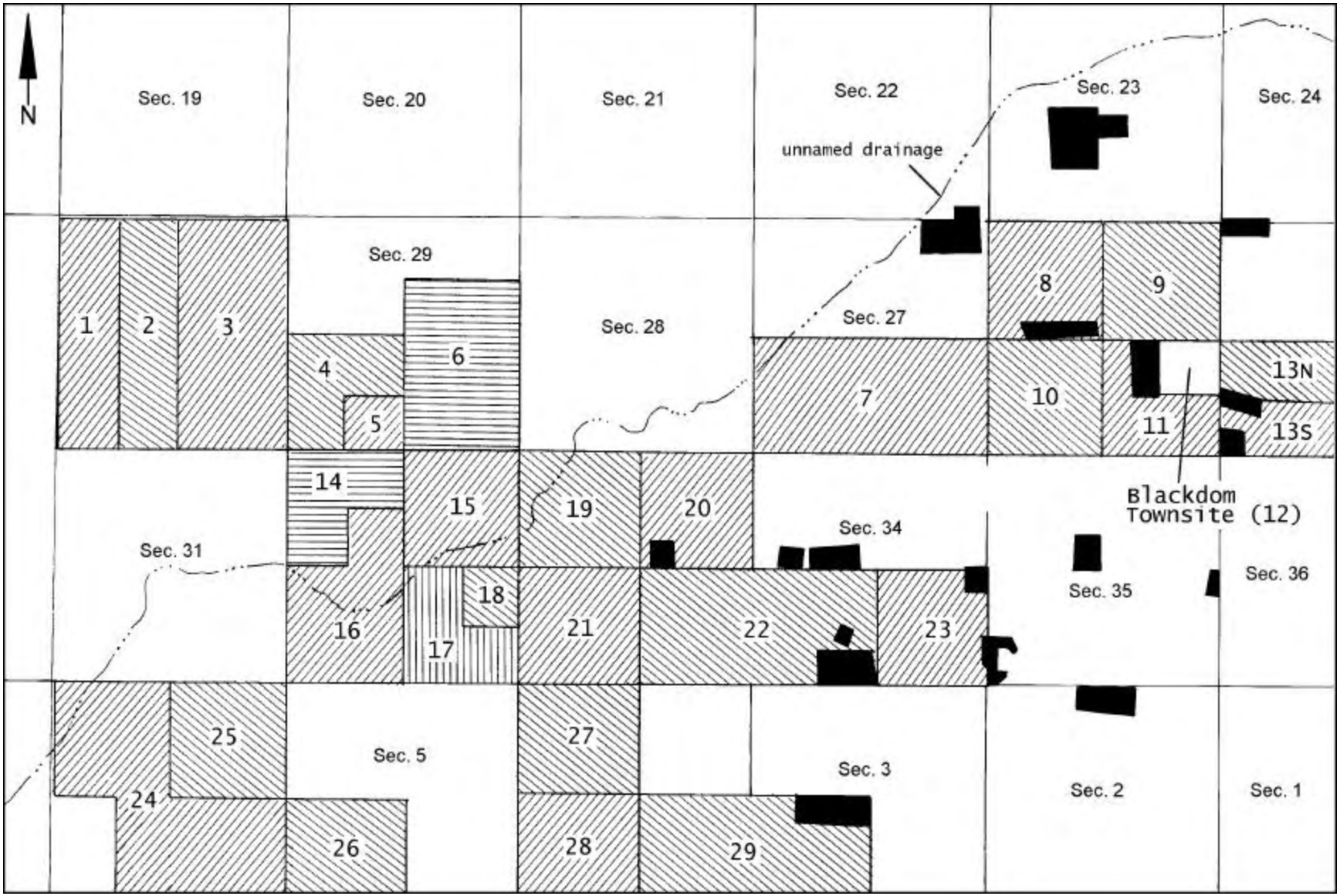


Figure 10. Blackdom townsite, Blackdom agricultural fields (black blocks). and some of the patented homestead tracts (hatchured). Numbers refer to owners as listed on Table 1. Peters Lake quadrangle.

Table 1. Continued.

Owner on Patent	Map No.	Legal Description				
		¼¼	¼	Section	Township	Range
Watkins Motley	6	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Joseph Smith	7	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Francis Boyer	8	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Ella Boyer	9	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Austriz(?) Smith	10	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Charles Fowler (?)	11	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Blackdom Townsite (Ella Boyer)	12	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Erastus Herron	13N	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Moseles Ragsdale	13S	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Clinton Ragsdale	14	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	15	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Thomas Collins	16	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	17	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Unknown	18	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Nick Gates	19	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Ezell Ragsdale	20	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Monroe Collins	21	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
George Washington	22	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Crutcher Eubanks	23	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Gilbert Wagoner	24	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
William Wagoner(?)	25	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Henry Smith	26	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
William Proffit	27	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
David Proffit	28	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Esther Herron	29	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

HISTORY OF THE ISAAC W. AND MOLLIE JONES HOMESTEAD

Janet E. Spivey

Introduction and Research Methods

The research orientation for LA 89153 included a combination of archaeological and historic methods. The historic study was conducted in the fall of 1997. During that time data were collected to determine the land-use history, especially as related to its use as a homestead site, and placement in a larger sociocultural context within the Blackdom community, which is located 16 miles south of Roswell, New Mexico.

Research methods included site visits, a study of land title records, historical documents and archival records, a review of pertinent published resources relating to the general history of the Blackdom community, and interviews with individuals knowledgeable of the homestead site and surrounding area.

Prior to conducting interviews regarding LA 89153, Bureau of Land Management (BLM) plat survey maps, Chaves County Courthouse records, the Historical Center for Southeast New Mexico, and the Roswell LDS History Center Library records were examined. The BLM and Chaves County Courthouse records showed United States Homestead Patent no. 867 was issued to ISAAC W. JONES, in 1905, for 160 acres on which the historic homestead is located (Fig. 11).

Historic Overview

Since the Blackdom community developed during the same time period as Roswell, it is appropriate to discuss the early historic development of the Roswell community. The 1867 survey of the area in which Roswell is now located does not mention any houses, shelters, or fences. According to Shinkle (1964:11), in 1868 or 1869 James Patterson built a trading post. The first references to this community call it Rio Hondo. James Patterson and Aaron Willburn both ran cattle on the Pecos River below Bosque Grande in 1866-1867. Later they relocated to a more favorable site on the Rio Hondo. Perhaps the use of this location by other trail herds influenced Patterson to establish a trading post (Oakes 1983).

In 1869, Van C. Smith and Frank Willburn, Aaron's brother, organized a general merchandise and cattle business at Rio Hondo. By 1870 Willburn and Company was building large corrals and branding pens for cattle coming from Texas (Shinkle 1964:10-12). Patterson sold his trading post to Van C. Smith in 1870, who then made it a part of the Smith and Willburn business association. Smith later renamed the area, called Rio Hondo, to Roswell, in honor of his father (Shinkle 1964:10-15; Oakes 1983:35-36).

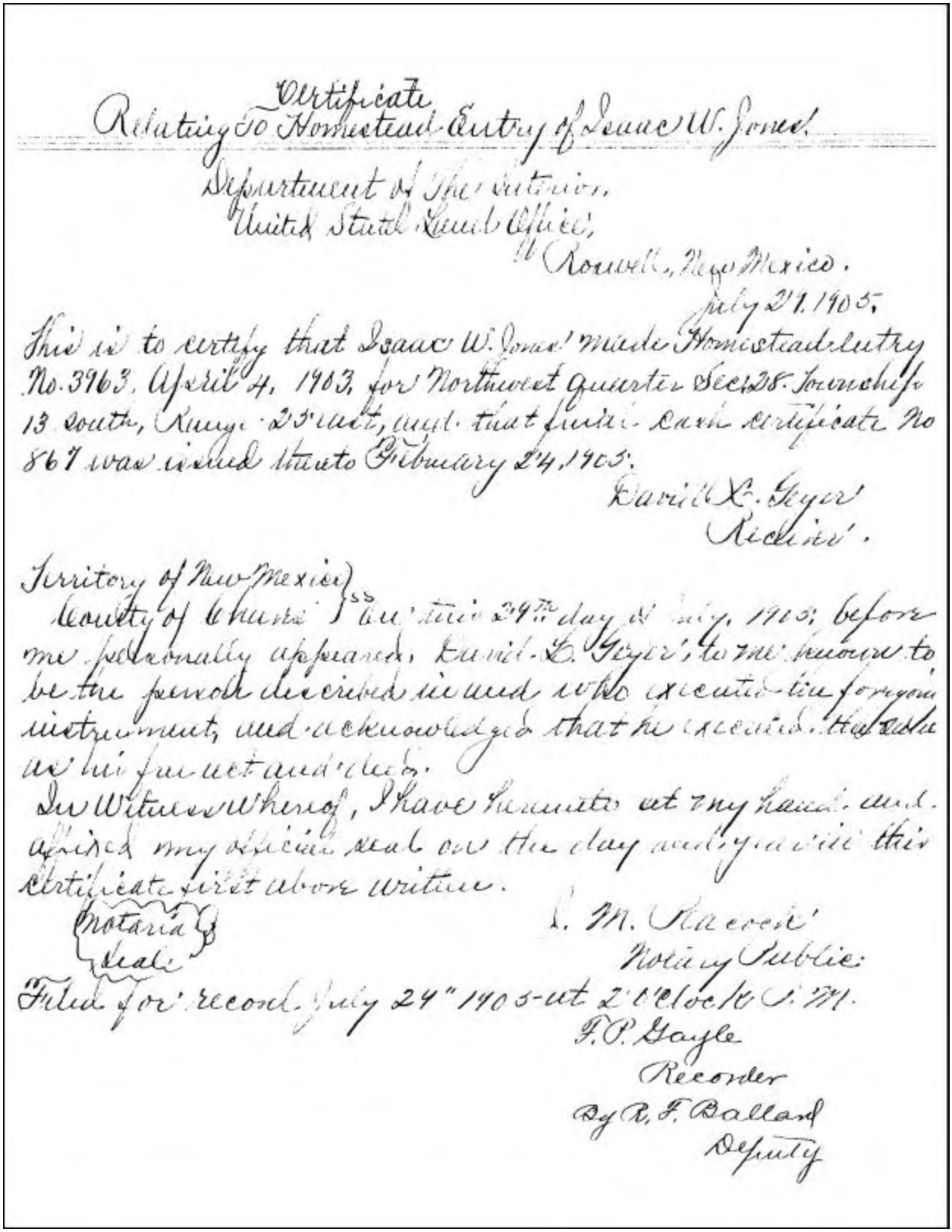
According to Scurlock (1979:178, 189), Roswell was founded in 1871. In 1872, John Chisum built one of the largest cattle empires in the Roswell area when he established the Jinglebob Ranch at Bosque Grande, about 35 miles northeast of Roswell (Sebastian and Larralde 1989:118-120). By 1875 Chisum had moved his ranching operation to the South Spring River, 4 miles from Roswell (Shinkle 1966:14-15).

Roswell remained a small trading post at the crossing of two cattle trails until 1877 when Joseph C. Lea, a former Confederate Army officer, acquired the Roswell site and began developing it (Shinkle 1964:18). The first settlers in the area were primarily farmers rather than ranchers and they settled east and southeast of present-day Roswell. They drew their water from the North and South Spring Rivers, planted trees, and dug irrigation ditches. Businesses began opening in Roswell during the 1880s. By 1885 the town consisted of nine houses, several irrigation ditches, a store, a blacksmith shop, and a hotel with a kitchen where Isaac Jones later worked. By 1892 approximately 200 people were living in Roswell (Shinkle 1966:5).

In 1886, a disastrous drought hit the region, and cattle died by the thousands. Many smaller ranches ceased to operate and some of the larger ones cut the sizes of their herds and merged their operations. Wells were drilled and windmills erected in order to provide new supplies of water, which helped the cattle business to thrive for several years. However, another major drought in 1893 damaged the Pecos Valley range land so severely that it never fully recovered (Shinkle 1966:6; Scurlock 1979:191).

In 1894 an extension of the Pecos Valley Railroad was completed from Eddy (Carlsbad) to Roswell. With the completion of the Pecos Valley and Northeastern Railroad in 1899, which extended service from Amarillo to Roswell, marketing of local products out of the region caused significant growth in the economy and population (Shinkle 1964:187-190).

The discovery of artesian water in 1890 by Nathan Jaffa, a prominent Roswell merchant, was one of the most significant developments in the growth of Roswell. Within a few years a "boom" began with the patenting of homesteads, land was developed with orchards being planted and many acres of alfalfa grown, and immigration to the Pecos Valley was promoted. By 1900 there were 153 wells in the area around Roswell alone



Certificate
Relating To Homestead Entry of Isaac W. Jones.

Department of The Interior,
United States Land Office,
Roswell, New Mexico.
July 24. 1905.

This is to certify that Isaac W. Jones made Homestead Entry No. 3963. April 4, 1903, for Northwest Quarter Sec. 28. Township 13 South, Range 25 East, and that said Cash Certificate No 867 was issued thereto February 24, 1905.

David X. Geyer
Register.

Territory of New Mexico)
County of Chaves) ss. On this 24th day of July, 1905, before me personally appeared, David X. Geyer, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

In Witness Whereof, I have hereunto set my hand and affixed my official seal on the day and year in this Certificate first above written.

Notarial Seal

L. M. Hancock
Notary Public.

Filed for record July 24" 1905 at 2 O'Clock P. M.

P. P. Gayle
Recorder
By R. F. Ballard
Deputy

Figure 11. Isaac W. Jones Homestead patent.

(Sheridan 1975:68). This was the period of time when the 160 acres was acquired and the homestead site of LA 89153 was built by Isaac W. Jones.

History of Blackdom, New Mexico

For the purposes of this report we have limited our investigations to the historic period surrounding the original community of Blackdom, New Mexico. However, a brief study of Black American history immediately after the Civil War will help place the development of Blackdom in an appropriate sociocultural context.

The Civil War began as a war for reunion but by 1863 it had also become a war against slavery. With the end of the Civil War came a time of severe hardship for the black Americans in the South. During the Reconstruction period of 1865-1877, the United States government policies failed, leaving the southern black population in extreme poverty and persecution. The former Confederate states reconstructed under President Andrew Johnson's guidance, and produced statutes known as Black Codes. The Black Codes provided for property ownership, the ability to make contracts, use of courts, and legal marriages. However, at the center of the Black Codes were regulations that constrained Blacks as wage workers. In 1866 Congress passed the Freedmen's Bureau bill and the Fourteenth Amendment to the United States Constitution. The Freedmen's bill lacked any provision related to land, which essentially meant freedom without land (Painter 1992:ix).

The South Carolina Land Commission and the Southern Homestead Act attempted to provide the freedpeople with land. The South Carolina Land Commission, created in 1869, sold land to black families but was accused of corruption and soon went out of business. The Southern Homestead Act made little difference since most freedpeople lacked the capital necessary for settling on the poor quality public land and supporting themselves through to a harvest. One of the alternatives to these miserable conditions proposed by black leaders was self-segregation in the United States within the protective confines of an all-black community (Crockett 1979:xii; Painter 1992:xi).

In 1869, the developers of Kendleton and Board House, Texas, became the post-Civil War era's first speculators to seek profits by establishing towns for blacks only. The first black settlers, who fled the upper South during Reconstruction participated in a great migration of land-hungry settlers. The majority of African-Americans who participated in this exodus came from Missouri, Kentucky, Tennessee, Texas, and Arkansas.

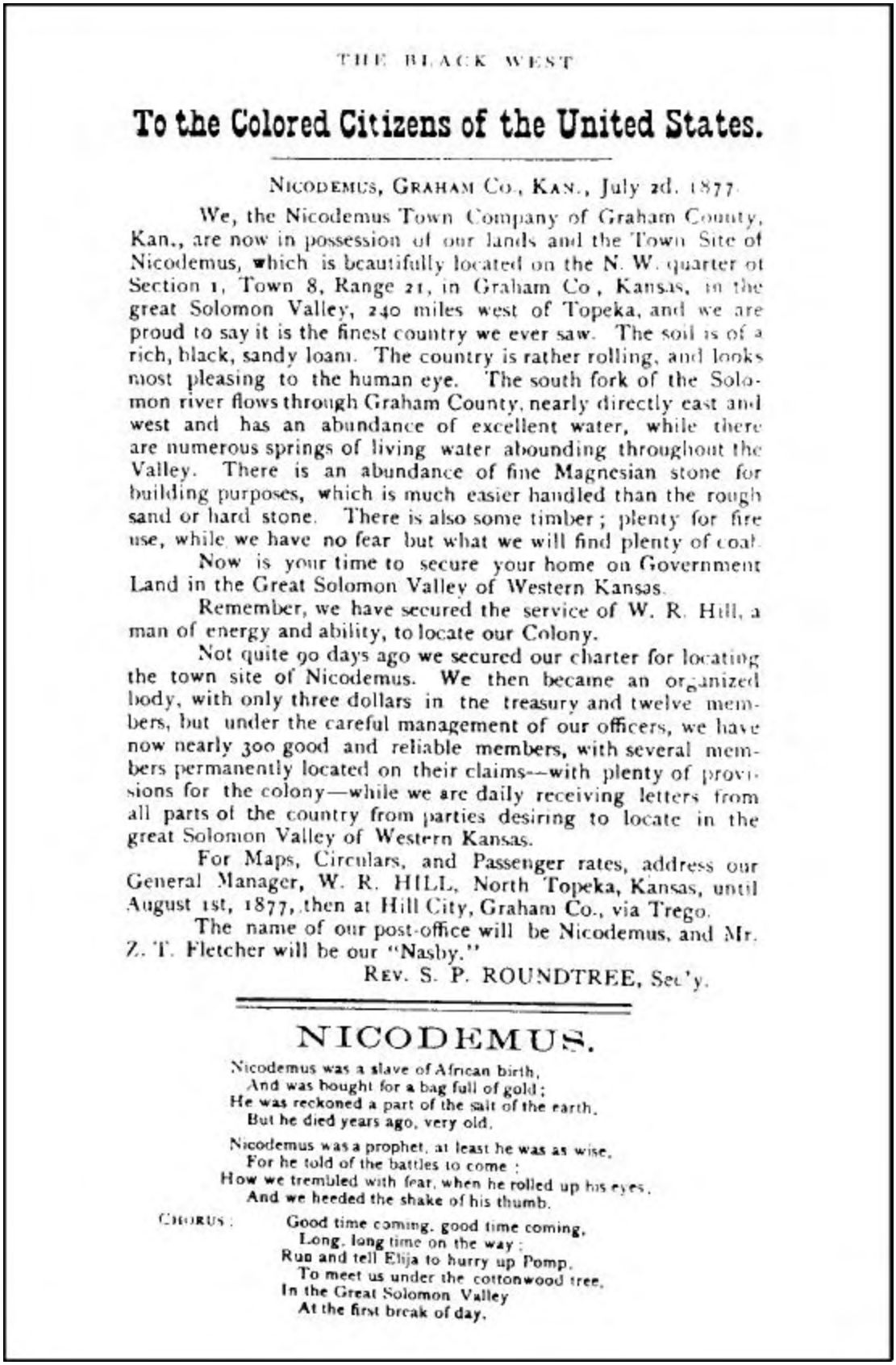
One of their first destinations was Kansas. Since the time of John Brown's militant abolitionist activities in Kansas, many southern blacks thought of it as the best place of freedom for them in the United States. Land speculators, both black and white, saw a way to profit from this migration and began to establish townsites for predominantly or exclusively black populations. During the decade of the 1870s, 9,500 blacks from Kentucky and Tennessee migrated to Kansas. By 1880 there were 43,110 blacks in Kansas (Hamilton 1991:1-7; Painter 1992:146-147).

Land speculators used a variety of methods in developing a town's population. They advertised town lots by distributing handbills, newspapers, and pamphlets to a target population. They sponsored round-trip promotional excursions that featured reduced rail fares for Easterners and offered free land for schools and churches (Hamilton 1991:5).

Nicodemus, founded in September 1877, was the first black town in Kansas and the destination of many African-American settlers during the "Exoduster" of 1879-1880. The settlement of Nicodemus was a part of a planned and gradual migration into Kansas by African-American settlers from Kentucky, Tennessee, and Missouri. The establishment of the African-American community was linked to Western townsite land speculation. Since Nicodemus was established on federally owned land within Kansas, the Townsite Preemption Act of 1844, as amended in 1867, guided its founders.

With this law the federal government had accepted land speculation as an integral part of town development in the public domain. The statute provided legal tools for developing unclaimed areas in the Trans-Appalachian West and the latitude necessary for the organization of townsite trust associations. The townsite trust association allowed any group that met the appropriate requirements of the state or territory in which it was organized to become a legal entity capable of filing a claim to public lands for the purpose of "siting" a town (Hamilton 1991:6-7).

Seven Kansans, one white and six African-Americans, formed the Nicodemus Town Company on April 18, 1877. The Nicodemus Town Company was the first trust association that would attempt to develop a town in the trans-Appalachian West for an all-black population. W. H. Smith, president, and W. R. Hill, the white treasurer, acted as the promoters and successfully recruited the Nicodemus residents, helped transport them to Kansas, and assisted the settlers in selection and purchase of lots or homesteads. On behalf of the Nicodemus Town Company, Hill filed a 160-acre townsite plat for Nicodemus with the government land office in Kirwin, Kansas, on June 8, 1877. This registration gave the townsite company the first option to buy the land at $1.25 per acre. Until they sold the land and applied for legal ownership, they did not have to invest any money into it. The only cost was to pay for the promotion of the site.



THE BLACK WEST

To the Colored Citizens of the United States.

NICODEMUS, GRAHAM CO., KAN., July 2d. 1877.

We, the Nicodemus Town Company of Graham County, Kan., are now in possession of our lands and the Town Site of Nicodemus, which is beautifully located on the N. W. quarter of Section 1, Town 8, Range 21, in Graham Co., Kansas, in the great Solomon Valley, 240 miles west of Topeka, and we are proud to say it is the finest country we ever saw. The soil is of a rich, black, sandy loam. The country is rather rolling, and looks most pleasing to the human eye. The south fork of the Solomon river flows through Graham County, nearly directly east and west and has an abundance of excellent water, while there are numerous springs of living water abounding throughout the Valley. There is an abundance of fine Magnesian stone for building purposes, which is much easier handled than the rough sand or hard stone. There is also some timber; plenty for fire use, while we have no fear but what we will find plenty of coal.

Now is your time to secure your home on Government Land in the Great Solomon Valley of Western Kansas.

Remember, we have secured the service of W. R. Hill, a man of energy and ability, to locate our Colony.

Not quite 90 days ago we secured our charter for locating the town site of Nicodemus. We then became an organized body, with only three dollars in the treasury and twelve members, but under the careful management of our officers, we have now nearly 300 good and reliable members, with several members permanently located on their claims—with plenty of provisions for the colony—while we are daily receiving letters from all parts of the country from parties desiring to locate in the great Solomon Valley of Western Kansas.

For Maps, Circulars, and Passenger rates, address our General Manager, W. R. HILL, North Topeka, Kansas, until August 1st, 1877, then at Hill City, Graham Co., via Trego.

The name of our post-office will be Nicodemus, and Mr. Z. T. Fletcher will be our "Nasby."

REV. S. P. ROUNDTREE, Sec'y.

NICODEMUS.

Nicodemus was a slave of African birth,
And was bought for a bag full of gold;
He was reckoned a part of the salt of the earth,
But he died years ago, very old.

Nicodemus was a prophet, at least he was as wise,
For he told of the battles to come;
How we trembled with fear, when he rolled up his eyes,
And we heeded the shake of his thumb.

CHORUS: Good time coming, good time coming,
Long, long time on the way;
Run and tell Elija to hurry up Pomp,
To meet us under the cottonwood tree,
In the Great Solomon Valley
At the first break of day.

Figure 12. 1877 handbill advertising Nicodemus, Kansas. (Courtesy Kansas State Historical Society)

The basic problem of the Nicodemus promoters was to locate those few blacks who had enough money to buy the lots and wanted to move from the South for socioeconomic betterment. Smith and Hill could not afford to hire agents or place advertisements in newspapers, instead they distributed circulars (Fig. 12). They mailed these circulars to African-American churches and other groups of African-Americans living in eastern Kansas, Kentucky, and Tennessee (Hamilton 1991:8-9).

Three-hundred-fifty African-American emigrants, recruited from Lexington, Kentucky, originally established Nicodemus, Kansas. During the first years of settlement the residents, lacking adequate timber, constructed dugouts. These earth structures provided insulation, but were plagued with poor ventilation, insect and rodent infestations, and lacked roofs. Later, above-ground sod houses and ultimately modest stone and frame residences were built (Fig. 13). However, by 1887 Nicodemus had two-hundred residents, four dry-good stores, at least three grocery stores, three drug stores, two millinery shops, one bank, four hotels, two livery stables, two newspapers, two blacksmith shops, two barbers, one shoe shop, two agricultural implement stores, and one land company. There was a two-story school building costing over a $1,000 and a salaried schoolmaster, J. E. Porter (Hamilton 1991:34).

In September 1887, the townspeople learned that the Missouri Pacific Railroad had rejected the township's subsidy offer, and would instead follow a route between Stockton, California, and Denver, Colorado, which would not include Nicodemus (Fig. 14). In 1888, the Union Pacific Railroad bypassed the town and created the town of Bogue, just 6 miles south of Nicodemus. Bogue had begun as a camp for the Union Pacific railroad's construction crews. It was platted by Union Land Company in September 1888. When the railroads bypassed the town, Nicodemus declined in population as most merchants relocated along the railroad right-of-way. The residents and their descendants who chose to stay helped establish Nicodemus, Kansas, in becoming the oldest African-American town in the Middle West. In 1983 the National Park Service declared Nicodemus, Kansas, to be a National Historic Landmark. As of 1986, 45 descendants of the original settlers remained in Nicodemus (Kendrick 1986) (Fig. 15).

Norman Crockett (1979) defines the African-American town as "a separate community containing a population of at least 90% African-American in which residents attempted to determine their own political destiny." Between 1865 and 1915 at least 60 African-American communities were settled. Twenty African-American communities were founded in Oklahoma alone. Two of these Oklahoma towns, Clearview (1903) and Boley (1904), were a part of the Creek Indian Nation.

Mozell Hill (1946), in his analysis of all Oklahoman African-American communities, identifies three distinct patterns on which they were all formed: (1) "Utopian" communities, established by various religious and sociopolitical sects in search of freedom, and attempting to escape the restrictions of the larger society; (2) "Boom towns" established as a result of the spontaneous rushes for gold, land, oil, and other natural wealth; and (3) "Promoters and enterprises," usually established through promotional and enterprising efforts of individuals and groups who deliberately encouraged migration into an area.

The publicity given by newspapers in Chicago, New York City, and southern cities to the early success of Nicodemus, Kansas, stimulated more speculators to become interested in developing African-American towns in and outside the South. Within a few years African-American towns were platted in several states, including Alabama, California, Illinois, Iowa, Louisiana, and New Mexico (Hamilton 1991:2-3).

The name of Blackdom, New Mexico, is included on Hamilton's (1991) list of "Black Towns in the Trans-Appalachian West" and on other lists of post-Civil War African-American towns. Today, little physical evidence remains of the community and townsite 16 miles south of Roswell, New Mexico, known as Blackdom (Fig. 16). Blackdom, as a community, existed for about 20 years after being started by African-American homesteaders around 1908. It was abandoned by the late 1920s.

According to Fleming (1975), the idea of an independent African-American community in New Mexico originated with Henry Boyer, a free African-American from Pullam, Georgia. Boyer was a wagoneer in Col. Alexander Doniphan's battalion of Missouri Volunteers, and came to New Mexico during the Mexican War with General Stephen W. Kearney in the summer of 1846. Apparently Henry Boyer liked New Mexico and went back to Georgia promoting the possibilities for a better future in the territory of New Mexico.

Henry Boyer never returned to New Mexico, but his son Francis (Frank) M. Boyer decided to follow his father's dreams. Frank M. Boyer was college-educated in Georgia and graduated from Morehouse College. In January 1900, Frank Boyer and Daniel Keyes left Pullam, Georgia, to come to New Mexico. They arrived during October of 1900. Frank Boyer worked several years on various ranches and farms and as a bellboy in a Roswell Hotel. In 1901 Boyer was able to send for his wife, Ella, and their children. The Boyer's and the Dan Keyes family (Ella's sister's family) homesteaded near each other 1 mile west of what was to become the village of Dexter.

According to Gibson (1986), Professor Andrew

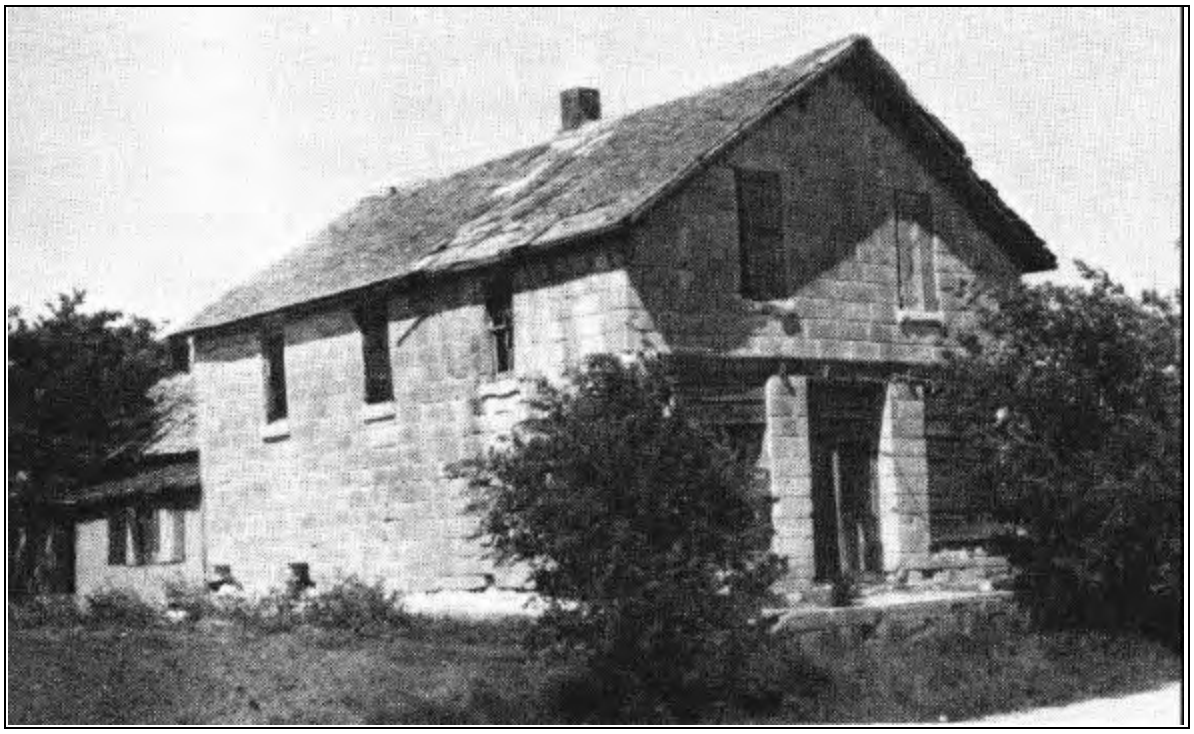


Figure 13. 1880 general store at Nicodemus, Kansas. (Courtesy Kansas State Historical Society)

Figure 14. An 1885 view of Nicodemus, Kansas. (Courtesy Kansas State Historical Society)

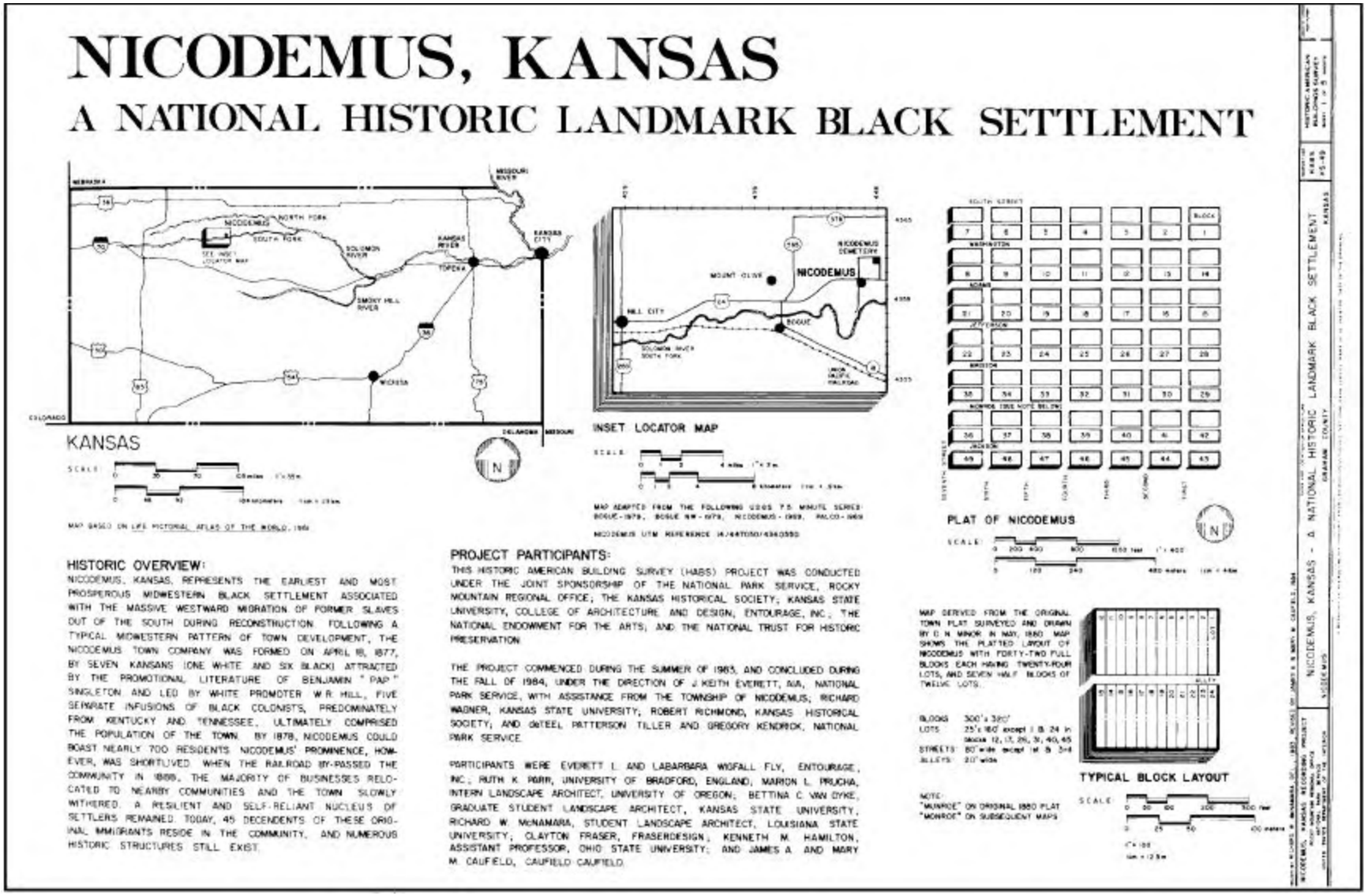


Figure 15. Historic landmark status for Nicodemus, Kansas. (Courtesy Kansas State Historical Society)

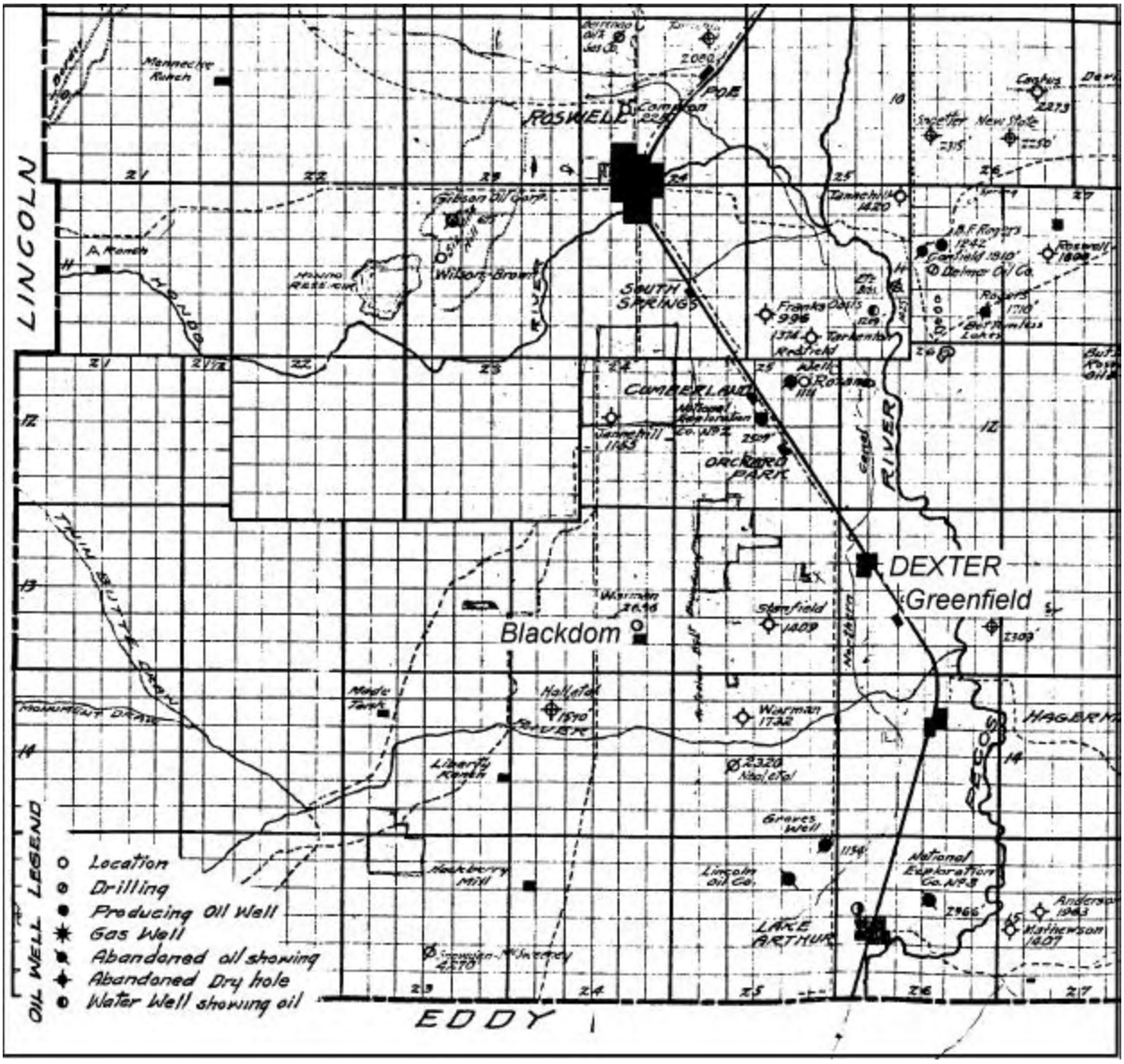


Figure 16. Eccles and Hunter sectional map of Chaves County, New Mexico, 1920. (On file Chaves County Courthouse)

Wall of New Mexico State University speculated that Frank Boyer had "planned and preconceived notion of a Black community existing of large farms and living a life of freedom before coming to New Mexico." Boyer bor - rowed money from Pacific Mutual Company to dig an artesian well. Having a good water supply, he was able to produce crops, such as alfalfa and apples. Boyer also began to advertise in newspapers and magazines in the South to attract more African-American people to the area. When they came, Boyer would help them get a house started and plant crops (Gibson 1986:46).

The Articles of Incorporation of Blackdom Townsite Company are dated September 5, 1903, and are signed by Francis M. Boyer, Isaac W. Jones, Daniel G. Keyes, and ten other people (Appendix 1, Articles of Incorporation). The object of the corporation was "to establish a Negro colony and to found and erect the town of Blackdom, and to lay off lands covered by said town into a townsite under the laws of the Territory of New Mexico; to maintain a colony of Negroes by means of the cultivation of crops, the growing of town and settlements and the general improvements of the colony; to build, erect and equip schoolhouses, colleges, churches and various educational and religious institutions for the improvement and upbuilding of the moral and mental condition of the colony." In 1904 Boyer had stationery with the letterhead reading, "Blackdom Townsite Co., Roswell, New Mexico. The only exclusive Negro settle -

ment in New Mexico," Boyer signed himself as "President and General Manager" (Fleming 1975).

Although Boyer and others were using the name Blackdom as early as 1903, it appears the community known as Blackdom was actually started about 1908. After Boyer and Keyes received title to their homesteads they mortgaged the land. According to Francis Boyer's granddaughter, Ethel Stubbs, her grandfather "always tried to help everyone and eventually became overextended on his mortgages and the banks foreclosed. After 12 years in the Dexter area, Boyer lost his farm and artesian well and had to resettle on a tract of land that was Ella's Desert Land Claim near the Blackdom townsite. Mrs. F. L. Mehlhop (n.d.) stated in As We Remembered It by Dexter Old Timers that "the white community in and near Dexter strongly discouraged the Black settlers from homesteading so near Dexter and encouraged them to move further west to build their own community."

Fleming (1975) states that the community of Blackdom consisted of scattered farmsteads involving some 20 families claiming about 15,000 acres of land (Fig. 17). In the beginning the settlers raised apples, lettuce, tomatoes, and other vegetables thanks to several good rainy years. Blackdom residents worked as laborers on the railroad or hired out as cowboys and ranch hands. A one-room, eight-grade school was built in 1909, and Williams (1997) states that Chaves County school records indicate the school was in operation with G. W. Malone as teacher from 1915 to 1920. The schoolhouse was a one-room structure built on a concrete foundation. It had a pitched, shingled roof and clapboard siding with ornate trim across the top. On top of the building was a bell tower and underneath was a storm cellar. The school building was also used for church services and community gatherings (Figs. 17 and 18).

Many of the homesteaders were experienced farmers but unaccustomed to the lack of rain and semi-arid conditions. The cost of drilling an artesian well was beyond the reach of most settlers and Blackdom was too far west and elevated from the waters of the Pecos River to tap into the water for irrigating or the ditches for drainage. This meant they had to depend on dry land farming. Many families had windmills and were able to raise crops, chickens, and hogs for their own use; however, most of the men had to hire out to white farmers in the Dexter area in order to support their families.

By the 1920s so many artesian wells had been dug in the Pecos Valley that the water stopped flowing. A law was passed that prohibited drilling new wells. Around 1916 worms destroyed most of the apple crop. These combined factors caused people to leave because there was no way to make a living. In spite of the adverse conditions, the plat of the townsite of Blackdom was filed by Frank and Ella Boyer in 1920. The townsite consisted of 40 acres divided into 166 lots that were 35 ft by 100 ft (Fig. 20). However, by 1921 the Frank Boyer family moved to Vado, a town south of Las Cruces, New Mexico, and purchased 640 acres (Gibson 1986).

Even though school records indicate the Blackdom school was in existence as late as 1928 with L. Wagoner as the teacher (Williams 1997), Blackdom was virtually abandoned by the end of the 1920s.

History of the Jones Homestead

A brief land-use history of LA 89153 was compiled from archival records, such as Homestead Patents from the National Archives in Washington, D.C., historical documents, land title records, and interviews with knowledgeable individuals who had lived in the Blackdom community and surrounding area.

In the process of researching land records concerning LA 89153, it was discovered that two land transactions were conducted so close together that it would have been difficult to determine the correct land ownership without the archaeological artifact inventory. Isaac W. Jones filed a homestead entry application on April 4, 1903 for 160 acres on the [redacted] Township 13 South, Range 25 East. Mack T. Taylor filed a homestead entry application on September 8, 1902, for 160 acres of the [redacted] The LA 89153 archaeological artifact inventory contained children's toys (see Williamson, this report). Since the Homestead proof documents of Mr. Isaac Jones stated he was married with one child, and Mr. Mack Taylor stated he was unmarried and mentioned no children, the conclusion was drawn that LA 89153 was the Isaac W. Jones homestead. Also the fact that LA 89153 lies within the Jones homestead legal description of the [redacted] helps confirm that it is the Isaac W. Jones homestead.

The earliest land transaction for use of LA 89153 comes from the Bureau of Land Management and Chaves County Courthouse records that showed homestead patent no. 867 was issued to Isaac W. Jones on July 18, 1905, for 160 acres on which the homestead site was located. According to these records, on April 4, 1903, Isaac W. Jones filed a homestead entry application for 160 acres on th[redacted] Township 13 South, Range 25 East.

