

ARCHAEOLOGY SOUTHWEST *magazine*

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Preservation and Partnerships along the Black Range of Southern New Mexico

Karl W. Laumbach, Human Systems Research, Inc.



An Earthwatch volunteer group touring the Pinnacle Ruin, one of several sites located in Cañada Alamosa.

THE LONG, DARK CHAIN OF MOUNTAINS that divides the Río Grande from the Gila and Mimbres drainages in southern New Mexico is called the Black Range. Numerous creeks began in that dark divide, running east towards the Río Grande, sometimes on the surface, other times dropping below to present the visitor with only a dry canyon. From north to south they number nine in all: Alamosa, Cuchillo Negro, Palomas, Seco, Las Animas, Percha, Trujillo, Tierra Blanca, and Berrenda. As the drainages flow from west to east, each passes through the representative zones of a Southwestern landscape, marked first by ponderosa, then by pinyon and juniper, by grasslands, by mesquite and creosotebush, and finally to the riparian bottoms of the Río Grande. Others, farther

south, drain not into the Río Grande but into the eastern edge of the Mimbres Bolson.

Since 1972, Human Systems Research, Inc. (HSR), has been interweaving site preservation, archaeological research, and public education (see pages 2-3) in this and other parts of New Mexico. This issue of *Archaeology Southwest* celebrates HSR's many successes and highlights the research conducted in the vicinity of the Black Range by HSR, its partners, and its colleagues.

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A Leap of Faith

Deborah M. Dennis, Human Systems Research, Inc.

IN MANY SOUTHWESTERN HOMES, Lewis Binford, James Judge, and J. J. Brody are household names. Their scholarly pursuits have added many pieces to the complex puzzle of New Mexican prehistory, and their work has enriched our understanding of those who came before us. Among their many accomplishments, however, is one that

agement. Curiosity for exploration, wonderment of discovery, and passion for the preservation of southern New Mexico's cultural heritage fueled its endeavors.

Preservation began at home. After camping outdoors through two harsh winters, the HSR crew moved its base of operation from Three Rivers to an office in Tularosa.

Thirty years later, that office remains the heart of HSR's financial operations. In 1994 came the acquisition of the historic Ladies Earnest Working Club, better known as the Tularosa Women's Club. Established in 1901, the building is a prime example of early Tularosa architecture and is a contributing property to Tularosa's Historic District.

Searching for a new preservation project in 1998, HSR purchased a building in Las Cruces, built by the Civilian Conservation Corps during the winter of 1936–1937, to serve as its education center. With the nomination complete, we hope

that the building will soon join the other HSR properties on the National Register.

Ten years before, in 1988, HSR purchased a 5-acre parcel in La Luz on which a portion of LA 457 is visible. LA 457 is a large, Jornada Mogollon (A.D. 200–1400) residential complex with numerous features and portions of an El Paso phase room block with multiple occupation floors. HSR has worked cooperatively with its neighbors during the past 14 years to ensure the preservation of this significant site in the face of encroaching development. Now we are transferring this extraordinary property into the hands of the Archaeological Conservancy.

Because of our belief that a well-educated and involved public is the best protection of our cultural heritage, most HSR endeavors interweave preservation, research, and public education. HSR archaeologists have captured the imaginations of youngsters in the public schools by re-



Don Woodman and Frank Crabtree

The HSR extended founding family in front of the first laboratory at 243 Roehl Road NW, Albuquerque, New Mexico, February 1972. In the second row are HSR's founders, graduate students Mark Wimberly (fourth from left) and Peter Eidenbach (tenth from left). Also shown are their mentors, J. J. Brody (second row, seventh from left), James Judge (back row, far left), and Lewis Binford (back row, third from left). In the first row (far left) is Richard Chapman, now of the Office of Contract Archaeology (see page 9).

goes almost unnoticed. In the winter of 1972, the three of them struck an agreement with two of their graduate students at the University of New Mexico in Albuquerque. Sometimes a mentor has to make a decision that requires a leap of faith, and in February of that year each did just that.

With help from their friends and cohorts, Mark Wimberly and Peter Eidenbach were inspired to create a non-profit 501(c)(3) corporation dedicated to the pursuit of basic research in anthropology and related fields of science. They chose a descriptive, scientific name—Human Systems Research, Inc. (HSR)—for their enterprise. Using the School of American Research, in Santa Fe, as an organization model, HSR appointed to its first board of directors none other than Binford, Judge, and Brody. Brought into existence during the dawn of salvage archaeology, HSR matured in the world of cultural resource man-

creating images of the excavated past. Teachers today in 28 different New Mexico schools, using a curriculum designed by HSR, report that their elementary school students are more interested in learning basic math and science concepts when presented within the context of archaeology. And high school and college students find their cultural awareness challenged when confronted with current historic preservation issues taught in another curriculum developed by HSR.

The delight of discovery has been shared not only with the young but also with the young at heart. Involvement and training of volunteers is central to HSR's philosophy as an educational organization. Over the years, various research projects have educated the interested public. Volunteers with metal detectors helped to find the 900-acre Hembrillo Battlefield, site of a great conflict in the Victorio War and now recognized as one of the premier historical sites on White Sands Missile Range.

Other volunteers excavated the Oliver Lee ranch house in Dog Canyon, near Alamogordo. Their efforts facilitated its transformation from a dilapidated structure into a historic gem in the collection of the New Mexico State Parks Division.