The 1900 Chaves County Census records identified Isaac W. Jones as a colored man who lived on Kentucky Avenue in Roswell, New Mexico. He was forty years old and born in Texas (although the 1905 Homestead Patent stated he was born in North Carolina). He had been married to his wife Mollie for 10 years. They had a six-year-old son, who was born in Texas in 1894. Mollie Jones was thirty years old and also born in Texas. The 1900

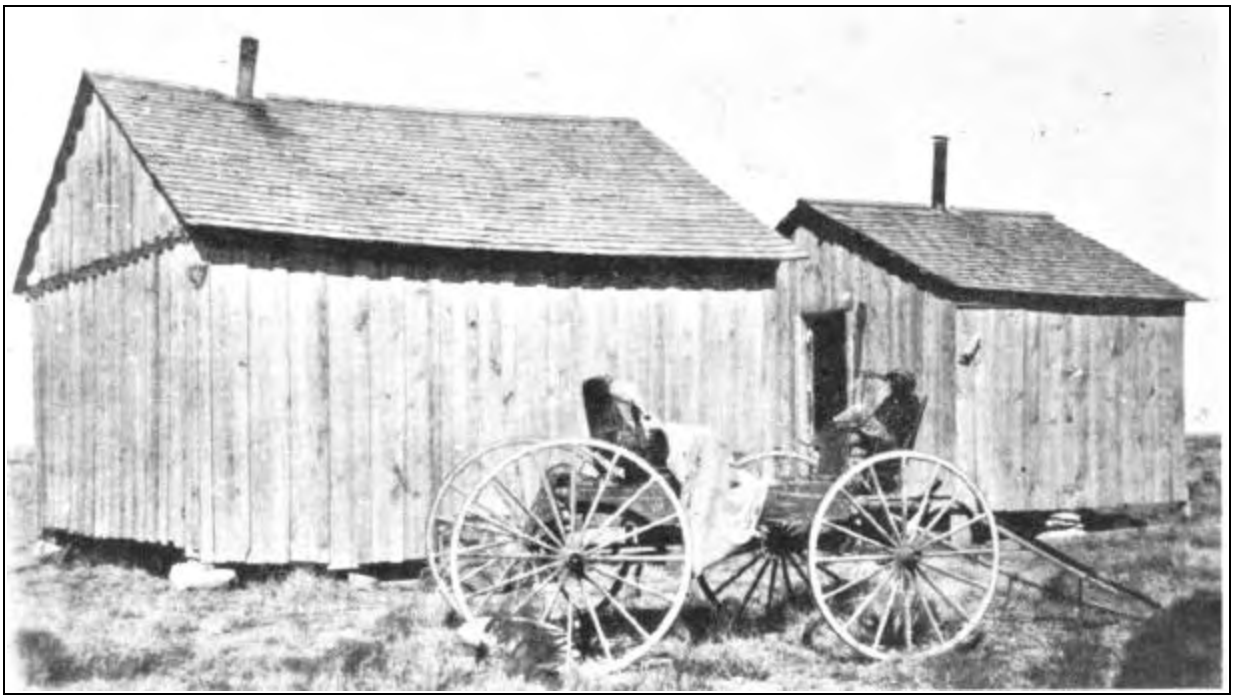


Figure 17. David Profitt house, a typical house in Blackdom, New Mexico.

Figure 18. Blackdom Baptist Church, now located in Cottonwood, New Mexico.

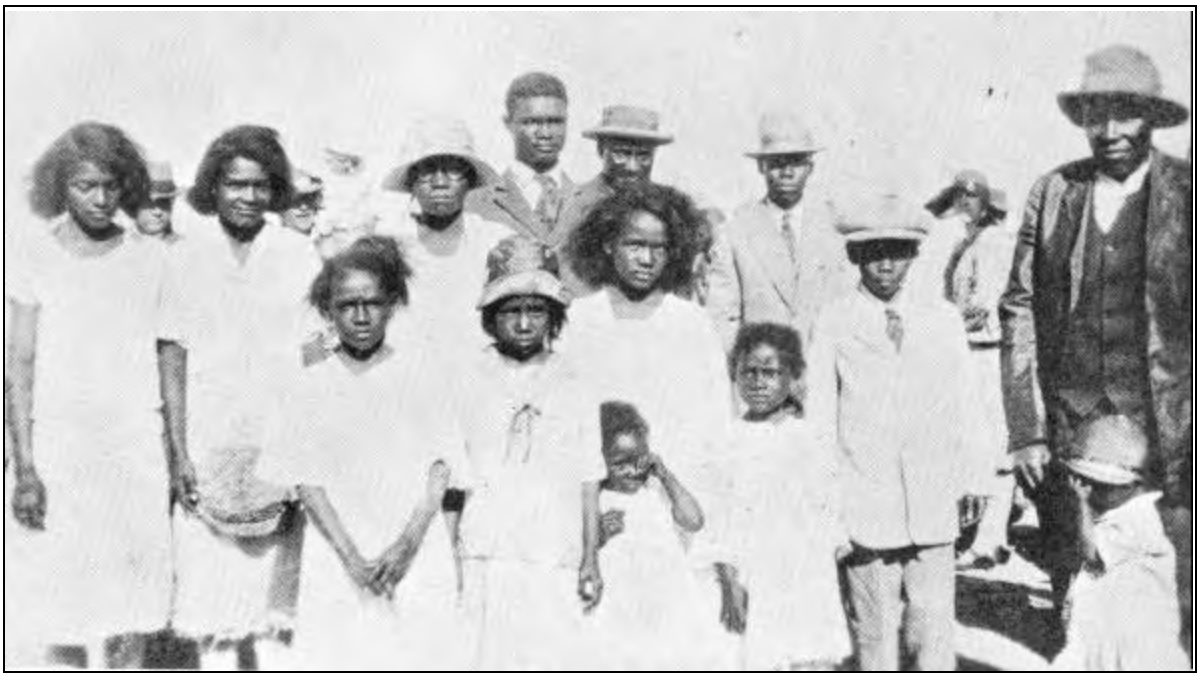


Figure 19. Sunday school class at Blackdom Baptist Church, ca. 1925. Standing, back row: Johnnie Taylor Mosley, Ruth (Taylor) Sherman, Mary Ragsdale, Ira Taylor, Clinton Ragsdale, Oscar Oliver; middle row: Evelyn Taylor Plousha, Susette Ragsdale, Vera Taylor Revere, Hazel Taylor Parker, Ulyses Ragsdale, Isaac Ragsdale; front row: Alice Taylor Jackson, Cynthia Ragsdale Brown.

Census stated that Jones owned the house on Kentucky Avenue and worked as a cook.

The Testimony of the Claimant (Isaac W. Jones) in the 1905 Homestead Proof stated that Mr. Jones was 45 years old and born in North Carolina (the 1900 Chaves County Census recorded Jones being born in Texas). Mr. Jones stated he had made homestead entry no. 3963 at Roswell on April 4, 1903, for the northwest quarter of Section 28, Township 13 South, Range 25 East (160 acres). Jones built a house in August and September of 1903, and established actual residence "therein on the first day of October 1903."

The house is described as "a box house 12 by 20 feet, shingle roof, floor, cellar, 2 doors, 2 windows, barn, well, out-buildings, corral and the entire tract fenced for a total value of $1,000." His family consisted of a wife and one child. Jones cultivated 6 acres and raised one crop. He used the balance of the land for grazing purposes. Homestead patent no. 867 was dated as approved June 22, 1905, and the patent was granted on July 18, 1905. Chaves County Clerk's Office records showed a Warranty Deed by Grantors Isaac W. and Mollie Jones to Grantee C. L. Tallmadge for the NW¼ Section 28, T13S, R 25E. The Date of Instrument was April 8, 1905, and the deed filed March 9, 1906.

Fleming and Huffman (1978) in "Roundup on the Pecos" state that "major factor in the settlement of the Dexter-Hagerman-Lake Arthur area was land promoters. C. L. Tallmadge 'Southwestern Lands' was one of the significant promoters." The 1904-1906 Roswell City Directories showed C. L. Tallmadge listed his occupation as Immigration, with an office on the Texas block.

Isaac W. Jones's association with the Blackdom community is documented in the Articles of Incorporation for the Blackdom Townsite Company dated September 5, 1903. Mr. Jones's signature is second after Francis M. Boyer (Appendix 1). Unfortunately, at the time of this research, no documents relating to Isaac W. Jones after 1905 have been located. The 1910 Chaves County Census did not show Isaac W. Jones or his family living in Chaves County. Also, Jones was not listed in the Roswell City Directory from 1904 through 1916. Therefore we are unable to locate Jones after he sold his land to C. L. Tallmadge.

None of the informants were familiar with the Isaac W. Jones family, even though the informants or members of their families had been residents of Blackdom. The fact that Jones was in Roswell at an early date (1900) and possibly left before 1910 makes it difficult to find anyone who would remember him.

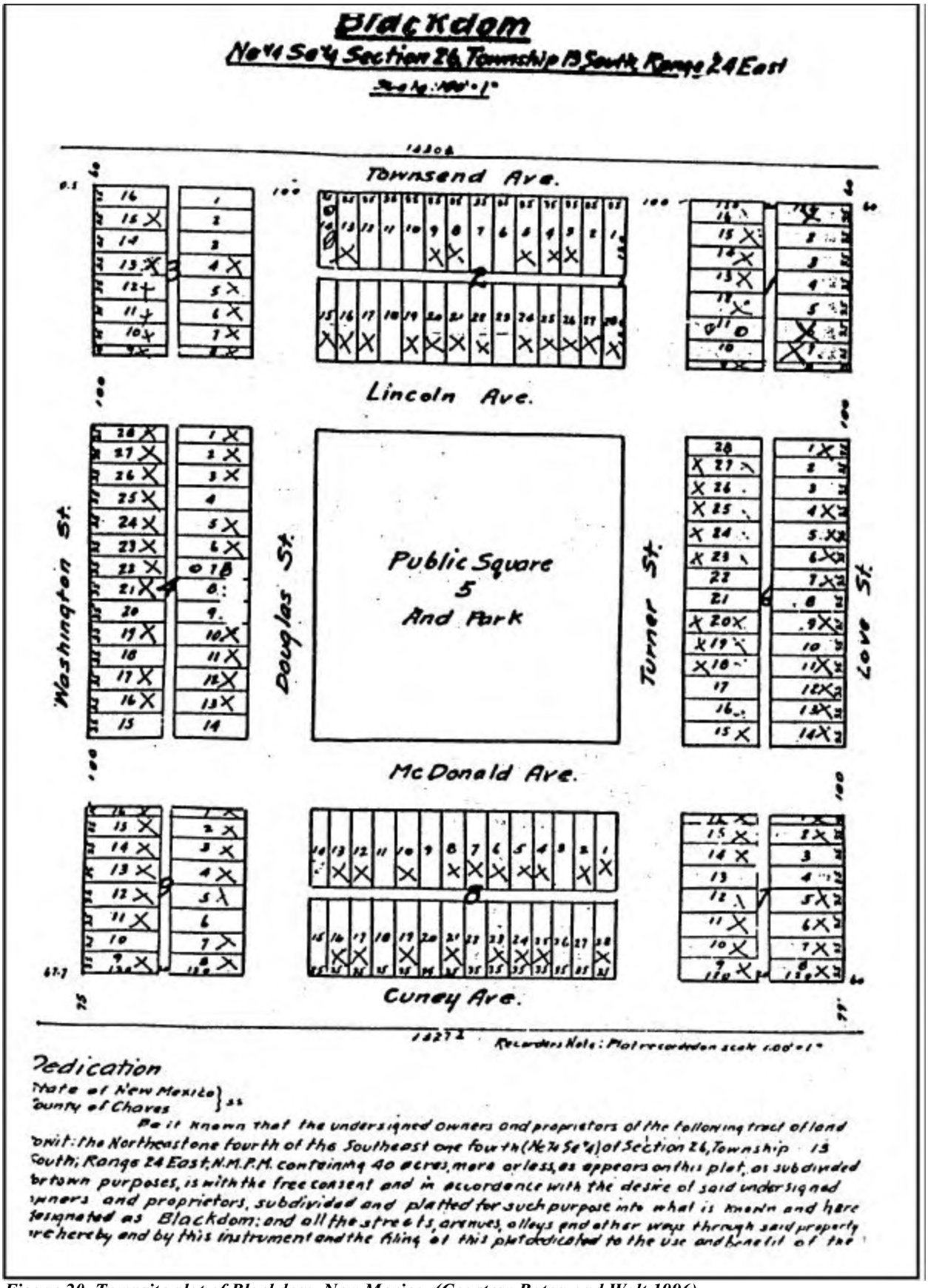


Figure 20. Townsite plat of Blackdom, New Mexico. (Courtesy Baton and Walt 1996)

Artifacts and Other Remains from the Jones Homestead—LA 89153

Natasha Williamson

About 4,000 artifacts were recorded at the Jones homestead; however, 1,996 of these were coal clinkers and will not be considered further. Due to the peculiarities of the analysis system, coal and clinkers are considered part of the unidentified category; to include half the artifacts here merely biases the statistics. Some artifacts were noted in the field but not collected or subjected to further analysis. A total of 1,962 artifacts were analyzed. The results are found in Table 2. Interesting artifacts were photographed. Unweighted average beginning and ending dates for the site are 1884 and 1923.7.

The Jones homestead application stated that there was a "box house 12 by 20 feet, shingle roof, floor, cellar, 2 doors, 2 windows, barn, well, out-buildings, corral and entire tract fenced. Total value $1000." At the Jones homestead, the only indication of the structure location was an area of lime that may have underlain a floor, and two shingles. There is also some evidence, that, instead of a dugout, the first structure at the site may well have been a tent, as indicated by several large grommets, a large carriage bolt inserted vertically in the ground and a type of fastener used on heavy cloth. There were a few areas of grass that may have overgrown previous animal enclosures or structures. One of these was tested, hoping to find the cellar, but the effort was abandoned after digging through a meter of very hard, sterile soil.

We do not know for certain where on the homestead the house was actually located. The major portion of LA 89153 lies under the existing highway. Nor do we know what happened to the house. There are several possible scenarios. Sometimes homestead shacks were just put on skids and moved to the next site. Or the house may have been demolished by either the new owners or the neighbors, who typically scavenged anything of value. The amount of window glass, while not large, does suggest that the house lasted long enough to have the windows broken out. Many of the nails had been pulled, suggesting some sort of demolition at the site. An alternative suggestion is that Mr. Jones, in his capacity as cook at a Roswell hotel, may have had access to packing crates that he recycled as either building material or firewood.

In the discussion, when field specimen (FS) numbers are given, the first number refers to the provenience of the sample and the second number, following the slash, refers to the order in which the artifacts from that provenience were analyzed. In general, the specific provenience is not especially critical within this site, and will not usually be referred to. No artifacts were found deeper than 5 cm below the present ground surface.

Table 2. Inventory of Excavated Artifacts, Isaac W. and Mollie Jones Homestead, LA 89153

Artifact Class/Type	No.	Pct.
Glass:	**589**	**16**
Clear, from unknown	562	
Clear, bottle	1	
Clear, thin	1	
Clear, thick	1	
Clear, vial	6	
Purple, from unknown	9	
Purple, bottle	1	
Purple, bottle, thin	1	
Purple, thin	1	
Aqua	1	
Blue	1	
Brown	2	
Green (melted)	1	
Milk glass	1	
Dishes, etc.	**55**	**1**
White ware, unspecified form	48	
White ware, plate rim	3	
White ware, cup rim	1	
Porcelain	2	
Terracotta(?) ware	1	
Cartridges, etc.	**28**	**1**
Shotgun shell base	8	
.22 caliber	8	
.22 caliber, short, misfired	1	
.22 caliber, long, live round	1	
.38 caliber	4	
.38 caliber, bullet	1	
Large caliber rifle	2	
Unspecified cartridge	4	
Metal Items and Fragments	**168**	**4**
Baking powder lid	1	
Bolt	1	
Bolt and nut (rusted together)	1	
Bolt, carriage	4	
Boot eyelet	1	
Boot rivet	1	
Bottle cap, small	1	
Brass item	2	
Bucket bail	1	
Buckle, belt	1	
Buckle, garter belt	1	
Can fragments	71	
Can hole-in-top	1	
Can, sardine	1	
Canning jar, lid and mouth	1	
"Grill work" fragments (unknown)	7	
Horseshoe	1	
Miscellaneous, unidentified	7	
Grommet, tent	1	
Kerosene lamp burner (flat)	1	
Lid, pushtop can	1	
Lid, unspecified container	1	
Nut, square	1	
Ornament	2	
Part, machine?	1	
Screw, wood	1	
Spike	1	
Spring, equipment	1	
Staples (fence) 1.75 inch	7	
Staples (fence) small	2	
Stove parts and fragments	10	
Strip, metal segment	3	
Strip, metal with nail	1	
Strip, metal ornamental with pin nails	1	
Strip metal clip	3	
Tack	1	
Toy part	1	
Washer	1	
Wire, segment	18	

Table 2. Continued

Artifact Class/Type	No.	Pct.
Wire, segment, heavy gauge	3	
Wire, clip	1	
Wire tie	1	
Miscellaneous Materials	**31**	**1**
Buttons	2	
Buttons, overall	4	
Connector, electrical(?)	1	
Doll fragment, porcelain	2	
Leather	2	
Leather rubberized (coated)	1	
"Mystery objects"	2	
Unknown rubber/plastic	3	
Unknown, black	1	
Unknown, white	1	
Paper fragment	1	
Pencil, ferrule	2	
Pencil, lead	1	
Slate "blackboard"	8	
Building Materials	**311**	**8**
Nails (n = 292)		
Unspecified size	276	
Square	6	
1.75 inch	5	
1.875 inch	1	
2.125 inch	1	
2.5 inch	2	
4 inch	1	
Paint "skin" fragment	1	
Paper, tar (roofing)	1	
Plaster fragments	1	
Window	3	
Wood fragments	9	
Wood fragment, painted	2	
Wood house shingle	2	
Animal Materials	**285+**	**8**
Bone fragments	228	
Tooth fragment	1	
Hair (swatch)	1	
Dung	55+	
Fuel	**2293**	**61**
Coal, small pieces, unburned	32	
Clinkers (burned coal waste)	2261	
Other	**2**	**<1**
Macrobotanical sample	1	
Miscellany	1	
Totals	**3762+**	**100**

Although it is difficult to tell, the inhabitants seem to have practiced a form of sheet trash disposal rather than pit burial, with the exception of bone. No bone artifacts were found on the surface, but conversely, they were not deeper than 5 cm either.

Economy and Production items include 39 pieces of animal dung. Although these items were not subjected to further analysis, the size and form of one of the nearly intact pieces is similar to mule (R. Scraggs pers. comm., December 1997). One horseshoe (Fig. 21), from a horse probably used for light work, was found. The shoe is calked, and of mass manufacture, but no maker's mark was apparent. Related items include a harness buckle and a portion of a buggy bolster, as buggy seat springs were called. The bolster spring is actually a Transportation category item, but it seems appropriate to mention it here.

However, the foremost point in this category is the

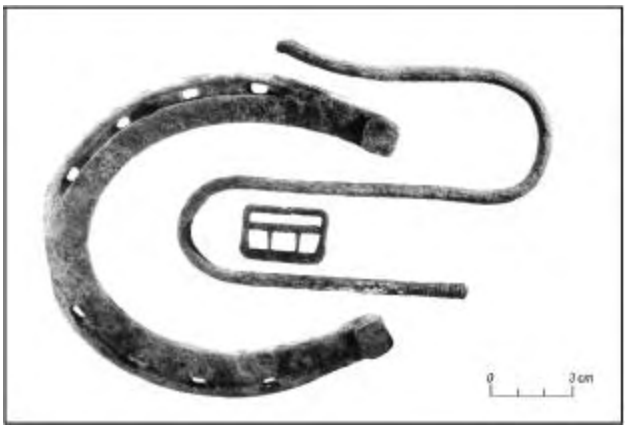


Figure 21. Horseshoe, harness buckle, and piece of buggy bolster, Jones homestead.

large amount of ammunition (Figs. 22 and 23) and asso - ciated artifacts present on the site. Thirty-nine artifacts constitute 1.98 percent of the total, a rather high number; by contrast, the Ontiberos site, where hunting was also suggested as a means of supplementing the subsistence base, had only .61 percent (adjusted) of the assemblage in the Arms category, and .63 percent by the original analysis. Even more impressive is the number of calibers and gauges represented at the Jones site. Ammunition ranged from the .22 CB caps, shorts, and longs through .30, .38, .42 and .44.

Figure 22. Cartridge cases and bullets, Jones home - stead.

Two shotguns were represented, a 12 gauge and a 10 gauge. Twelve shotgun shells were recorded, with eight of these being 12 gauge, three 10 gauge, and one unspec- ified. Ten gauge is usually used for high flying birds (Russell Young, pers. comm. 1998; Barnes 1985:326), which would certainly have been accessible as the Pecos River bosque is just a short distance away. Such game could have included ducks and geese. The 12 gauge is more commonly used as an all-around gun, capable of taking anything from ground-based birds like quail and pigeons to coyotes, and with the replacement of shot by

Figure 23. Shotgun shell bases, Jones homestead.

rifled slugs, can even take deer and bear. Barnes (1985:320) states that, "in actual use the 12 gauge will do more things well and under a greater variety of shooting conditions than any other gauge. This makes it a great favorite with the one gun man or those who require an all-round weapon for any reason."

One other artifact, which is very significant by its presence, is the lid of a metal can that held black powder. The lid has an embossed label, reading xx-HIGAN or xx-RICAN POWDER MILx. This is about the size of the last metal cans produced by DuPont (Russell Young, pers. comm. 1998). If the consumption of ammunition was as high as seems to be the case, reloading would be a very viable option for the Jones family. Barnes (1985:316) stated that at one time almost everyone loaded his own shotgun shells, a practice that died out about 1920, until the modern revival. Some of the shot shell bases had no primer present and one was found with a nail through the primer hole (Fig. 23). This nail was very blunt, exhibiting a battered point, as though it had been used for the purpose several times. Barnes (1985:351) stated a loading tool may be anything from a piece of wood with a nail in the end on up to a specialized tool. Apropos of the nail through the shell base, Russell Young (pers. comm. 1998) said that he remembered such a device being used for a candleholder during his Kentucky childhood. Young said he used to keep a drawerful of shotgun shell bases because they were so useful for so many things.

Rimfire cartridges cannot be reloaded, and the price of .22 shells is so low as to hardly justify the time spent (Sears Roebuck [1969] advertised 100 .22 shorts for $.30), but centerfires and shotgun shells are reloadable, and as Barnes (1985:321) says, "the only way to save money on shotgun shells is to load your own." Interestingly, Sears also offered .22 longs loaded with shot instead of slugs at $.54 per hundred, so it is possible that some of the .22 cartridges actually held shot. The large number of CB cap .22s and other .22 cartridges were probably used for pest control and keeping birds out of the crops. Ravens and crows can also be hunted with a 10 gauge, but a .22 will serve the purpose much cheaper.

In 1897, .30 caliber shells were $1.80, while .44 Winchester shells were $1.98 a hundred. One could also buy primed but otherwise empty cases in a wide assortment of styles, including the .44 Webley. One .44 Webley was found at the site, which was considered unusual. The Webley was a Royal Irish constabulary pistol dating from 1868 which enjoyed some popularity in the United States until almost the time of the Second World War. An interesting side note to the Webley is that it was cheaper than any other .44 caliber ammo offered by Sears and Roebuck in their 1902 catalogue. Fifty shells were only $0.59, as opposed to $0.71 for Colt .44. Evans .44 shells were $0.83, and even the S&W American, the next cheapest shell, was $0.68 per fifty, almost a dime more. In 1902 a dime could be a considerable amount of money. The original load was a 200 or 220 grain bullet, which may be relevant to the description of Field Specimens 190 and 132 (Fig. 23).

FS 190 is a bullet of .417 inches diameter and 199.1 grains, with a round nose and a very irregular wide belt. If a rimfire, it would probably be a .42 Forehand and Wadsworth, at .417, but Barnes does not give any further information on the size of the slug. In obsolete centerfires, the rounds from .415-.418 are all too heavy or are flatnosed. In current centerfires, none are even close in size. The .44 Short rimfire, a popular handgun cartridge that was fireable in most arms (including Forehand and Wadsworth) chambered for the .44 Long, also had a 200-210 grain bullet but it was .446 inches in diameter. The fact that no Forehand and Wadsworth cases were found is not necessarily significant, as the ammunition may have been made by UMC-Remington or Winchester. Most of the .41-.44 cartridges came out around the Civil War and were obsolete by the 1920s. The Webley was also too large at .436, but it might be possible to bore out the .417 to fit a .44 Webley case. FS 132, another 200 grain bullet of .407 diameter, seems very similar. It could be a calibre as small as .41, but most of the .41s in this diameter are around 163 grain size. Because of the irregular crimping and swaging on both slugs, and the odd size, these may have been cast or molded by hand.

There are two .38 centerfire cartridges in the assemblage for the Winchester 73 model, which was introduced in 1874, and discontinued in 1937. Colt also began chambering revolvers for the .38-40 (Barnes 1985:80). However, one of these was made by UMC which was absorbed by Remington in 1910-1911, so an end date is given of 1910. After that date, head stamps were REM-UMC. One reads UMC .38 CFW, for centerfire Winchester, and one was made by Winchester. Another

.38 is a rimfire, which dates from as early as 1866 and became obsolete around 1930. This one cannot date earlier than 1868 since it is a UMC. It should not be supposed that two guns were necessary for the different cartridges, as many of the old rifles could fire either a centerfire or a rimfire with a simple adjustment.

Manufacturers include UMC, Winchester, Remington, and one each of Peters, United States Cartridge Co., and a Sears Roebuck shotgun shell. Shotgun shells exhibited an astonishing variety of brand names, including New Victor (Peters), Leader (Winchester), NuClub (UMC), NuBlack (Winchester), NuLoad (UMC), New Rival (Winchester), and Referee (Peters). The New Victor was in existence by 1897, the New Rival by 1901 (Heath, pers. comm., Jan. and Feb. 1998) and I suspect that the Nu and New type names all came out around the turn of the century.

The Economy and Production category gave unweighted average beginning and ending dates of 1875 to 1924 (rounded), almost nine years earlier than the site as a whole, which is a pattern that recurs, suggesting that the Jones family reused older items rather than buy new ones. They apparently adhered to the old saw, "use it up, make it do, or do without."

The category of Foodstuffs (n = 261) is somewhat larger than normal. The faunal remains (n = 232) are included in this category, which is not always the case in historical archaeology. This results in under-reporting of food remains. In this instance, faunal remains were put through the standard analysis and provision was made for them in the statistical runs.

The faunal remains indicate a varied meat diet, including some that were undoubtedly home-raised (Table 3). Only one bone, a section of long bone that is probably a beef round steak or possibly a ham slice, indicated commercial butchering. As a cook, Mr. Jones probably butchered his own animals. However, the faunal remains show a severe reduction. There were no whole bones; the largest, a piece of ossified rib cartilage not worth further reduction, was 95 mm long, and the average was only 37.5 mm long and 17.3 mm wide. Only eight bones were over 70 mm long, but 147 were less than 30 mm.

Potentially, two types of cuts are recorded for each bone. All bones were recorded with one cut, and 51 received secondary cuts. It should be emphasized, that due to the fragmentary nature of the assemblage, it was not usually possible to distinguish the intentional breakage from the incidental. At least one bone, in addition to the two recorded cuts, also exhibited two knife cuts that probably resulted from removing flesh. Including the round steak bone mentioned above, only five bones exhibited distinct saw marks. Some 120 bones showed indeterminate primary cuts, but the largest number of identifiable primary cuts was in the "split, longitudinally" class (n = 54 primary, 9 secondary). Another 10 splits were recorded in transverse or oblique directions, bringing the "split" total to 73. The next largest class was simply "chopped" (n = 40 primary, 27 secondary). Eleven additional specialized chop marks were recorded, bringing the chopped total to 78. Overall, the butchering technique was designed to get at the marrow for maximizing food value extraction.

Table 3. Animal Remains from the Jones Homestead

Taxon	Count	Percent
Mammal, indeterminate size	70	30.17
Small mammal (mouse to jackrabbit)	1	.43
Medium mammal (badger to sheep)	86	37.07
Large mammal (antelope to bison)	8	3.45
Family Leporidae (Rabbits)	15	6.47
Lepus sp. (Jackrabbits)	1	.43
Order Artiodactyla (Split hoof mammals)	6	2.59
Bos taurus (Cattle)	12	5.17
Ovis/Capra (Indeterminate sheep or goat)	1	.43
Sus scrofa (Domestic swine)	28	12.07
Aves (Birds)	2	.86
Galliform birds (Chicken-like birds)	2	.86
Total	232	100.00

The distribution of elements was interesting. The only taxon which had upper limb bones recorded was jackrabbit, essentially free meat. Some 142 specimens were indeterminate bits of cancellous tissue, long bone fragments and plate or blade fragments. Cranial fragments comprised the largest identifiable category with 49 specimens, including a pig tusk (Fig. 24). Seven rib fragments; 18 vertebra fragments, including a bovine atlas, 4 tibia fragments, and various extremity fragments completed the inventory.

Noticeably missing are the economically more valuable pieces of the animals. If the Joneses were raising these animals, they may have been selling the more desirable cuts to supplement their income. An alternate explanation is that Mr. Jones kept his position at the hotel and was bringing home the discarded bits from butchering, with only secondary rendering taking place on site. The bird bones are all extremities. It is also possible that

Figure 24. Pig tusks, Jones homestead.

we only found the debris associated with the butchering area itself and that the more desirable cuts went to the house and were discarded in a different place. If that were the case, it is certain that the material underwent some form of cooking and rendering after butchering, or there would have been no point in splitting it all. The species distribution may imply that both strategies were employed.

One key-strip can fragment was also found, indicating that possibly some meat or fish was bought. The following table gives the counts and percentages for the taxa found at the Jones homestead.

The galliform birds are probably not chicken, as they are quite large for chicken. They are also much smaller than present-day turkey, more in the goose size range, but it must be remembered that wild turkey, a smaller species, would have been a possible acquisition for the family. Even assuming that all the unidentified artiodactyl remains are sheep/goat, only 3 percent of the family's diet came from these species, implying that they did not raise them. The same implication holds for cattle. Even assuming all the large mammal remains to be cattle, a maximum of only 8.62 percent could be cattle.

Positively identified pig remains at 12.07 percent implies that swine were important to the diet. Assuming most of the medium mammal remains are also pig, as seems statistically likely, as much as 49 percent of the faunal remains could be pig.

Jackrabbit could have been part of the diet, but only one bone, a portion of a mandible, was found on the surface. The remainder of the *Lepus* bone was found in association with other remains and was subjected to the same chopping and splitting. These facts, coupled with the high percentage and the availability of the species, argue that rabbit was indeed on the menu.

Of course, a single cow bone usually represents more meat than one from the smaller species, but since the parts in question consist of skulls, feet, and a few vertebra and rib fragments, the difference may not be as great as would be the case with the meatier cuts.

Only 27 bones yielded any age estimate. Most of the animals were immature, but no very young animals or very old ones were included. Judging from the age and development, there were probably two individuals in the swine category. One of the pigs seemed, judging from the size of the tusk, to be mature, while the swine tibia had an unfused distal epiphysis. Distal epiphyses generally fuse before the proximal, but swine also get their permanent canines by the end of the first year of life, so the question is still open. The remains may well represent one large specimen.

All the cans are contemporary with the site, and most are of the fruit and vegetable type of hole-in-top, stud closure (n = 11). Most of these cans were fairly intact as well. Most seams are soldered. Indeed, one of the cans is so sloppily soldered (Fig. 25) that the contents may have been home canned. Home canning kits for use with steel cans were available for a reasonable sum, and we know from the remains assigned to the Domestic Routine-Canning category that a fair amount of home canning was done on the site. Only one can of evaporated or condensed milk was recovered, indicating that this was not a usual expenditure. Nor were there any recognizable coffee cans. This negative evidence, coupled with the presence of a tea pot sherd, may indicate that tea was the more usual beverage consumed.

Figure 25. Solder-seam can, probably homemade, Jones homestead.

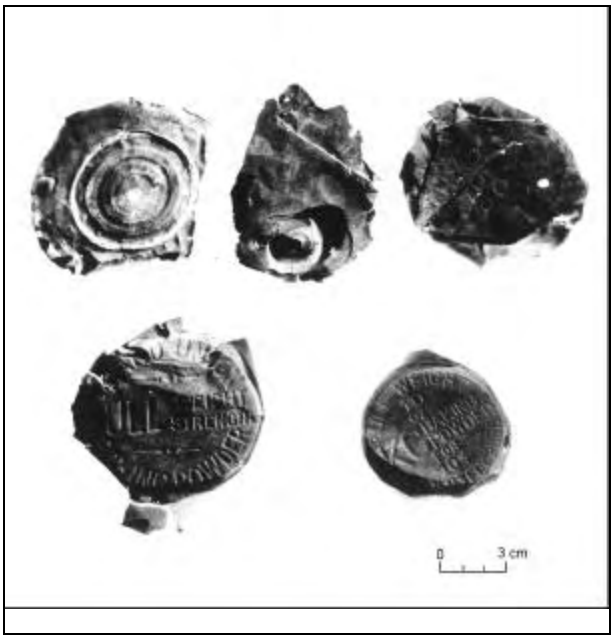


Figure 26. Can lids, Jones homestead.

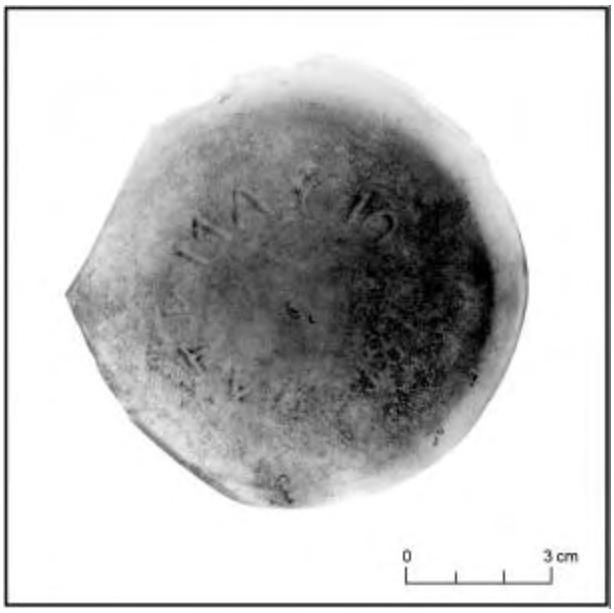


Figure 27. Bottle bottom with date, Jones homestead.

Four cans of baking powder, including one very large can of Grand Union Baking Powder and three smaller 10 oz. cans of KC Baking Powder (Fig. 26) were found, indicating baked goods were a considerable part of the family's diet in the two years they were at the site.

Another unusual artifact is a can lid, of the slip-on variety, that said "HEALTH/FOOD/XXX" (Fig. 26). Most people's diets were so poor that some form of supplementation was considered necessary. Fresh fruits and vegetables were only available seasonally and were limited in type. Bitters, a popular condiment, were sold to alleviate the dyspepsia caused by eating a diet heavy on baking powder biscuits, salt pork, fried meats, etc. This can, because it had a slide-on lid, held a dry substance, such as malt, bouillon, brewer's yeast, etc.

One artifact of interest in the Foodstuffs category was the base of a bottle probably made by the English firm of Davey and Moore. The firm used the "D" trademark, as found on this bottle base (Fig. 27), from 1870 to 1900, and "specialized in wide mouth jars for British pickles, jams and other foodstuffs" (Toulouse 1971:153-154). After 1900, the mark changed to "D&M." All the glass made by this company was hand-blown until around 1930. This base also bears the legend "PATD MAY 10 1870," surrounding the "D." It is difficult to know what was patented, since a hand-blown glass container could hardly be patented and foodstuffs are not usually patented. Five years (from 1900 to 1905 when the site was abandoned) seems an excessively long time to keep a jar of pickles or other original contents, so this container may represent reuse as well. We attempted to trace this patent through the U. S. Patent Office yearly and through general indices, but no likely candidate emerged (Jackie Shane, pers. comm. 1998).

The Foodstuffs category gave a date range of 1881.6 to 1930.3, a wider range than the site as a whole, and 25 years after abandonment. This disparity is accounted for by the practice of recycling bottles and the fact that canning technology did not change again until well after the site was abandoned.

Indulgences (n = 9) are somewhat under the average, only .46 percent. There are a few fragments of thick brown glass, possibly the remains of a beer bottle, that could have added to this total, but the shards were too small for certain identification. Nor is it good practice to assume that brown glass held beer, as many other items, including bitters, came in brown glass. There is also a bottle that may have been a liquor bottle (Fig. 28), but this bottle seems to be handblown, perhaps with a snap case finish, and may well represent reuse. The bottle is very thick, a distinctive gray color, and has an unusual

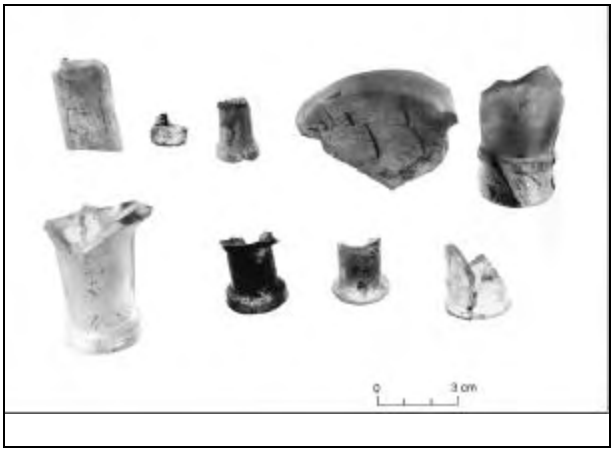


Figure 28. Bottle lips and necks, Jones Homestead.

finish which was reconstructed, but was still not found in any of the standard references. Indeed, only 24 pieces of glass had seams recorded, and none were on the bottle finish. Most of the recorded seams and most of the Indulgences category came from the fragments of a sin - gle Hiram Walker Canadian whiskey bottle that may well post-date the site, as the glass was clear in color, and showed no obvious signs of age. However, Hiram Walker first registered the name as a trademark in 1887 (American Business Information, Inc. 1998; U.S. Patents and Trademarks Office 1998), so it is also possible it was part of the site.

One bottle fragment that might be added to the Indulgences category had "MILW" on the base, a device used by several, related companies: Wisconsin Glass, 1881-1885 (or 1882-1886), William Franzen and Son, 1900-1929, and Chase Valley Glass Co. and Chase Valley No. 1 and No. 2, all 1880-1881 only. Chase Valley made beer bottles for the Milwaukee brewers and later became Wisconsin Glass (1881-1886) and then William Franzen and Son, ca. 1896 to 1929 (Toulouse 1971:111, 151-152). The incarnations between 1886 and 1896 do not seem to have used Milwaukee on the bottle bases. If contemporaneous with the site, the bottle was made by Franzen and Son, but if it is another case of reuse, then the bottle may well have been 20 years old when it arrived at the site. This type of reuse was not unusual. Marian Russell, for example, in an earlier period, reused a Ft. Leavenworth, Kansas, soda bottle for her smelling salts and carried it with her back and forth across the Santa Fe Trail (Gardner 1991).

The only other indulgence noted was snuff. Several cans of a typical size and a lid with the United States Tobacco Company logo were found (Fig. 29). The cans seem to be of two sizes, one of which associates with Garrett's Scotch Snuff, and the other with the UST Co. Not all of the likely snuff cans are included in this cate - gory, as it is impossible to state without equivocation that they are indeed snuff cans.

Domestic Routine artifacts (n = 103) included 57

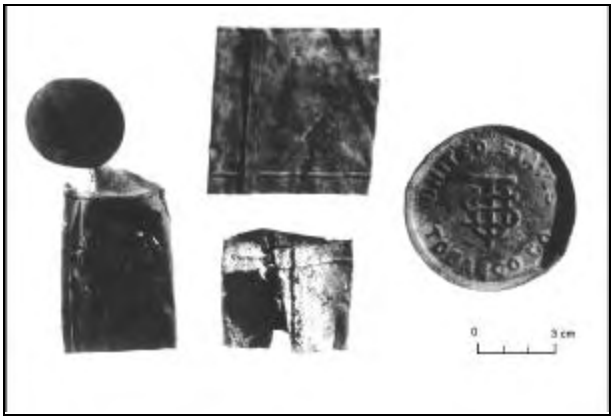


Figure 29. Snuff lids, Jones homestead.

Figure 30. Tumbler and glassware fragments, Jones homestead.

Figure 31. Glass lid and canning fragments, Jones homestead.

dish fragments, 19 glassware fragments (Fig. 30), one artifact in the utensil category (a nutcracker), 25 canning accouterments (Fig. 31), and one sewing artifact, a pin. Domestic Routine artifacts yielded a date range of 1877.7 to 1925.3. The earlier date is a function of the time lag always associated with ceramics.

Almost all of the glassware was of the tumbler type, and a specific type of tumbler: those having a decorative band of scallops around the base. There were also three shards of unidentifiable glass with a fine pattern of pressed lines on the exterior, which was smoothly curved, but with an angular interior. These shards may represent domestic glassware as well. They may also be from a bottle. The glass has a surprisingly modern appearance, in spite of its sun-altered purple color.

Among the dishes, 45 of 57 were white ware, a type of dishware that enjoyed great popularity during the last

half of the nineteenth century. White ware, of which ironstone was only one of the varieties, was made in both England and the United States, especially by the Trenton, New Jersey, and East Liverpool, Ohio, potters and is common on sites in New Mexico dating after 1875. Not all of these sherds are plain white ware, however. At least one plate had a brown band below the rim. Several other pieces were gilded. As an aside, it is worth examining microscopically any rim sherd for evidence of gilding, much of which will escape the naked eye. Gilding remains not only as minute flakes, but sometimes all that is left is the gray or black flecks of mastic that was used to adhere the gilding to the vessel body.

Seven pieces of porcelain were recorded in the Domestic category. (Porcelain also occurred in Furnishings and Personal Effects.) One stoneware, one red ware, and three refined earthen pastes of unknown ware round out the inventory. Decorative techniques include molding, gilding and molding, molding with paint, paint, paint over glaze, molded with colored glaze, colored glaze, clear glaze, and one mixing bowl of an Albany-type slip. Missing from the inventory were transfer wares and decal decorations. These omissions may be from economic factors or cultural factors. See the discussion under Furnishings below.

At least ten vessels were found in the inventory: two mixing bowls (2 sherds), a tea pot (1), a plate/saucer (1), two plates (11), one large coffee mug (7), one lid (1), one or more cups (7), and a bowl (1). Twenty-six sherds of unidentifiable vessel forms were also recorded. Within the unidentifiable vessels there are indications of four to six more vessels. There are two blue and white sherds; one with a painted floral pattern and gilding, and one with a curvilinear painted pattern, which may of course be the same vessel. There are also two rim sherds, one with a molded design and one with a plain rim. There is also a sherd of a "paint over glaze" and a sherd of "paint under glaze" decoration.

Evidence of home canning is abundant, comprising 24.3 percent of the category. Aqua canning jar fragments, a glass lid or two of the lightning-type (wire bail closure), a zinc screw-on lid and a metal clamp that seems to be the type that held the Woodbury's glass lid on are among the relics (Fig. 31). Several aqua glass jar shards have Woodbury identification marks. In addition, there are several other artifacts that seem to be part of the Woodbury system. These are metal caps, probably zinc, about .6" in diameter. Photographs of Woodbury jars (Munsey 1970) show a cap of some kind on the glass lid. However, the New Mexico Bottle Collectors Association confirmed that there was indeed a small metal cap, "about the size of a dime" that was threaded onto the Woodbury jar (Simmons 1998). One of these caps has a rudimentary thread, the other seems to have snapped on, so we may have two models. Munsey (1970) gives a ca. 1865 date for the Woodbury in green glass with iron clamp, which seems insupportable in the face of Toulouse's (1971:539-540) history of the company.

Woodbury had several incarnations, including Woodbury Glass Works, 1882-1896; Woodbury Glass Co. 1900-1904; Woodbury Bottle Works 1904-1916, all in New Jersey. We seem to have a new logo, not shown in Toulouse, but the embossing is in the same style as the Woodbury fruit jars, one of their primary products. The jar bottom has the letters -BURY GLASS/ -RKS, which dates the jar to the first incarnation of the company. Again, a jar made before 1896, found at a site that dates from 1903 to 1905, implies a jar that had been recycled many times. Woodbury jars are more common in the East and are fairly unusual in New Mexico, which supports the reuse hypothesis and suggests that the jar came with the family from North Carolina.

The evidence of at least two glass-based canning systems, plus the possibility of use of a metal-can-based system implies a great deal of home-canning activity. Canning was a major activity within the Blackdom community at large (Baton and Walt 1996).

At least one of the glass canning jar lids from the Jones site had the letters and numbers backward (Fig. 31) The glass is too thick to read them from the reverse side. This was not too uncommon a problem around the turn of the century. A can lid from Victorio, a siding of the El Paso and Southwestern Railroad in southwestern New Mexico, suffered the same problem (Williamson 1998), indicating plenty of room for human error at the dawn of mass production.

One bail handle might represent a pot or pan, but bails are usually listed as Unidentifiable artifacts, since they can occur on cooking utensils, pails and buckets, and foodstuff cans such as lard or peanut butter. One possible "ear," the device which attaches a bail to the pail, was also found, but this one is almost decorative in the extent of its crimping, perhaps implying less of a utilitarian role for the product and throwing doubt on the identification. There is also a piece of steel that may have been the attachment device between a lightweight skillet and its handle (Fig. 32).

Furnishings (n = 26) comprise only 1.33 percent of the total, yet give a fairly good view of the household. The top of a kerosene lamp chimney and a complete burner for same indicate the use of "coal oil" for lighting. The burner is THE SOLAR (Fig. 33), made by EM & Co. All brass, it had two sets of threads, probably for adapting to different font sizes. It used a 1½-inch flat wick. The 1897 Sears Catalogue (Israel 1968) offered such a size, but no lamps to fit it. We were unable to trace the company.

As was obvious from the amount of clinkers present,

Figure 32. Skillet handle and pail "ear," Jones homestead.

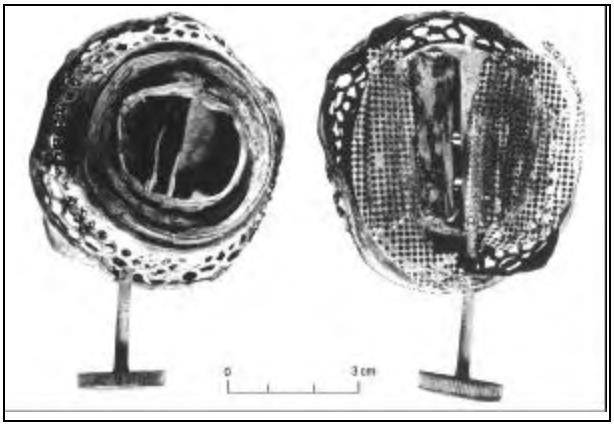


Figure 33. Kerosene burner, top and bottom views, Jones homestead.

the family heated and probably cooked with coal. Several pieces of a cast iron stove were found, including the flange that holds the cook top and four plates (Fig. 34), pieces of the door hinge and the base to which a leg was bolted (Fig. 35) and a few more iron pieces that could not positively be attributed to a stove. This piece, shown in Figure 36, is problematical. The spring cannot extend beyond the casing, so must have served as a spacing/tension device only. It must have originally moved in two directions. Some stoves have opening devices that must move up, for instance, before they can open out, but this one does not seem to be of that class.

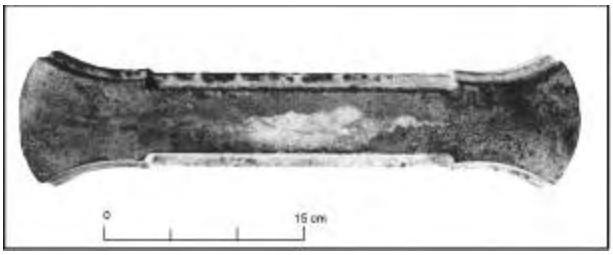


Figure 34. Stove flange, Jones homestead.

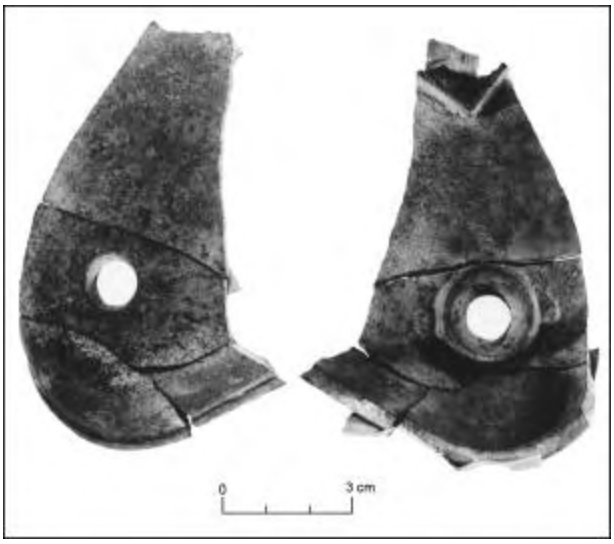


Figure 35. Cast iron hinge and leg fragments, Jones homestead.

There are a few electrical artifacts from the Construction and Maintenance category that seem to be contemporary with the site, but they may not be associated with lighting (see discussion under Construction and Maintenance-Electrical). It would be interesting to find out if there was a phone line that far from Roswell at the time. Some very small towns in eastern New Mexico did have phone service shortly after the turn of the century. It is also possible that kerosene was the first lighting on the site, followed by electricity. However, the components are more probably from an early vehicle.

Figure 36. Problematical object, Jones homestead.

The analysis system includes linoleum in the Construction and Maintenance category, but it seems more appropriate to discuss it here. What was described in the field notes as painted wood proved, upon microscopic examination, to be linoleum (FS no. 180). Linoleum was certainly in period, as it appears in the

1897 Sears Roebuck catalogue where it was described as similar to oil cloth, except for the presence of cork in the composition. All 16 pieces seem to be from the same pattern, which has ovals of yellow and green on a white background enclosed in a black line which separates the pattern from a golden brown ground which probably alternated with a greenish cream. Patterns of the period were made to look like tile floors and usually had alternating pattern blocks.

Linoleum was not an inexpensive floor covering. Wool carpet was advertised in Sears's 1902 catalogue (Sears Roebuck 1969) starting at 58 cents a square yard, hemp carpet for as cheaply as 12 to 25 cents a square yard, Sea Island cotton (known as granite carpet) for 25 cents a square yard, while linoleum started at 34 cents a square yard and quickly went up to 68 cents a square yard. Oilcloth could be bought for as little as 23 cents a yard, so linoleum was certainly not the cheapest floor covering available. According to the catalogues, Sears's prices were as much as 50 percent lower than retail. Most of the good competition was English and the "cheap" goods were American made. In a land of constant wind and dust, linoleum's attraction may have been the ease with which it could be cleaned.

There was a surprising amount of bric-a-brac (n = 13), much of it porcelain (Fig. 37). One of the porcelain objects, probably a vase or candy dish, had been painted a dull blue after firing. The coloring is not worthy of the clay body and may represent a child's efforts in a school project. Another vase of higher quality was a teal blue-green, fading into a pastel shade in the upper portion. Both also had molded decoration. Several dishes and bric-a-brac objects also had gilding. One piece, of a deep cobalt, with circular emblems in a lighter blue, had gilding applied in a random manner over the glaze. This very Oriental-looking piece is actually not porcelain. It may be a European imitation, or, as would not be unheard of in the long and convoluted history of blue-on-white pottery, may be a Chinese copy of a European imitation (Hill 1998).

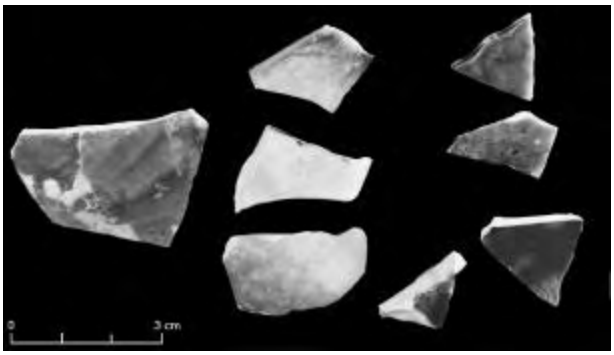


Figure 37. Porcelain fragments, Jones homestead.

Walt (Baton and Walt 1996), in an archaeological survey of several Blackdom homesites, also noted a surprisingly high percentage of gilded porcelain. However, Adams and Boling (1991:59), working on Georgia plantations (but admittedly, the Jones family came from North Carolina), found that "porcelain was often found in greater numbers in the slave quarters than in the plantation big house kitchen . . . for several vessel forms slaves had more expensive ceramics than their masters. This suggests that the slaves themselves viewed ceramics as status indicators and purchased them accordingly." Thus these ceramics among the Blackdom residents may reflect either heirloom pieces or a continuing cultural tradition of investing in what was perceived as high-status ceramics. For blacks whose presence in a community was only on sufferance, it made sense to invest in portable goods.

Construction and Maintenance (n = 813) is the largest category at 41.44 percent of the analyzed total. Running an average of both beginning and ending dates for this category (minus window glass) gave some interesting results. A beginning date of 1888.47 reflects some of the peculiarities of the site, such as antique nails (see below). The ending date of 1903.33 is within a very few months of actual initial occupation.

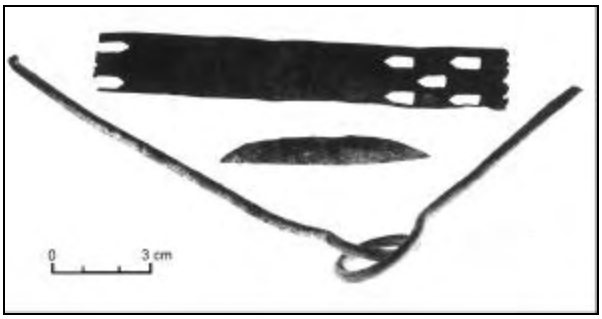


Figure 38. Combination tool and fastener, Jones homestead.

Only two tools were found, a plane blade and a very unusual combination tool (Fig. 38) with a screwdriver blade on one end and a hook device on the other. Russell Young (pers. comm. 1998), historian and blacksmith, examined the screwdriver and agreed it was homemade, or at least hand-forged. Young said it was not the first time the man who made it had worked steel. The maker knew enough to reharden the metal after working it and did it well enough that the metal twisted under stress rather than chipping or breaking off the corners, which is what would happen to improperly hardened metal. The tool has a good "hand" and Young suggested that the two ends probably represent two operations frequently and sequentially performed. The loop in the center is necessary to give leverage for the twisting action of the screwdriver.

The bulk of the artifacts in this category are of the hardware type, with most of these being nails and other fasteners. Interestingly, no door or window hardware, or associated devices such as springs, hinges, etc. were found. Among the more unusual items were some previously unknown (in New Mexico) fasteners (Fig. 38). The items measure 6 inches in length, and 1 inch wide. They are stamped from metal strip with a pattern of five teeth, spread over about an inch of the length on each end. Russell Young identified them as a type of "hurricane fastener," which was used to tie house roofs to the frame more securely. David Fazenbaker, former curator of the Virginia Museum of Science, further identified this type as being used, not for wood, but for canvas. The fasteners, coupled with the presence on site of four old-fashioned grommets (Fig. 39), called eyelets at the time, and the large carriage bolt that was driven into the ground vertically, led us to speculate that the first structure on the site may well have been a wall tent, which, on the flat terrain available, would have worked much better than a dugout.

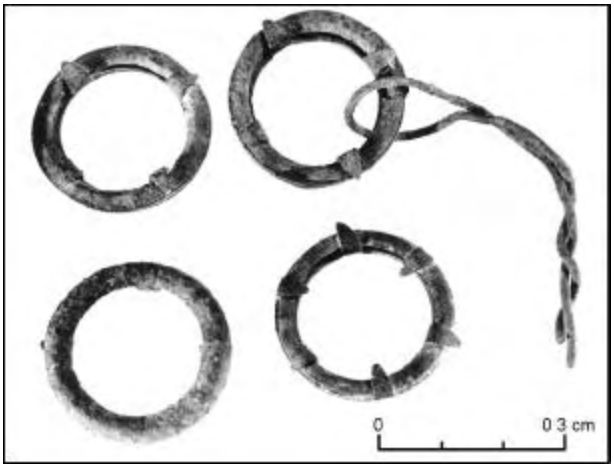


Figure 39. Grommets, Jones homestead.

Nails and other hardware (n = 511) accounted for 62.85 percent of the category total. Nails alone totaled 376. Nails smaller than 8d (n = 291) accounted for 77.4 percent of the total nail count, and fully a third of the total nail count was 4d and under. Figure 40 shows some of the variety present in this size range. Note the "spade-foot" in the center of the top row. I presume this was a production error rather than a type. Only 40 nails were 16d or greater and only 18 of those were larger than 20d. Common nails outnumbered box nails in a ratio of 1.4:1 (196:152). However, many of the common nails were also in the smaller sizes and would have been interchangeable with box nails for many tasks.

Only 19 cut nails were recorded, a fact that in itself would be sufficient to date the site to post-1890. The ratio of cut to drawn nails was almost 1:20. However, there were several very interesting cut nails, which are probably clinch nails (Fig. 41). They have a rounded head, usually eccentric to the shaft, which is rounded under the head, and then tapers to a rectangular (or even wedge) shape. These nails generally fit the description given by Nelson (1968) for early cut nails, circa 1830, when they were still being headed by hand. Whatever they are, it is clear they are not standard "store-bought" cut nails of the period, but may well represent curated, heirloom nails. It is possible they were in an older piece of furniture or a door or wagon box brought from North Carolina. Conversely, they may have been in the bottom of the nail can for many years and only got used after the move to New Mexico.

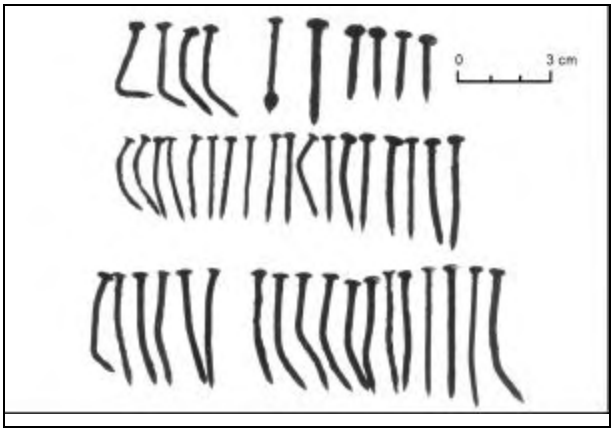


Figure 40. Nail sizes, Jones homestead.

Figure 41. Clinch nails, Jones homestead.

Many of the nails in all categories and other hardware had been pulled, twisted, or cut (Fig. 42), indicating deconstruction was a primary activity at some point in time, perhaps after the Jones family left the site.

FS 195/6 is a rivet, only .135 inch diameter. This is

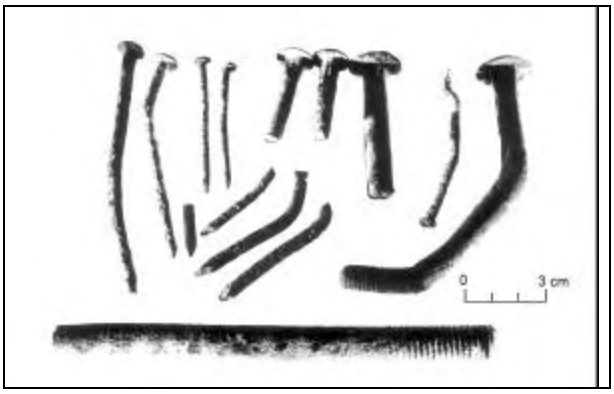


Figure 42. Twisted and cut nails, Jones homestead.

smaller than the 1/4 inch diameter wagon rivets advertised in the 1897 Sears catalogue, yet longer than the coppered, annealed steel rivets advertised for belt and harness work, which came in 3/8 inch to 3/4 inch lengths.

FS 126/1 is a carriage bolt of inferior quality. Sears advertised full sized square shoulders; these are decidedly narrower than the shaft, which is a 3/8 inch or 5/16 inch, depending on where on the shaft it is measured. The artifact is broken about ½ inch below the beginning of the threads. From below the head to the top of threads, it measures 2 inches but may have been twice as long.

In building materials, window glass led the category with 228 pieces. Raw average thickness was .091, and the adjusted thickness was .090. Adjusted thickness is found by simply throwing away the outliers, the highest and lowest values recorded. In addition to the glass definitely recorded as window glass there were several pieces of Unidentified glass recorded with a flat shape. These pieces have a much higher average thickness, .1 inch, and ranged up to .135 inch. These may represent vehicle window glass and were not included in the window glass analysis.

Window glass has been recognized as a valid temporally diagnostic artifact. Early work (Chance and Chance 1976; Roenke 1978) utilized large samples, in the thousands of pieces, from sites well documented historically, to establish the scales. Roenke (1978) working in the Northwest, used the dates 1855-1885 for .085 in glass, 1870-1900 for .095 in glass, and 1900-1915 for .105 in glass. It has been shown (Schoen 1990:69) that one regional framework may not translate to another region without error. However, used with caution, Roenke's and Schoen's approaches have been found valid in New Mexico on much smaller assemblages (Boyer in prep).

Various methods have been used to process window glass statistics, including mean, mode, and median. For small samples, the mean has been found to be the most useful (Teague and Shenk 1977). The mean was used in calculations for the Jones homestead.

Using regression analysis, Moir (1982) deduced a formula, ID=84.22 (TH)+ 1712.7, where ID is the initial date of construction or occupation and TH is the mean thickness (in mm). Using this formula, with TH = 2.29, the ID for LA 89153 is 1905.56, which is fairly close, as we know from archival work that the Jones moved to their homestead in the fall of 1903. Schoen found that Moir's formula yielded dates that were too late by 2 to 28 years for the Plains area sites, all of which were dated archivally. Two years off would place initial construction in 1903, which is the historically accepted date for construction of the Jones homestead.

Using the formula derived by Schoen (1990), who builds on Moir's work, of Y=1725.7+1713.0 (X), where Y is initial construction and X is mean thickness in inches, Y=1879.87 for the Jones homestead, a date much too early, unless the Joneses had brought the glass with them. Shoen's formula has been more reliable in analyses where it was applied to New Mexico (Boyer in prep.), including the Cass homestead, to which the Jones homestead is compared in the Regional Perspectives portion of this report. This reliability is probably because most of New Mexico was getting its window glass from the same jobbers as the Plains area sites. However, Moir's work is based on Southern sites; since the Joneses were Southern, they may have ordered their glass from a Southern supplier.

Another factor may be the modality of the Jones glass. The only thickness classes that have more than one or two pieces per class are those from .083 to .09, measured in thousandths of an inch. These classes are continuous, with no gaps, as opposed to both the thinner and thicker classes that are highly discontinuous. The number of artifacts in each class goes up dramatically from 1 at .08, to 5 at .082, 30 at .083, and 51 at .084. The drop off on the high side is almost as dramatic, from 15 at .090 to 1 at .091. If we eliminate the thickness classes with fewer than five artifacts from the sample, we arrive at an 88.16 percent of the sample, which is close to the 90 percent recommended by most researchers to eliminate the possibility of including other kinds of glass artifacts in the window glass category.

Using the restricted sample of 201 window glass shards gives a mean sample thickness of .0854 inch. According to Roenke, the glass was made between 1855 and 1885. Plugging the new value into the Moir and Schoen formulas gives values of 1894.6 and 1871.3, respectively. Schoen's formula fails completely as there was scarcely any window glass to scavenge in southeastern New Mexico at that time. The 1894 date is also puzzling and disappointing, proving once again that theory can only go so far against the realities of site formation.

The failure of Schoen's method to accurately predict

the date of the site suggests that either the Joneses brought the glass with them from the South, or scavenged it from an older site in the area. It is also possible that this represents a case of a merchant in Roswell selling older merchandise. It is also very possible that, if the Joneses were living in a tent in 1903, they did not get window glass until shortly before they left the site in 1905, in which case Moir's formula would be perfectly valid.

Plaster samples are of two kinds. One is a chalk-like substance, very fine and soft, and pure white. It is probably slaked lime, calcium hydroxide. The other, from the floor surface, appears to be caliche, calcium carbonate, which was used extensively for road surfacing in the area during the period, although we do not feel this deposit represents any kind of road work. However, its use for road work would make it easily available at the time. Both specimens respond to dilute solution of hydrochloric acid with an appropriate fizz.

A small, eroded piece of tile (FS 213/1) was not coded as building material, but as unidentifiable. It is unlikely that this small sherd represents a building component, but more likely is from a trivet or other household item. There was supposed to be a well on the site, so it could be a tiny bit of ceramic pipe. However, it should be stressed that no other plumbing gear whatsoever was found at the site. This piece could have passed for an isolate of a prehistoric Indian pottery called Three Rivers Red Ware, but 30X microscopic examination failed to reveal the expected temper.

Two kinds of paint were found at the site, as splatters, indicating the paint was actually used on the site. One was a standard white paint and the other seemed to be a galvanizing paint, sold as a zinc powder to be mixed and applied at home (Israel 1968).

Fencing supplies were limited to wire fragments and fence staples, of which there were 12 recorded, ranging in size from .5 to 1.75 inch long. The variation in size suggests different-sized animals and probably a garden were being fenced. The statement on the homestead application that the whole 160 acres was fenced is not confirmed by the archaeological remains, but admittedly boundaries of the site were not investigated, as that would have been outside the scope of work. Nor could the turn-of-the-century fence be expected to survive in an area where consolidation of small tracts into much larger ones has been the rule.

The only wire was 18 short pieces of varying gauges (8, 11, 18, 23, 36, and 40). Wire, 36 gauge or smaller, which was the bulk of the sample, was coded as Unidentifiable, but such small gauges may well be remnants of chicken wire. During the excavation, numerous very short pieces of an exceedingly small gauge of wire were found, but it was soon realized that these were

Figure 43. Electrical connectors, Jones homestead.

detritus from pieces of an insulated wire cable found scattered across the site. Not only is this wire thin, but it is also black, as opposed to the usual rusted look of site-contemporary wire. All of this fine black wire was excluded from the analysis.

Two electrical connections were found (Fig. 43). Little can be said about them except that they appear to be fairly archaic samples of their kind. They may well postdate the site, although not by much. Where wire ought to be in one of the connectors is a white fibrous mass extending the length of the section. This is probably some sort of insulation surrounding wire that is no longer there, because there is a space on either side where wire could go. Turn-of-the-century electrical wire was actually cloth-covered. Two small tabs have holes for a very small screw or nail, or they may merely fold over, as one does, to hold the larger section in place and the holes may be nonfunctional. The larger section is formed by folding over one piece of metal, and bringing the ends together to form a sort of jaw. The smaller section, where the white material is, is also formed by folding and is attached by a portion of the metal bending back to clasp the larger section in the fold.

Personal Effects comprised 2.65 percent of the total (n = 52) at the Jones homestead, a fairly high percentage (Fig. 44). One variation in the analysis technique that may have biased the total is the inclusion of school slate fragments (n = 12) under this category. They have previously been classed as Unidentifiable. Even without these artifacts, the Personal Effects category is still over 2 percent of the total. Personal effects yielded a surprisingly early beginning date of 1872.8 and an acceptable ending date of 1916.5.

Among the artifacts is a portion (Fig. 44) of a beautifully cut mother-of-pearl button (FS 183) of 1.175 inch-

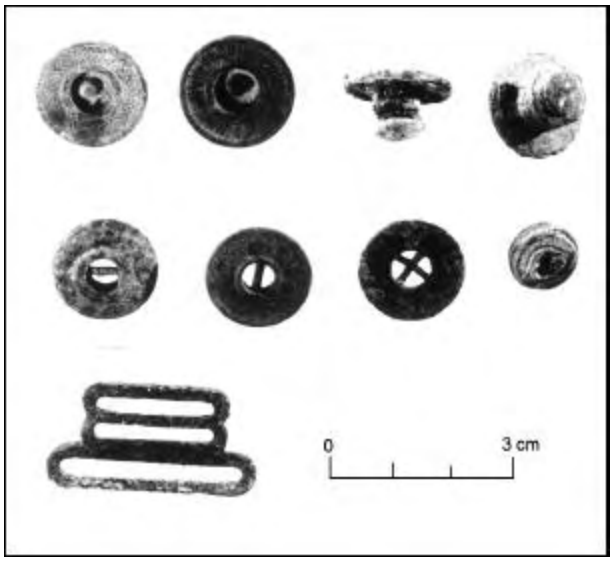


Figure 44. Personal effects, Jones homestead.

es diameter (70 lignes). The back of the shell is present, with fibers running perpendicular to button face. The backing splits and flakes off from the button face easily. This is a common state of affairs with mother of pearl, which was examined in its raw state at a jewelry supply house. The button came from a woman's dress or coat and may well be an heirloom. The natural shell backing was less common after 1900 and this specimen is ornately carved, which usually predates 1880. Other than that, "pearl" buttons are difficult to date because of the long popularity of the type. Pearl buttons were introduced into the United States about 1855, exploded in popularity between 1890 and 1900, and continued in popularity through the 1920s (Pool 1991).

Pearl buttons were imported from (usually) Birmingham, England, through the mid 1800s, when the United States began making pearl buttons, again from imported shells. After 1888, the discovery of freshwater, but noniridescent, shells from the Mississippi and Ohio rivers allowed a cheaper, domestic product to take a lion's share of the market, especially after 1891 when high tariffs were imposed on imported shell (Pool 1991). There were still over 4 million gross of ocean pearl buttons made in America in 1900, although Pool (1991) states that most U.S. manufactured buttons were "small utilitarian fasteners for shirts, undergarments and children's clothes." This article does not fit that description and was probably imported, and represents a higher status item than the freshwater shell buttons. There was also another small plain two-hole shell button, 23 lignes diameter, of the type used for underclothing, shirts, or children's clothing. A piece of shell that may well be prehistoric was also found on the site.

Most of the buttons were actually rivets or similar overall or jean type buttons (Fig. 44). Five were from the same garment, which was of black cotton cloth, probably a man's overall or dungarees. Black was a popular color for men's jeans at the turn-of-the-century. Although stamped, these buttons were so ornate as to suggest the possibility of an engine-turned original. The small rivet type button had the letters "L-M" embossed on it. This mark was untraceable.

Other personal effects included a stocking support attachment clip, and a set of fastening devices for a pair of heavy weather men's work boots. Nowadays, we recognize such devices as galoshes clips, but at the turn of the century they came on a wide variety of outdoor footwear, as the Sears catalogues clearly show. Another piece of boot hardware was a lace hook, such as many boots have above the lace holes.

There were also several decorative bezels that may have held clothing ornamentation and one bezel that may have been from a piece of jewelry.

A collection of five bottle finishes was recorded (Fig. 28) from the type commonly known as patent medicine bottles, although flavorings and extracts came in such bottles as well. If for no other reason, patent medicines were useful to evade disapproval of liquor consumption, but with so few bottles, it seems unlikely that this was the case. Given the amount of baking undertaken at the Jones homestead, which we can estimate from the baking powder cans, it is very likely that most of these bottles could as easily be classified under Domestic Routine as Personal Effects.

Unfortunately, the body shards, which might have been expected to provide some information, rarely had more than one or two letters on them. None were identifiable to maker. Each of the letter groups was put through the Trademarks Registered database held at the State Library, but no matches were found. Two of the bottles have patent finishes and two have prescription finishes. One of the patent finishes clearly exhibits the horizontal striations left by the turn mold process on a bottle's exterior. This is not very useful in dating the bottle, however, as turn molds were used from 1870 to 1920, whereas the amethyst glass gives a closer date of 1880 to 1920. All the bottle finishes are in varying shades of purple, from a pale color only discernible when the artifact is placed on a white background to a true deep amethyst, including one reconstructed finish where every shard was a different shade of purple, which only illustrates the role chance plays in the color of sun-altered glass.

One of the bottles is so thin (.03") it may represent a homeopathic rather than patent medicine bottle. The thin glass was probably designed for a single use. This bottle also fits the small pewter caps tentatively assigned to the Woodbury self-venting fruit jars, although it would have been difficult to remove it without damaging the thin glass (FS 69/1 and 2). Just below the little packer type

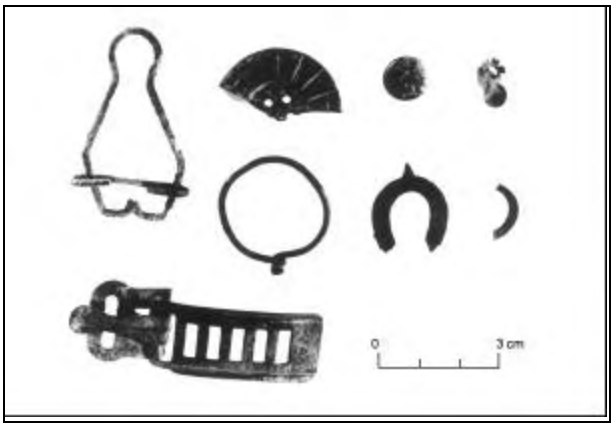


Figure 45. Personal effects, Jones homestead.

lip, but still on the finish, is a small groove that only extends perhaps an eighth of the way around the circumference (of the whole lip—we have about half), probably for securing a wire that held the cork. Homeopathic remedies were not limited to human use, of course. Dr. Humphrey of San Francisco, among others, also made homeopathic veterinary medications (Fike 1987) to complement his line of patent remedies.

Another artifact that supports the preceding interpretation is a wire cork ring (Fig. 45), which is simply a tiny corkscrew for removing small corks that was sold with the bottles. This one has snapped at the junction of the ring and the spiral. All the bottles had cork closures.

One interesting item was a portion of a hairbrush back, made of hard rubber. At first it was thought to be a piece of a horse brush, but a perusal of the Sears catalogues of the period showed that horse brushes usually had a leather base, while molded black rubber was all the rage for personal items.

Entertainment and Leisure items (n = 33) were also well represented at 1.68 percent of the total. The bulk of these, however, came from a single artifact, a beautiful, hand-painted china doll's head (Fig. 46), fragments of which were found scattered all over the eastern side of the site. It bears a maker's mark on the back that seems to be 1010, with some writing underneath, but not all the writing is present. One other toy was found, an iron wheel and axle from an unknown vehicle. Such an item could be from a toy wagon, truck, train, or even a small wheeled horse.

The rest of the category was stationery equipment, notably two pen nibs, which, when cleaned, displayed the Esterbrook label. The style, the Falcon, is a bronze finished steel pen that was "the most popular pen in use for general business purposes" (Israel 1968:354). Such pens cost six cents per dozen in 1897. Also found were pieces of a pencil, including the ferrule that held the eraser and pieces of the graphite. The pencil was a hexagon, probably made by Faber's as the 1897 Sears catalogue

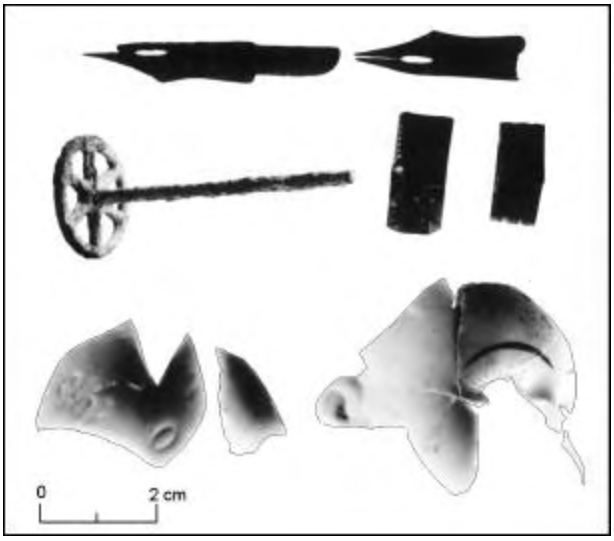


Figure 46. Porcelain doll's head fragments, pen nibs, and toy parts, Jones homestead.

advertised a "Hexagon Gilt" at 48 cents a dozen, a "Commercial Hexagon (30 cents a dozen)," a "Housatonic" (12 cents a dozen) or even the "Black Monarch" hexagon (40 cents a dozen), all made by Faber when most other manufacturers were making round or even triangular pencils. Faber's line had gold or silver stamping, nickel-plated tips, and rosewood cases. Faber's pencils were expensive, compared to the competition, which offered plain round pencils for as little as 30 cents a gross and ones with erasers for as little as seven cents a dozen.

Missing from the inventory of entertainment devices were two that have been found on virtually every historic site: marbles and harmonica parts. The lack of marbles is especially interesting, as they could easily be made at home from clay. The census lists the Jones' child as a boy, but that may be an error, as suggested by the presence of a doll and the lack of marbles. It was not unheard of for girls to play with marbles and boys to play with dolls at the turn-of-the-century, but it would have been more unusual.

Entertainment items only yielded a beginning date of 1897, from the circa date for the pen points. This might have been more interesting had the doll been dated.

Transportation, in keeping with most homesteads, is a minuscule part of the assemblage. One recurring problem with this category is that many analysts simply do not recognize wagon parts and harness bits. For instance, harness leather is often recorded as a man's belt, a personal effect category item. But very few men wore belts at the turn of the century, when suspenders were much more common. However, at the Jones homestead, only one very small piece of leather was found.

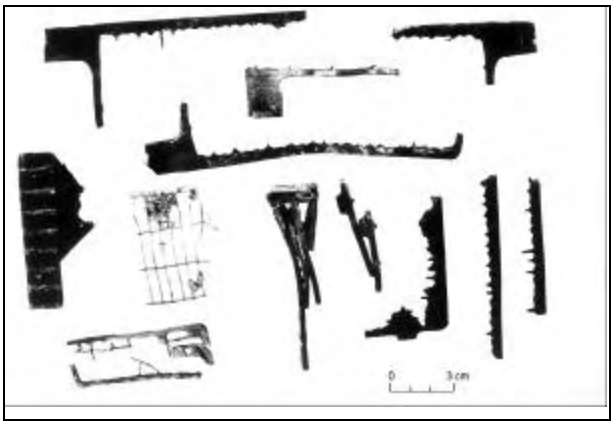


Figure 47. Battery plate fragments, Jones homestead.

Another obvious reason for the common absence of Transportation artifacts is that when people leave a site, they take their transportation with them. Another reason is the peculiarities of the present analysis system, which places horseshoes and harness in the Economy and Production category. One piece of a possible buggy bolster, or seat spring, a possible harness buckle and a horse shoe (Fig. 21), were the only artifacts that could possibly be associated with wagons.

Vehicle parts were more plentiful, and were possibly of some antiquity, but it is doubtful that they were actually associated with the Jones's occupation of the site. What we called the "mystery object" seems to be battery plates (Fig. 47). There were also numerous pieces of molded hard rubber that may be a battery case scattered across the site. The entire assemblage may represent one battery of unknown age, but with a highway running by the site, it is likely that this artifact is later than the site and associated with the highway.

Unidentifiable artifacts constitute 29.36 percent of the total assemblage. As is usual, most of this category is glass fragments (n = 410). Some of these have already been discussed as possible indulgences, but since the analysis errs on the side of caution, we cannot state categorically that the Milwaukee bottle fragments were from beer bottles, because, while the beer bottles were the major part of its production, other types of containers, including fruit jars, were manufactured as well.

Coal is the next largest category at 38, followed by steel (n = 31), ferrous metal (n = 24) and can fragments (n = 20). Very likely most of the steel and ferrous metal fragments are from cans. Assuming they are, for the sake of argument and comparison, only 38 artifacts, 1.9 percent, are completely unidentifiable beyond material.

I have interpreted most of the cast iron at the site as stove parts rather than unidentifiable, as is common.

PRECIPITATION, DRY-LAND FARMING, AND BLACKDOM

Regge N. Wiseman

The historic records and comments by interviewees clearly reflect the reliance of the Blackdom community on dry-land farming (Spivey, this report). In hindsight, the success of dry farming in the Roswell region has been negligible. Only those farms with access to irrigation water proved successful over the long term. The first farmers in the region were able to tap water for irrigation from the Berrendo, North Spring, and South Spring rivers, but those waters were claimed primarily in the 1870s, 1880s, and 1890s (Shinkle 1972; Fleming and Huffman 1978).

It was only with the discovery in 1890 of the vast artesian water system underlying the lower Pecos Valley that additional tracts could be placed under cultivation (Larson 1993). Between that and the speculating and promoting related to the construction of a water reservoir along the Rio Hondo soon after the turn of the century, large numbers of people began pouring into the Roswell region to take up farming. It was in this atmosphere, at the end of what Fleming and Huffman (1978:16-23, 174-178) call the Developmental period (1890-1903) that Frank Boyer arrived and began promoting the community called Blackdom.

Blackdom was situated well west of the main irrigation farming areas along the Pecos River. Some of the homesteaders erected windmills, and others hauled water, but in the end, their efforts at farming failed. The community was abandoned prior to 1930 (Larson 1993).

Local lore recounts how during the late 1800s, when Anglo-European settlement of southeastern New Mexico began in earnest, the country was rich in resources and fertile for farming (Shinkle 1966). But like Blackdom, the local lore also states that the dreams of many ranchers and homesteaders dried up and blew away because of a change in the weather.

It is interesting in this context to take a look at weather data for the period. While there are a number of ways to characterize such data, it must be borne in mind that different kinds of changes have differing effects on soil moisture and therefore on plants and animals. Magnitude and frequency of changes and length and direction of trends (whether positive or negative) are all critical factors. The final critical factor is how nature (especially fires and winds) and man (grazing and agricultural practices) affect the soil and plant conditions.

The Weather Bureau (U.S. Department of Commerce, Weather Bureau 1965) has been keeping records for Roswell since 1878. Figure 48 presents the annual precipitation curve for the period 1878 through 1930, providing a glimpse of conditions immediately preceding and during the Blackdom period. The solid horizontal line marks the position of the 16-inch annual rainfall line. Below this line, dry-land farming is difficult or impossible, especially without regionally adapted crops. The jagged line is the year-by-year fluctuation in precipitation. The dashed line denotes the average for each half decade.

The results clearly illustrate precipitation changes for the period of interest. The overall range is 4.87 (1910) to 28.73 (1884) inches per year. Even more importantly, year-to-year differences can be extreme, as exemplified by 1918 with 9.18 inches and 1919 with 22.69 inches (difference of 13.51 inches). In only four instances did pairs of years have nearly the same precipitation (i.e., less than 1 inch difference)—1880 and 1881 (19.6 and 19.9 inches respectively), 1892 and 1893 (14.42 and 15.25 inches), 1914 and 1915 (15.45 and 16.16 inch), and 1915 and 1916 (16.16 and 16.82 inch).

The number of year-to-year changes for gains and losses were about equal, with 25 gains and 27 losses. In this and subsequent discussion, the gain or loss of a given year is relative to the preceding year. Overall, the average of the gains was 5.41 inches (range 0.30 to 13.51), while losses averaged 5.33 inches (range 1.11 to 14.27).

Frequency of change is gauged in several increments dictated by the record. The most common increment is the single year or year-to-year change. An example of a year-to-year or single year increment is 1882 within the sequence of 1881-1882-1883. The year 1882, at 9.91 inches, had a loss or decrease in precipitation relative to 1881 (19.90 inches) and 1883 (17.04 inches) had a gain or increase. Year-to-year changes for the period of interest include 12 single-year losses versus 9 single-year gains. Losses of two years' duration number two, while gains number six. Two three-year periods of losses occurred in 1901-1903 and 1920-1922, but there were no three-year periods of gains.

One five-year period of losses involved the years of 1906-1910. This was followed by the only four-year period of gains, which occurred from 1913-1916. The 1906-1910 period was obviously a drought of serious consequence. This drought was at least partly rectified (i.e., marked by replenishment of soil moisture) by the return to near "normal" precipitation starting in 1911, and augmented by the 1913-1916 gain period. Maximum

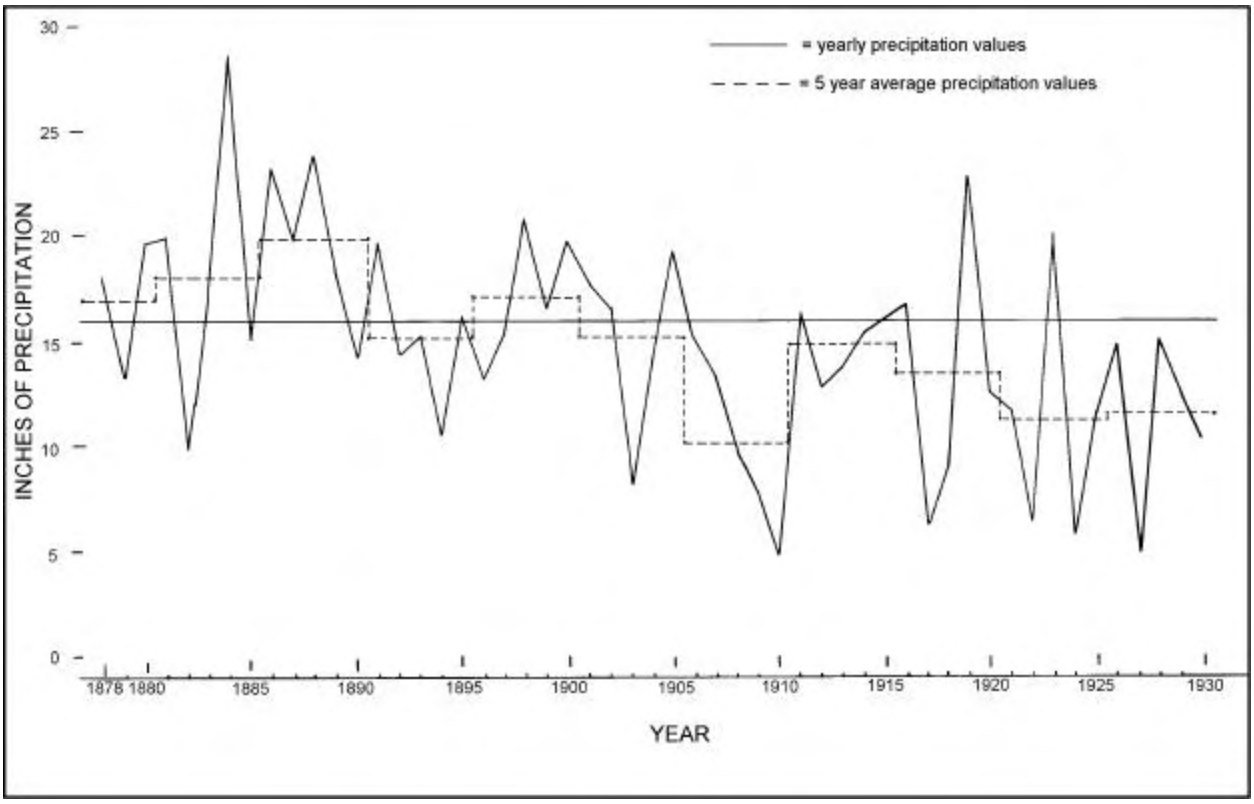


Figure 48. Roswell precipitation from 1878 to 1930.

benefit of this recharge period would have accrued to those tracts of land that were not subjected to serious water depletion through improper plowing techniques or overgrazing.

And finally, in the larger picture regarding Figure 47, we can contrast the periods before and after 1900. Before 1900, the average precipitation for all five-year periods dropped below 16 inches only once (1891-1895). In fact, the second half of the 1880s averaged 20 inches per year! After 1900, no five-year period matched or exceeded a 16-inch average, and from 1906 to 1910 precipitation averaged only 10 inches per year.

In summary, the documented precipitation for the Roswell area displays marked variability in terms of year-to-year precipitation. The overall trend between 1878 and 1930 is gradual diminution of annual precipitation, with those years prior to 1900 being marginal for dry-land farming and those subsequent to 1900 being decidedly inadequate for dry-land farming.

It is important to note that, as far as we have been able to ascertain, most, if not all, Euroamerican farmers who settled the Roswell region after the Civil War irri - gated their crops rather than attempting to dry-land farm. Before the discovery of the artesian system in 1890, water was diverted from several spring-fed streams in the area, and after 1890 both stream-fed and artesian systems were used. Thus, the dream of the residents of Blackdom to wrest a living from their lands through dry-land farming was essentially doomed from the start.

COMPARISON WITH SELECTED SITES IN THE REGION

Natasha Williamson

One of the research questions involved comparing the Jones homestead to other sites in the area. There are several studies with which the results can be compared. Katz and Katz (1985) completed a study of the Seven Rivers-Brantley area for the Brantley Reservoir project. The Brantly Reservoir area was also studied by Barnard et al. (1980). Oakes (1983) studied a Hispanic homestead, the Ontiberos site near Roswell, and Boyer (in prep.) studied the Cass site (LA 54346), an Anglo homestead near Roswell that was destroyed by fire in 1912. Where appropriate, comparisons will be made to the other sites to provide a perspective on the Jones homestead, which has the distinction of being the only African-American homestead excavated in New Mexico. The sites will also be compared to the New Mexico average, as elucidated in Oakes (1983:101-108). A brief description of the other sites in the comparative material will be presented.

Historical archaeology in the Southwest is still very much in its infancy and opinions vary among researchers as to chronology, classification, and other issues such as material-based analysis versus functionality. However, some continuity is provided here by the fact that the present analyst worked on the excavations and analyses of the Cass homestead as well as the Rock Schoolhouse and the Jones Homestead. The Ontiberos site was also excavated by the Museum of New Mexico, albeit under a different analysis system. However, the system then used was based on function, as is the present system.

Katz and Katz, although working through Incarnate Word College of San Antonio, did use standard Museum of New Mexico Laboratory of Anthropology recording forms. Their method of analysis seems to be based primarily on material type. Function was considered secondarily. Only one of their sites is comparable, LA 44572, the Rascoe homestead, which was filed in 1900. Most of the other Brantley sites were eliminated by their 1880s dates, their use as industrial sites, or a paucity of artifacts. The 1880s sites predate the railroad in New Mexico. The coming of the railroad made too many changes in availability of goods to make much of a valid comparison with post-railroad sites.

Both the Ontiberos homestead and the Jones homestead were part of satellite communities. The Ontiberos homestead was a part of the Eight-Mile Draw community, a mixed Anglo and Hispanic settlement outside Roswell, while the Jones family was part of the Blackdom settlement. Although located some distance from the main settlement, the Jones were not alone. Other members of the community had taken up adjoining quarter sections. The Cass place was on the outskirts of Roswell.

Certain differences should be noted among the sites at the outset. The foremost difference is in construction techniques. The Rascoe homestead of 1900 was rock and adobe, partially dug into the hillside. Although the homestead records were consulted for the Rascoe homestead, Katz and Katz (1985) do not give any information about the house. However, since Mr. Rascoe relinquished his claim, he did not have to file final proof, and the person who took it up later, a Miss Lucille Jackson, made a cash entry. The Ontiberos homestead of 1903 consisted of a dugout, and a later stone house. The Cass house of 1909 was described as a one and a half story frame structure, while the Jones homestead (1903) was also a frame structure with a shingle roof. Thus, the Cass homestead is the most comparable to the Jones homestead because of similar construction techniques, but the other sites may be compared for general material culture.

Few artifacts were collected from the Rascoe homestead. A total of 195 artifacts, plus an unknown number of nails and rivets were collected from the site. Katz and Katz (1985:112) state that "most of the artifacts . . . postdate Rascoe's occupation of the site. The screw tops date after 1924; the clear glass dates after 1930; and the paint cans are recent." However, Katz and Katz (1985:75) are in error about screw-type lids on jars and bottles, as, again: "thus, jars or bottles with screw closures can date no earlier than 1924, but may be considerably more recent." While the complete screw-on cap did not become a major closure method until the 1920s, it cannot be assumed that a jar exhibiting screw threads dates after 1924. Indeed, Mr. Mason patented his two-piece screw-on lids in 1857, almost 70 years before Katz and Katz's assumed date. Too, it cannot be assumed that clear glass post-dates 1930. However, without having seen any of the artifacts, I, too, suspect some deposition of trash by someone other than Mr. Rascoe at a later date.

In his Homestead Proof for Homestead Entry no. 3963, Mr. Jones described his establishment as a "box house 12 by 20 feet, shingle roof, floor, cellar, 2 doors, 2 window, barn, well, out-buildings, corral and entire tract fenced. Total value $1000."

By 1909, the forms had gotten somewhat more elaborate, so there is more information on the Cass place. Lewis Cass and his two brothers each described the place somewhat differently (Homestead Proof no. 3713),

which together give a fairly good picture of the Cass place. According to Leigh Cass, the "[h]ouse 1½ stories, frame, 28 by 30 ft, six rooms, wash-house attached and a screened-in porch and summer kitchen. 100 ft lineral [sic] length of sheds and stable room." The windmill was described variously as having a wheel between 8 and 14 ft in diameter, with a three horsepower gasoline engine. Lewis, who might be presumed to know, stated there was a 12 ft wheel on a 30 ft tower. The well was 90, 100, or 120 ft deep, depending on which brother was responding. "About 30 or 40 trees (or 50-60) under a three or four wire fence." Lewis offered that the house had a cellar started, a porch all along the front of the house, and a screen porch on the back.

The barns and sheds were 100-by-12 ft including a work shop. "Horse corral of woven wire 60 by 80 ft. Lot around the house is enclosed with chicken wire, 175 by 250 ft, 20 acres fenced with four wire." Lewis also said he had a "4,000 gallon steel tank, 500 ft of graded drive, and 800 ft of 4 inch casing for piping water about the place." Mr. Cass had "15 acres broken, with three to five acres in feed stuff" and had a "fair home garden." He kept one or two horses and a half dozen to a dozen goats.

As is common on New Mexico homesteads, very few of these improvements can be demonstrated archaeologically. In the case of the Cass homestead, about 4 ft of chicken wire was all that was left of 850 ft of fence. Of the extensive water system, only a few timbers framing the well, a few pieces of pipe, and a faucet were found.

Table 4 shows the comparative percentages of the three sites: Jones, Cass, and Ontiberos. Certain adjustments have been made in the Ontiberos and Cass data, for different reasons, to make the comparisons. The reasoning is explained and Tables 5 and 6 provide the transformations.

The total Cass assemblage was 36,429 artifacts. The Jones homestead assemblage (n = 1,962) is only 5.4 percent of the Cass artifacts, but the vast majority of the Cass assemblage was nail and window glass fragments. Of course, the Cass place burned in a fire hot enough to melt steel nails. Outside of those two artifact types, the two assemblages are much closer in number and comparability. In an effort to eliminate some of the bias inherent in the fragmentary nature of the Cass artifacts, a new table was prepared, removing the nail categories "shank," "shank and point," and "fragment." This eliminated 3,455 artifacts and brought the total to 32,974.

The Ontiberos site yielded 6,311 artifacts, some of which were road trash mixed with original deposits. Only 6,069 artifacts appear in the analyzed totals, so presumably the difference of 242 artifacts was caused by discarding road trash. This was also a problem at the Jones site, but a greater effort was made to eliminate the road trash before analysis. The Ontiberos faunal remains were not included in the Foodstuffs category during the analysis, but I have done so for the comparison, giving a total of 6,273 artifacts. In some instances certain artifacts

Table 4. Comparison of Percentages of Artifact Inventories from the Cass, Ontiberos, and Jones Homesteads

Category	Cass (n = 32,974)	Ontiberos (n = 6,273)	Jones (n = 1,962)
Unidentifiable	19.28%	34.96%	29.36%
Economy and Production	0.16%	1.37%	4.33%
Foodstuffs	6.17 %	7.97%	13.3%
Indulgences	0.003%	5.99%	0.46%
Domestic Routine	1.62%	15.86%	5.3%
Furnishings	0.33%	1.0%	1.33%
Construction and Maintenance	72.07%	29.3%	41.44%
Personal Effects	0.29%	2.38%	2.65%
Entertainment and Leisure	0.09%	1.16%	1.68%
Transportation	0.003%	n/a	0.15%
Total	100.0%	100.0%	100.0%

Table 5. Conversion of Ontiberos Artifact Categories to Categories Used in This Report

Category	Original Percent	Totals	Comparable Totals	Comparable Percentages
Foodstuffs	4.88	296	500	7.97
Indulgences	6.75	409	376	5.99
Domestic Routine/ Furnishings	17.43	1058	995	15.86
			63	1.00
Construction/ Maintenance	30.29	1838	1838	29.30
Personal Effects	1.91	116	149	2.38
Entertainment and Leisure	1.20	73	73	1.16
Arms	.63	38	86	1.37
Stable and Barn	.79	48		
Indeterminate	36.13	2193	2193	34.96
Total	100.01	6069	6273	100.00

Note: This table reflects artifact percentages from the Ontiberos site. Faunal remains have been included in the Foodstuffs category to make the sites more comparable. Percentages have been adjusted accordingly. In some instances, certain artifacts have been shifted between categories to more accurately reflect the present-day analysis system.

Table 6. Conversion of Cass Artifact Categories to Those Used in This Report

Category	Number	Percent	Adjusted Number with Fauna	Adjusted Percent	Adjusted Number without Nail Fragments	Adjusted Percent
Unidentifiable	6357	18.530	6357	17.490	6357	19.280
Economy and Production	54	0.160	54	0.150	54	0.160
Foodstuffs	7	0.020	2033	5.600	2033	6.170
Indulgences	1	.003	1	.003	1	.003
Domestic Routine	534	1.560	534	1.470	534	1.620
Furnishings	108	0.310	108	0.300	108	.330
Construction and Maintenance	27128	79.060	27218	74.650	23763	72.070
Personal Effects	94	0.270	94	0.260	94	0.290
Entertainment and Leisure	29	0.080	29	0.080	29	0.080
Transportation	1	.003	1	.003	1	.003
Total	34313	99.996	36429	100.006	32974	100.006

have been shifted between categories to more accurately reflect the present-day analytical system, particularly moving pharmaceutical bottles from Indulgences to Personal Effects. The old Domestic Routine category has now been subdivided in two. The second category is Furnishings, which was distinguishable in the category records. The old categories of Arms and Stable/Barn have now been subsumed under Economy and Production. It was possible to simply add these two together to get a comparable category.

As can be seen, there is a significant difference in distribution across the various categories. Interestingly, the Jones site is almost twice as high in the Economy and Production category as the high end of the new predictive New Mexico percentage of 2.34 (Oakes 1983:107), a function of the large amount of ammunition. Both the Ontiberos site and the Jones site are relatively high in ammunition totals, foodstuffs, and entertainment items. The Howell site, to which the Ontiberos site was compared in the original work (Oakes 1983), also is high in both categories. But the Jones site is the highest ever recorded in percentage of ammunition at a homestead that I am aware of. At the Cass site, at least 73.7 percent of the ammunition was .22s, implying pest control rather than hunting. Three kinds of shotgun shells were found, 10, 12, and 16 gauge, including modern plastic cases. Only one .30 caliber shell was found.

Virtually all of the Cass ammunition is thrown into question by the fact that the area, which has had no road nearby until after the project was completed, is still used by both hunters and target shooters. On the other hand, the presence of a highway directly adjacent to both the Ontiberos and the Jones sites should preclude extensive use of the sites by hunters or recreational shooters since the highway went in. Also of importance is the fact that none of the Jones ammunition could be proved to postdate the site. Mr. Jones may have been supplementing his income by selling game birds to the Roswell commercial establishments where he had connections.

The Howell site's high foodstuffs, indulgences, arms, and domestic routine counts are considered to be a function of the excavation technique of only placing 1-by-1-m test pits within the six major structures, "skewing the collected material toward household items and away from outside construction debris" (Oakes 1983:102). While that explanation holds for most of the categories, I fail to see what relevance it has to arms and ammunition. Indeed, much of the site was surface collected.

The Howell site was considered high in Foodstuffs at 9.05 percent (which is the high end of the range for the New Mexico sites excavated as of 1983), yet the Jones homesite came in at 13.3 percent. Faunal remains are mentioned as being recovered at the Howell site, but no further information is given about them, neither species nor number, so it is impossible to compare these two high-end sites. It seems likely the faunal remains were not included in the Foodstuffs at the Howell site, but the site was much larger, and most of the site was available for investigation, so a more comprehensive subsistence picture would be expected. That the Jones site, small, ephemeral and only partially available for investigation, should yield such information is even more impressive.

At the Cass homestead, the faunal remains were even more severely reduced than at the Jones place. Only a very few percent were identifiable to species, including just one or two pieces of quail and jackrabbit. Well over two-thirds of the Cass bone was only identifiable to size of creature, with 58.59 percent of the total bone count being medium mammal. Since Cass stated that he kept goats, one can presume that the bulk of this was indeed goat. However, without the faunal totals, the Foodstuff category at the Cass homestead is only 0.02 percent, yielding very little information about the family's subsistence pattern. This fact, coupled with the knowledge that the Cass family kept a home in Roswell, suggests that they only "weekended" at the homestead.

At the Ontiberos site, where an adjusted Foodstuffs percentage was 7.97, cattle seemed to be the major food source, even though Mr. Ontiberos, a day laborer, may have had some involvement in the sheep trade. Even fewer rabbit, bird, and sheep-goat remains were found at the Ontiberos site than at the Jones site. Pork was not mentioned, so we may be looking at an ethnic difference, although whether that ethnicity may be ascribed to the Jones family or to their previous residence in the South is a moot point. Most of the Anglo settlers of southeastern New Mexico were Southerners as well, although the Casses were not. I suspect that the two ethnicities reinforce each other.

It is interesting, however, that the three ethnicities represented by the three homesteads seem to have based their subsistence on a different domestic animal. Cass ate goats, at least at the homestead. Ontiberos seems to have eaten more beef, and Jones ate pork, supplemented with beef and a higher percentage of jackrabbit than the other two.

Indulgences were very low at the Jones site, which is probably a function of the staunch Baptist community they lived in. It may owe something to the analyst's reluctance to include more of the road trash in this category. Even the very thick, old-looking brown glass is suspect, both from the site's proximity to the road and the Jones' predilection for recycling bottles. This .46 percent is not the lowest in the sample (.13). The mean is 12.18 percent and the highest is 17.48 percent. Snuff cans are present in sufficient quantities to indicate the taking of snuff was a regular occurrence. Snuff is an old-fashioned way of indulging in tobacco, but has the

advantage of leaving one's hands free to work. Especially among Southerners, both men and women took snuff, so it would be a mistake to ascribe the snuff to Mr. Jones.

Domestic wares were essentially the same at all sites, with the majority of ceramics being plain white wares. At the Cass site, the next most common ceramics were transfer wares and some decal decorated wares, whereas the Jones family preferred gilded and painted porcelain for their "fancy wares." Porcelain was also found at the Ontiberos site in significant numbers. Does the Cass family's transfer ware indicate higher status than the gilded porcelain of the Jones family? Probably not, except in the sheer number of transfer wares, 150 versus 224 plain white wares, implying transfer ware was used frequently at the table, perhaps as the "Sunday china" while we do not know the vessel form or use of most of the Jones porcelain. They may have been "mantle pieces" only, except that it would be unusual for that many show pieces to have been broken in the short time they were at the site.

However, the Jones site is very low (5.3 percent) in overall domestic wares, well below the average (27.91 percent) and just above the lowest site (4.11 percent) in the 1983 comparisons. The predictive range (Oakes 1983:107) is so wide (0.0-84.28) here as to be of no help. The Cass site is even lower than the Jones site, which may be a function of our suspicion that they did not live full time at the site. Ontiberos is also low compared to the average, but significantly higher than either of the other sites. This may be a function of the number of children. With the exception of a broken nutcracker, no table wares were recorded at the Jones site, whereas the other two had spoons, knives, and utensil handles recorded. The Ontiberos family had more children to lose spoons and the Cass family lost everything that was in the house at the time of the fire, while the Jones family may have had better luck curating their tableware. The Cass site did have silverplate tableware, but the Ontiberos tableware material is unknown. The low domestic wares count may be a result of the short occupation, the limited excavation at the site, and the conservation practices of the Jones family.

The women of most homesteads spent much time canning, but Mrs. Ontiberos evidently did not. Mrs. Cass limited herself to the standard common Mason jars, while Mrs. Jones had probably brought her Woodbury jars with her from North Carolina, which in itself implies a serious commitment, and may well have had the rarer home steel canning equipment. The Ontiberos's canning equipment and types of containers are not specified.

Use of nails at the Cass site and the Jones site showed some interesting differences that allow us to speculate that Jones used smaller dimensioned lumber in his house than Cass did. A total of 4,565 nails from the Cass site was examined for this comparison. Of course, at the Cass site, there was a one and a half story house, plus whatever furniture was in the house at the time of the fire, which included at least a bed and a dresser. The cabinets and furniture certainly inflated the small nail counts at the Cass site, but still the category of all nails less than 8d (n = 1,536) in size was only 33.65 percent of the total, and 6p nails were over half of that total (n = 853). Nails larger than 8d (n = 821) were 17.99 percent and 8d (n = 2,208) were 48.36 percent.

In contrast, in the Jones assemblage of 192 nails, 67.71 percent were under 8d (n = 130), larger than 8d (n = 37) was 19.27, and 8d were just 13.02 percent of the total. The sizes 4d, 5d, 6d, and 8d were equally common on the site, as opposed to the Cass site, where 8d was almost half the total. The larger percentage of big nails is somewhat surprising, but perhaps was necessary to counter the smaller overall size of nails. The largest size at the Jones place was only 40d (n = 2), however, as opposed to one 60d at the Cass homestead. Presumably, these represent the "king post" type nail. Cass also had 27 40d and 15 30p nails. The latter are totally lacking at the Jones place, but interestingly, both sites had 25d nails, in almost the same number, four for Cass and six for Jones. This unusual size nail may have had some specialized, limited use.

Both sites had nails in all size classes from 2 to 10, including what we could only call 9d and 7d. The Cass site also had odd sizes such as 13d and 14d. Each of these nails was compared to a standard set of nails. The 25d were weighed in grams, and the result converted to pennyweight (24.99), so the designation, however unusual, is not spurious. This may have been a function of the still-emerging drawn nail industry's lack of standardization, or these may be sizes that have fallen out of favor in our standardized world.

Entertainment may be high at both the Jones and Ontiberos sites because of the presence of children. Ontiberos had four to six children, and while the Jones only had one recorded child (they may have had another by the time they were living at the site), the total in this category is higher at the Jones household in part because of the presence of writing implements. The pens, pencils, and school slate fragments are suggestive of a household that valued its literacy and clearly reflect the articles of incorporation for Blackdom townsite (see Spivey, this report). The school slate fragments are actually present in higher numbers than at the Rock Schoolhouse. No writing implements were found at either the Cass or the Ontiberos sites. At Ontiberos, three poker chips provide the only clue to adult leisure activities. Regarding children's leisure activities, marbles differ markedly; they are numerous (n = 50) at Ontiberos and notably absent at

Jones. Doll parts were comparable at both sites.

Another category where the Jones homesite stands out is Personal Effects. Again the site is well over the next highest site recorded, which happens to be the Ontiberos site. The mean percentage for Personal Effects for all sites is 1.55 percent, the Ontiberos site is 1.91 and the Jones site is 2.65 percent, which is also slightly above the top end (2.42) of the predictive range (Oakes 1983:107). One artifact of interest is the galosh or boot closure that was found at the Rascoe, Ontiberos, and Jones sites, implying that all the men wore comparable work shoes. Both Ontiberos and Jones had jean or overall rivets and buttons, implying the men wore similar clothes. Shell buttons were also similar, with the exception of the large ornamental button at the Jones site. The only explanation I have for the unexpectedly high percentage of this category is that it is inflated by the relative sparsity of artifacts overall.

Unidentifiable artifacts were surprisingly low at the Cass site, especially considering the fire, and were in fact lower than the predictive low end for New Mexico sites (20.32). The Ontiberos site was very close to the high end, which is 39.09 percent, whereas the Jones site is comfortably in the midrange of excavated sites (Oakes 1983:103), at 29.36 percent, although toward the low end of the predictive range (20.32-52.62). Indeterminate or Unidentified categories are always suspect, because so much depends on the analytical system used and the experience of the analyst. A material-based analysis will have virtually no unidentified artifacts, whereas a function-based one will have greater amounts. As an example, all bottles and cans not further identifiable by function are assigned to the Unidentifiable category by the Museum of New Mexico, even though most of them are likely to be from foodstuffs or indulgences. A less in-depth analysis might have a category "Containers" that would subsume all these artifacts, even if none of them were identifiable by function or maker.

The picture that emerges from the artifactual remains is that the Joneses were a frugal, saving people, whose major indulgence, aside from a taste for bric-a-brac, seems to have been their children. In comparison with two other families in the area, the Casses and the Ontiberoses, they wore similar clothes, ate off the same type plates, and probably shopped at the same stores. The only potential "ethnic" attribute that sets them apart from the Casses and the Ontiberoses is a taste for, and access to, pork. And they did not seem to be coffee consumers.

The fact that they did not stay at their homestead very long in no way sets them apart from the bulk of their neighbors. Ontiberos sold out within three months of acquiring his final papers. The Cass family, which had several homesteads in the name of various members, lost everything to the bank. Homestead failure rates were so high in the West that Congress was prompted to create the Stock Raising and Homestead Entry of 640 acres, after it became apparent to that august body that 160 acres in the West was the direct equivalent of "starvin' to death on a government claim" as the old song had it.

Summary—Isaac W. Jones Homestead (LA 89153)

According to the archival and interview research conducted for LA 89153, the site is the probable homestead of Isaac W. Jones, patented in 1905. Jones is listed in the 1900 Chaves County Census as living in Roswell, New Mexico, with his wife Mollie and a six-year-old son. The 1905 Homestead Patent no. 867 information stated Jones had taken up residence on the [redacted] containing 160 acres on October 1, 1903. He had built a box house (12-by-20 ft) in August and September 1903. The entire tract was fenced; he had cultivated 6 acres and raised one crop. The balance of the land was used for grazing purposes.

Homestead Patent no. 867 was approved June 22, 1905, and granted July 18, 1905. It is of interest to note that Frank Chisum was one of Isaac W. Jones's witnesses to his intention to make final proof, signed on January 4, 1905. According to Fleming (1991:7-8), Frank Chisum grew up as John Chisum's "step-son" after having been bought as a black slave by John Chisum in 1861. Frank was known as an excellent wrangler, and lived in the Roswell area well into the twentieth century. He returned to Paris, Texas, a couple of years before his death and was buried next to John Chisum.

Chaves County Courthouse (County Clerk's Office) records showed a Warranty Deed by Grantors Isaac W. and Mollie Jones to Grantee C. L. Tallmadge for the [redacted] on April 8, 1905. The deed was filed on March 9, 1906. C. L. Tallmadge was one of the significant promoters of immigration to the Dexter-Hagerman-Lake Arthur area in the early 1900s. In the Roswell City Directories of 1905-1906, Tallmadge is listed as having an office on Texas Street and his occupation as immigration.

Isaac W. Jones's signature on the Articles of Incorporation of the Blackdom Townsite Company in 1903 places him on the Board of Directors. This connects Jones directly with Francis M. Boyer and plans for founding the town of Blackdom.

It is interesting to note that Jones's neighbor, Mack T. Taylor, also sold his homestead around the time the homestead patent was granted. Taylor was granted Homestead Patent no. 677 to t [redacted] containing 160 acres on May 13, 1904. Chaves County Courthouse records showed Mack T. Taylor as Grantor to Grantee Charles C.

Tannehill in a Warranty Deed dated April 9, 1904. Sale of a homestead after receipt of notice that the patent was to be granted, but prior to receipt of the actual patent papers, was not unusual. Charles C. Tannehill then sold this property to C. L. Tallmadge on June 5, 1905. Another interesting aspect of Mack T. Taylor's homestead patent is in the Testimony of Witness section. Two of Taylor's witnesses are Francis M. Boyer and Daniel G. Keyes, founders of the Blackdom community. This information supports the implication that Taylor was a part of the Blackdom community. It also indicates that some of the black settlers sold their homesteads soon after the patent process was completed to C. L. Tallmadge of Roswell who was actively involved in promoting immigration to the Dexter-Hagerman-Lake Arthur area.

It is unfortunate that at the time of this research, no other information has been found concerning Isaac W. Jones or his family after 1905.

The surface artifact inventory and excavations reveal several aspects about the site, including the function and orientation of a structure floor. Feature 1 is a sheet of caliche or caliche-like material placed on native soil in a manner consistent with flooring for a structure. The size and shape are similar to the dimensions of the homestead house described in the Homestead Proof filed by Isaac Jones.

The total artifact distribution is concentrated around the north, east, and south sides of Feature 1. This is consistent with an interpretation that Feature 1 was the location of a human habitation and that most of the human activity resulting in the deposition of small artifact fragments took place to the north, east, and south of the structure. This, plus the southeastward toss direction of the majority of the coal clinkers from a bulge along the east edge of the caliche floor indicates that the door was located on the east side. The bulge probably represented the threshold of the door.

The distributions of other materials were also informative. The distribution of nails met our expectations about the position of the north and east walls of the house but were absent along the presumed west and south wall positions. The widely scattered pieces of unburned coal suggest that loads of coal were dumped at various locations near Feature 1 rather than at one specific point. At some point in time, perhaps during the winter and spring seasons, a mule was permitted to loiter near the southwest and the northeast corners of Feature 1.

The area immediately west of Feature 1 apparently experienced relatively little human activity. This may have been in part due to a tendency for water to stand there after rains and in part due to the fact that during the summer, this would have been the hottest side of the structure and therefore avoided.

Several factors, contrary to our expectations derived from the Homestead Proof and a picture of a "typical" house at Blackdom (see Spivey, this report), raise questions about our identification of Feature 1 as the house floor of the Jones homestead. The Homestead Proof is the more important document since it pertains directly to Jones's house. Feature 1 is somewhat longer and a little narrower than the 12-by-20 ft dimensions described in the proof. The word sequence in the proof indicates the presence of a cellar, presumably under the house, obviating the presence of a caliche floor at ground level.

The picture of a "typical" house at Blackdom shows a raised frame structure set on spaced foundation stone. The raised floor would have provided a measure against insect and pest invasion of the house. It would have facilitated moving the house to and from the location by skidding it across the prairie, a common method for moving buildings in those times. However, perhaps the Jones house was not "typical" in this regard.

The proof also mentions the presence of a barn, a corral, and other outbuildings. Why would a mule be allowed to loiter around the house if it had the shelter and containment afforded by a barn and corral?

Could Feature 1 be the remnant of one of the outbuildings? Perhaps. But how are we to explain the nature of the artifact scatter? The contents and nature of the scatter indicate long-term accumulation representing a full range of activities by adults and children alike. And, if the interpretation of the shape of the scatter of clinkers (i.e., elliptical, as if thrown out through a door) is correct, it is most likely that the stove would be in the house, not the other buildings.

How might a change in perspective and assumptions derived from the Homestead Proof and the typical picture reconcile both with the archaeological data? Were the dimensions of the house actually measured or were they estimated? Was the cellar under the house or at another location a short distance away (as in a dugout or storm cellar)? Did the Jones house have a raised wooden floor like many of the Blackdom townsite homes, or was it set on the ground, possessing a dirt floor? Were all of the Jones's animals kept in the barn and corrals, or was a favored old mule permitted to roam at will?

We may never answer these questions or reconcile all of the differences. However, it seems certain from location data, artifact inventory, and occupation dates that LA 89153 is part of the Isaac W. Jones homestead. We further believe that Feature 1 probably represents the house and not one of the outbuildings on the property.

And finally, an examination of Roswell's precipitation records revealed a diminution of overall precipitation from 1878 to 1930, the period prior to and during the existence of the Blackdom community. Prior to 1900,

and just before the arrival of most of Blackdom's members, the annual precipitation averaged in excess of 16 inches. This amount would have been enough to permit marginally successful dry-land farming. After 1900, the annual average precipitation eventually declined to a point below 16 inches, virtually guaranteeing that dry-land farming would fail.

This change from comparatively wet times to comparatively dry times agrees with the local lore that "the weather changed" and thus supports the contention that this factor is to blame for the failure of a number of farming and ranching ventures in the region. However, 100+ years of study of climate now shows that these periods of good and bad years are merely a natural aspect of long-term weather patterns. Thus, at some point in the future, overall wetter times should return, but the question is, when?

American settlement of this region took place during naturally "good" times. But when the precipitation took a natural swing to drier times, farming and ranching predictably suffered. Our mode of farming and ranching operations, and especially the level of intensity of those operations, are not basically compatible with the "normal," long-term climate of the region. Crop irrigation and the practice of supplemental feeding in the case of ranching help to ameliorate this situation.

THE ARCHAEOLOGY OF ROCK SCHOOLHOUSE AT SEVEN RIVERS (LA 116473)

Regge N. Wiseman

The Rock Schoolhouse is located along existing U.S. 285 and is situated on the first terrace about 50 m south of the South Seven Rivers channel. At the time of its use (ca. 1885 to ca. 1920; Spivey, this report), it was known as the Rock Schoolhouse, but today some locals refer to it as the Seven Rivers School (W. H. Balgemann 1982). Although a vast area of the lower Seven Rivers drainage, including the area surrounding LA 116473, was considered part of the frontier community of Seven Rivers, the actual townsite was located a little over 2 miles (3 km) to the east of the Rock Schoolhouse. The townsite was nearer to the confluence of the Seven Rivers with the Pecos River where it is now under the water of Brantley Reservoir. Elevation at the Rock Schoolhouse is 3,300 ft (1,006 m) mean sea level.

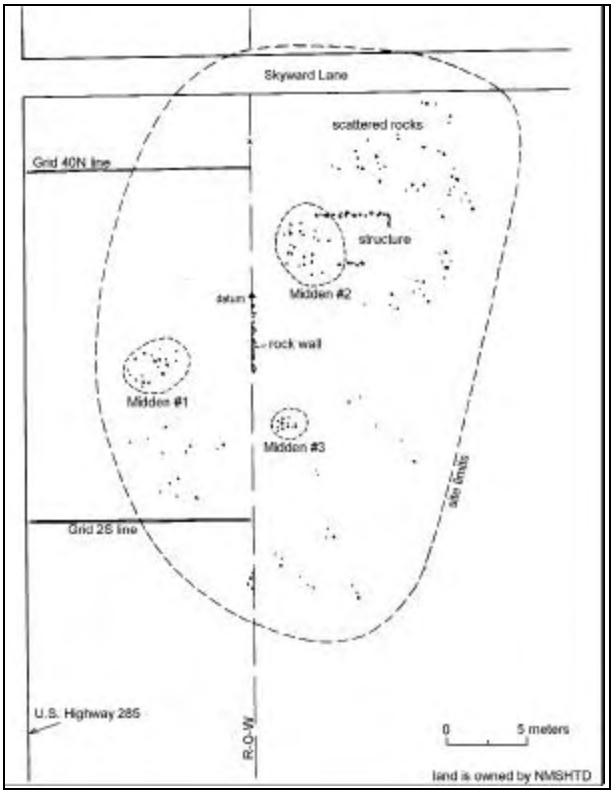


Figure 49. Archaeological sketch map of LA 116473, Rock Schoolhouse, Seven Rivers community, New Mexico.

Today the Rock Schoolhouse consists of a low, discontinuous alignment of rocks set in a rectangular pattern (Fig. 49). According to interview data (Spivey, this report) the rock walls were dismantled by locals for use elsewhere in the mid 1900s. Several definable trash piles, most with coal clinkers as well as metal fragments, white ware, and glass, are placed about the site. A short, low remnant of a piled-rock wall parallels the fence just outside the current right-of-way.

Only Midden 1 is within the proposed highway construction zone and was the focus of OAS investigations. The main objectives were to inventory the surface artifacts, test for depth, and ascertain whether the pile did indeed belong to the school occupation. A brief inspection of the main site area lying across the fence was also made for comparative purposes, but no collections were made. OAS investigations revealed that Midden 1 did relate to the school occupation. Interestingly, and in hindsight, predictably, most of the trash around the building derived from transient use after the school was abandoned (Williamson, this report).

Field Activities

Two tasks were completed at this site: (1) surface counts and collection of selected artifacts from 756 sq m of site area, including Midden 1; and (2) excavation of two small units in Midden 1 to ascertain the depth and nature of the deposit.

The surface artifacts were inventoried and counted using 2-by-2 m squares as the basic unit. This information was used to create distribution and density plots (Fig. 50) to serve as a guide for choosing the location and extent of the excavation units. Only those items requiring further identification or needed to document specific activities or chronometric data were collected for laboratory study and eventual curation. Coal clinkers and travertine rocks were also inventoried and counted by square but left in the field.

Two test units, each measuring 0.5-by-0.5 m and placed in squares with high artifact densities (Grid Square 12N/9W and 16N/9W), were troweled to hardpan (8 to 10 cm). The fill was screened through ¼-inch wire mesh. The artifacts from the excavations were inventoried but not collected.

The fill of both units was the same—the natural, loose surface layer of silty clay with large numbers of artifacts, coal clinkers, and occasional travertine rock fragments. The rock fragments, some as large as 15-by-10-by-5 cm, evidently derived from the stone used in the construction of the school building. No features other than the midden itself were found.

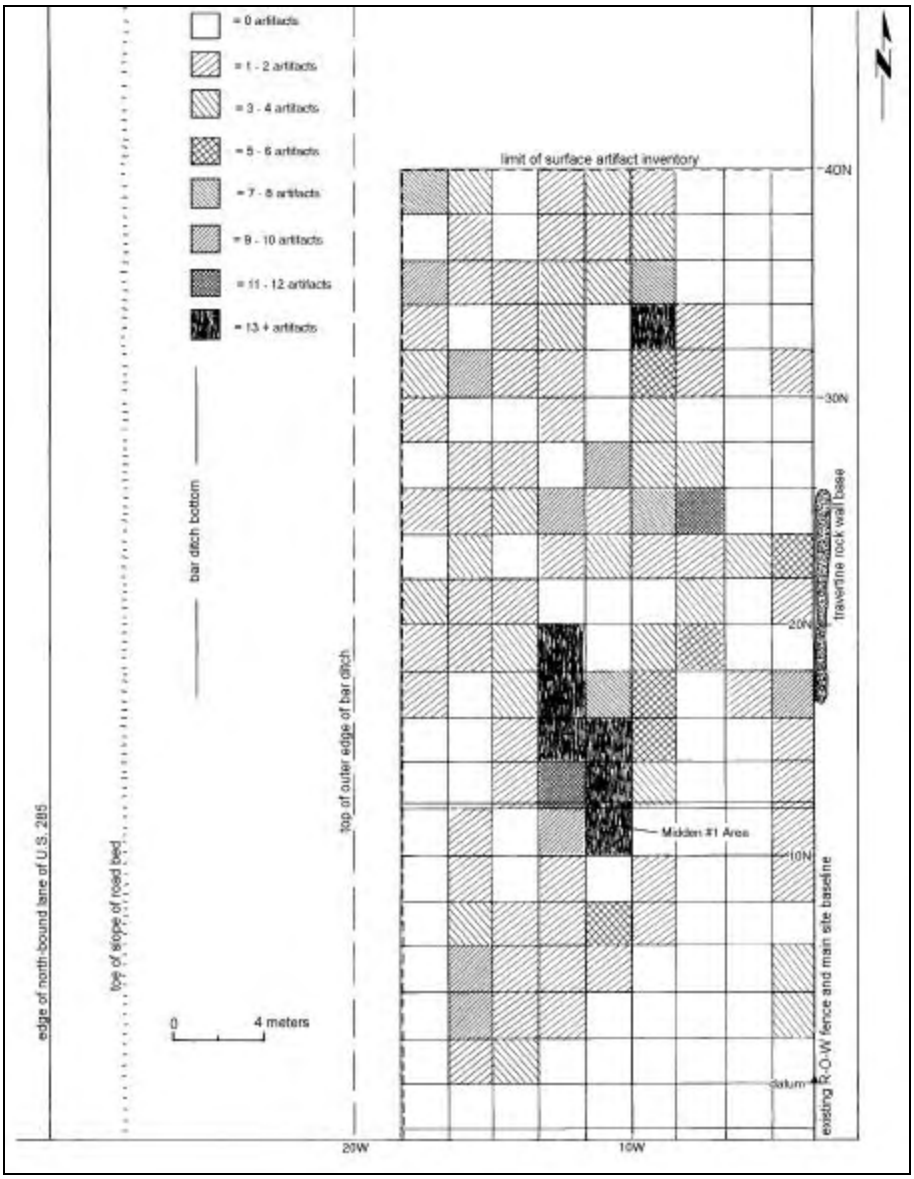


Figure 50. Surface artifact density plot, Rock Schoolhouse.

HISTORY OF THE ROCK SCHOOLHOUSE

Janet E. Spivey

Introduction and Research Methods

The research orientation for LA 116473 included a combination of archaeological and historic methods. The historic study was conducted in May, June, and July 1997. During that time data were collected to determine the land-use history, especially as related to its use as a schoolhouse location, and placement in a larger socio-cultural context within the old Seven Rivers community. Research methods included site visits, a study of land title records, historical documents and archival records, a review of pertinent published resources relating to the general history of the Seven Rivers community, and interviews with individuals knowledgeable of or associated with the site and surrounding area.

Prior to conducting interviews regarding LA 116473, Bureau of Land Management (BLM) plat survey maps, Eddy County Courthouse records, and the Carlsbad Family History Center Records were examined. The BLM and Eddy County Courthouse records showed United States Homestead Patent no.103 was issued to Oscar Sassin, in 1894, for the 160 acres on which the historic schoolhouse is located.

Historic Overview

For the purposes of this report we have limited our investigations to the historic period surrounding the original community of Seven Rivers, New Mexico. According to Katz and Katz (1985), prior to the time of the establishment of the town of Seven Rivers, the term Seven Rivers referred to the general area surrounding the confluence of seven streams and the Pecos River. People considered themselves to be from Seven Rivers even though their homesteads were located 20 miles from the townsite (Fig. 51).

The first known documented reference to the Seven Rivers region is a designation on a 1710 Spanish map showing the location of a branch of the Faraoan Apache Indians known as the “Apaches de los Siete Rios” (Katz and Katz 1985:30-31). Differing accounts exist for the founding of the Seven Rivers townsite. Meyers (1962) stated that perhaps Mexican-Americans were in the area before the Anglos and called it Siete Rios.

In 1866, Charles Goodnight and Oliver Loving blazed a cattle trail from Texas through the Middle Pecos region. They were followed in 1868 by John Chisum who started a cattle ranch that extended south along the Pecos River from near Fort Sumner to Seven Rivers, a distance of 150 miles. As early as 1870 individual families of settlers came to the Rio Peñasco and North Seven Rivers area. Hugh Beckwith and family set up ranching headquarters near present-day Lakewood about 1870. By 1873, Dick Reed and George Hoag had established a general store near the confluence of Seven Rivers and the Pecos (Hendley 1982:26).

The first actual wagon trains of settlers came to the Pecos Valley near Roswell in 1878 or 1879, bringing eight family units including Martin V. B. Corn, his wife, and seven children. The townsite of Seven Rivers was established in the mid-1880s (Fig. 52) and was located about halfway between present day Artesia and Carlsbad, New Mexico. The actual townsite is located under the waters of Brantley Reservoir, about 2 miles east of the modern map location of Seven Rivers. When twenty- year-old Frank Rheinboldt arrived in the area in March 1882, he provided the following description:

> There was only one store in Seven Rivers then, and it was owned by Captain Sansom. It was a general merchandise store, post office and saloon combined. The only building there at all was this store where Sansom and his wife lived. The name Seven Rivers came from seven springs, each forming a stream that emptied into a main channel and then into the Pecos. This main stream ran right by the store. Along the several streams were a number of settlers. Each had a small ranch and owned either sheep or cattle. (Hendley 1982:26)

Frank Rheinboldt also commented on the toughness of the Seven Rivers area, observing that 10 men "who had died with their boots on were placed in the little cemetery in the few years before he came" (Ferguson 1993:19). Several of the early settlers had been involved in the Lincoln County Wars that had climaxed with the battle between the McSween-Tunstall-Chisum faction and the Dolan-Murphy-Riley faction in 1878 (Ferguson 1993:15).

Families and individuals settled on plots of land available for homesteading up and down the valley or they simply squatted on the land. These families added to the solid citizens already present. The settlers were followed by merchants and other people looking for honest work. At this time there were not many sheep ranches and only a few farmers. In 1880, 47.6 percent of the males classified themselves as working with cattle and

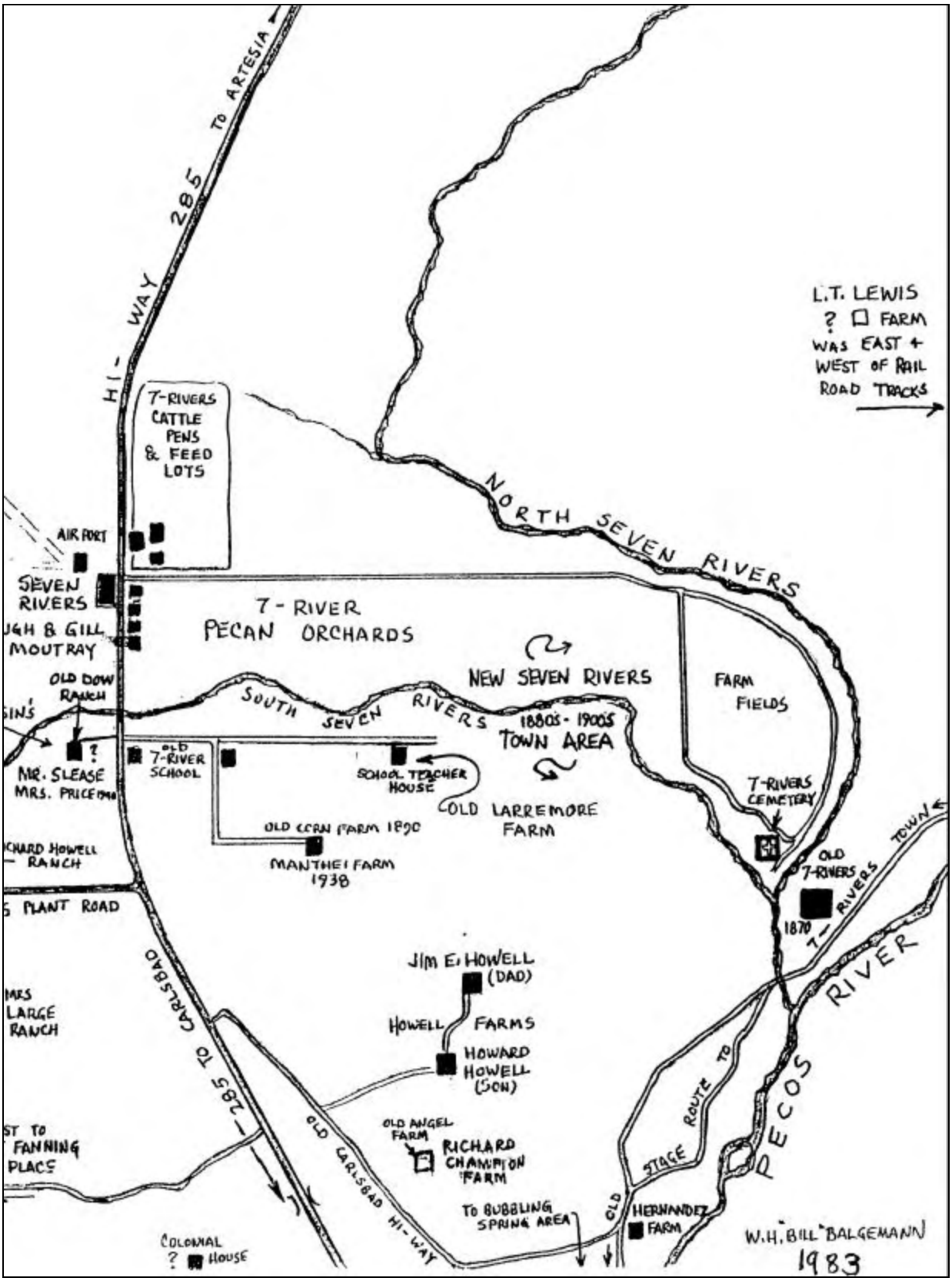


Figure 51. William Balgemann's sketch map of the Seven Rivers area, southeastern New Mexico.

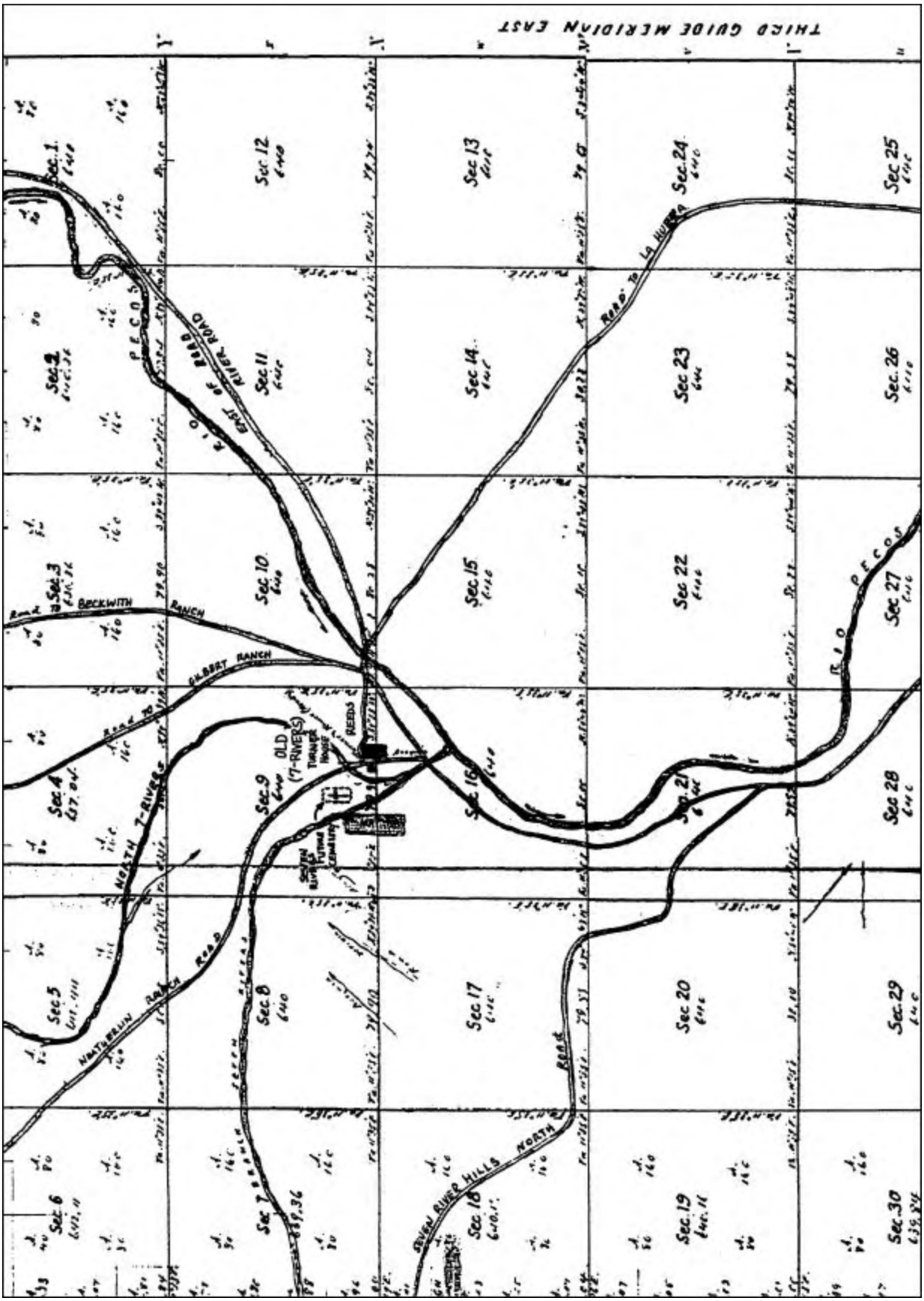


Figure 52. 1879 plat of old Seven Rivers and vicinity. (Courtesy Chester Walkup)

54.9 percent in 1885 (Gallagher and Bearden 1980:292). Seven Rivers was a ranching center that provided goods and services to the cattle industry and its existence depended a great deal upon the growth and decline of that industry (Katz and Katz 1985:48-50).

By 1885 the plat for the town of Seven Rivers (Fig. 53) was completed and the New Mexico Territorial Census of 1885 listed some 300 residents in the area. The town supplied basic services: two saloons, a hotel, two general stores, a schoolhouse, and a cemetery. The 1885 census also lists the professions of the residents. The town had several freighters, a blacksmith, retail salesmen, and even a jeweler. Regular stagecoach service was established in the late 1880s (Katz and Katz 1985:52).

According to Eve Ball (1969), Barbara Jones, known as Ma'am Jones of the Pecos, was among the first to conduct school in the Seven Rivers area. Heiskell and Barbara Jones had moved to Seven Rivers around 1878. Ball (1969) stated that when Seven Rivers had acquired two stores and five saloons, Barbara Jones felt it was time for neighbors to gather together and build a school. The school was built of adobe and Heiskell Jones brought glass from Las Vegas for windows and also a school bell. Two doors were made for the entrances—separate ones for girls and boys (Ball 1969:186-187).

Although cattle ranching was dominant, most individuals had gardens or cultivated farms. The long growing season, between 200 and 240 frost-free days, and an abundance of sunny days, meant that a number of crops could be grown by the farmers. When the land was first cultivated, good crops were produced with irrigation. Water was diverted from the rivers and springs. John Chisum had a long irrigation ditch that diverted the water from the South Spring River to lands south and southeast of his headquarters. The tens of thousands of cattle and smaller number of more efficient sheep caused severe overgrazing of the grama grass cover. When the rains came the topsoil was washed away. In 1887, drought and

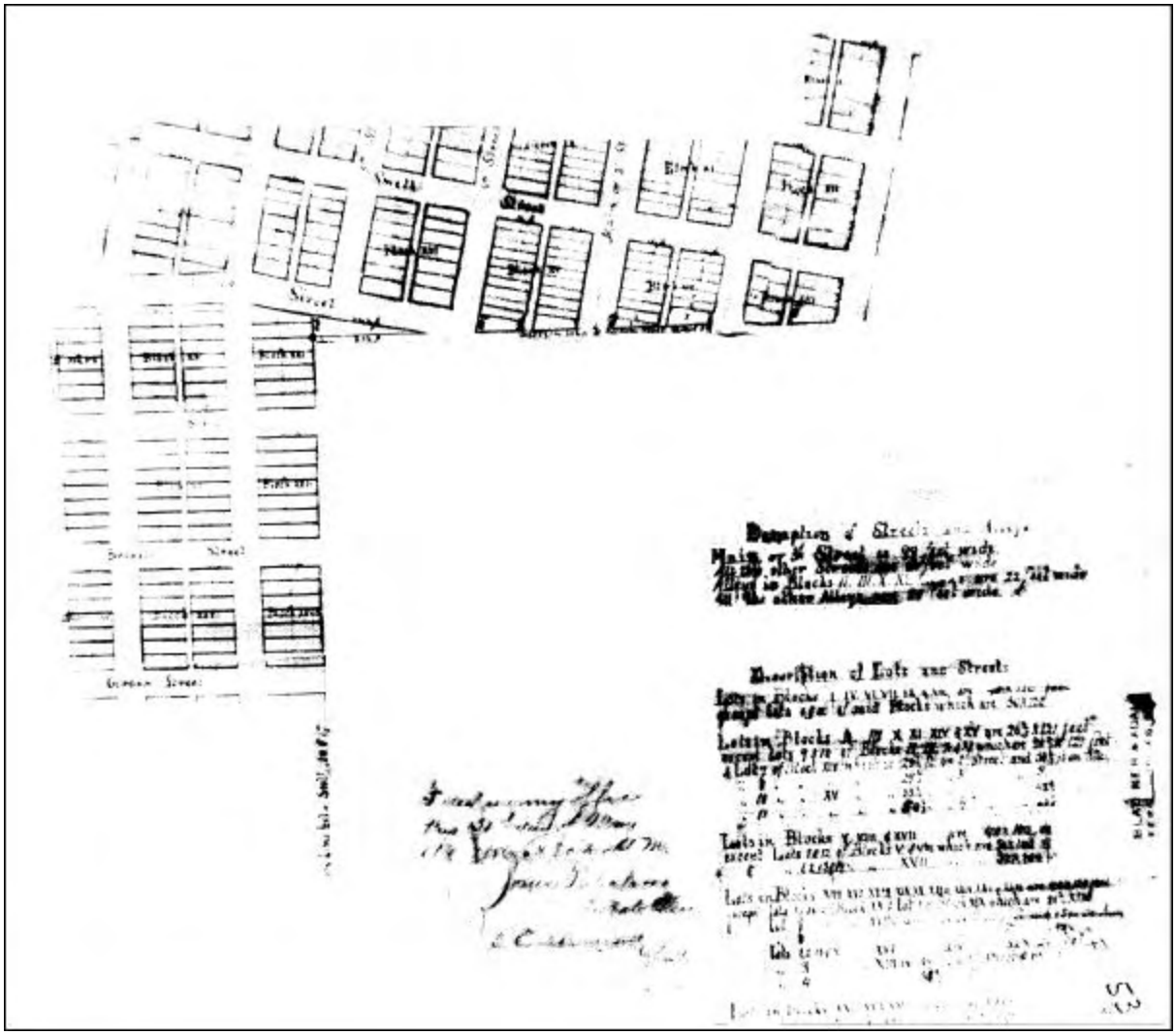


Figure 53. 1885 plat map of the town of Seven Rivers. (On file, County Clerk, Eddy County, Carlsbad, New Mexico)

a slump in the cattle industry forced many ranchers to leave. Floods in 1889 killed hundreds of cattle on the open range. By 1896 the larger ranches began reducing the size of their herds and by the turn of the century the days of the open range were over (Ferguson 1993:30).

Pat Garrett, ex-sheriff of Lincoln County, irrigated his farm with a canal he had built from Berrendo Creek, near Roswell. Garrett came up with the idea of creating a huge irrigation complex for the Middle Pecos Valley and discussed it with Charles (C. B.) Eddy. Eddy had come West in 1881 and with his brother, James, bought a ranch near Seven Rivers. Eddy joined his brother James, Joseph Stevens, Elmer Williams and Arthur Mermod to form the Pecos Valley Land and Ditch Company in 1887. Reorganized in 1888, the major shareholders included C. B. Eddy, Pat Garrett, and Charles Green, who served as managing directors (Katz and Katz 1985:56).

In 1888 the Pecos Valley Land and Ditch Company built a diversion dam on the Pecos River near the present site of Avalon Dam and later McMillan Dam, near present-day Lakewood (Fig. 54). John J. Hagerman made substantial investments in the company and by 1890, he and a group of investors had controlling interest.

The company was reorganized and became the Pecos Irrigation and Improvement Company with Hagerman as president in 1892. In order to succeed, the company needed to promote and populate the lands to be irrigated. Advertising and trips abroad describing the beauty and agricultural potential of the Middle Pecos Valley encouraged people to move there (Fig. 55). The investors advertised the Pecos Valley nationally as a veritable agricultural "Garden of Eden":

> WATER IS KING! The Pecos Irrigation and Improvement Company is now engaged in the most GIGANTIC IRRIGATION ENTERPRIS - ES in the West. Its canals will reclaim more than 200,000 acres of wonderfully fertile land. Limestone-Soil, Plenty of Water, Abundant Sunshine, A combination of elements that never fail to reward the farmer for his labor. (Gallagher and Bearden 1980:279)

Unfortunately things were not as advertised. In 1893 a major flood breached McMillan and toppled Avalon Dam destroying many of the structures as well. Also in 1893 a stock-market crash, coupled with the damage from the flood, caused the Pecos Irrigation and Improvement Company severe financial stress. Charles Eddy left the company in 1893 and Garrett followed in 1894. Hagerman intervened and kept the company operating until 1897 when Hagerman withdrew his support, and by 1898 the company went into receivership (Katz and Katz 1985:58-61).

However, by 1885, 10,680 acres or 66.2 percent of the Seven Rivers land area had been claimed. From 1886

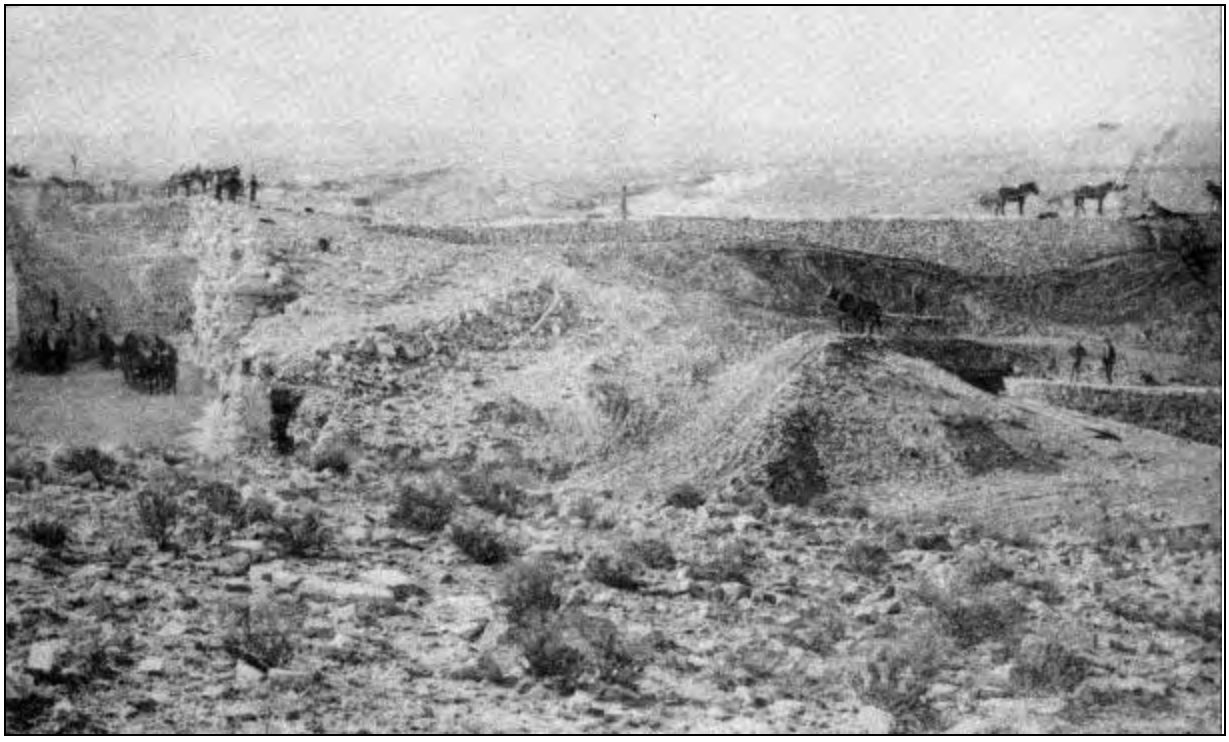
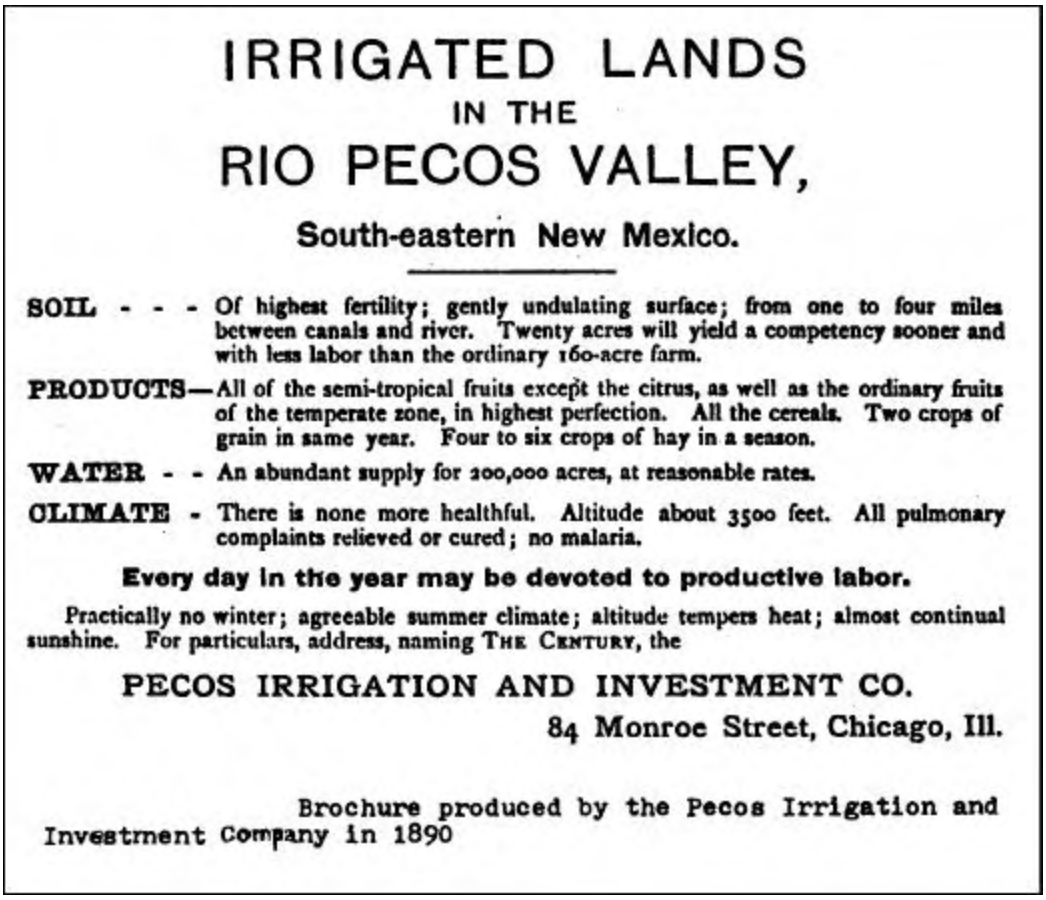


Figure 54. Avalon Dam under construction, 1889. (From* Watering the Land, *courtesy National Park Service, Bureau of Reclamation, Denver)



IRRIGATED LANDS
IN THE
RIO PECOS VALLEY,
South-eastern New Mexico.

SOIL - - - Of highest fertility; gently undulating surface; from one to four miles between canals and river. Twenty acres will yield a competency sooner and with less labor than the ordinary 160-acre farm.

PRODUCTS—All of the semi-tropical fruits except the citrus, as well as the ordinary fruits of the temperate zone, in highest perfection. All the cereals. Two crops of grain in same year. Four to six crops of hay in a season.

WATER - - An abundant supply for 200,000 acres, at reasonable rates.

CLIMATE - There is none more healthful. Altitude about 3500 feet. All pulmonary complaints relieved or cured; no malaria.

Every day in the year may be devoted to productive labor.

Practically no winter; agreeable summer climate; altitude tempers heat; almost continual sunshine. For particulars, address, naming THE CENTURY, the

PECOS IRRIGATION AND INVESTMENT CO.
84 Monroe Street, Chicago, Ill.

Brochure produced by the Pecos Irrigation and Investment Company in 1890

Figure 55. 1890 Pecos Irrigation and Investment Company brochure. (From Katz and Katz 1985)

to 1890, an additional 1,240 acres (7.7 percent) were titled, and 2,560 more acres (15.9 percent) were added between 1891 and 1895. The remaining 1,640 acres (10.2 percent) were titled between 1896 and 1900. Thus the moderate success of the land and irrigation company promotions is indicated by the acquisition of 26 percent of the total land between 1891 and 1900 (Gallagher and Bearden 1980:283).

The decline of the cattle industry and growth of irrigation agriculture brought new changes to the town of Seven Rivers, and in the 1880s it became the economic and social center of eastern Lincoln County. More changes were to come in the 1890s with the development of nearby communities. One of those communities was promoted by C. B. Eddy to meet the need for a more cosmopolitan life. Eddy developed the plan for a town that would take the place of Seven Rivers as the area's primary center.

The new town was called Eddy and was to be a business-oriented community with office buildings, residences, and other commercial interests. The town had banks, a baseball team, and churches. The first school in Eddy, The Adobe School, was built in 1889 by the Pecos Valley Town Company at a cost of $1,995. It was one-story high and stood on the corner of South Main and Bronson. It measured 22-by-30 ft. The first teacher was Fred Nymeyer.

By 1891, a railroad link to Pecos, Texas, an investment of J. J. Hagerman, had been completed to Eddy (present-day Carlsbad). The railroad bypassed Seven Rivers in 1894 as it linked Eddy to Roswell. As the railroad was essential to the existence of a small town, the bypassing of Seven Rivers effectively stopped any future development. In 1895 the town of Seven Rivers lost its post office. However, the geographic designation and its place in the lives of the early settlers and their descendants continued until the construction of Brantley Dam and Reservoir in the mid-1980s (Katz and Katz 1985:62) (Fig. 56).

Public Education in Territorial New Mexico (1846-1912)

In 1850, New Mexico, as a U.S. Territory, had no public school system. Prior to this time, the Catholic Church had established and maintained schools. In 1851, Bishop Lamy came to New Mexico and because he believed in the benefits of education, did much to promote it. The

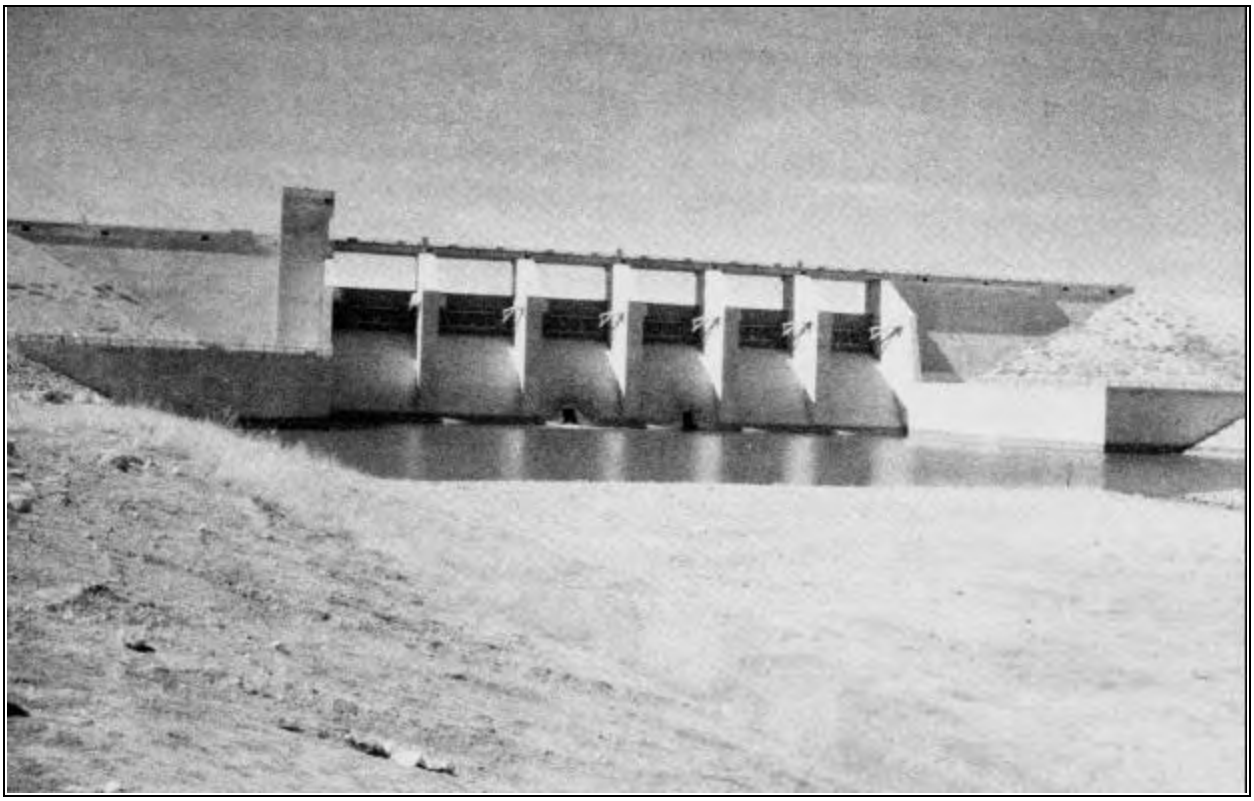


Figure 56. Brantley Dam, completed in 1987. (From* Watering the Land, *courtesy National Park Service, Bureau of Reclamation, Denver)

Loretto Academy and St. Michael's College were opened in Santa Fe, and the Sisters of Loretto founded a school in Taos in 1863 with schools in Mora, Las Vegas, Bernalillo, and Las Cruces soon following. The Protestant churches began mission schools in the 1860s, with the Presbyterian Church claiming a school "in every New Mexico town of importance" by 1895 (Nanninga 1942:7-19).

The first school laws of New Mexico were passed in February 1856 as an attempt to establish a public, tax-supported school system. Some of the early provisions of the laws were:

1. Every male inhabitant in the Territory of New Mexico twenty-one years of age (Pueblo Indians excepted) was required to pay an annual tax for education of the youth of the territory.

2. A board of education was appointed for each county by the probate judge for a period of two years. Anyone refusing to accept the appointment was to be fined ten dollars, which was to be paid to the school fund.

3. The Board of Education established schools in each precinct or township and made rules for and determined the number of sessions to be held each year.

4. Teachers were appointed by the board of education and their salary ranged from eight to forty dollars a month, depending upon the work and number of pupils in the school.

5. The law of 1855-56 was to be in force immediately in all counties except Taos, Rio Arriba, Santa Ana, and Socorro. These counties were to submit the act to the voters for approval or disapproval. The returns of the election showed that of the 5,053 votes cast in these counties, only 37 were in favor of public schools.

The Territorial legislature meeting in December 1856 repealed the law, and all taxes and fines collected were by legislative act returned to the people paying them. Four years after the 1856 law was repealed, a new school code was passed by the legislative assembly of the territory on January 27, 1860 (Nanninga 1942:7-19).

The new school code of 1860 stated that in every precinct of the territory it was the duty of the justice of the peace to annually appoint a person capable of teaching children. The teacher's salary was fifty cents a child per month. The parents were required to furnish the school books and supplies, and each child was to deliver one stick of wood to the schoolhouse per day, which was to be placed at the front door. The law of 1860 specified that school was to be in session annually from the first day of November until the last day of April (Nanninga 1942:12).

The Territorial legislature of 1876 established the office of county superintendent. Children under the age of eighteen and over the age of seven were to attend

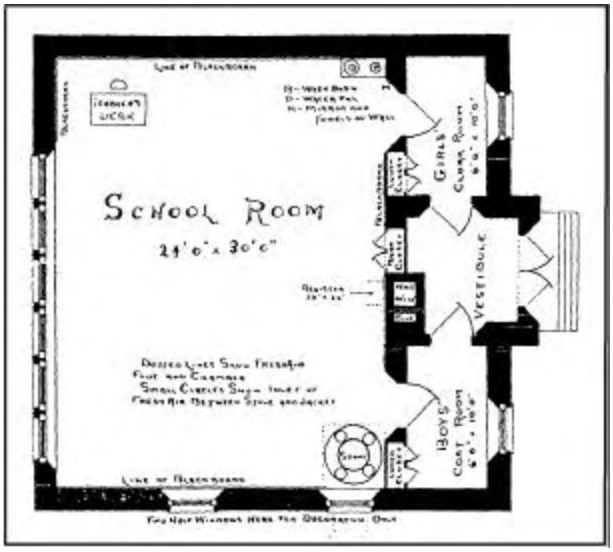


Figure 57. 1909 Floor Plan No. 1 for a one-room adobe (school) building.

school, provided the father or guardian furnished the children with necessary books, paper, ink, wood, and paid fifty cents a month per child (Nanninga 1942:13).

Revenue for support of schools was a problem especially since the legislature made no appropriations. In 1872 a poll tax law was passed for school purposes. Every male citizen over twenty-one years of age, idiots and persons of unsound mind excepted, was required to pay annually one dollar to the school fund. When a county had a surplus of more than five hundred dollars in the treasury, after paying all current expenses, the surplus above five hundred dollars was to be placed in the county school fund. Also, violation of certain laws resulted in fines to be paid into the school fund. An example was a strict Sunday law passed in 1876 which provided that no person was allowed to engage in any games or sports, horse racing, cock fighting, dancing, or selling merchandise on Sunday (exceptions were drugs and necessities); nor could one engage in any kind of labor, except works of necessity, charity, or mercy (Nanninga 1942:14-15).

In 1875, Bernalillo County had eighteen public school teachers, all men, and only boys attended school. The average salary per month was $22 for five and a half months. Santa Fe County in 1875 had fourteen public school teachers, four of these were women, the salary averaged $26 per month for ten months. One of the schools was for girls and six were coeducational. In 1875, the Territory of New Mexico had only 138 schools and 147 teachers.

The Public School Law of 1891 established a system more like that of the present day. It created the office of superintendent of pubic instruction, to be appointed by the governor, and a territorial board of education. The territorial board was composed of the governor, the superintendent of public instruction, and the presidents of the University of New Mexico, the Agricultural College (NMSU), and St. Michael's College. The schools were supported by taxes and therefore no parent or guardian made payments to send their children to school. By 1906 there were more than a thousand school teachers, with about 50,000 students enrolled in the public schools. One of the major factors in improving the public school system was the immigration of settlers into New Mexico. These settlers made permanent homes and wanted quality education for their families, much like they had in the states from which they came (Nanninga 1942:17-18) (Fig. 57).

Public Education in Eddy County (1892-1912)

The following information was located at the New Mexico State Records Center and Archives in the Report of the State Superintendent of Public Instruction for the years 1892-1912.

An 1892 report from Amado Chavez, State Superintendent of Public Instruction, listed John S. Shattuck as Eddy County School Superintendent but had received no report on the Eddy County Schools. The following year, 1893, the Chavez report listed Fred Nymeyer as Eddy County School Superintendent and stated that Eddy County had a total enrollment of 605 students and 17 school teachers. In 1893 Carlsbad built a new brick school building with six rooms, a hall, and a basement costing about $14,000 dollars. The school enrollment was 136 students.

By 1900, School District Seven is listed separately in the report from the State Superintendent for Public Instruction. Only one school is listed in School District Seven and is in all probability the Rock Schoolhouse (LA 116473). The value of the school property was $600. There was one teacher with 26 students enrolled for a school term of six months. The teacher's salary was $300 per year. By 1906, School District Seven was called the Lakewood District. There were two schools located in this district, with a total enrollment of 100 students. There were two male teachers and the teacher's salary was $822.50 a year. There was a new building, grounds, and furniture with a value of $10,500.

For the school years 1910-1912, Eddy County had 40 schools, of which Carlsbad had three, Artesia had two, and the other schools were in the Lakewood and Dayton areas. Twenty-seven schools had only one teacher. One school was built of stone, three of adobe, one of concrete, two of brick, and the others of lumber. There was mention of the need to consolidate some of the schools.

History of the Rock Schoolhouse

A brief land-use history of LA 116473 was compiled from archival records, such as Homestead Patents from the National Archives in Washington, D.C., historical documents, land title records, and interviews with knowledgeable individuals, such as current landowners and individuals familiar with the schoolhouse.

The earliest land transaction recorded for use of LA 116473 appeared in the Bureau of Land Management and Eddy County Courthouse records showing Homestead Patent no. 103 issued to Oscar Sassin on October 6, 1894, for the 160 acres on which the Rock Schoolhouse was located. According to these records, in September of 1893, Oscar Sassin filed a homestead entry application for 160 acres on the E½ SW¼ and W½ SE¼ of Section 7, T 20S, R 26E. In November 1893, Sassin, in the Homestead Proof-Testimony of Claimant, stated that he was 45 years old and his post office box was Seven Rivers, New Mexico. Sassin stated he built his house and established actual residence on the first day of March 1887. The house was 20-by-21 ft.

Sassin had 120 acres fenced, about 25 acres in cultivation and about 150 trees on the place for a value totaled at $1,200. Sassin also stated that he was married and had five children. The 1900 Territorial Census of New Mexico for Eddy County stated that Oscar Sassin lived in Precinct 4. Sassin was 51 years old and born in Texas in 1848. He was a farmer, married to Lethe Sassin for twenty years, and they had four living children. A son, Victor, died in 1897 at age 10. Lethe Sassin was born in Texas in 1861 and was 38 years old. Their children were Louis, age sixteen, born in 1883 in New Mexico; Willie M., age twelve, born in 1889 in New Mexico; Norma, age seven, born in New Mexico in 1892; and Winnie Ford, age four, born in New Mexico in 1895.

Homestead Patent no. 103 was also to contain reservations according to the provisions of the act of August 30, 1890 (26 Stat. 391) relating to rights of acequias, ditches, and canals. In the Homestead Proof-Testimony of Witness, Robert H. Pierce stated that Oscar Sassin "has houses." Unfortunately there is no description of the houses, thus we cannot determine from these records if the schoolhouse structure existed as early as 1887.

However, information obtained from Deed Book 6 located at the County Clerk's office in the Eddy County Courthouse in Carlsbad, contained an indenture between Oscar Sassin and his wife, Lethe, with School District 7 on November 1, 1894. The Sassins sold 1 acre of land out of Homestead Patent no. 103 to School District 7 for a sum of $5.00. The land is described as follows:

> Commencing at a point in the center of Section 7 of Township 20 South of Range 26 East NMPM running thence east 208 feet thence south 208 feet thence west 208 feet thence north 208 feet to the place of beginning which has HERETOFORE been used for school purposes.
>
> Stipulations of the use of the land and PREMISES shall be exclusively for school purposes and no balls or dances shall be carried on but the board of trustees may allow the premises to be used for any other public gathering and if no other use of the premises for school purposes or if any balls or dances should be allowed to be carried on then the deed shall become null and void and all right title and interest of and to the premises shall revert back to the Sassins or their successors heirs.

The deed record showed that the Rock Schoolhouse was in existence by 1894 and indicates there was an existing structure that had been used for school purposes prior to 1894. Unfortunately, no description of the schoolhouse associated with the deed has been found. Therefore, written or oral testimony from individuals associated with the schoolhouse must be relied upon to obtain a description.

The following article about old Seven Rivers was written by Mary Neatherlin Dow of Roswell, and appeared in the Artesia Advocate in 1940. The article was reprinted in the Carlsbad Current-Argus, October 22, 1964. In this article Mrs. Dow reflects on her memories of the Seven Rivers Community where she lived from 1885 to 1896:

> In 1885 the new town had a small population and a very few business houses. Two general merchandise stores (the post office was kept in one of the stores), an eating house, a saloon, and a small adobe building. People had to go to Las Cruces on land business and to Lincoln on District Court business. The whole of southeastern New Mexico was in Lincoln County, and the town of Lincoln was the county seat. Seven Rivers had its larger population in what we called the "Rock Schoolhouse District."
>
> As one travels down our modern paved highways from Roswell to Carlsbad he will cross a bridge that spans that branch known as Middle Seven Rivers. Look to the left as you leave the bridge and you will see some old

crumbled stone walls. These crumbled walls are what remains of a rock building that once was the pride of the surrounding countryside. It was built for a schoolhouse that would accommo - date all children of scholastic age in the com - munity. As it was the only building of its kind it was used for church and Sunday school as well as day school. I wonder if there are any pupils who attended school there in 1885 and the two succeeding years that remember our teacher (Mr. Hammond)? He was a fine Christian gen - tleman and scholar. He superintended and taught Sunday school as long as he was employed as a teacher for our school.

From Mrs. Dow's 1940 testimony it appears that the Rock Schoolhouse existed as early as 1885, which would be two years earlier than the 1887 house Mr. Sassin stat - ed that he had built.

Another informant, Mrs. Earl (Tina) Bowers of Carlsbad, New Mexico, attended the Rock Schoolhouse in 1914. At the time of this interview she was 94 years old. Mrs. Bowers was born in 1903, 1½ miles west of the Rock Schoolhouse. Paul Kroeger was her father and he died in 1912.

Mrs. Bowers first started school at the McDonald's School in 1909. At that time she rode a burro to school. She described the McDonald's school as being mostly a shack. The McDonald school building burned down

Figure 58. 1939 Soil Conservation Service aerial photograph of Rock Schoolhouse vicinity. (Courtesy Earth Data Analysis Center, University of New Mexico)

when she was in the fourth grade. The next school year (1914) she started fifth grade at the Rock Schoolhouse and continued school there through sixth grade. Mrs. Lener was the teacher.

Mrs. Bowers recalled the schoolhouse as being built of rock and mud. She thought the rocks always looked like they had been under water. The school building had one room with a stage built up at the front of the room. There were two doors on the front of the building to allow for separate entrances for the girls and boys, and a board on the wall in the back of the room that functioned as a coat and hat rack. A wood stove was used to heat the building, and a nearby spring supplied the water for the school. According to Mrs. Bower's testimony the Rock Schoolhouse was still functioning from 1914 through 1916.

Another informant, Barbara Buckner, was also familiar with the Rock Schoolhouse. Mrs. Buckner was born in 1920 in Hope, New Mexico. Her father, George Wood, was born in 1889 and had attended school at the Rock Schoolhouse. She recalled being with her father about 1928 while he was building fence near the Rock Schoolhouse. They spent the night inside the school - house. Mrs. Buckner recalled the schoolhouse being built of rock and mud, and having one room with a dirt floor. At that time it was not being used for school pur - poses.

Mr. James Moutray's family moved to the present site of Seven Rivers along U.S. 285 in 1931. Mr. Moutray recalled seeing remains of the schoolhouse standing in the late 1930s, including 6-8- ft-high walls. He thought the ruins of the stone walls were still stand - ing in the 1960s.

A December 1939 aerial photo of the Upper Seven Rivers settlement shows the remains of what appears to be the Rock Schoolhouse. This photo was located at the University of New Mexico Earth Data Analysis Center (EDAC). According to EDAC staff, the image seen on the photo is the remains of standing walls with no visible roof (Fig. 58).

Material Remains from the Rock Schoolhouse

Natasha Williamson

Both the Rock Schoolhouse and an associated can dump were outside the project area, leaving only the sparse cul - tural remains inside the right-of-way to be investigated. Two test pits were excavated but no new information was gleaned from the thin and rocky soil.

The can dump, just outside of the project area, and in front of the schoolhouse, was visually surveyed and yielded 15 tobacco tins, 1 potted meat can of the hole-in-top variety, 1 coffee can lid, 1 large can, 2 lard buckets, 6 milk cans and 18 indeterminate, probably food cans. The types of cans can mean that the dump postdates the schoolhouse and represents a tertiary site use.

Table 7. Artifacts by Category, Number, and Percentage of Site Total at LA 116473

Category	Number	Percentage
Unidentified	238	39.67
Economy and Production	6	1.0
Foodstuffs	12	2.0
Indulgences	18	3.0
Domestic Routine	72	12.0
Construction and Maintenance	226	37.67
Personal Effects	23	3.8
Entertainment and Leisure	5	.8
Total	600	99.94

Within the project area, only 15 artifacts were col - lected, but a total of 600 were recorded in the field. One maker's mark was partially identified. A piece of white ware was made by one of the Meakin factories, but not enough of the mark was present to determine which of the several Meakin factories it was. Table 7 gives the per - centages and counts of artifacts in each of the represent - ed categories.

The somewhat large number of unidentified artifacts is a result of field recording rather than laboratory analy- sis. Slightly over 70 percent of the unidentified artifacts were glass, usually bottle glass, and most of the rest of the artifacts were can or other metal fragments.

Economy and Production artifacts were evenly divided between Arms and Stock Supplies. Two .22 cal - iber and one .30 caliber shells were found. The rest of the artifacts in this class were horseshoe nails (n = 3).

Foodstuffs and Indulgences category was heavily influenced by the can dump outside the right-of-way fence. This dump does not appear to relate to the school- house activities, but to a terti-ary use as a campsite either for travelers or stockmen.

Domestic Routine artifacts were almost entirely dish fragments (Fig. 59). Twelve of 70 were porcelain, of unknown type. White ware led with 46 specimens, one was stone ware, and one was yellow ware. Among the 46 white ware were 13 sherds recorded as "cobalt," because there was a noticeable blueness to the glaze. These may be a form of "pearlware," popular in the preceding gen - erations. The type began around 1790, and declined around 1840, but continued to be produced as late as

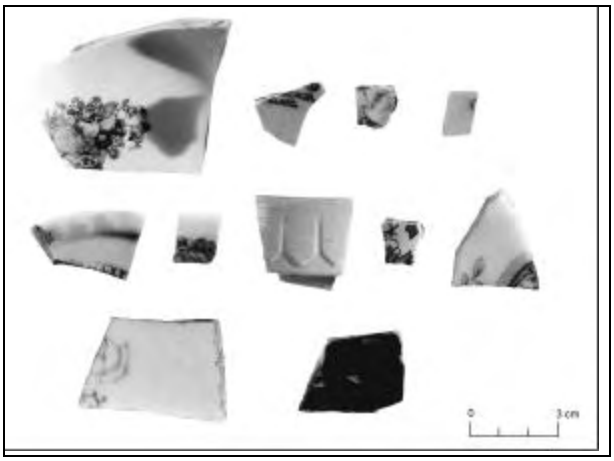


Figure 59. Dish fragments, Rock Schoolhouse.

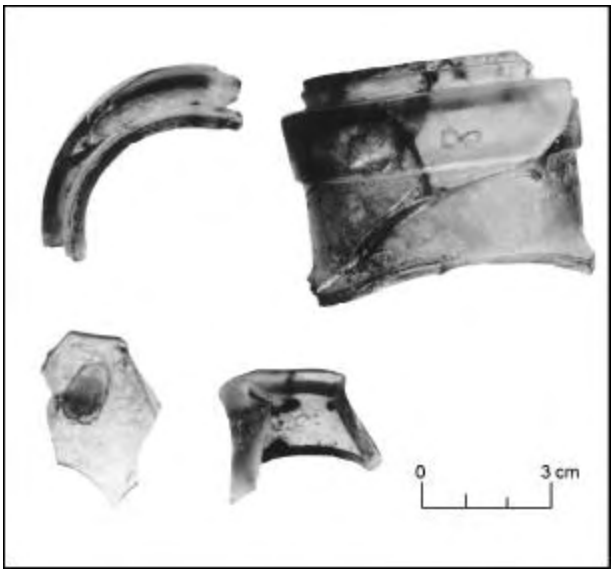


Figure 60. Amethyst glass fragments, Rock Schoolhouse.

1890. It is possible that the merchants in the area were receiving outdated merchandise from their suppliers, or mothers were sending children to school with the older, "second-best" china. A time lag of 20 years to a century for ceramics over the rest of the assemblage is a common problem in historical analysis (Adams and Gaw 1977) because of their durability and curation.

Barnard et al. (1980), working with the nearby Brantley Reservoir artifacts, also noted 33.3 percent of their white ware sample to be of what they called a "bluish gray." At Seven Rivers, the percentage was 28.3. Barnard et al. (1980) quote Jewitt, who wrote in 1883 that the Staffordshire potters were producing "white graniteware for the United States and Canadian markets of both qualities—the bluish tinted for the provinces, and the pure white for the city trade." The majority of the blue wares have been found to be hollow vessel forms such as cups and bowls, as opposed to flatwares like plates. We would expect to find cups and bowls at the schoolhouse. However, almost all of this category was recorded in the field, and most were too small to be identified to vessel form. The only cobalt sherd identified in the field notes to vessel form is a piece of a plate.

One artifact, a large amethyst glass jar (Fig. 60) that several pieces were recovered from, was thought to be a master ink bottle, but after reconstruction, seems instead to be a large fruit jar of the lightning type. It is possible that the jar was recycled as a master ink or glue bottle. A master or stock bottle was the one the teacher kept and from which supplies were doled out to the students.

Furnishings were not found, which is not too surprising.

Construction and Maintenance was 37.67 percent of the total, with the bulk of that being window glass (n = 195). Window glass was measured in the field in 1/32 of an inch by holding the sherds against a ruler. These "eyeball" measurements are not really adequate to investigate window glass, which is usually measured in the thousandths of an inch or fractions of a millimeter, but glass is sold in fractions of an inch, so the technique is still useful. Most glass occurred in 1/16, 1/8 and 3/32 of an inch, with the latter being the dominant mode. The average thickness of the glass, converted to decimals, is .093 inch, a thickness suggestive of 1885 as an initial date of construction, using Schoen's (1990) formula, which bolsters the projected date of construction.

Personal Effects consisted of school slate fragments and buttons for the most part. Both of these artifacts would certainly be expected in a schoolyard.

Entertainment and Leisure did not contain any toys or marbles, some of which would be expected in a school yard. Interestingly, no marbles were found at the Jones homestead, either, whereas marbles are almost ubiquitous at Territorial/early Statehood sites in New Mexico.

No **Transportation or Communication** artifacts were recorded. One exception may be the presently unidentified object in Figure 61. It seems to be vehicle-related road trash and postdates the site. Shown with it in Figure 61 is a matchstriker on the lid of a tobacco tin.

The artifactual remains barely support the supposition that this was a schoolhouse. The school slate fragments can be argued to do so, but in fact, there were more such fragments at the Jones homestead. It is possible that most of the children's outdoor activities took place in another direction from the structure, and thus would be found outside the project limits. The evidence for a later use of the site by travelers or herders is just as strong. Since the site was known to be a residence at one time, it may be best to call it a multiuse site with one of those uses probably being a schoolhouse.

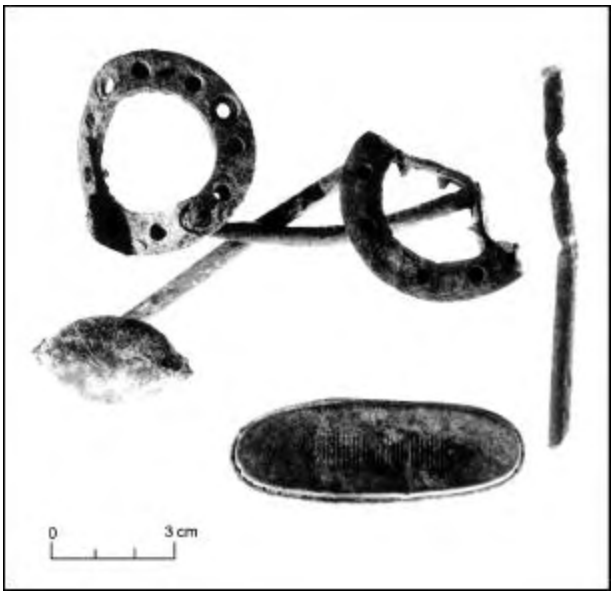


Figure 61. Unidentified object and matchstriker.

Summary—The Rock Schoolhouse (LA 116473)

Some conclusions about the Rock Schoolhouse may be drawn from the written and oral records. According to Mary Neatherline Dow, the Rock SchoolHouse was in existence as early as 1885. The 1894 indenture between Oscar and Lethe Sassin and School District 7 of Eddy County described the 1 acre of land and premises as heretofore used for school purposes. The 1900 Report of the State Superintendent of Public Instruction stated that School District 7 consisted of one school building indicating that the Rock Schoolhouse was in operation.

According to informant testimony the building was still being used as a public school from 1914 through 1916. Around 1928 the building was apparently no longer being used for school purposes but was still intact. The school building began to deteriorate in the 1930s with only standing walls visible in an 1939 aerial photo. Several informants stated that after the school was no longer in use, area residents used the rocks and stones for building materials, especially for fences. One local resident, who has lived near present-day Seven Rivers since 1931, stated that ruins of standing walls and rubble from the Rock Schoolhouse were visible in the 1960s.

The archaeological information derived from an examination of Midden #1 and a visual assessment of the surface artifacts associated with the former building location outside the project zone is informative. Artifacts like pieces of student slateboards specifically support a school function for the site. Various domestic items could be from either a schoolhouse use or a house-homestead function. However, the numerous tobacco cans, as well as food cans, around the former building location, suggest nonschool functions and are the sort of evidence that one would expect with subsequent use of the site for temporary shelter by travelers. Dish fragments and the like suggest use as a temporary home or trash dumped by the inhabitants from nearby homesteads.

Thus, Midden no. 1 probably reflects more nonschool uses of the site than school-related uses. These nonschool uses should be expected given the existence of the structure after its abandonment as a school, its proximity to the highway, and its location within the Seven Rivers community.

HISTORIC COMPONENT AT ARCHAEOLOGICAL SITE LA 8053, SOUTH SEVEN RIVERS DRAINAGE, EDDY COUNTY, NEW MEXICO

Regge N. Wiseman

The Archaeology

LA 8053 has both prehistoric and historic components. The prehistoric remains are described and discussed in a separate volume on prehistoric sites.

LA 8053 is situated on the north side of the South Seven Rivers and west of existing U.S. 285 (Fig. 62). The Rock Schoolhouse sits across the river to the south and east of the highway. The historic remains of LA 8053 include a rock structure "foundation" with attached shed "floor" (Feature 13) and associated trash scatter (Fig. 63). Two pits of a conglomerate quarry are located a short distance to the southwest (Fig. 64).

A records search and interviews with knowledgeable local individuals failed to identify the inhabitants of the structure or the dates of the quarry (Spivey, this report). Yet it was at least partly contemporary with the Rock Schoolhouse (Martinez, this report). We cannot even be certain whether the structure was related to the use of the quarry. Thus, the only information derives from the archaeological investigations.

Field Activities

Two tasks were completed for the historic component: (1) inventory of artifacts on the surface; and (2) completion of forms documenting the structure (Feature 13).

The surface artifacts were identified in the field by David Hayden and left where they had been found. None were collected. G. Martinez (this report), working from the list of artifacts, discusses their significance and dating.

No excavations were conducted in this component. The rocky nature of the ground surface around the structure and throughout the area of the trash scatter indicates that most of the artifacts were probably on the surface.

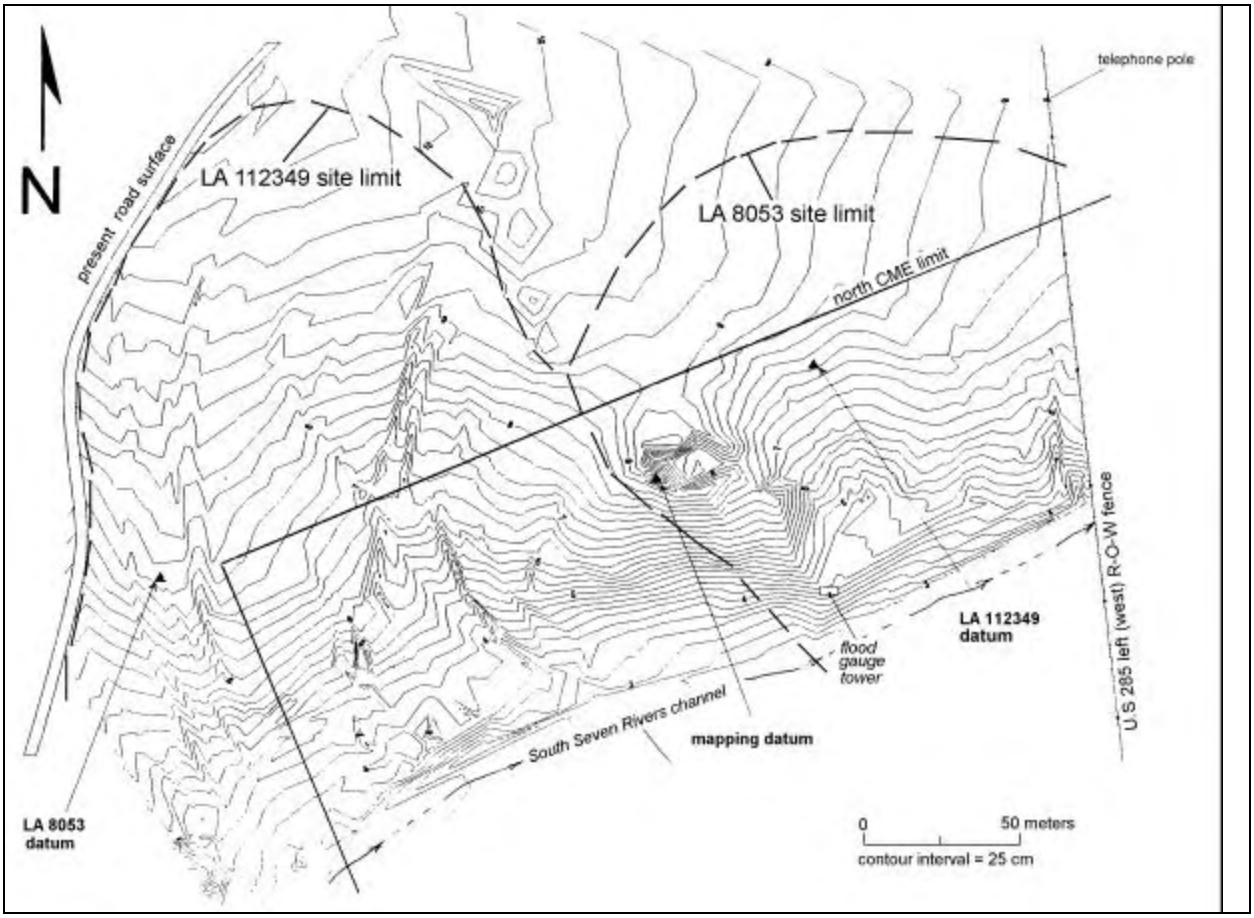


Figure 62. LA 8053 in relation to LA 112349.

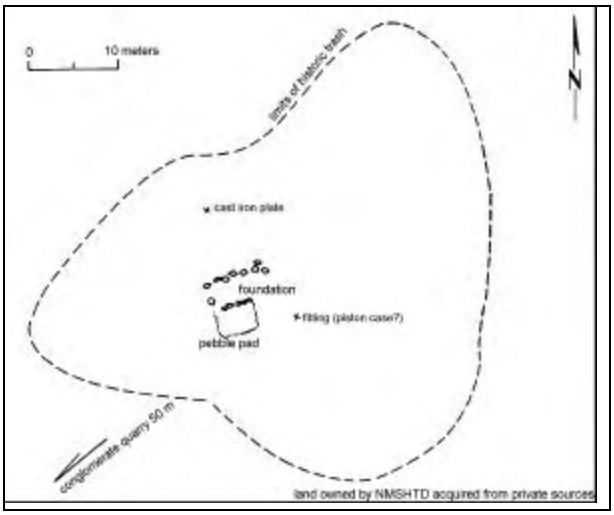


Figure 63. Historic foundation and trash scatter limits at LA 8053.

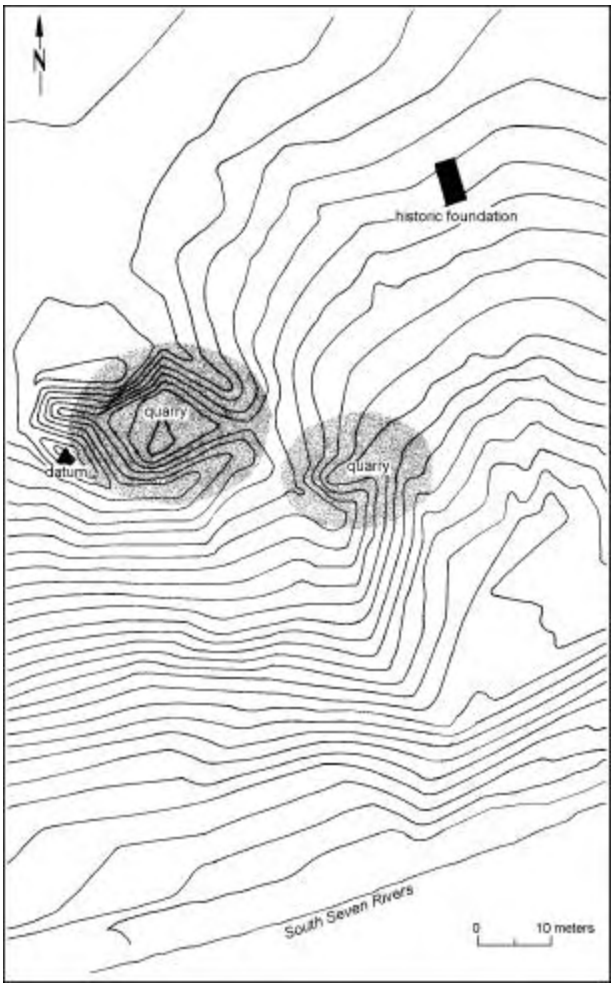


Figure 64. Historic component and quarry pits at LA 8053.

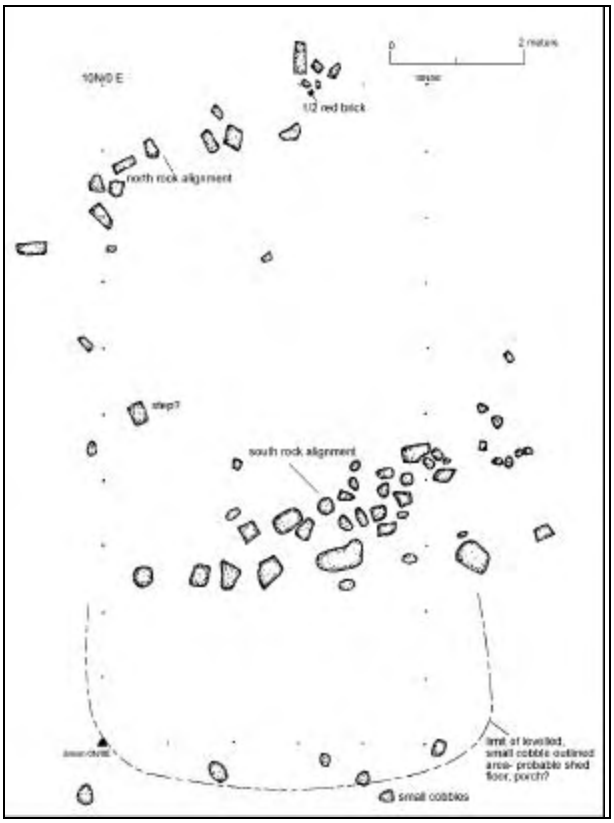


Figure 65. Detail of structural remains (foundation, shed floor), LA 8053.

Features

Structure Foundation and Shed Floor (Feature 13)

Two parallel rock alignments appear to constitute the foundation of a wooden frame structure (Fig. 65). The alignments are more accurately described as tumbled linear arrangements composed of unmodified large cobbles and angular blocks of local carbonitic rock. The rocks would have been dry-laid to one or two courses high. The lengths of the rock alignments and the spacing between them suggest the structure measured 8 m north-south by 7 m east-west. The wooden floor of the house would have been about 30 cm above the ground. A large, single rock (30-by-25-by-20 cm) located about the center of the west wall position may have been a step. If so, it saw little use as it lacks wear and use-polish.

The type of structure presumed to have stood at this location is a wooden frame building that could be moved by placing skids underneath it and pulling it across the prairie with a team of mules, horses, or oxen.

A leveled area abutting the south wall foundation and vaguely outlined by small cobbles may have served as the floor of a shed covered by a tarp, tent, or other eas

ily erected, easily removed material. The "floor" area measures 6-by-3 m with the long axis parallel to the south wall.

Rock Quarry (Conglomerate)

Two pits are located at the end of a short, low ridgelike rock outcrop at the edge of the terrace (Fig. 64). The larger pit on the west is clearly a quarry pit, the main part of which measures 15 m east-west by 10 m north-south. Unusable material had been thrown up around the edges, artificially increasing the depth of the pit. Real depth below the original ground surface was about 2 m. A level-bottomed low place in the east side was used to enter and leave the pit. The rock type quarried from the pit was conglomerate.

The smaller, eastern pit is located in the side of the terrace. Although we believe that it was a smaller quarry pit, it could also have been a dugout home or other structure meant for habitation or for storing tools and other items for quarrying. The size was consistent with a dugout, for it was 5 to 6 m long (into the terrace) by 3 to 4 m wide by 1.5 m deep at the back (west) end. The bottom was level with the ground at the east end.

If the smaller pit was a dugout, rather than another quarry pit, it would have been a bankhouse or chosa as discussed by Spivey (below). The back wall was formed by the back of the pit, the front would have been a constructed wall (with door), and the sides would have been partly of natural earth (or rock) and partly of constructed wall. No timbers, rock configurations, or evidence other than the size and shape of the pit suggest that this pit may have been a dugout.

History of LA 8053

Janet E. Spivey

The historic research for LA 8053 was conducted in November 1997. During that time data were collected to determine the land-use history and placement in a larger sociocultural context within the old Seven Rivers community.

Research methods included a study of land title records, historical documents and archival records, a review of pertinent published resources relating to the general history of the Seven Rivers community, and interviews with individuals knowledgeable of the LA 8053 site area.

Prior to conducting interviews regarding LA 8053, Bureau of Land Management (BLM) plat survey maps, Eddy County Courthouse records, and the Carlsbad Family History Center Records were examined. The BLM and Eddy County Courthouse records showed Heiskell Jones made Timber-Culture entry no. 72 on July 24, 1882, for the [redacted] However, entry no. 72 was canceled by relinquishment on April 21, 1884. Unfortunately no records were found that describe any land-use activity by Mr. Jones during the almost two years he owned the property. The 1873 Timber Culture Act required the planting and cultivation of at least 10 acres of timber. Unlike the Homestead Act of 1862, no residency was required.

The next land transaction recorded for LA 8053 appeared in the BLM and Eddy County Courthouse records that showed Desert-Land Entry No. 581 was made by Lethe Sassin on June 24, 1899, for 320 acres of th [redacted] and approved October 5, 1904.

Historic Overview

A more detailed historic summary of the area surrounding LA 8053 can be found in the previous discussion concerning LA 116473 or the Rock Schoolhouse. For the purpose of the report on LA 8053, we have limited our investigations to the historic activity during which Desert Land Entry Act Patent no. 347 to Lethe Sassin was approved.

The Desert Land Act of 1877 was designed to facilitate agricultural production on land that required irrigation. The land had to be irrigated within three years after the entry was made. The applicant could buy 640 acres and did not have to reside on the land. The price per acre was $1.25. The act was amended in 1890 to reduce the acreage to 320. Another amendment in 1891 stated that or 40 acres were to be under cultivation. The Desert Land Act proved to be an efficient method of land procurement for the Pecos Irrigation and Investment Company formed in July 1888.

Many of the first 150 or so Desert Land Certificates issued in Eddy County went to irrigation company directors and their families as well as to individuals from New York, Chicago, and Colorado. These lands were formally transferred to the Pecos Irrigation and Investment Company during the first few months of 1892. The company paid these individuals from $9 to $35 per acre for their lands (Hufstetler and Johnson 1993:30-31).

The Pecos Irrigation and Investment Company also added to its land holdings by acquiring the tracts of legitimate Desert Land entrymen and would either purchase the land at $10 to $30 an acre, or trade permanent water rights for 80 acres in exchange for the remaining acres (Hufstetler and Johnson 1993:31).

In 1889, as the irrigation company began construction on the reclamation project in the lower Pecos Valley, the town of Eddy grew considerably. The irrigation com-

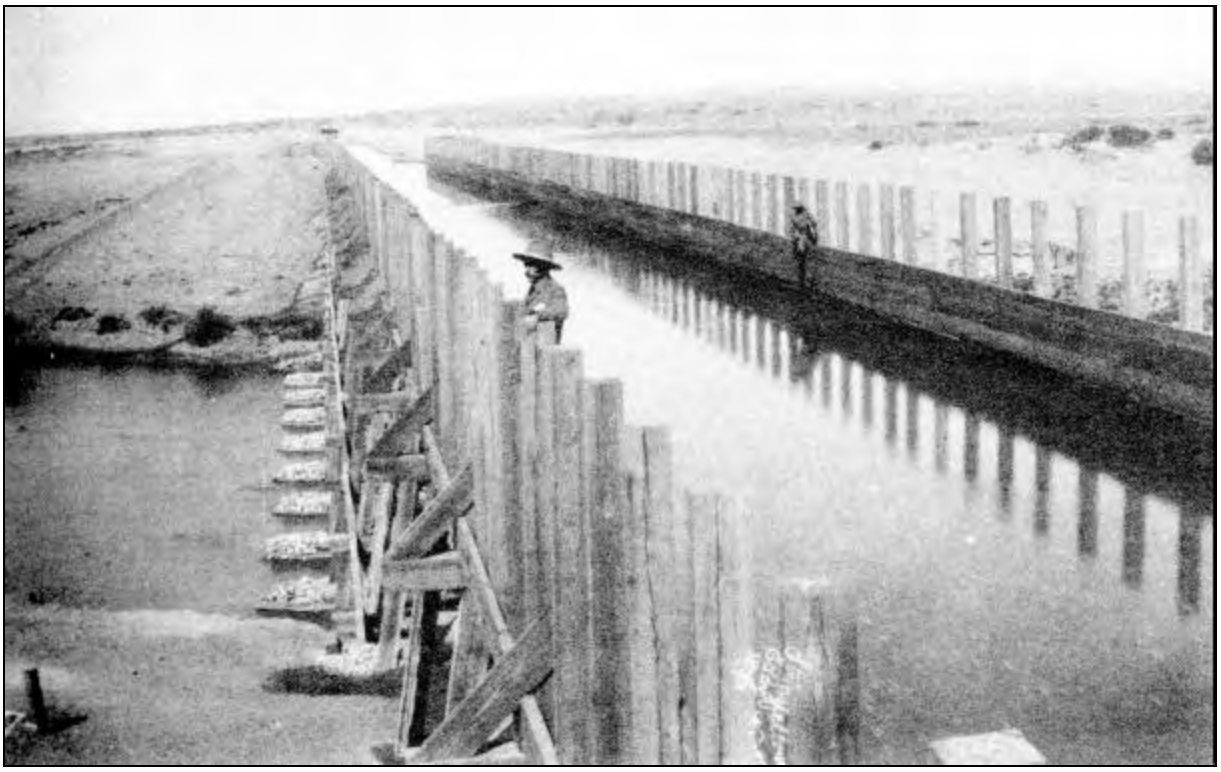


Figure 66. Wooden flume across the Pecos River north of Carlsbad. (From* Water the Land, *courtesy National Park Service, Bureau of Reclamation, Denver)

pany's work between 1889 and 1890 centered on a diversion dam and the upper reaches of the Southwestern canal. The diversion dam, the canal, and the wooden flume across the Pecos River were all constructed at the same time. The dam was called various names during its first years, such as Eddy Dam, Reservoir No. 2, Six-Mile Dam, and Rock Dam. It was finally named Avalon Dam (Hufstetler and Johnson 1993:23-27) (Fig. 66).

It was soon realized that a second reservoir was needed to provide additional water storage. Work began on what was initially known as the Seven Rivers Dam or Reservoir No. 1, in October 1892 (Fig. 67). Later it became known as McMillan Dam and held eight times as much water as Avalon. As the main storage reservoir for the Pecos Valley irrigation project, Lake McMillan was designed to hold water for release to Lake Avalon where it could be diverted into the canals of the irrigation system.

Most of the construction work on McMillan dam was completed by August 1893, just as a series of natural disasters struck the Pecos Valley. Seemingly endless pouring rain caused the Pecos River to rise until the Avalon Dam gave way, resulting in severe damage to the canal system and flume (Fig. 68). Even though repairs were completed in time for the 1894 growing season, the Pecos River Valley continued in an economic slump throughout the decade (Hufstetler and Johnson 1993:39-43).

The Pecos Valley economy improved after 1900 with the completion of the Pecos Valley and Northeastern's railroad line from Carlsbad (formerly Eddy) to Amarillo, Texas. By 1902, the Pecos River flume needed replacement and construction work began in September 1902, continuing into 1903. The Pecos Irrigation Company spent $50,000 in the construction of the new reinforced concrete flume. Almost 500 ft in length, the structure was said to be the longest irrigation flume in the United States (Hufstetler and Johnson 1993:54-55) (Fig. 69).

After two years of drought, disaster once again hit the Pecos Valley when in October 1904, a devastating flood struck the Pecos Valley with most of the damage occurring in the Carlsbad area. The amount of damage to the Pecos Irrigation Company's physical plant was significant. W. M. Reed, a reclamation service engineer, reported damage to the irrigation company's entire operation, including both dams, much of the canal system, and the new concrete flume (Hufstetler and Johnson 1993:56-58).

The irrigation company's network of some 63 miles of primary canals and 500 miles of lateral ditches was inoperable, and the farms dependent on it were threatened with crop failure and ruin. The only reasonable solution was for the irrigation company to sell its hold

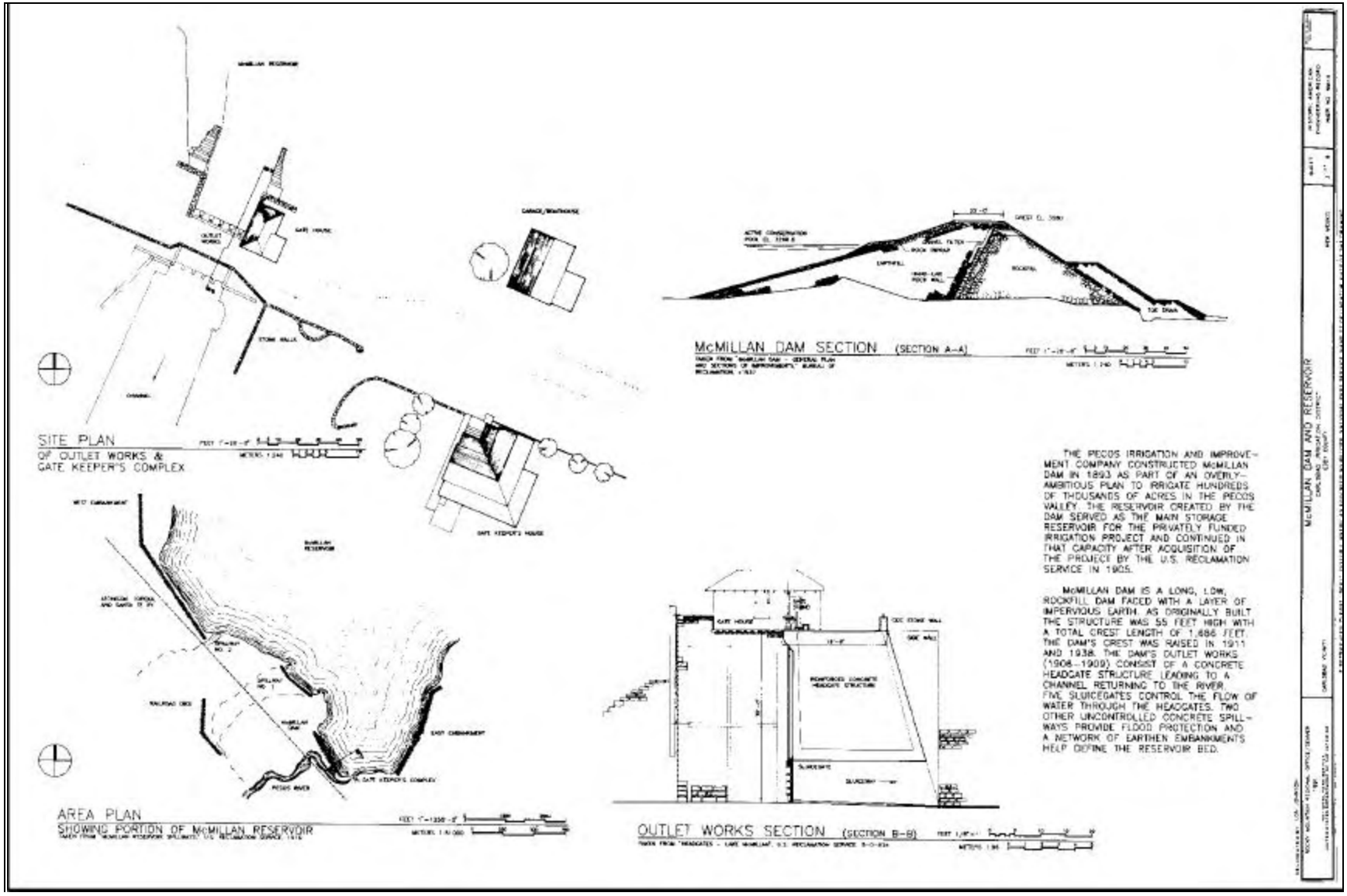


Figure 67. Specification drawings of McMillan Dam. (From* Watering the Land, *courtesy National Park Service, Bureau of Reclamation, Denver)

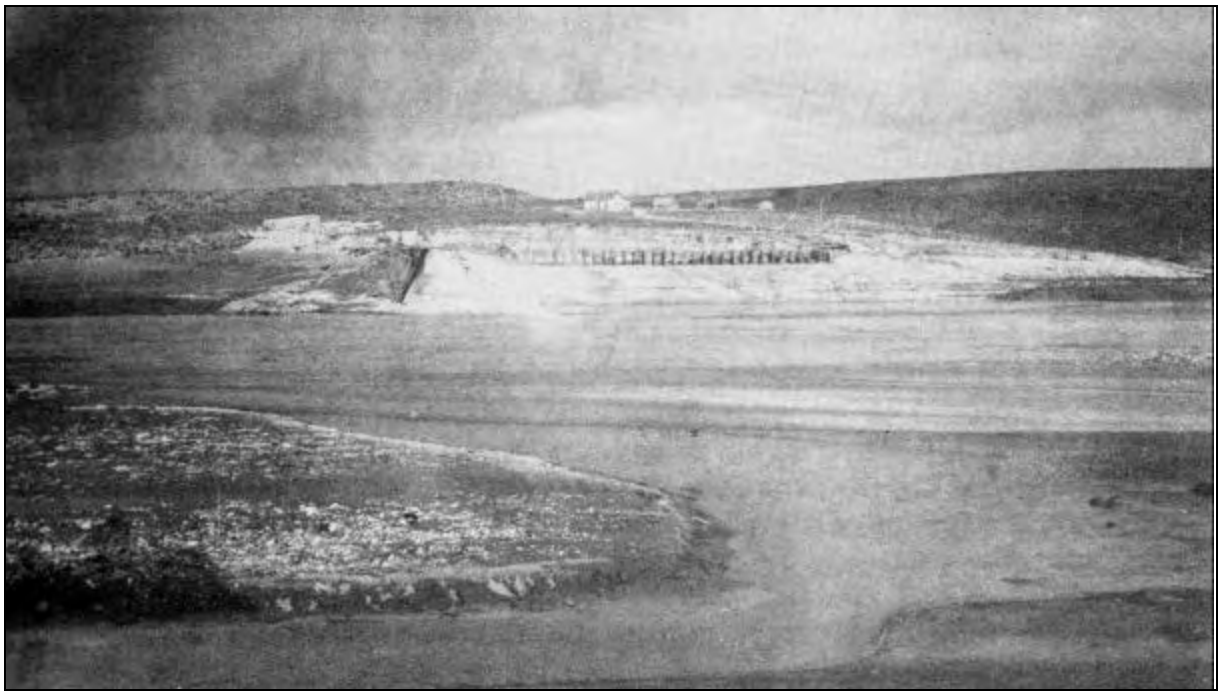


Figure 68. 1893 flood damage to Avalon Dam. (From* Watering the Land, *courtesy National Park Service, Bureau of Reclamation, Denver)

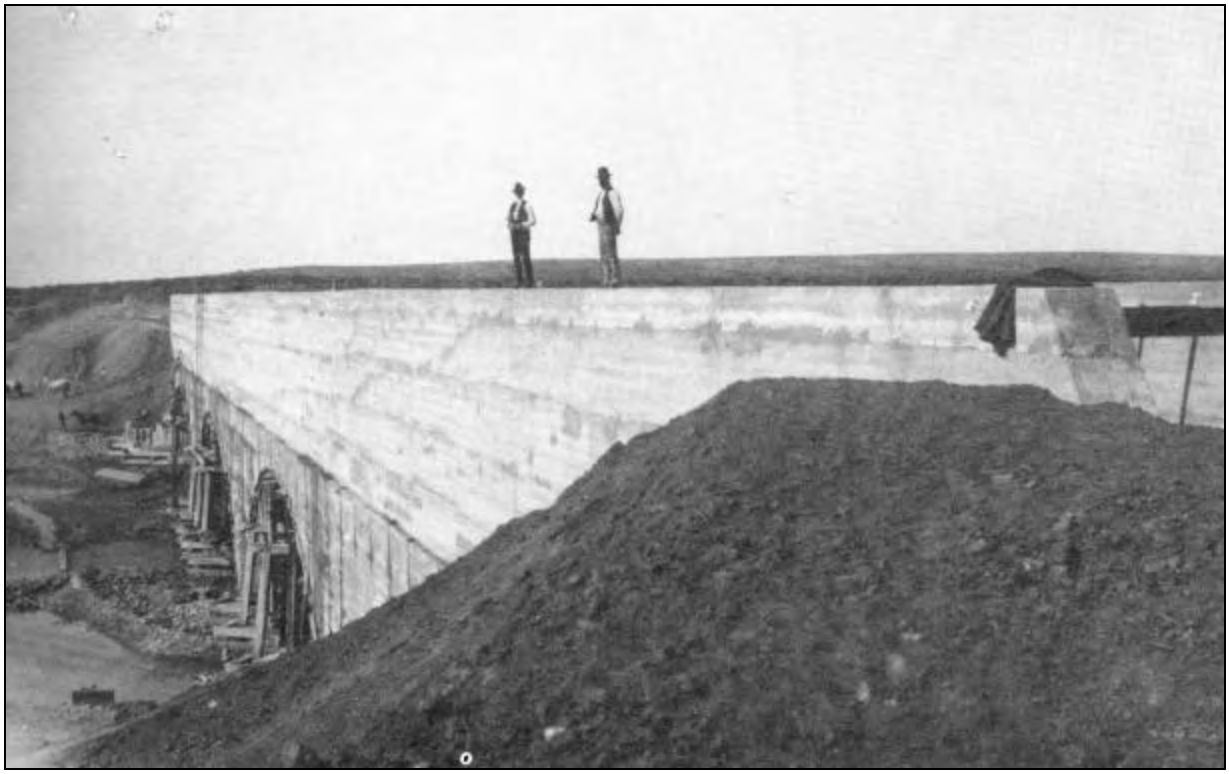


Figure 69. Concrete flume over Pecos River that replaced the wooden flume lost to flood waters. (From* Watering the Land, *courtesy National Park Service, Bureau of Reclamation, Denver)

Figure 70. Reclamation repair crews' buildings and yard, Avalon Dam, 1906. (From* Watering the Land, *courtesy National Park Service, Bureau of Reclamation, Denver)

Figure 71. Construction of new rock-filled Avalon Dam, 1907. (From* Watering the Land, *courtesy National Park Service, Bureau of Reclamation, Denver)

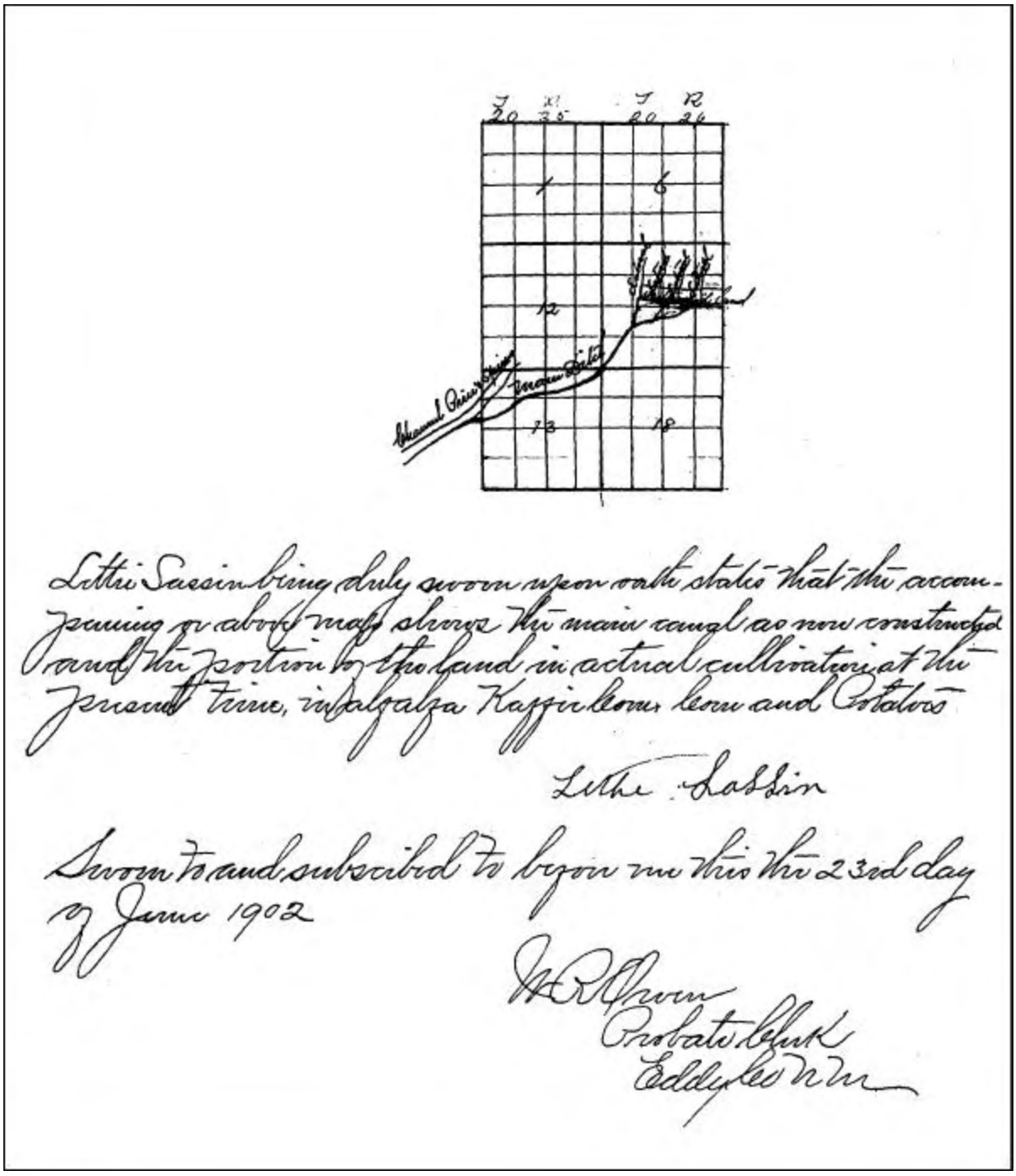


Figure 72. Lethe Sassin's dreaing of ditch and irrigated land, Seven Rivers.

ings to the Reclamation Service of the United States Government. The Pecos Irrigation Company originally asked $350,000 dollars for the sale price but finally agreed to $150,000 with a warranty deed executed on December 18, 1905. The restoration of irrigation water to most of the area was completed by early 1907. The Reclamation Service spent more than $650,000 repairing the reservoirs and finished the work in 1909 (Hufstetler and Johnson 1993:69-92) (Figs. 69 and 70).

History of the LA 8053 Vicinity

LA 8053 is located within the [redacted] patented by Lethe Sassin in 1904. However, since the Desert Land Entry Act did not require residency, the Sassin Desert Land Entry patent (no. 347) document does not contain information about structures.

According to Lethe Sassin's Deposition of the

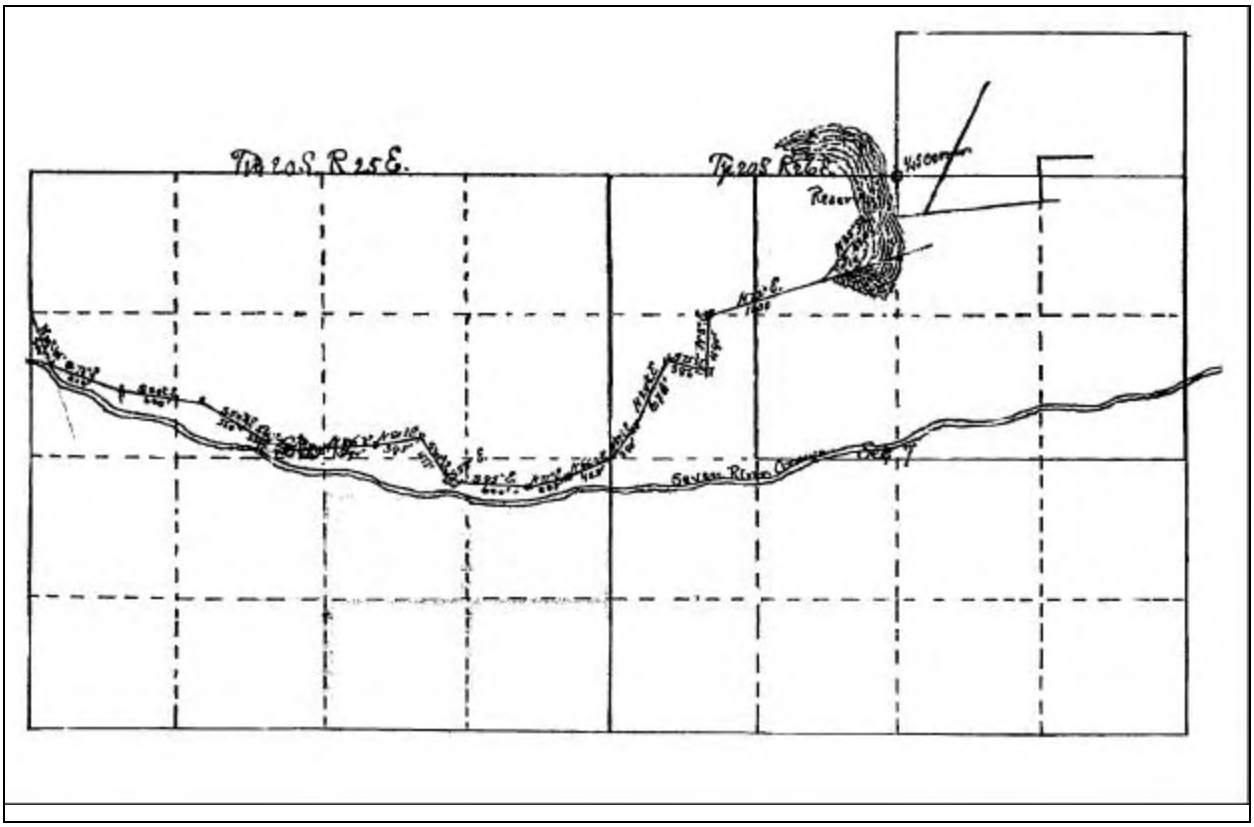


Figure 73. Map of Lethe Sassin's ditch and reservoir, Seven Rivers.

Applicant on June 22, 1903, Sassin stated she was 43 years old, was born in Texas, was a housekeeper, and had a post office address at McMillan, New Mexico. George McDonald, as a witness to the deposition, stated that he had known Lethe Sassin for 18 years and that she resided on the adjoining land on the home place. The home place referred to is probably the house Oscar Sassin, Lethe's husband, built on his homestead in 1887.

In keeping with the Desert Land Act requirements regarding irrigation and agriculture, Lethe Sassin stated that the source of water came from the Seven Rivers and Price Spring. There were also two main ditches and a reservoir. The cost of these improvements was $2,000. Sassin had cultivated 55 acres of the land in corn, potatoes, kafir corn, alfalfa, and used the rest for pasture (Fig. 71).

Oscar Sassin, as a witness to the 1902 deposition, states that $320 had been spent for grubbing 15 acres, including scraping, hauling, plowing, ditching, building flumes for ditches and cultivating 54 acres of land. The reference made to building "flumes" is the only reference to any building activity noticed in the patent document no. 347.

The March 6, 1903, ditch affidavit of Lethe Sassin stated she claimed not less than 13 cu ft of water by right of appropriation under Chapter 71 of the laws passed by the 29th legislative assembly of the Territory of New Mexico and approved February 26, 1891. The 13 cu ft of water came from the floodwaters of the South Seven Rivers channel to be stored in a private reservoir and to be conducted therein through the George Larramore ditch.

The George Larramore ditch diverted water from the South Seven Rivers in the [redacted] nd ran easterly on the north side of South Seven Rivers until it entered the Sassin Reservoir. The water stored in the Sassin Reservoir is intended to reclaim and irrigate land in the [redacted] d other lands adjacent if a surplus of water was proven to be contained in the reservoir. The construction of the Sassin reservoir commenced about December 1, 1902 (Fig. 73).

According to Eddy County Courthouse records, on October 28, 1905, Lethe and Oscar Sassin sold Desert Land Entry no. 347 to L. D. Wright of Iowa for $4,800. An interesting side note is that Oscar and Lethe Sassin also sold the acreage in Section 7 of Homestead Patent no. 103 and the [redacted] including the Oscar Sassin Ditch, to Christian F. Hearra of Jackson County,

Table 8. Artifacts Inventoried at LA 8053

Artifact Type	Number	Percent
Economy and Production		22
harness(?) buckle, steel	1	
staples, fence	2	
wire:		
smooth	21	
barbed	9	
sheep fence	1	
Foodstuffs		5
lard buckets	5	
sanitary cans	3	
Indulgences		2
tobacco cans, hinged lid	3	
Domestic Routine		57
glass:		
clear	8	
purple	23	
aqua	2	
white ware	28	
stove parts	28	
Construction and Maintenance		8
brick fragments	2	
corrugated steel fragment	1	
nails:		
6 penny	1	
8 penny	3	
10 penny	1	
pipe, steel (piston?), 1 inch	1	
pipe fitting, steel, 3 inch	1	
screws, small	1	
washers:		
1/4 inch	1	
1 inch	1	
Personal Effects		1
suspenders buckle	1	
belt buckle	1	
Entertainment and Leisure	-	-
none		
Unidentified		5
iron scraps, miscellaneous	8	
Totals	157	100

Missouri, on January 3, 1906 for $4,812. It appears that by 1906 the Sassins had sold their land in Sections 6, 7, and 18 of T 20S, R 26E.

Local informants Barbara Buckner and Tina Bowers could not identify the rock house foundation or quarry at LA 8053. They recalled half-dugouts, known as *chosas,* being located within the LA 8053 site area.*Chosas* were made by digging a hole about 3 ft deep, 14 ft wide, and 16 ft long. Stones or boards were placed around the walls and then extended 3-4 ft. A very steep roof was placed over it. Then steps and a door frame were added. However, the rock foundation at LA 8053 is not a*chosa*-type structure.

Artifacts from the Historic Component at LA 8053

Guadalupe A. Martinez

The artifacts at this site were identified by David Hayden of the OAS staff and left in the field. The writer used Hayden's list to analyze the artifacts according to the system described for the historic trash dumps at LA 38264 (this report).

The low number of food and domestic items at LA 8053 constitutes very little trash for a domicile (Table 8). Five lard buckets and 3 food cans do not amount to much food, especially if one takes into account that the buck - ets may have been recycled. Twenty-three pieces of inde ter-minate white ware are the only domestic artifacts recorded; these could have been produced by only a few dishes, perhaps even one.

The Construction/Maintenance assemblage is fairly sparse. The ubiquitous steel or baling wire scrap is the most frequent artifact (n = 21). There are nails (n = 10), fence staples (n = 2), washers (n = 2), and a screw. Eight pieces of iron scrap, two pipe fittings, a one inch pipe, two pieces of brick, a bucket handle, a piece of sheep fence, and one piece of corrugated steel constituted the remainder of the assemblage.

Only two personal effects artifacts were noted—a suspender buckle and a belt buckle, both of which were of a size that would be used by an adult male.

Dating the assemblage was based on two types of artifacts. Three hinged tobacco tins were recorded in the indulgences category. Hinged tins date from 1906 if they are round-sided or 1910 if they are flat-sided according to a Continental Can Company informational flyer. Of the 28 unidentifiable pieces of glass, 23 were purple (amethyst) glass. Amethyst glass is produced when glass containing manganese dioxide is exposed to the sun. Manganese oxide was used in the U.S. from 1880 to 1916 as a decolorizer for glass (Rock 1980:16). Using these dates, the trash from LA 8053 can be bracketed between 1910 and the 1920s allowing for a lag time of 5 to 10 years.

Summary—Site LA 8053 and Vicinity

According to BLM and Eddy County Courthouse records, the earliest land transaction concerning the area in which LA 8053 is located was a Timber-Culture Entry no. 72 made by Heiskell Jones on July 24, 1882. However, Entry no. 72 was canceled by relinquishment on April 21, 1884, and no records were kept of relin - quished claims. Therefore no information was found describing land-use activity by Heiskell Jones during the

period of 1882 to 1884.

The next land transaction recorded for LA 8053 was also located in the BLM and Eddy County Courthouse records. These records showed Desert-Land Entry no. 581 was made by Lethe Sassin on June 24, 1899, for 320 acres of the [redacted] nd approved October 5, 1904. The Desert Land Entry Act did not require resi - dency, so the Sassin Desert Land Entry patent no. 347 does not contain information about structures or build - ings.

The Sassin patent no. 347 stated that on June 22, 1903, Lethe Sassin lived on the homeplace, which is most likely the homestead Oscar Sassin built in 1887. The only reference to building activity on Desert Land Entry no. 347 was noted in the 1902 witness deposition of Oscar Sassin, which described building "flumes" associated with developing the ditches and reservoir.

On October 28, 1905, a year after patent no. 347 was approved, Oscar and Lethe Sassin sold Desert Entry no. 347 to L. D. Wright of Iowa for $4,800. On January 6, 1906, the Sassins sold the acreage of Homestead Patent no. 103, including the Oscar Sassin Ditch in Section 18 to Christian F. Hearra of Jackson County, Missouri, for $4,812.

The sale date was about the time of, or shortly pre - ceded, the date suggested by the archaeological materials surrounding the structure location. Does the structure represent a house built or moved to the location by Lethe Sassin shortly before she sold the property? Or, does it represent a house moved to the location by Christian Hearra? Whatever the case, the presence of an above-ground structure at this location was not recorded by either Sassin or Hearra, or by any other person for that matter. Given the short period of occupation suggested by the associated trash, this is not surprising, though it is definitely perplexing!

In conclusion, it is possible that the droughts, floods, and poor economic conditions in the Pecos River Valley during the years of 1904 to 1907 were major factors in the Sassins selling the Desert Land Entry no. 347 and Homestead Patent no. 103 land by January 1, 1906.

Archival searches and consultations with local informants about LA 8053 could not identify ownership of the house foundation, associated trash, or the quarry. The local informants recalled half dugouts, known as chosas, located in the vicinity of LA 8053. The smaller depression located east of the main quarry could have been a dugout or chosa. Thus, we have clear archaeolog-ical evidence for one or more occupations or uses of the LA 8053 area, but can find no substantive information about who the people were. Yet, these occupations are dated by the archaeological materials to the early part of the twentieth century.

HISTORIC COMPONENTS AT ARCHAEOLOGICAL SITE LA 38264, SOUTH SEVEN RIVERS DRAINAGE, EDDY COUNTY, NEW MEXICO

The Archaeology

Guadalupe A. Martinez and Regge N. Wiseman

Four small, separate trash dumps were present within the limits of LA 38264, a large, linear prehistoric site along the south side of the South Seven Rivers channel (Fig. 74). These dumps represent individual or at most a few wagon or truck loads of trash hauled to this location from (presumably) nearby farms some time between 1910 and 1930.

The access route for making the dumps was from the old road that runs parallel (east-west) along the south side of the stream; that part of the road east of U.S. 285 is still used and has recently been named Skyward Road. A segment of the old road west of U.S. 285 was black-topped and used as recently as 1954 (USGS Seven Rivers topographic map) but has since been abandoned. The dump designations refer to the site number and whether the dumps are east or west of U.S. 285. Guadalupe Martinez analyzed the contents of each dump in the field according to the procedures and criteria then in effect at the Office of Archaeological Studies.

The LA 38264-E trash dump was located on top of the terrace between Skyward Road and the edge of the terrace. It measured 10-by-10 m with some artifacts strewn farther afield.

Trash dump LA 38264-W-1 is situated on the slope just below the terrace edge and within 10 m of the old road. The artifacts have spread downslope towards the river. The main concentration covers an area about 6-by-6 m. It is not certain whether this dump was generated in place by a work crew or hauled to this location. We suspect the latter.

Trash dump LA 38264-W-2 is 20 m northwest of LA 38264-W-1 and on the midslope of the terrace. As with the other dumps along the river bank the debris is strewn towards the river. The main body of the dump measures approximately 6-by-6 m.

Trash dump LA 38264-W-3 includes two small artifact concentrations situated in two adjacent rills or shallow runoff channels on the mid slope of the terrace face. Though separated by the divide between the drainages, the concentra-tions were linked by a thin scatter of artifacts on the divide, suggesting that the two concentrations, plus the intervening scatter, constitute one dump or two related dumps. Total size was 15-by-5 m.

Origin of the Historic Components at LA 38264

Regge N. Wiseman

All four historic components at this site were trash dumps situated between the old road and the South Seven Rivers drainage channel. The dumped materials were hauled to these points of final deposition in wagons or early automobiles. Thus, their points of origin, presumably one or more homesteads/farms in the vicinity, cannot be determined. Were the dumps made by the owners of the land on which they were found? Or, were they made by people who lived further away? Without a tie to a specific tract, archival and records searches are inappropriate, and, given the date of the dumps, it is very unlikely that anyone could be found who remembers them.

The Artifacts of LA 38264

Guadalupe A. Martinez

The artifacts at four dump locations at LA 38264 were analyzed and left in the field (Table 9). They were identified and sorted by category and function in accordance with the standard procedures set by the Office of Archaeological Studies (OAS).

The artifacts, if applicable, were assigned to eleven categories: Economy/Production, Food, Indulgences, Domestic, Furnishing, Construction/Maintenance, Personal Effects, Entertainment/Leisure, Transportation, Communication, and Unassignable. Under these broad categories were classifications of type and function. An example of this analytical method would be the example of a Prince Albert can. The primary category would be Indulgences, the type would be tobacco, and the function would be tin (container).

Other attributes that were monitored included the material(s) that made up an artifact, product brand, name of manufacturer (if known), production technique, type of closure, and ceramic ware, plus others. Various methods for dating artifacts included production technique, decoration methods, and manufacturing production dates (if known).

Due to the fragmentary nature of artifacts associated with dumps in general, identification of each artifact was impossible. Nonetheless, enough attributes were present

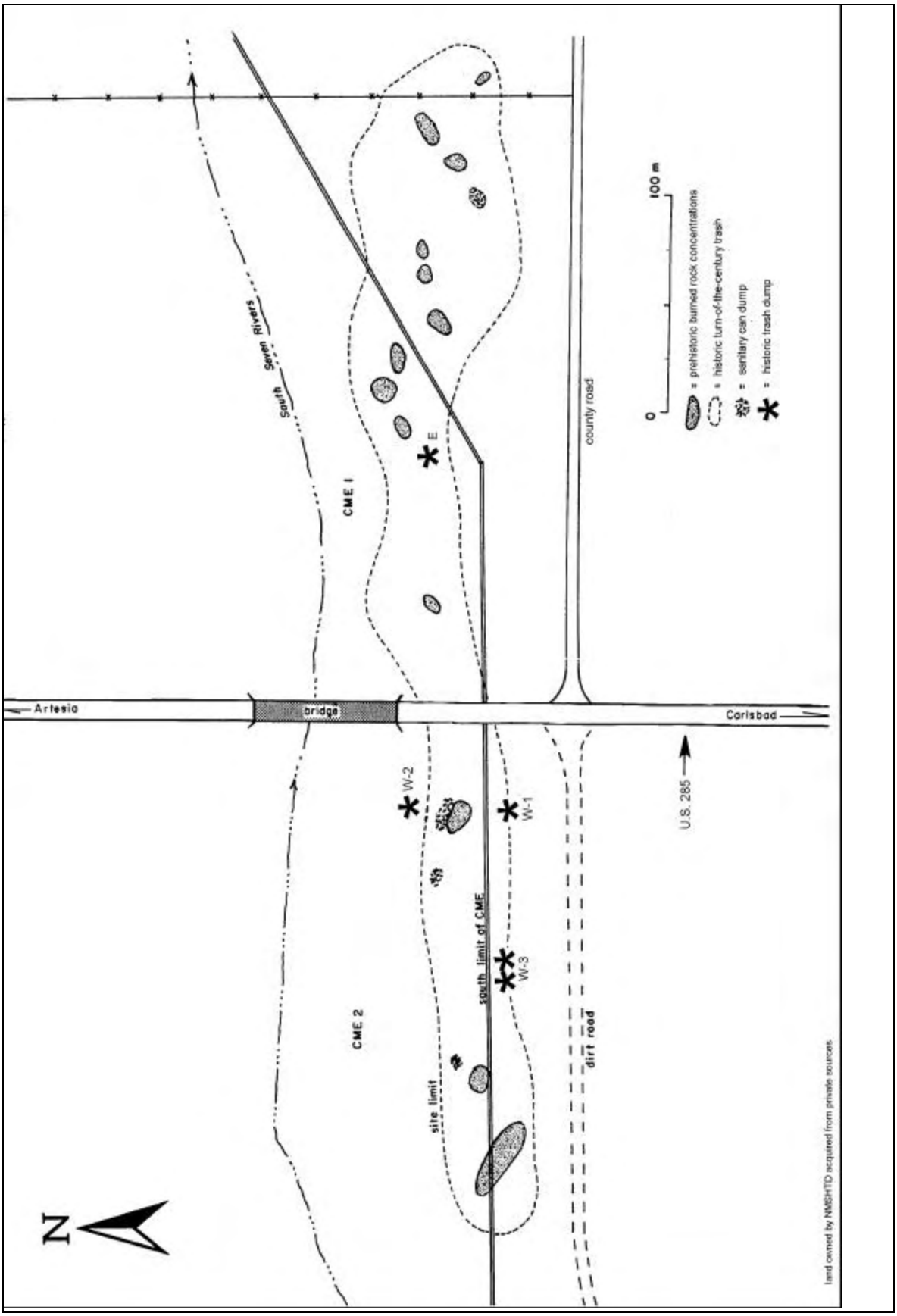


Figure 74. LA 38264 sketch map, including locations of trash dumps.

Table 9. Artifacts by Locus at LA 38264

Artifact Type	E	W-1	W-2	W-3
Unassigned/Miscellaneous				
battery core, C or D dry-cell			1	
brake pad		1		
can, small rectangular		1		
cast iron fragments	X			1
funnel, tin				1
glass, amethyst	2			
glass, unidentified	X			
metal strap with latches				1
plate glass		20		
spouts, sheet metal		2		
tin "plate," oval w/ rolled edges				1
Economy and Production				
wire:				
bailing	X	X	X	X
barbed	X	X		X
chicken	X			X
sheep	X	X		X
Foodstuffs				
bottles:				
amethyst				1
ketchup			2	
cans:				
baking powder		2	1	
baking powder, tall can				1
coffee, one-pound			2	2
evaporated milk			5	
fruit/vegetable	379	44	44	
fruit/veg., 1 gallon or larger				7
lard			2	10
meat/fish		6	12	
sardine		13		
jars:				
canning	4	2		
condiment	1			
Indulgences				
bottles:				
beer	1			
soda	6			
wine	3			
snuff		3	1	1
one-pint (wine or liquor)		5	1	
can:				
beer		9		
beer/soda			1	
taper-top (soda/beer)		1		
tobacco cans/lids	21	2	6	

Table 9. Continued.

Artifact Type	E	W-1	W-2	W-3
Domestic Routine				
bowl, mixing		1		
bucket, galvanized, with fragments of pickling	1			
crock				X
cups:				
oriental porcelain	2			
tin (handle)		1		
white glass	3			
enamel ware:				
cup	1			
pail, 5 gallon	1			
small pan, 10 inch	1			1
diameter				1
pan, 1-2 quart				
glass tumblers:		1		
amethyst	2			
clear	2			
green			1	
pail, tin lunch(?) (handle)				
pans:	1			
bread	1			
cake	1			
measuring cup or sifter				
plates:	2			
clear glass	1			
white ware (possibly a bowl)		1		
		1		
stove fragments, cast iron				
whiteware, unknown form				
Construction and Maintenance			1	
barrel, 50 gallon (lip)	X			
bolts		2		1
brick fragments, red	X			
cable, steel, 3/4 inch				
cans:	1			
paint			1	
paint, half gallon			1	
tar (lid)	1			
varnish	X			
nuts	X			
pipe, steel	1			
rebar, bent	X	1		
sheet metal	1			
shovel, hand-forged	1			
steel plate, 1/8 inch				1
steel lid, 20" diameter embossed				
Personal Effects				
bottles:				
Listerine mouthwash, 1-2 oz.			1	
			1	
Listerine mouthwash, quart				
buckles:		1		
belt	1			
suspender				
jars:	3			
cold cream			5	
cold cream, Ponds		1		
pommade, white glass	1			
Vick's vaporub		1		
shoe heel				
Entertainment and Leisure				
marble	1			
Totals	447+	122+	89	30+

x = present but not counted.

to determine the age of the dump material, the economic status of the people who were responsible for the refuse, and some of their household activities.

LA 38264-E

Examination of the scatter indicated that the refuse had been hauled to the area because there was no habitation adjacent to the trash scatter. Many of the artifacts in the assemblage were objects that are associated with a working homestead (Table 9).

There were fencing scraps, pieces of chiseled metal, glass shards, cans, dish and bottle fragments, and pieces of cast iron. The road that runs east-west to the south of the scatter was probably used to haul the refuse to the deposit area.

The largest category represented in the assemblage is food cans (n = 379). These were identified by their shape, size, and method of opening and closing. Can size is measured in inches and sixteenths of an inch thus, a 307-by-409 mm can is 3 7/16 inches in diameter by 9/16 inches height. In some cases, the brand name was still visible.

Another category that relates to the food items is Domestic. Three baking utensils were recorded: a bread pan, a cake pan, and a graduated tin, 2-cup measuring cup or sifter. There were also various types of dishes represented in the assemblage. There were at least four glass tumblers, two green and two clear. Five cups were pres -

ent, two of which were oriental porcelain, the other three were white glass. Two clear glass plates and one white ware plate or bowl were noted. Other household utensils were enamelware; a cup, a 5-gallon pail, and a small (9½-inch-diameter) pan. A galvanized bucket with a repaired handle was also recorded.

Although there were not many artifacts identified in the category of Indulgences, the few that were shed light on the character of the people who deposited the trash on the site. In this category there were 21 tobacco can lids, maybe 3 wine bottles, 1 beer bottle, and up to 6 soda bottles. Two of the soda bottles still had labels—Coca-Cola and Dr. Pepper—and were bottled in Carlsbad, New Mexico. There were numerous glass shards in the assemblage; however, their function could not be discerned, so there is a possibility that the number of indulgences is underrepresented.

Glass containers in the assemblage spanned many categories, though most of the jars and bottles were shattered beyond only minimal attribute identification. The rims of at least four canning jars were found along with fragments of metal lids and rubber gaskets. There were three or more cold cream jars present and one Vick's Vaporub jar. Another bottle was identified as a condiment of some sort. Other glass container fragments were bases, lips, and bodies of no identifiable specific functions. Two pieces of amethyst glass were recorded; this type of glass dates between 1880 and 1920.

There were many scavenged or altered pieces of metal that probably indicate recycling activity. Pieces of steel cable (¾ inch), pieces of cast iron, sheets of metal, nuts and bolts, steel pipes, had all been cut or beaten as if they were being taken apart for reuse. There was a piece of rebar that had been bent into a hook shape. A 20-by-20 cm piece of -inch steel plate appeared to be hand-chiseled on all sides. One shovel that was hand-forged was recovered. There were numerous bits of baling wire, chicken wire, barbed wire, and sheep fencing strewn across the dump site. Some pieces of baling wire were wound as if for storage.

The assemblage reflects the gender and activities of the people who generated the trash. The appearance of the cold cream jars and the delicacy and variety of dishes point to a woman among the people who left this particular pile of garbage on the landscape. A marble found in an ash stain in the dump leads one to suspect that a child, more than likely male, was also a generator of the refuse. A suspender buckle appears to belong to an adult, probably a male. The previously mentioned ash stain appears to be from a stove or fireplace. A paint can and varnish can indicate household maintenance or construction.

LA 38264-W-1

The refuse of LA 38264-W-1 contained fragments of only a few domestic utensils—two fragments of a banded mixing bowl, a white ware sherd, a tin coffee cup or pot handle, and an amethyst glass tumbler fragment. The food items assemblage is more like a camp or work detail refuse pile. There are 44 vegetable or fruit cans, 13 sardine cans, 6 meat or fish cans, and 2 baking powder cans. Most were opened with a bayonet-style opener, but a few were opened with a knife. Two canning jar lids and two screw top jar lids were also present.

The indulgences that were used by the depositors consisted of three snuff bottles, two tobacco tins, nine beer cans (punch top and pop top), and five pint bottles of either wine or liquor. One beer or soda can had a tapered top with a crown can lip. Personal items were limited to just three artifacts—a belt buckle (2¾-by-2 inches), one shoe heel (nailed), and a milk glass pomade jar.

Four pieces of sheet metal had been shaped. One was round with a folded edge; there are soldered seams with holes along the folded round edge. This may have been the bottom of a small tank or a large tub. Another is crushed, but was cylindrical and looks like a stove part, possibly where the stove pipe comes out of the stove body. It had been cut leaving a ragged lip around the pipe portion. The pipe portion is riveted together. The two other pieces are tapered like spouts. The larger one is 11 inches long and is soldered. Both are flattened. The larger has been shot twice.

Construction and maintenance artifacts were mostly fencing materials. Baling wire scraps, some wrapped for storage or reuse, were spread around the dump site. There was a pile of rusted and twisted two-strand barbed wire and sheep fence. About 20 pieces of plate glass were in the assemblage.

Two small chunks of red brick, a brake pad, and a small (1-by-2½ inch) rectangular can were also recorded.

The assemblage at W-1 probably represents either two different dumping episodes (amethyst glass and pop-top cans represent different time periods) or else one dumping episode that involved items accumulated over a long time span.

LA 38264-W-2

The assemblage on this site does not differ much from LA 38264-W-1. The food artifacts consisted of 44 vegetable or fruit cans, 12 meat or fish cans, 5 evaporated milk cans, 2 lard cans, 1 baking powder can, 2 one-pound coffee cans, 1 to 3 ketchup bottle bases, and a beer

or soda can. A double handled tin box that was possibly a lunch pail was also recorded. The indulgences were limited to the previously mentioned beer or soda can, six tobacco tins, a snuff bottle, and a pint bottle of wine or liquor.

This deposit did not have any fencing material among the Construction/Maintenance artifacts. There was some baling wire that was twisted and folded, but baling wire is used for many things in addition to fencing. The rusted lip of a 50-gallon barrel was among the trash. Two screw cap lids were found, but they were not food related. The core of a dry cell "D" or "C" battery was recorded. A half-gallon paint can and a lid for a can of tar suggest that dump was generated from a homestead and not related to fencing work.

A curious aspect of this assemblage is the number of personal hygiene artifacts. There were five Ponds cold cream jars, a small (1-2 oz) bottle of Listerine mouthwash, and a quart bottle of Listerine. This appears to be a disproportionate number compared to the number of other artifacts. This also implies that the artifacts came from a household rather than a field crew.

LA 38264-W-3

This dump consisted of two small scatters in shallow north-running drainages. Though they were separated by a small ridge between the drainages, the refuse was strewn between the two in a continuous manner so as to appear as one. There are large and small bundles of twisted wire and fencing. Sheep fence, chicken wire, barbed wire, and baling wire were scattered across both drainages. Travertine and limestone rock appear to have been collected and piled up in no discernable pattern on the metal debris; perhaps the piles were part of a clearing process for fencing.

There were only seven vegetable or fruit cans, however, these are large institutional size cans, 1 gallon or more. Two 1-pound coffee cans and a tall baking powder can were found. Many lard cans (n = 10) were present, one of which had been reused as a bucket with an added wire handle. Fragments of a crock base and an amethyst bottle base that might have been food related were also recorded.

An enamel pan (1-2 qt) with a broken handle and small basin (10-inch diameter) were the only household utensils found. A metal strap with latches could have been from a chest trunk in a household, but it wasn't attached to any material that would have indicated its original use.

A repaired tin funnel in the assemblage could have been for domestic use or for construction maintenance. Half a red brick was also found. The only indulgence in the assemblage was one snuff bottle.

A few pieces of metal were unidentifiable, but are curious enough to be mentioned. There was a bowl-shaped piece of cast iron, perhaps part of a pot or stove. One elongated oval tin plate had rolled edges and two hexagonal-shaped indentations with holes (possibly to hold hex nuts). A galvanized steel lid with embossed concentric circle had a star in the center with the letters "GEP" also embossed inside the star. Around the star were the words "ANTI WEDE" and may have referred to an herbicide. The lid was about 20 inches in diameter.

Discussion and Dating

Guadalupe A. Martinez and Regge N. Wiseman

All four locations of historic materials at LA 38264 are clearly trash dumps brought to their respective locations by either wagon or truck. The artifacts in each are highly concentrated within relatively small areas. Moreover, although the numbers of items in each dump differ, many different kinds of items and materials are present in each dump and represent a wide variety of activity types. For instance, the smallest dump, W-3, has only 30 to 40 items. Yet, these 30 to 40 items represent at least 19 artifact categories in six of the eight activity domains. The largest dump is E, with 440+ items representing 41 artifact categories in eight activity domains. Clearly, each dump represents an accumulation of items from a wide variety of activities that was gathered up and moved some distance away.

As archaeologists, we can view the content of each dump in at least two different ways when it comes to interpreting the remains and what they tell us about the behavior of past peoples. One way is to look at the numbers from a statistical sense. In general, the higher the numbers, the greater the variety we can expect if all other factors are known or can reasonably be expected to be equal.

This possibility is certainly a good one in the present case, for there is a general gradation or correlation in the overall numbers of items, numbers of artifact categories, and numbers of activity domains for the four dumps as a whole (Table 10). Thus, the differences in numbers probably relate to accumulation time, with dump E probably representing the longest accumulation time, dump W-1 the next longest time, and so forth. Another inference that might be made, given the overall similarities, is that the dumps could have been made by the same family or household (but see discussion below).

Another way of looking at this information is to make detailed statistical comparisons on the basis of artifact categories or of activity domains. However, since we lack total counts on each artifact category (and therefore, activity domain), we cannot pursue this analytical

Table 10. Comparison of Artifact Diversity among Trash Dumps at LA 38264

LA 38264 Dump	Number of Artifacts	Number of Artifact Categories	Number of Activity Domains
E	443+	41	8
W-1	110+	27	7
W-2	89	20	7
W-3	30+	19	6

avenue. This is a problem with limited in-field artifact analysis.

While the above discussion suggests that all four dumps at LA 38264 are statistically similar in many respects, qualitative information suggests some differences as well. For instance, in the foodstuffs activity domain, fruit/vegetable cans are well represented in all four dumps. In fact, they are the dominant artifact category in three of the dumps (E, W-1, W-2). In dump W-3, fruit/vegetable cans are exceeded in frequency only by lard cans.

But another interesting aspect of the W-3 dump is that the seven fruit/vegetable cans are all of a gallon size or larger, that is, of "institutional" size, and reflect the need to feed larger numbers of people at a given time. This is reiterated by the larger number of lard cans and the tall can of baking powder. The supposition is that, if flour sacks had survived, more of these would have been found at W-3 as well. We also suspect that the virtual absence of indulgence items (tobacco, snuff, beer, wine, liquor, etc.) at W-3 signals this difference. Thus, we have evidence that suggests at least two different households were responsible for the four dumps, rather than one as suggested by the statistical view presented earlier.

Several other features of the dumps provide us with glimpses into the lives of the people. Some of the items in all four dumps display evidence of prolonged use and of reworking into different shapes for new uses. This is typical of earlier times in our nation's history. For this reason, it is especially difficult to estimate the accumulation rate represented in each dump.

The meager home canning materials in all four dumps indicate that the people were on a cash or wage economy, or they were prosperous enough to buy canned goods and not have to "put up" food.

Fencing materials are associated with all dumps. Although the records indicate that most of the early settlers in the region were farmers or ranchers, we were still a little surprised to find so much fence material.

The absence of domestic household goods (fragments of dishes, glasses, etc.) in the smaller dumps was initially perplexing. However, when we look at the small inventories of these dumps, we are reminded once again that they represent short-term accumulations, perhaps on the order of several days or perhaps a couple of weeks, judging by the number of fruit/vegetable cans at each. This supposition is based, of course, on some notion of how much food was served every day and therefore how many cans would be emptied and thrown away. Since empty cans would accumulate rather quickly, and people would be making a conscious effort not to break their plates and glasses, the ratios of cans to broken domestic items should be relatively high.

The source of the trash in the four dumps would most likely have been one or more of the many homesteads that existed along the river. Old roads run east and west along both banks of the South Seven Rivers (see discussion of LA 112349 below). One homestead is less than a half mile from the project sites. Travertine foundation blocks are all that remain, as the site has been stripped of all usable material since abandonment. A well frame, a galvanized tub, and a stock tank are all that remain of the outbuildings. The fences are identical to the discarded fence material at all the dump sites, including sheep fence with barbed wire across the top. The cans at the homestead are the same as those at the project dumps, and glass jars, especially the canning type, are scarce. Thus, some of the materials in the project dumps could easily have come from that particular homestead.

Based on the amethyst glass and can types, a date range of 1915 to 1955 can be determined for the deposits. Amethyst glass dates from 1880-1920 based on production techniques. The tobacco tins, the "Prince Albert" type, began production in 1915. The tapered-crown-top beverage can was in use from the mid-1930s to the mid-1950s. Given the paucity of amethyst glass and tapered cans, we suggest that all four trash dumps were deposited within the period 1920 to 1940.

Summary—Site LA 38264

The four historic period loads of trash situated along the south bank of the South Seven Rivers drainage were carried to their locations in some form of wheeled vehicle and dumped. Access was provided by a road, in part now known as Skyward Avenue. In the old days, this road ran westward out of the old Seven Rivers settlement along the Pecos River and connected the townsite with homesteads and ranches situated in the upper reaches of the Seven Rivers Basin.

The four trash dumps, all dating primarily to the period 1920 to 1940, are similar in that they reflect people who lived on a wage economy. They bought much of their food and evidently relied less on home-canning than during earlier periods.

At least two different households appear to be represented—one that used smaller quantities of food at each meal as expressed in standard can sizes, and one that used larger quantities at each meal as expressed in what would be called institutional or commercial size cans today. It is possible that the dump with these larger cans, as well as numerous lard cans and the large baking powder can, derived from a boarding house operation or, during round-up season, a livestock operation.

The last salient feature of the dumps is the abundant evidence for reuse of items. Some of them were refashioned into forms useful for purposes other than their original one. This phenomenon, common in the United States prior to World War II (1941-1945), represents a more conservative, more commendable, approach to the use of natural and economic resources.

The four trash dumps at LA 38264 represent a site type that is usually overlooked by both the archaeologist and the historian. The primary reason is that they cannot be linked to specific habitation sites and thereby to specific individuals or activities in the usual manner in which archaeologists and historians prefer to operate. Yet, this study has been able to demonstrate that two different households were probably responsible for the trash, with one probably being a small household and the other a large one. Because the nearest settlement during the period 1920 to 1940, the period represented by the dumps, were several kilometers away, we are probably safe in assuming that both households were either farms or ranches in the vicinity of the dumps. In spite of the size difference, both households were evidently on a wage economy, indicating a level of economic security greater than that afforded by homesteading in the preceding period.

EARLY ROADS AND RIVER CROSSINGS AT ARCHAEOLOGICAL SITE LA 112349, SOUTH SEVEN RIVERS DRAINAGE, EDDY COUNTY, NEW MEXICO

Regge N. Wiseman

The Archaeology

During the excavation of the prehistoric component at LA 112349 we noticed that the site was criss-crossed by a series of linear, 3-m-wide depressions in the landscape, some shallow (ca. 50 cm) and grass-covered, others deeply eroded (up to 3 m along the river channel). Yet other linear depressions were a combination of these two conditions. Upon investigation, we discovered that these depressions were actually old road ruts that related to crossing points along the South Seven Rivers. We did not have the time to investigate these trails for associated artifacts or to make excavations to characterize the ruts. However, we used fine-detail topographic mapping to get a good image of the slope and to bring out the irregularities in topography that mark the trails.

Our efforts were quite successful in spite of the moderately thick vegetation that covered some parts of the site. The primary ruts and some of the secondary or alternate ruts are well defined by the topographic irregularities (Fig. 75). The overall pattern is typical for the Southwest wherein the initial trails, began to erode. Secondary or alternate routes were then made, some parallel and adjacent to the initial trails and others took entirely new routes. Neither the trails nor the entry-exit points from the stream were improved by heavy equipment nor were materials such as cobbles or concrete or a bridge put in place to provide solid footing.

A number of entry-exit points into the Seven Rivers channel are evident along the river bank and are typical of unimproved crossings. Alternate entry-exit points become necessary when the initial points become too eroded or dug out by wheels to permit continued use. Then new entry-exit points have to be developed. Some of the entry-exit points curve slightly eastward, suggesting that the traffic that used these points came up the stream bed from some point further downstream. Roads with segments comprised of stream beds were fairly common in territorial and early statehood New Mexico (E. S. Wiseman, pers. comm. 1975).

History of the Roads and Crossings at LA 112349

The New Mexico State Highway and Transportation Department (NMSHTD) archives were researched for information on the earliest highway construction in the vicinity of LA 112349. It is clear from the F.A.P. No. 132-A cover sheet (Fig. 76) that the current alignment of U.S. 285 was established in 1927-1928. Prior to that time, the main Carlsbad-to-Roswell route in the Seven Rivers sector ran along the valley bottom much nearer to the Pecos River and through the immediate vicinity of the old Seven Rivers townsite. North of the South Seven Rivers channel, the road makes a series of right-angle turns, presumably as it works its way around farmed fields.

Immediately north of the South Seven Rivers channel and just west of the main road is the notation "low ground subject to heavy overflow." The heavy overflow problem is most likely a seasonal phenomenon and probably led to the establishment of, or perhaps intensified the use of, an alternate road that leaves the main road just south of the South Seven Rivers channel and strikes northwest, then west toward the project area. This road served a number of farms and ranches situated for many miles along the south side of the South Seven Rivers drainage. Today, the part of this route that accesses Brantley Reservoir from U.S. 285 has been maintained and is called Skyward Avenue. That part west of U.S. 285 has been closed-off and is slowly falling into disrepair.

The alternate, presumably wet-weather, route just described is shown in more accurate detail on another NMSHTD plat for the 132-A Project (Fig. 77) dated April 13, 1927. Marked as a "trail road," the configuration of this route clearly shows that it is an alternate route for the main road. It crosses the South Seven Rivers channel at LA 112349, curves back slightly to the alignment that is now the U.S. 285 alignment, and strikes north for about 1.5 miles. It is clear from the slight angle in U.S. 285 that the highway was explicitly placed over the trail road.

At the township line, the trail road turns east and follows the line to the section corner. From there, the trail road turns north along the 31-32 section line and follows it to the north corner. Turning east-northeastward, the trail road then "wanders" through the south half of section 29, back toward the main road. The main road, marked "Present Road to Carlsbad," can be seen in the upper left corner of the plat.

One last piece of evidence helps tie together all of the threads of evidence discussed thus far. The 1939 EDAC aerial photograph (Fig. 58) shows a network of two-track dirt roads within and associated with LA 112349. First, it should be noted that not all of the roads

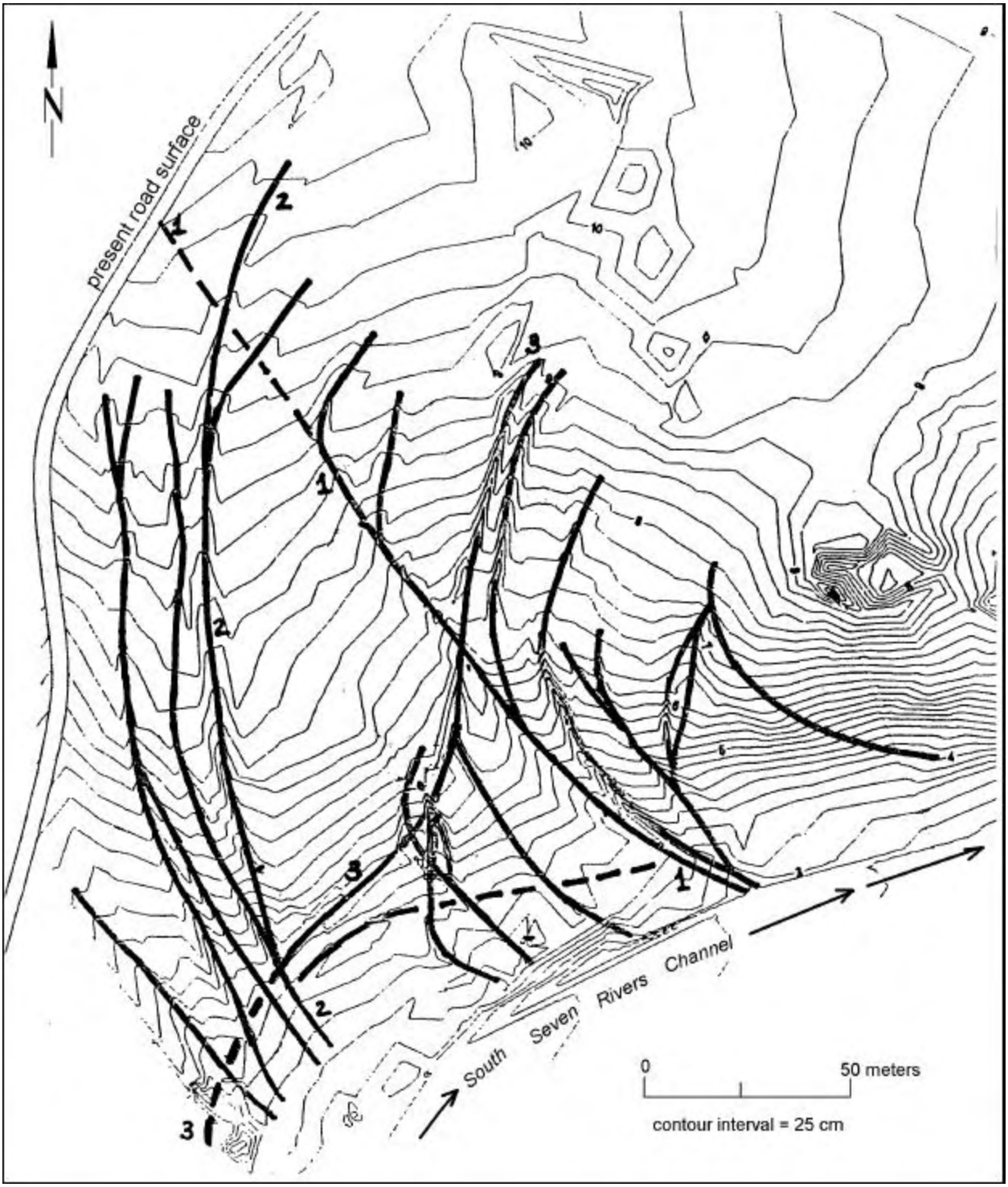


Figure 75. Archaeological map of roads and river crossings of the South Seven Rivers at LA 112349. Solid lines are roads indicated by topographic lines, dashed lines are roads indicated by 1939 EDAC aerial photographs.

definable on our topographic map show in the EDAC photograph. This is to be expected since the older, abandoned roads would have become obscured over time. But in terms of roads still in use, and in some cases only recently abandoned (1939), it is clear that several correlations between the photograph and our map can be made. For instance, at least one road (no. 1 on our map) comes up the South Seven Rivers channel from the east and exits north as one of the eastern two-track roads.

Alignment 2 is the alternate trail road discussed ear-

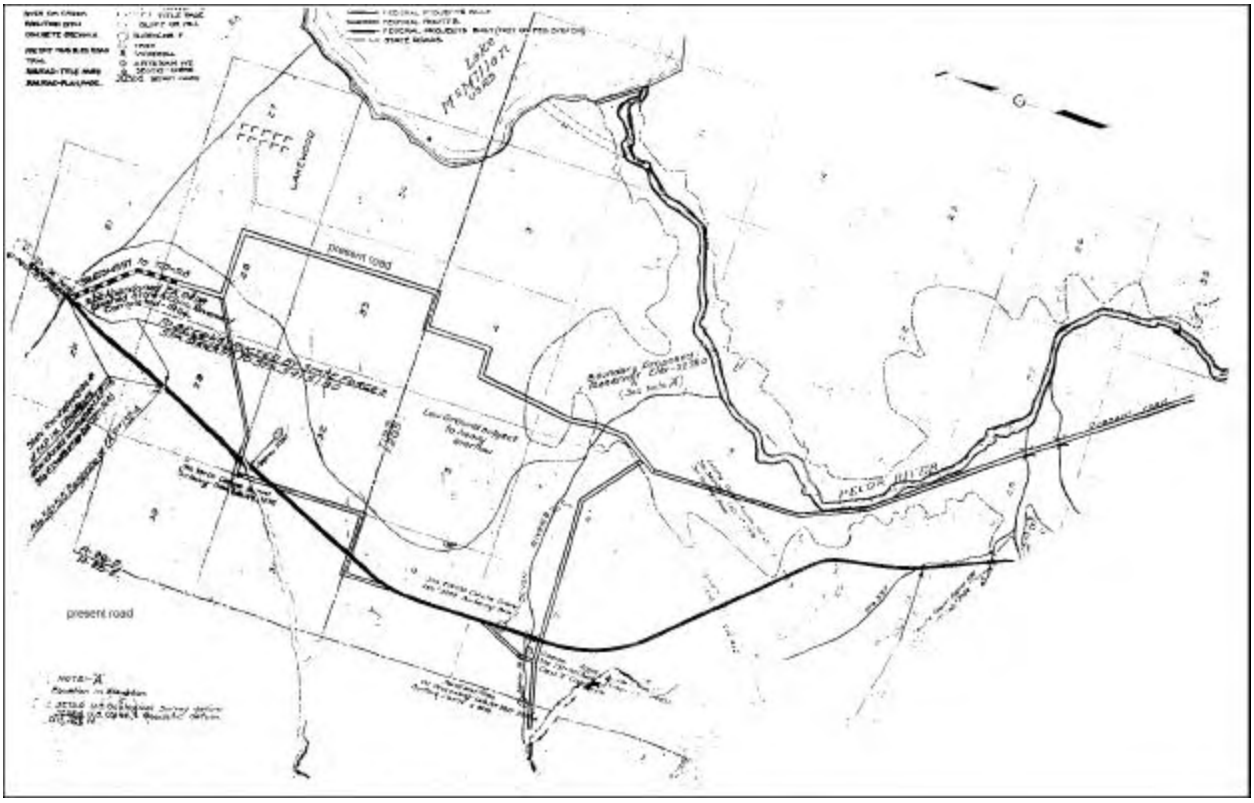


Figure 76. Remnant of cover sheet to engineering plans for first (now) paved highway along present (1998) alignment of U.S. 285 at Seven Rivers; dated 1927. (Courtesy of NMSHTD Archives Section)

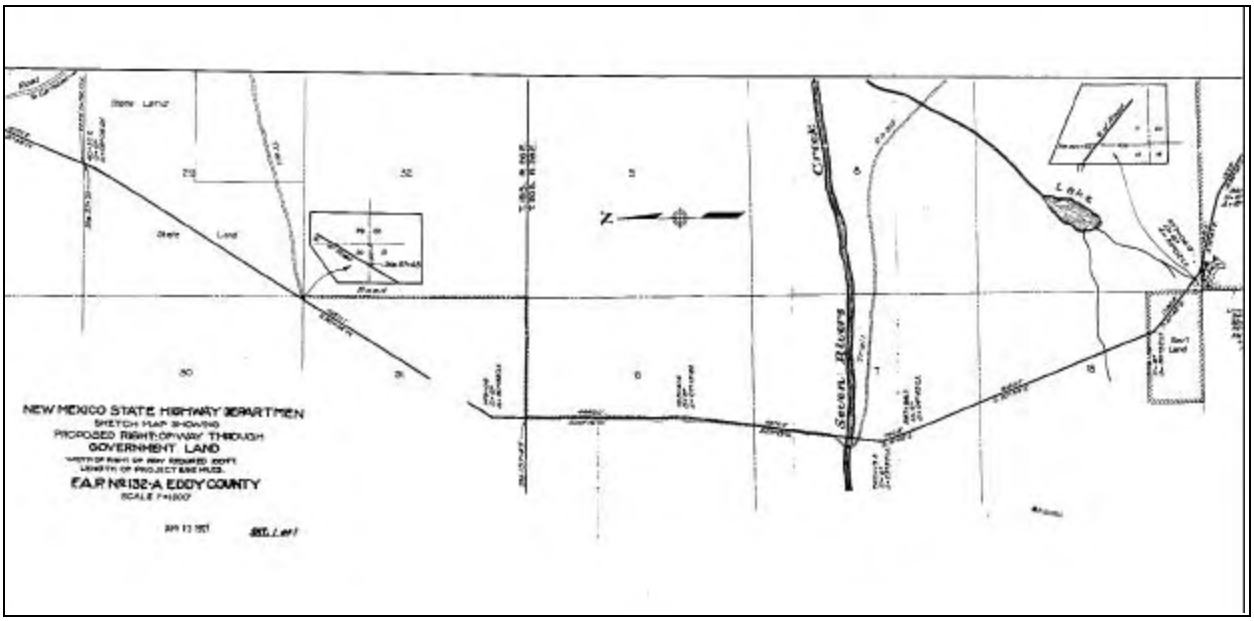


Figure 77. Engineer drawing for first paved highway along present alignment of U.S. 285 at Seven Rivers, Eddy County, New Mexico, dated April 13, 1927. (Courtesy of NMSHTD Archives Section)

lier that paralleled the south bank of the South Seven Rivers and swung northward in a large arc, crossed the stream, and then curved back toward what is now the present alignment of U.S. 285.

A third alignment is an alternate to no. 2, and perhaps preceded it. Alignment no. 3 crosses a short distance further upstream than no. 2, but its tighter arc brings it back parallel to the stream for a short distance before it strikes north-northeast through the center of the embayment in the terrace.

A beginning date for the roads and crossing points at LA 112349 could not be established. We suspect that the first roads (or trails) and crossings were established prior to 1900 and perhaps as early as the 1880s as an alternate route for wagon traffic, especially during wet weather. It is clear that the use of these roads probably diminished greatly or entirely after U.S. Highway 285 was built in 1928 or 1929.

Summary—Site LA 112349

As sometimes happens in archaeological fieldwork, unexpected discoveries have led to the documentation of a series of unimproved trail-roads and river crossings dating to the post-Civil War to early statehood period. Now seen as a series of ruts, some cut by arroyos and others consisting of grass-covered linear swales, these roads are at a takeout or cross-over point of the South Seven Rivers. Typical of unimproved roads and river crossings, several alternative alignments and takeout or cross-over points became established in turn as erosion and rutting made the current ones unusable.

The existence of these particular trail-roads and the takeout or crossing point probably reflects the need for a wet-weather alternative to the main road along the Pecos River floodplain to the east. Although use of these trail-roads and crossing mostly ceased at the time the present alignment of U.S. 285 and its bridge over the river were built in the late 1920s, a 1939 aerial photograph suggests that the crossing was still occasionally used at that late date.

THE PROJECT SITES IN PERSPECTIVE

In this section the project results are evaluated and summarized in the format of the data recovery plan. Within each problem domain, the sites are discussed in the order of their archaeological site (LA) numbers.

Problem Domain I

Problem Domain I was to identify the functions and to inventory the remains at the sites. In combining the archaeological, archival, and interview information, several surprises were experienced. These surprises reaffirm the value of combining all three types of information in historical studies.

Archaeological Site LA 8053 (possible homestead and quarry)

LA 8053 was believed to be the foundation of a structure with its associated occupational debris. The question was whether the structure represented a homestead or a building associated with the nearby conglomerate quarry. Mapping of the structure location documented the positions and alignments of the stones of the presumed foundation and revealed a gravel "pad" believed to be the floor of a shed attached to one end of the structure. The trash scattered around the structure was inventoried but left in the field; the nature of the artifacts in the trash is consistent with a habitation function (i.e., homestead, line shack, or the like) rather than an "office" associated with a quarry or other commercial operation. Numerous pieces of amethyst glass date the site to the turn-of-the-century or probably a little later.

The conglomerate quarry consisted of two pits, one large main pit and what appeared to be a smaller pit off to one side of the main pit. Judging by the topography, the main pit was at a conglomerate outcrop that was mostly consumed by the quarrying operation.

The records search for the property and vicinity documented the existence of an irrigation ditch and nearby reservoir and farm fields. It failed to mention the presence of a habitation structure even though the records and artifactual remains pertain to the same general time period. Did Lethe Sassin, the documented owner of the land, have a home on the property that was not mentioned in the appropriate records? Or does the structure post-date her ownership?

Interview information indicates that one or more dugout houses or chosas were present in the area early in the century. The small pit originally thought to be a quarry pit could have been a dugout, though no artifacts were noted anywhere except around the structure foundation located 40 m to the north. Unfortunately, the possibility that the small pit might be a dugout was not discovered until the interviews were conducted several months after the field phase of the project and long after archaeological investigations were feasible.

Thus, although we lack the answers to several important questions about the historic period occupation of LA 8053, we are still far ahead of our previous level of information. And because we combined all three avenues of research, we have a fuller picture of the history of the parcel than would have been possible by using only one, or even two, of those techniques. Perhaps future studies will answer some or all of the unanswered questions.

Archaeological Site LA 38264 (Four Trash Dumps)

The historic remains at LA 38264 consisted of four isolated trash concentrations that were carried to their respective locations in a wagon or pickup truck and dumped. Each concentration would have constituted one load or trip, or at most two in the case of Locus E. As would be expected, no historic records or interview information exist for these dumps. Because they are relatively short-term accumulations, they effectively represent time capsules of information, small slices or windows of time dating to the period 1920 to 1940.

What do they tell us? Several things: (1) the people who made the dumps evidently were involved in farming or ranching (several types of fencing material); (2) they lived on a cash economy (absence of home canning materials); (3) they were frugal (much evidence for reuse of materials and items); and (4) apparently two households are represented, one with few individuals and the other with a larger number of people (container size differences). More importantly, regarding the larger picture, the economy of the area or these individuals had improved over the level of basic subsistence, suggesting the advent of progress over earlier times.

Archaeological Site LA 89153 (Isaac W. Jones Homestead)

The OAS team originally believed this site was a scattered trash deposit dating to the turn-of-the-century. Surface artifact mapping and excavation revealed that it was a partially intact habitation site, and archival research revealed that it was a homestead belonging to the nearby Blackdom community. In the documents, two

homesteads were noted for the area of LA 89153, but the artifact assemblage permitted us to identify LA 89153 as the Isaac W. Jones family place, rather than the Taylor place. Taylor was a bachelor.

Although the homestead patent describes the Jones house in some detail, we cannot completely reconcile this description with the archaeological remains. The size of the archaeological manifestation is about correct, but if it is the Jones house floor, it consists of caliche-stabilized earth, rather than wood. While the records do not preclude an earthen floor, a picture of a "typical" house within the nearby Blackdom townsite clearly shows a raised, presumably wooden floor. This does not, of course, automatically mean that all Blackdom homesteads had raised floors. This might especially be true of the earlier homesteads that might have had fewer amenities because of the absence of a local infrastructure.

Comparison of the artifact assemblage from LA 89153 with other homestead assemblages in the Roswell area shows many similarities. However, several differences are also apparent—the Joneses apparently did not drink coffee, had higher quality china than some of the other homesteaders in the Roswell area, consumed pork in some quantity, and saw to the education of their children. While we know that many settlers in the region believed education to be important, archaeological finds of school materials at homestead sites are uncommon.

And finally, written records and local lore indicate that climatic conditions in the Roswell area were perceived as having deteriorated in the years following settlement of the region. Evaluation of the weather records for Roswell clearly shows this to be true. Importantly, however, the downturn in average annual precipitation is viewed as part of the natural cycling of weather, rather than an anomaly. Southeastern New Mexico, like much of the West, was initially settled during the wet cycle when range conditions were at their best. When conditions took a natural turn to drier times around 1900, farming without irrigation and grazing large herds of animals on relatively small tracts of land became impossible. Those conditions remain today. However, if our understanding of weather patterns is correct, we can anticipate a shift to wetter times some time in the coming century.

Archaeological Site LA 112349 (Old Roads and River Crossing)

The discovery of a series of old road ruts and river crossing points at this site during the archaeological field phase was unexpected. Systematic archaeological investigation of these features was not possible. However, between the historical research conducted for the nearby Rock Schoolhouse (LA 116473, below) and limited research in the New Mexico State Highway and Transportation Department archives, we determined that the crossings date mainly prior to the construction of U.S. 285 and its bridge over the South Seven Rivers in the late 1920s. The roads leading to and from LA 112349 evidently constituted a wet-weather alternate route for the main road between Eddy (Carlsbad) and Roswell. The main road, which coursed along the Pecos Valley alluvium in the vicinity of the old Seven Rivers townsite, was vulnerable to floods and ponded water during wet periods.

Additionally, other old maps of the area (see Spivey's report for LA 116473) and archaeological field evidence indicate that the actual streambed of the South Seven Rivers was used as a road to some degree and that the LA 112349 locus was used as the upstream entry and exit point. The other entry and exit point was downstream, presumably in the vicinity of the old Seven Rivers townsite some 3 km to the east.

Archaeological Site LA 116473 (Rock Schoolhouse)

Only Midden 1 of this site lay within the highway project and could be formally investigated. We assumed from a brief examination of the surface artifacts that Midden 1 belonged to the school located just outside the highway construction zone. However, because of the proximity of Midden 1 to U.S. 285 and the concentration of other historic sites in the vicinity, we needed to establish whether Midden 1 belonged to the school or to some other activity (i.e., was dumped trash). The materials of the actual school building were salvaged long ago for use elsewhere.

Archival records and informant interviews established the location as that of what was formally known as the Rock Schoolhouse. Although located within the general Seven Rivers community, the school was not within the Seven Rivers townsite. Use of the location as a school may have started as early as the mid 1880s and ended about 1920. The walls were still standing in 1939 and perhaps as late as 1960.

A few school-related artifacts in the midden confirmed a connection with the school, but many other artifacts could just as well be found at a homestead. Examination of the artifacts around the place where the school building originally sat also did not belong to a school setting. Thus, it appears that much of the trash in Midden 1, as well as the items around the building itself, may have derived from elsewhere (i.e., dumped trash) or represented use (shelter for travelers or temporary home for transients?) of the site after it ceased to function as a school but before the site was salvaged for building materials.

Problem Domain II

Problem Domain II seeks information on the local economy as reflected in the remains left by the common citizen. More specifically, what can we learn about the local economy, its relative wealth, and its connections with near and distant sources of goods? And, does the economic situation stay the same, decline, or improve through time?

Although some archaeological work has been conducted in historic sites in southeastern New Mexico, the degree of detail concerning the artifact inventories in most reports is generally minimal, curtailing comparative treatment through time (see Williamson's artifact discussion). However, the trash dumps from presumed homesteads or ranches in the vicinity of LA 38264 on the South Seven Rivers drainage do provide limited insight through time on a large geographic scale.

On a more restricted geographic scale, we have two turn-of-the-century homesteads in the Roswell area that can be combined with the Jones Homestead for a contemporary study. Interestingly, one is Hispanic (Ontiberos; Oakes 1983) and the other is Anglo (or white) (Cass; Boyer in prep.). These, plus the Jones homestead, provide an opportunity to look at questions about economic access and success along the ethnic dimension. This possibility is enhanced because all three homesteads are within a relatively small geographic area, thereby eliminating many potentially complicating factors that would have to be considered if the homesteads were spread over a much larger territory. Thus, differences among the three homesteads should be attributable to no more than two realms—financial ability and personal choice or preference.

The possibility of discerning ethnic differences in the artifact assemblages of historic sites is an important one for archaeologists. The interest here is not a political or social one. The reason is purely pragmatic; if systematic differences can be defined along ethnic lines, archaeologists will have another "tool" at their disposal for identifying ethnicity. This in turn will help track the histories of peoples and events with greater clarity. A good example involves the as yet unidentified structure and associated trash described in this report for site LA 8053. The hope is that the archaeological discipline will eventually be able to develop a set of principles for identifying ethnic groupings in the archaeological record. Success in this endeavor should be applicable to prehistoric sites and remains as well, permitting us to better sort out the comings and goings of various groups in a given region.

The Contemporary Economic Scene in the Roswell Area Shortly after the Turn-of-the-Century

One aspect that we had initially hoped to gain perspective about is the delineation of regions elsewhere in the United States and abroad that contributed goods to the southeastern New Mexico economy. That is, especially after the coming of the railroad, were all goods produced in the U.S. available to anyone in southeastern New Mexico who desired them, or were goods available mostly or even solely from only one or two regions such as the upper Midwest, the South, New England, or the West Coast?

We were unable to satisfactorily investigate this question simply because we lacked a sufficient number of artifacts that could be confidently assigned to specific factories, producers, and suppliers. If many containers and hardware items had labels or were embossed, and if the parts of those items bearing those marks had been recovered, we might have found that their contents were from one state as opposed to another. Or, equally important, if numerous producing states and regions were represented in one or more products, then this would be useful information as well. Had we been able to answer the question of source-region(s), we would have been faced with the question of whether a given type of goods, especially nonfood or dry goods, was acquired from a local merchant or whether the individual ordered them from a catalogue firm such as Sears and Roebuck or Montgomery Wards.

Williamson's comparative treatment of the Jones Homestead artifact assemblage with those from other homesteads in the region, especially those from Ontiberos and Cass, revealed some interesting similarities and a number of differences (see Oakes 1983 and Boyer in prep. for more details). In terms of similarities, there are at least two that we see in the archaeological record—all three homesteads display unmistakable evidence of frugal living, and all three apparently consumed sheep or goat meat on occasion.

But there are differences as well. The one aspect that may account for some differences is the likelihood that the Cass homestead does not represent a full-time habitation; it is a matter of record that the Casses also had a home in Roswell. Given the fact that the homestead building burned, it is highly likely that the contents of the site accurately reflect what was present and used at the house. Conversely, items that would normally be expected at a full-time residence but are missing at Cass were probably not regularly present or in use there.

The same may not be true for the Jones and

Ontiberos artifact assemblages. These sites were deliberately abandoned, with all usable items and materials being taken by the Joneses when they left or else scavenged later by neighbors. If an item did not break, or wear out, or otherwise lose its usefulness, it probably did not end up as an artifact to be found by archaeologists. It is interesting to note in this regard that Jones and Ontiberos sold their homesteads; the Casses lost theirs to repossession by the lending institution.

Table 11 presents a comparison of the similarities and dissimilarities among the assemblages from the three Roswell area homesteads. The reader must keep in mind several important, qualifying aspects of this comparison. First, the categories are few in number, making any conclusions tentative and not necessarily significant beyond these specific homesteads. Instead, the conclusions are best considered to be hypotheses to be kept in mind during future research. If systematic similarities can be correlated with the results of future archaeological investigations, then we may advance these conclusions to the status of cultural, economic, ethnic, or religious markers. It is equally possible that some or all of these similarities and dissimilarities are spurious or have no particular meaning beyond personal choice or happenstance in the lives of the three families. As personal circumstances changed for each family, so might their "profile." One factor that already is known or suspected of affecting the comparability of these particular assemblages is the implication that the Casses lived a significant part of the time in town.

With these admonitions in mind, we can now look at the information in Table 11 and draw some tentative conclusions. Overall, the Joneses shared several similarities with the Ontiberoses and several different similarities with the Casses. The Ontiberoses and the Casses are the most dissimilar. What might account for this prospective "pattern"?

The four similarities between the Joneses and the Ontiberoses are the quantities of ammunition or cartridges useful for hunting (as opposed to pest control), the use of wild species of birds and animals, the overall quantities of personal effects, and the occurrence of items from men's work clothes and footgear. The first two are probably related, though the ultimate disposition of the game may have been different. The Ontiberoses consumed the antelope. The Joneses may have sold some or most of the birds they "bagged," as Williamson suggests. Her suggestion is based on the large number of cartridges relative to the very few migratory bird bones recovered from the site deposits and the connections Jones would have had through his job in the restaurant business in Roswell. Rabbit was evidently on the menu at both the Jones's and the Ontiberos's homes.

The overall similarity in numbers of personal effects is another matter. If the low incidence of these items in the Cass homestead is a reflection of the possibility that most of these items were at the Cass home in Roswell as has been suggested by Spivey, then a "difference" between Cass and Jones and Ontiberos does not exist. Perhaps more importantly, there are interesting differences between Jones and Ontiberos within the personal effects category. Personal effects at the Jones homestead consist mainly of fancy porcelain (bric-a-brac) and other lady's items. Although normally subsumed in the domestic routine items, fancy, gild-edged serving ware complements this interpretation. The Ontiberoses personal effects center on strictly functional items. Interestingly, the men's clothing and footwear items from both the Jones and the Ontiberos homesteads are similar, leading Williamson (this report) to suggest that the men essentially dressed the same. The overalls and the boots/galoshes indicate outdoors working men, confirm-

Table 11. Similarities and Dissimilarities among the Artifact Assemblages for Jones, Ontiberos, and Cass Homesteads

Artifact Category	Jones	Ontiberos	Cass
Ammunition (cartridges)	XXXXX	XXXXX	
Use of wild species	XXXXX	XXXXX	
Personal effects, overall	XXXXX	XXXXX	
Men's clothing/footgear	XXXXX	XXXXX	
Domestic items	XXXXX		XXXXX
Educational/writing items	XXXXX		XXXXX
Entertainment	XXXXX		XXXXX
Indulgences	XXXXX		XXXXX
Domicile construction	XXXXX		XXXXX
Foodstuffs		XXXXX	XXXXX
Preferred meat	pork	beef	goat
Fancy domestic ware	gilded porcelain	plain porcelain	transfer ware
Preferred tobacco	snuff	plug	cigarettes?
Construction board sizes (inferred from nails)	smaller	(masonry)	larger

XXXXX= shared similarity. Data taken from Table 4.

ing the written records. Cass, by way of contrast, was a white-collar worker (postal clerk) and immigration promoter.

The Jones and Cass homesteads share five similarities in artifact assemblages—domestic items, educational—writing materials, entertainment, indulgences, and type of house construction. In terms of domestic routine, both had relatively few items. As mentioned earlier, the relatively few items at Cass may reflect the fact that they had a home in Roswell and may have spent more time there. The Joneses, on the other hand, appear to have had generally fewer plates, utensils, mixing bowls, etc., although as also mentioned earlier, some of their porcelain items were definitely higher quality than is often found in homestead settings.

Educational and writing materials are well represented at the Jones place and are present at Cass. Since relatively few items were recovered from Jones, perhaps reflecting overall fewer items in the Jones household inventory, the percentage of educational materials could be artificially heightened. However, the founding fathers of Blackdom (see Appendix and Baton and Walt 1996) clearly emphasized the value of education and the intent of making it a major feature of the Blackdom experience.

The entertainment and leisure category in Table 4 indicates that the Jones and Cass homesteads are quite different in this regard. However, if we remove the writing materials (pieces of slate, pen nibs, and pencil fer rule) from the Joneses entertainment value, only a few fragments of toys remain, resulting in a figure much more like that of the Cass homestead. By way of contrast, the Ontiberoses had significant quantities of children's toys, no doubt reflecting the fact that they had six children, compared to the one or possibly two in the Jones household (see Williamson's discussion on this subject) and the two in the Cass household. Ontiberos evidently gambled, as poker chips and perhaps Chinese coins (Oakes 1983) testify. These items were missing altogether at both the Jones and Cass homesteads.

Indulgences at the Jones and Cass homesteads are almost nonexistent, especially compared to the nearly 6 percent rate at the Ontiberos site. Since this category includes alcoholic beverage containers, it seems very likely that the Jones and Cass figures reflect the effects of a strong Baptist sentiment in the Roswell and Blackdom communities. Since Ontiberos was Catholic, Baptist doctrine prohibiting the consumption of alcoholic beverages would not apply to him.

House construction for both Jones and Cass was wooden frame. Ontiberos first had a dugout and then a rock-walled surface structure. The Ontiberos's choices are commonly seen in other homesteads in the region (Katz and Katz 1985) and probably reflect local availability (or lack thereof) of cheap materials as much as anything else.

The Ontiberos and Cass homesteads compare favorably in only one category—total foodstuffs. Both are lower than the Jones total. On the face of it, the significance of the similarity (and dissimilarity with Jones) may not be very meaningful.

In terms of dissimilarities, each household seemed to have individual preferences in primary meat, fancy domestic ware, form of tobacco, and construction board sizes as inferred from nail sizes. These preferences may be economically defined, individually defined, culturally defined, or ethnically defined. We feel that the Jones's preferences for pork and gilded porcelain objects may be an ethnic or possibly a Southern cultural marker. Type of tobacco cut is probably individual, and construction board sizes probably reflect economic considerations.

Four major categories of material culture have not been discussed in the foregoing paragraphs. These are: economy and production, furnishings, transportation, and unidentified (Table 4). Economy and production is not considered in any detail simply because so many items that probably might have been included in this category had to be placed in the unidentified category simply because they were too fragmentary to be explicitly identified.

Too few furnishings were recovered from any of the sites to be comparable on any level except their scarcity. This is all the more surprising because the Cass homestead burned. This leads us to believe that the Casses either had few pieces of furniture in the house or else got several pieces out before fire consumed the structure.

Also surprising is the virtual absence of transportation-related items at all of the sites. Horses and horse-drawn vehicles were still the main form of transportation in the region at the turn of the century. Since large numbers of items and parts are involved with horse gear and buggies and wagons, it is likely that the near absence of such items among the artifacts is a simple reflection that the barn and stable areas of the homesteads were not found or excavated. Thus, a comparison of this category is of no benefit.

In summary, from an archaeological stand-point, the Jones homestead material culture and refuse is most similar to the Cass homestead (n = 6) and slightly less similar to the Ontiberos homestead (n = 4). In contrast, the Ontiberos and Cass homesteads are similar in only one category. In this discussion, however, we must keep in mind the fact that we are talking about degree of similarity or difference along a continuum rather than direct oppositions.

So how can we account for these similarities and differences, given that all three homesteads were contemporary and partook in the same local economy? We suspect the following general principles apply. The sim-

ilarities between Jones and Cass relate to a common American cultural background as developed by the dominant white culture and acquired by blacks through centuries of association. The similarities between Jones and Ontiberos probably relate to an outdoors working-man (farm laborer) economic situation, as opposed to Cass who was a white-collar worker.

The notable dissimilarity between Ontiberos and Cass almost certainly derives from a lack of shared cultural background. Although New Mexico had been a territory of the United States for 60 years, statehood did not happen until 1912. The ability of New Mexicans to avoid or put off "Americanization" was easy through rural living and survived well into the twentieth century. Further distancing was also undoubtedly enhanced by differences in religion. Cass was married in the Presbyterian church, and Ontiberos was Catholic. All of these factors permitted people to form and maintain social and cultural enclaves that bolstered differences such as some of those we see in our sites and the families who lived in them.

Archaeological Indications for Economic Improvement on the Home Front in the Roswell-Carlsbad Region between 1900 and 1940

Having grown up in Roswell in the 1950s and early 1960s, the senior author (RNW) had the unmistakable impression that the economy of Roswell and southeastern New Mexico was viewed by the local people as being less than it should have been. The general sentiment was that things should be better, but for some reason were not. Was this picture accurate, or did it reflect the general American feeling that prosperity should be a constantly advancing phenomenon?

While this kind of sentiment might derive from a number of factors, some of them real and some fanciful, it is nevertheless a point of interest in general simply because the economic health of a region is key to the overall success of a given culture and its adaptation. And, the degree of that success is due in part to the attitudes and expectations of the individual and group perceptions of the situation and its potentials. Are things going well or poorly, and if the latter, what can be done to change the situation for the better? The answer, of course, is at least partly tied to the national, and to some extent, international economies.

It is useful in this regard to briefly review the history of the main economic mainstays in the region starting with the period immediately following the American Civil War. The first substantive American intrusion into southeastern New Mexico started with the cattle drives from Texas to the Bosque Redondo Navajo and Apache reservation and, shortly thereafter, to mining areas in Colorado and Arizona. This was quickly followed by the establishment of ranches in the Roswell area. Farmers began moving into the Roswell area in the late 1870s and 1880s to take advantage of the fertile Pecos Valley and the then abundant water.

The discovery of artesian water at Roswell in the early 1890s fueled intense land speculation and resulted in the opening of thousands more acres to farming. The economic picture of the region became fully developed when the railroad arrived in the mid 1890s, providing access to national markets for sale of products and the easy acquisition of goods from other regions. The federal government did its share by rescuing the massive but failing irrigation network initially built with private funds by Eddy and Hagerman in the Carlsbad district. This agrarian base—ranching and farming—provided a solid economic base for the southern Pecos Valley in New Mexico.

But the situation was not all positive. Droughts, blizzards, and shifting markets resulted in a slow down in the demand for beef just before the turn of the century. And a dropping groundwater table, first noted about 1915 or 1916, signaled a slowing, then cutbacks, in agricultural development. But, overall, as the school system and other aspects of infrastructure improved, the basic economy and "civilization" of the region were set.

Major nonagrarian business ventures and economic opportunities came to the region starting early in the twentieth century. Oil was discovered east of the Pecos River in the 1920s, and vast fields belonging to the Permian Basin were developed throughout southeastern New Mexico during the century. Extensive potash deposits, discovered east of the Pecos and first mined in the early 1930s, gave rise to a strong mining economy in the Carlsbad area. World War II resulted in the establishment of an airfield, later known as Walker Air Force Base south of Roswell in the 1940s. But, as such things go, the airbase was closed in the late 1960s, potash mining declined in the 1970s and 1980s, and the oil industry has followed the seemingly endless boom-and-bust cycle caused by world affairs and a changing market situation. While these industries and events have brought large amounts of money and people to the region, they are ultimately fleeting in duration. Farming and ranching remain the economic mainstay of the region.

So how has the condition of the common man been affected by all of this? The project sites, representing the period 1900 to perhaps as late as 1940, provide a limited view on the subject. As seen in Williamson's comparative study for the Jones homestead, which dates to the first decade of the twentieth century, the artifact inventories for the Joneses, Ontiberoses, and Casses reflect the general availability of a wide range of economic goods from the industrial regions of the United States, espe-

cially the East Coast and New England. The actual numbers of items represented at each homestead are low by modern standards, probably because of expense. All three families were frugal, as evidenced by frequent reuse of containers and the fashioning of new tools or "gerry-rigging" from old materials into new items. Evidence of home-canning and the use of family livestock and garden produce was common at all three sites. Self-sufficiency was obviously important and probably a necessity at the turn of the century.

The situation 10 to 30 years later appears to have been a slightly different story, if the trash dumps along the South Seven Rivers drainage are any indication. At all four dumps, representing at least two different, probably rural households, the large number of fruit and vegetable cans, plus a dearth of evidence for home-canning suggests that the people were on a wage economy. Evidently, they could afford to buy more foodstuffs than the Joneses, Ontiberoses, and Casses. However, like the earlier homesteaders, they continued the tradition of frugality evidenced by reuse of containers and the refashioning of old items into new tools. Things were measurably better than earlier in the century.

CONCLUSIONS

New construction along U.S. 285 between the cities of Carlsbad and Roswell in southeastern New Mexico provided the opportunity to investigate five historic archaeological sites prior to their removal by construction activities. One site is west of Dexter and just south of Roswell and the other four cluster along the South Seven Rivers drainage about half way between Carlsbad and the city of Artesia.

None of the sites had standing architecture at the time of these investigations, and it is fair to say that all appeared to be so minimal in appearance that many people would have considered them to be inconsequential. Yet, through a program of excavation, collection, mapping, artifact analysis, and traditional historical research, we have been able to reconstruct who the people were and what they were doing shortly after 1900. We believe that the entire experience has been a good example of just how the disciplines of archaeology and history can provide a picture that neither can produce alone.

The main thrust of this project has been to look at the remains left by certain common citizens and learn something about who they were, what they did, what their communities were like, and how they fit into the local and regional pictures. While we were only able to partly achieve this rather ambitious goal, we have been able to document several specific locations and activities that would not otherwise have been singled out for study under the conditions of "normal" historical or archaeological research. We believe that we have made a worthwhile contribution to local and regional history.

The project has not been without its surprises and disappointments. The first surprise came upon the discovery of a network of old road traces associated with the then unknown river crossing (LA 112349) during investigations of prehistoric remains at that location. The second was the discovery that what had previously been believed to be a scattered trash dump was in fact the remains of the Isaac W. Jones homestead (LA 89153) and a component of the African-American farming community of Blackdom. And, the third discovery was the existence of a school dating to the turn of the century and belonging to the greater Seven Rivers community; except for this study, which now "puts it in the books," knowledge of this school appears to have been drawing to an end with the passing of local oldtimers.

The disappointments are equal in number. At the time we were working along South Seven Rivers, we assumed that a small pit located to one side of an obvious conglomerate quarry was also a quarry pit. It now seems likely that this smaller pit may have been a pioneer's dugout even though it lacked any trash or other manifestation of a habitation. We did not learn of the former presence of dugouts or *chosas* in the area until after the archaeological field period had been completed. Unfortunately, the pit is now gone. Another disappointment is that we were not able to definitively pin down the original occupant of the historic structure at LA 8053. It could be the unrecorded location of Lethe Sassin's house, a point of some interest and mystery to local historians for many years now.

The last disappointment, and one that turns a negative into a positive, is that we have answered to our satisfaction a question of long standing among archaeologists. The question is, should basically all historic sites be treated in the same manner that we have, for decades, been treating all prehistoric sites? Specifically, should we be collecting all artifacts and taking them into the laboratory for analysis, or should we continue analyzing them in the field and leaving them there? The answer is an unqualified, resounding, *take them to the laboratory!* The information gain by taking them into the lab is threefold or more. Although the cost in doing this increases, all of the money is better spent.

What other contributions has this project made? The location and some aspects of the Isaac W. Jones homestead (LA 89153) are now a matter of record. The homestead was developed and patented soon after the turn of the century. Although Baton and Walt (1996) have made a valuable start in archaeologically documenting the Blackdom community, the current project is the first archaeological excavation of a component of that community. Only a small part of the site remained for investigation, but it proved informative nonetheless. We did encounter one problem: we could not reconcile the written description of the house with the remains uncovered in the excavations. We know from other archaeological remains recovered from the site that the Jones were a frugal family, that Mrs. Jones liked nice articles having intrinsic value, and that the family valued education. They not only aspired to, but evidently lived the dream of education and moral uplifting declared as major goals in the articles of incorporation for Blackdom. Mr. Jones was the second signer of those articles, right behind the founder, Frank Boyer. Pork and rabbits were common fare at their table, and Mr. Jones may have hunted wild birds for home consumption or for sale to other locals. Even though the homestead deed describes outbuildings and a barn for domestic animals, it appears that a favored large animal, perhaps a mule, was permitted to hover around the family house.

An interesting study involving three Roswell-area homesteads permitted us to compare and contrast the

lives and cultural remains of three families—the Joneses, the Ontiberoses, and the Casses. While the sample of three homesteads is clearly too small to draw strong conclusions, we were able to glimpse several possible ethnic markers that could, if proven true in future studies, prove valuable in identifying and tracing the lives and experiences of different ethnic groups in the archaeological record. We found that food preferences, religious proscriptions, cultural background, and world view have possibility in this regard. Individual preference obviously has a distinct potential for confusing the situation. Also, it cannot be emphasized too strongly that historical circumstances and the particular time periods are important considerations in studies of this nature. Additionally, as archaeologists are all too well aware, and as shown by this report, historical records cannot be found for all archaeological sites, nor can archaeological sites be found for all historical records. Thus, tracing various ethnic groups, and identifying their various contributions to the history of a given region and the country as a whole requires combining the efforts of archaeologists and historians.

Archival and literature research on Blackdom showed the community to have been the dream of Mr. Frank Boyer and all like-thinking men, including Isaac Jones. It was to be a predominantly African-American community where the people could control their destinies to the greatest extent possible, where they could emphasize education and moral uplifting and improve their lives. Only in recent years has interest arisen concerning settlements like Blackdom. Blackdom was part of a larger social experiment that ultimately involved many towns in several states in the West. We were disappointed in the fact that we were unable to trace the Jones family after they sold their homestead at Blackdom in 1906. Boyer later moved to the village of Vado on the Rio Grande below Las Cruces; some of his descendants can be found there to this day. Blackdom was abandoned about 1927 because of agricultural failure.

Farming at Blackdom and its outlying homesteads was dependent on rainfall. An analysis of the precipitation records for the Roswell area between 1878 and 1930, the periods just prior to and during the existence of Blackdom, revealed a general shift in annual precipitation. Prior to 1900, the years were wetter on average and marginally suitable for dry-land farming. After 1900, the annual average dropped below 16 inches, making dry-land farming impossible and ultimately led to the abandonment of Blackdom. Although Blackdom came into being after this shift had occurred, or was in transition, the sod of the prairie would have retained moisture from the previous years until such time as it was broken by tillage. An occasional year or two of good precipitation would forestall drying of the soil caused by tillage, plant growth, and exposure of the soil, but the result was inevitable. Irrigation was the only possible remedy for the situation, but the drilling of new artesian wells was prohibited by a countywide moratorium because of dropping water pressure and overall lowering of the water table. The shift in natural precipitation is viewed as a natural part of weather cycling through time. It is unfortunate that American settlement of the Southwest occurred during the wet part of the cycle, for the new settlers were misled into thinking that the land had greater potential for productivity than is possible over the long term. Nature had, and still has, the final word in the matter.

Only a trash pile associated with the Rock Schoolhouse (LA 116473) was archaeologically investigated on this project. Analysis of the items in the trash pile, plus on-site assessment of trash clustered more closely around the building footings, indicates that the trash at this site probably did not result, or resulted only in part, from the use of this location as a school. The trash is more typical of a habitation or temporary use by travelers. However, the archival and informant information clearly establishes the use of the location as a school starting perhaps as early as the mid 1880s and lasting as long as about 1915 or 1920. The building, or parts of it, were still in existence as of 1939 and perhaps as late as the 1960s. Thus, there was plenty of time for habitation uses of the site subsequent to the demise of the school. Most of the rocks and other materials of the building were scavenged over the years for use elsewhere, leaving only some of the footings at the time of this project.

The historic remains at LA 8053 could not be predicted by the extant archival records for this tract of land. Archival information suggests that the tract was used for farming activities, especially as the location of a main ditch that transported water from a spring to the west, to a reservoir and irrigated fields to the east. The system was built by Lethe Sassin soon after the turn of the century. Historic above-ground structures and the conglomerate quarry are not mentioned anywhere, yet artifacts associated with a structure footing and gravel pad (shed floor?) clearly date to the Sassin period or shortly thereafter. Local interviewees provided little information other the fact that one or more dugouts or *chosas* were present in the general vicinity. No direct evidence of the feeder ditch was found, probably because it lay north of the project area. The reservoir appears to have been on the tract to the northeast, probably within what is now the Seven Rivers Orchard. We speculate that the house footing and trash mark the site of Lethe Sassin's house. If true, then it would have been constructed after Sassin filed the homestead proof. Local historians like William Balgeman have suggested one or more locations for the Sassin house, but the guesses have generally focused south of the South Seven Rivers channel. LA 8053 is

north of the channel. The date and destination of materials from the conglomerate quarry are unknown, but their use in construction of the first U.S. 285 bridge over the South Seven Rivers channel in the late 1920s is a good possibility (see below).

The old road ruts and river crossing at LA 112349 lie immediately west of the conglomerate quarry of LA 8053. Although ruts and the crossing were discovered too late in the field phase to permit more than detailed topographic mapping, archival research shows an early road and crossing at this location that were essentially replaced by the construction of the modern alignment of U.S. 285 in the late 1920s. The ruts associated with the crossing involve several more or less parallel alignments and up to four, closely spaced crossing or out-take points. The mutiple alignments were alternates necessitated by erosion and rutting through use. The configuration of the ruts at the edge of the river channel also show that the actual river bed was used as a road. Interpretation of the archival documents suggest that the roads and crossing comprised a wet-weather alternate to the main road which, at that time, ran along the Pecos Valley proper several kilometers to the east.

The four trash dumps of LA 38264 were scattered along the south side of the South Seven Rivers drainage. Their small sizes (about one wagon or truck load) and location just off a road and down towards a low place in the landscape are earmarks of dumps from individual homes. Those homes were most likely within a mile or so of the dump locations. Their contents, much like the contents of sunken ships, are time capsules of culture, small slices of time. They provide a quick glimpse of the lives of those who left them on the landscape. In these particular instances, the LA 38264 dumps show a surprisingly wide variety of items representing numerous functions. They obviously represent materials accumulated over a period of time, perhaps a few months or a year. Based on can sizes, we suggest that the individual dumps represent two different households, one with relatively few individuals and the other with more individuals. The dumps, which date between 1920 and 1940, are a little later in time than the Jones homestead, the Rock Schoolhouse, and the Sassin(?) sites. Overall, the LA 38264 dumps show a continuation of frugal living in the reuse of materials and items, but they also show that the households lived on a cash economy as indicated by the virtual absence of "home-canned" food containers.

This project has looked at the cultural remains and lives of both known and unknown peoples living in the Pecos Valley of southeastern New Mexico between 1900 and 1930 or 1940. As far as we can tell, all of the people involved in this study were ordinary citizens going about their daily lives in their customary manner. We have seen how their lives differed and how they were similar. And although the individual homesteads were ultimately abandoned for various reasons, and especially economic reasons, the overall circumstances of the people in the region improved through time. The productive meshing of both archaeological and historical information has greatly enhanced the degree to which we have been able to develop this study.

REFERENCES CITED

Adams, William H., and Linda P. Gaw
1977 A Model for Determining Time Lag of Ceramic Artifacts. *Northwest Anthropological Research Notes* 11(2):218-231. Washington State University.

Adams, William H., and Sarah Jane Boling
1991 Status and Ceramics for Planters and Slaves on Three Georgia Coastal Plantations. In *Approaches to Material Culture Research for Historical Archaeologists,* compiled by George L. Miller, Olive H. Jones, Lester A. Ross and Teresita Majewski, pp. 59-86. The Society for Historical Archaeology, Ronald L. Michael, editor, California, Pennsylvania.

American Business Information, Inc.
1998 American Business Disc [CD Rom]. 1st edition. Omaha, Nebraska.

Balgemann, W. H.
1982 Schematic Map of Seven Rivers Area Showing the Location of Historic Homesteads, Ranches, Schools, and Other Features. On file, Carlsbad Family History Center, Carlsbad.

Ball, Eve
1969 *Ma'am Jones of the Pecos.* University of Arizona Press, Tucson.

Barnard, B., J. G. Gallagher, R. Moir, and N. DePaoli
1980 Historic Site Descriptions. In *Evaluation of Cultural Resources at Brantley Reservoir, Eddy County, New Mexico,* assembled by Joseph G. Gallagher and Susan E. Bearden, pp. 301-385. Archaeological Research Program, Southern Methodist University, Dallas, Texas.

Barnes, Frank C.
1985 *Cartridges of the World.* Revised 5th edition. DBI Books, Inc. Northbrook, Illinois.

Baton, Maisha, and Henry Walt
1996 *A History of Blackdom, N.M., in the Context of the African-American Post Civil War Colonization Movement.* Report submitted to the Historic Preservation Division, Office of Cultural Affairs, Santa Fe.

Boyer, Jeffery L.
In prep. Excavations at Historic Homestead Sites along the Roswell Relief Route. (working title). Office of Archaeological Studies, Museum of New Mexico, Santa Fe.

Chance, David H., and Jennifer Chance
1976 Kanaka Village/Vancouver Barracks 1974. In *Reports in Highway Archaeology* No. 3. Washington.

Chaves, Amado
1892 *Report of the Superintendent of Public Instruction.* New Mexico Printing Company, Santa Fe.

Crockett, Norman L.
1979 *The Black Towns.* Regents Press of Kansas, Lawrence.

Dane, Carle H., and George O. Bachman
1965 *Geologic Map of New Mexico.* U.S. Geological Survey, Washington, D.C.

DESIGNER/builder Magazine
1991 "Blackdom." April issue.

Dick-Peddie, William A.
1993 *New Mexico Vegetation, Past, Present, and Future.* University of New Mexico Press, Albuquerque.

Dow, Mary Neatherlin
1964 "Late Mrs. J. L. Dow recalled Seven Rivers as a Fine Town." *Carlsbad Current Argus* for October 22, 1964.

Ferguson, Bobbie H.
1993 *"And They Laid Them to Rest in the Little Plot Beside the Pecos."* Final report on the relocation of old Seven Rivers Cemetery, Eddy County, New Mexico, vol. 1, U.S. Bureau of Reclamation, Denver.

Fleming, Elvis E.
1975 Blackdom. Address to the Chaves County Historical Society, Roswell, May 3, 1975.
1991 John Chisum's Negro Children. In *Treasures of History II: Chaves County Vignettes,* edited by Elvis E. Fleming and Ernestine Chesser

Williams, pp. 6-8. Chaves County Historical Society, Roswell.

Fleming, Elvis E., and Minor S. Huffman
1978 *Roundup on the Pecos.* Chaves County Historical Society, Roswell, New Mexico.

Gallagher, Joseph G., and Susan Bearden
1980 *Evaluation of Cultural Resources at Brantley Reservoir, Eddy County, New Mexico.* Southern Methodist University, Archaeology Research Program, Research Report 120.

Gardner, Mark L.
1991 A Close Encounter with Marian Russell. *Wagon Tracks* 5(2):1, 18. Santa Fe Trail Association Quarterly, Woodston, Kansas.

Gibson, Daniel
1986 Blackdom. *New Mexico Magazine,* Santa Fe.

Glasrud, Bruce A. (compiler)
1998 *African Americans in the West: A Bibliography of Secondary Sources.* Center for Big Bend Studies Occasional Papers No. 2. Sul Ross State University, Alpine, Texas.

Hamilton, Kenneth Marvin
1991 *Black Towns and Profit, Promotion and Development in the Trans-Appalachian West, 1877- 1915.* University of Illinois Press, Champagne.

Henderson, Mark
1976 *An Archaeological Inventory of Brantley Reservoir, New Mexico.* Archaeology Research Program Contributions in Anthropology No. 18. Department of Anthropology, Southern Methodist University, Dallas, Texas.

Hendley, Josephine B.
1982 Old Seven Rivers. *Pecos Trails* 2(1):25-27.

Hickerson, Nancy Parrott
1994 *The Jumanos, Hunters and Traders of the South Plains.* University of Texas Press, Austin.

Hill, Mozell C.
1946 The All-Negro Communities of Oklahoma: The Natural History of a Social Movement. *Journal of Negro History* 31:254-268.

Hufstetler, Mark, and Lon Johnson
1993 *Watering the Land, The Turbulent History of the Carlsbad Irrigation District.* National Park Service, Rocky Mountain Region, Denver, Colorado.

Israel, Fred L. (editor)
1968 *1897 Sears Roebuck Catalogue.* Facsimile edition by Chelsea House Publishers, New York.

Katz, Susana R., and Paul Katz
1985 *The History of the Carlsbad Basin, Southeastern New Mexico: Technical Report of Historic Archaeological Investigations in the Brantley Project Locality.* Bureau of Reclamation, Southwest Regional Office, Amarillo, Texas.

Kendrick, Gregory D.
1986 *Promised Land on the Solomon: Black Settlement at Nicodemus, Kansas*. U.S. Department of the Interior, National Park Service, Denver, Colorado.

Kuchler, A. W.
1964 *Potential Natural Vegetation of the Conterminous United States.* Map and manual. American Geographical Society Special Publication No. 36, New York City.

Larson, Carole
1993 *Forgotten Frontier: The Story of Southeastern New Mexico*. University of New Mexico Press, Albuquerque.

Levine, Daisy F.
1996 *A Cultural Resource Survey of Bridge No. 5252 and 9.0 Kilometers (5.6 miles) on U.S. 285 North of Carlsbad, WIPP-285-1(27)50, Control No. 2097.* NMSHTD Report 96-10 (Replaces Report 95-54 from October 1995), New Mexico State Highway and Transportation Department, Santa Fe.

Maker, H. J., H. E. Dregne, V. G. Link, and J. U. Anderson
1974 *Soils of New Mexico.* Agricultural Experiment Station Research Report 285, New Mexico State University, Las Cruces.

Marshall, Michael P.
1997 *A Cultural Resources Survey for the Proposed Roswell to Carlsbad U. S. 285 Highway*

Improvement Project, Chaves and Eddy Counties, New Mexico. Cibola Research Report No. 174, Cibola Research Consultants. Prepared for Taschek Environmental Consulting, Albuquerque.

Mehlhop, F. L.
n.d. Library of Congress #74-29-455, Washington, D.C.

Meyers, L. C.
1962 The Pecos Seven Rivers was Rough Cow-Town. *The Southwesterner* 2 (July):12-13.

Moir, Randall W.
1982 Windows to Our Past: A Chronological Scheme for the Thickness of Pane Fragments from 1635-1982. Ms. on file, Department of Anthropology, Southern Methodist University, Dallas. [This reference was not consulted, but is supplied for the convenience of readers who may wish to consult the original work.]

Munsey, Cecil
1970 *The Illustrated Guide to Collecting Bottles.* Hawthorne Books Inc., New York.

Nanninga, S. P.
1942 *The Problems of Education in New Mexico.* University of New Mexico Press, Albuquerque.

Nelson, Lee H.
1968 *Nail Chronology as an Aide to Dating Old Buildings.* Technical Leaflet 48. *History News* 24(11), November. American Association for State and Local History, Nashville.

Oakes, Yvonne R.
1983 *The Ontiberos Site, A Hispanic Homestead near Roswell, New Mexico.* Laboratory of Anthropology Notes No. 311. Museum of New Mexico, Santa Fe.

Painter, Nell I.
1992 *Exodusters: Black Migration to Kansas after Reconstruction.* Alfred A. Knopf, New York City, New York.

Pool, Juliann C.
1991 *An Overview of Nineteenth- and Twentieth-Century Buttons.* Research Notes Historic Sites and Materials No. 1. Texas Parks and Wildlife Department, Austin. March 1991.

Rock, Jim
1980 *American Bottles: A Few Basics.* Klamath National Forest, Region 5, USDA Forest Service, Oregon.

Roenke, Karl
1978 Flat Glass: Its Use as a Dating Tool for Nineteenth Century Archaeological Sites in the Pacific Northwest and Elsewhere. *Northwest Anthropological Research Notes* 12(2):1-128.

Schoen, Christopher M.
1990 Window Glass on the Plains: An Analysis of Flat Glass Samples from Ten Nineteenth Century Plains Historic Sites. *Central Plains Archaeology. Journal of the Nebraska Association of Professional Archaeologists* 2(1):57-90.

Schroeder, Albert H., and Dan S. Matson
1965 *A Colony on the Move: Gaspar Castaño de Sosa's Journal, 1590-1591.* School of American Research, Santa Fe.

Scurlock, Dan
1979 Historic Resources of the Roswell District, Bureau of Land Management, New Mexico. In *A Cultural Resources Overview for the Bureau of Land Management, Roswell District,* assembled by Eileen L. Camilli and Christina G. Allen, pp. 153-228. Prepared by the Office of Contract Archeology, University of New Mexico, for the Historic Preservation Division, Office of Cultural Affairs, Santa Fe.

Sears Roebuck Company
1969 *1902 Catalogue.* Facsimile edition published by Bounty Books, New York City.

Sebastian, Lynne, and Signa Larralde
1989 *Living on the Land: 11,000 Years of Human Adaptation in Southeastern New Mexico.* Cultural Resources Series No. 6. New Mexico State Office, Bureau of Land Management, Santa Fe.

Sheridan, Tom
1975 *The Bitter River: A Brief Historical Survey of the Middle Pecos River Basin.* Bureau of Land Management, Roswell District Office,

Roswell, New Mexico.

Shinkle, James D.
1964 *Fifty Years of Roswell History, 1867-1917.* Hall-Poorbaugh Press, Roswell.
1966 *Reminiscences of Roswell Pioneers.* Hall-Poorbaugh Press, Roswell.
1972 *Martin V. Corn, Early Roswell Pioneer.* Hall-Poorbaugh Press, Roswell.

South, Stanley
1977 *Method and Theory in Historical Archaeology.* Academic Press, New York City.
1979 Historic Site Content, Structure, and Function. *American Antiquity* 44(2):213-237.

Southeastern New Mexico Historical Society
1982 *Eddy County New Mexico to 1981* . Craftsman Printers, Inc. Lubbock, Texas.

Teague, George, and Lynette Shenk
1977 *Excavations at Harmony Borax Works.* Western Archaeological Center, U.S. Park Service, Tucson, Arizona.

Toulouse, Julian Harrison
1971 *Bottle Makers and Their Marks.* Thomas Nelson Inc., New York.

Tuan, Yi-Fu, C. E. Everard, J. G. Widdison, and I. Bennett
1973 *Climate of New Mexico*. Revised edition. New Mexico State Planning Office, Santa Fe.

U.S. Department of Commerce, Weather Bureau
1965 *Climatic Summary of the United States Supplement for 1951 through 1960: New Mexico.* Climatography of the United States No. 86-25, Washington, D.C.

U.S. Patent and Trademarks Office
1998 Trademarks Registered [CD Rom]. Washington, D.C.

Williamson, Natasha
1998 *Victorio: Halfway from Nowhere on the El Paso and Southwestern.* Archaeology Notes 183, Office of Archaeological Studies, Museum of New Mexico, Santa Fe.

Wiseman, Regge N.
1996 *U.S. 285 Seven Rivers Project: Plan for Data Recovery at Four Archaeological Sites along South Seven Rivers, Central Eddy County, New Mexico*. Archaeology Notes 190, Office of Archaeological Studies, Museum of New Mexico, Santa Fe.
1997 *U.S. 285 Roswell-South Project: Data Recovery Plan for Nine Prehistoric and Historic Sites Between Roswell and Carlsbad, Chaves and Eddy Counties, New Mexico.* Archaeology Notes 225, Office of Archaeological Studies, Museum of New Mexico, Santa Fe.

APPENDIX 1

ARTICLES OF INCORPORATION

OF

BLACKDOM TOWNSITE COMPANY

———-oOo———-

KNOW ALL MEN BY THESE PRESENT, That we, Francis M. Boyer, Isaac W. Jones, Daniel G. Keys, Burrel Dickerson, Charles C. Childress, John T. Boyer, James Jackson, Charles W. Clifton, Charles Thompson, Albert Hubert, Benjamin Harrison, George White, and Joseph Cook, all citizens of the United States of America and residents of the Territory of New Mexico, have this day associated ourselves together for the purpose of forming a corporation under and by virtue of the provisions of Chapter I of Title V of the Complied Laws of the Territory of New Mexico of 1897 and we do hereby state and certify:

ARTICLE I.

INCORPORATORS: That the full names of the persons who are to form said corporation are: Francis M. Boyer, Isaac W. Jones, Daniel G. Keys, Burrel Dickerson, Charles C. Childress, John T. Boyer, James Jackson, Charles W. Clifton, Charles Thompson, Albert Hubert, Benjamin Harrison, George White, and Joseph Cook, and such other persons as shall hereafter by the purchase of stock become members thereof.

ARTICLE II.

CORPORATE NAME: That the corporate name of this company shall be BLACKDOM TOWNSITE COMPANY.

ARTICLE III.

OBJECTS OR PURPOSES: That the objects of this corporation are:

1. To establish a Negro colony and to found and erect the town of Blackdom, and to lay off the lands covered by said town into a townsite under the laws of the Territory of New Mexico and to lay out additions thereto, and to plat said townsite and additions into blocks, lots, streets, alleys, avenues, commons, parks and public grounds and to own, hold, sell, and convey said lots and blocks and improve the same.
2. To purchase, sell, improve, cultivate and colonize lands in connection with the matter mentioned in paragraph 1 of these purposes.
3. To purchase, build, erect, construct and operate one or more irrigation plants by means of a system of artesian wells, or appropriating the now unappropriated waters of any natural stream in the County of Chaves and Territory of New Mexico and the construction of reservoirs, canals, ditches and pipes for the purposes of irrigation and reclamation of lands, and the sale of waters and water rights in connection therewith.
4. To maintain and establish irrigated farms and to handle, sell and dispose of the products thereof.
5. To establish a system of education among the inhabitants of the town of Blackdom and surrounding country and to improve the health, welfare and prosperity of such inhabitants.

6. In general it is proposed to gain control of a large body of land in the County of Chaves and Territory of New Mexico under the laws of the United States of America and there to establish and maintain a colony of Negroes by means of the cultivation of crops, the growing of town and settlements and the gen - eral improvement of the inhabitants of such colony; to build, erect and equip schoolhouses, colleges, churches and various educational and religious institutions for the improvement[?] and upbuilding of the moral and mental condition of said[?] colony.

ARTICLE IV.

CAPITAL STOCK: That the amount of capital stock of this corporation shall be ten thousand dollars, which shall be divided into five thousand shares of the par value of two dollars each.

ARTICLE V.

PERIOD OF EXISTENCE: That the period of existence of this corporation shall be fifty years from and after the date of the filing of these articles of incorporation in the office of the secretary of the Territory of New Mexico.

ARTICLE VI.

PLACE OF BUSINESS: That the principal place of business of this corporation shall be at the pro - posed town of Blackdom. Provided however, that until such town is established the business of said com - pany shall be transacted in the town of Roswell, in the County of Chaves and Territory of New Mexico.

ARTICLE VII.

BOARD OF DIRECTORS: That the affairs of this corporation shall be managed and controlled by a board of Directors consisting[?] of thirteen members chosen annually by the stockholders from among their number, who shall serve for the period of one year and until their successors are elected and quali - fied; Provided however, that for the first three months of the existence of this corporation said Board of Directors shall be composed of the following persons, to-wit: Francis M. Boyer, Isaac W. Jones, Daniel G. Keys, Burrel Dickerson, Charles C. Childress, John T. Boyer, James Jackson, Charles W. Clifton, Charles Thompson, Albert Hubert, Benjamin Harrison, George White, and Joseph Cook.

Territory of New Mexico,
County of CHAVES

On this 5 day of Sept. 1903 before me personally appeared Francis M. Boyer, Isaac W. Jones, Daniel G. Keys, Burrel Dickerson, Charles C. Childress, John T. Boyer, James Jackson, Charles W. Clifton, Charles Thompson, Albert Hubert, Benjamin Harrison, George White and Joseph Cook, personally sworn to me and known to me to be the persons described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

IN WITNESS _____, I have hereunto set my hand and affirmed my official seal the day and year in this certificate first above written

James M. Henry[?]
Notary Public