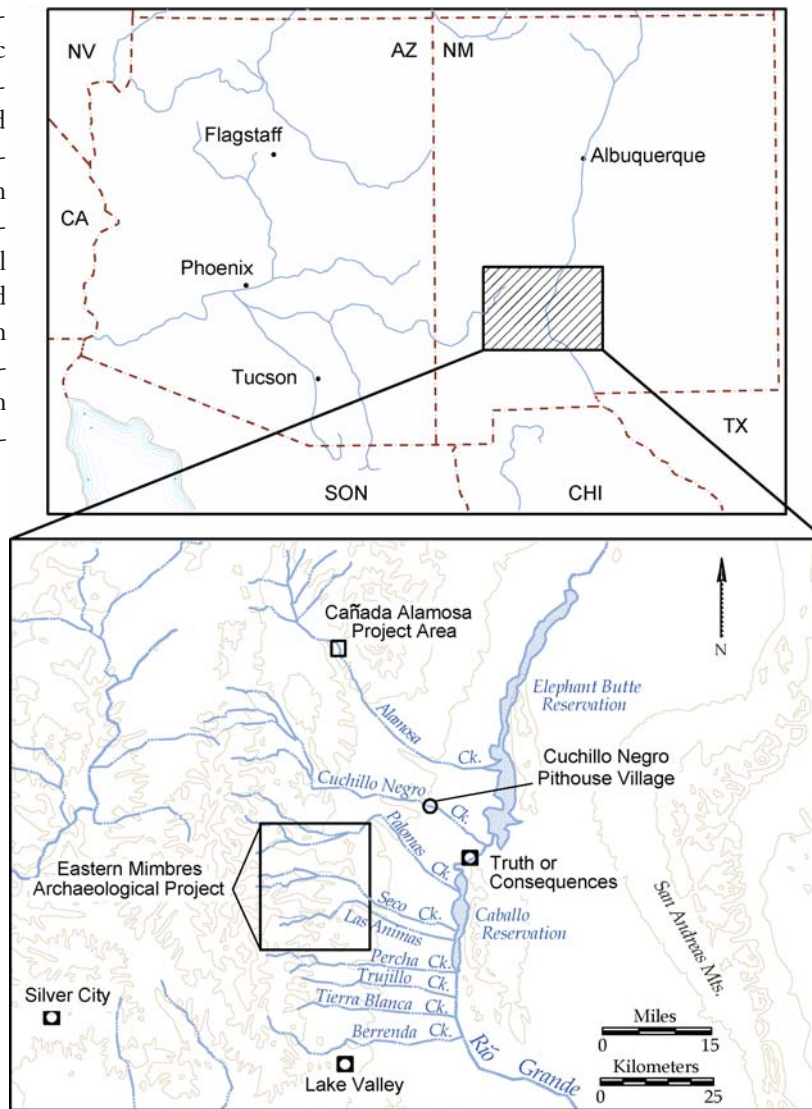
Still more volunteers investigated the burned remains of the Alexander McSween house in Lincoln, gaining a greater empathy with those under siege by the Dolan faction during the July 1878 confrontation known as the Lincoln County War. HSR archaeologists and Civil War buffs dug through sand dunes to identify and preserve the lost Fort Fillmore cemetery, outside Mesilla.

The Cañada Alamosa Project, discussed in this issue of *Archaeology Southwest* (see page 4), is the most recent example of HSR's preservation efforts through archaeological research and public education.

Born in an act of imagination and faith, HSR has not only survived but also established deep roots in New Mexico. In 1994, in recognition of its distinguished contributions to Southwestern archaeology, HSR received a Heritage Preservation Award from the New Mexico Historic Preservation Division.

Now, as colleagues and comrades talk of retirement, the spirit that stirred our founders continues to inspire us. Fueled by equal parts of ingenuity, faith, and perseverance, energized by volunteers and fortified by community support, HSR is undergoing its latest metamorphosis. Historically, all HSR endeavors were managed under one umbrella. Soon the complementary but inter-

woven halves of HSR—its contract archaeology division and its public outreach programs—will be formally divided. Henceforth, our outreach and preservation activities will be conducted through HSR's new Center for Public Archaeology. Amid these changes, HSR will continue to passionately embrace its role in understanding, interpreting, and preserving the past while teaching others about our shared history.



Map of the Black Range area; detail map shows the locations of sites and projects discussed in this issue. The Eastern Mimbres Archaeological Project was featured in Fall 2003 *Archaeology Southwest* (17[4]).

For additional information about the Earthwatch Institute, a partner in the Cañada Alamosa Project:
800.776.0188
www.earthwatch.org

The Cañada Alamosa Project: Investigations of a Prehistoric Frontier

Karl W. Laumbach, Human Systems Research, Inc.

A DEEP, WELL-WATERED CANYON on the northern end of the Black Range is the scene of an ongoing archaeological project. The goal is to explore the last two millennia of cultural and environmental change on Alamosa Creek.

O'Tooles joined forces with HSR to create the Cañada Alamosa Project.

Partners in this endeavor include Eastern New Mexico University, Portales; the University of Colorado, Boulder; the Earthwatch Institute, Maynard, Massachusetts; and the New Mexico Farm and Ranch Heritage Museum, Las Cruces. Fueled by donations, grants, and volunteer effort, the project is now in its sixth year. Excavations involving university field schools and Earthwatch volunteers are limited to a few weeks per year. Dedicated HSR volunteers, led by Karl and Toni Laumbach, analyze artifacts during the winter months.

Each of the four sites has yielded radiocarbon dates, environmental information, and a representative sample of artifacts. Survey on neighboring properties has added to a computerized database of more than 400 sites for which volunteers have entered specific site data. Ceramic assemblages suggest that the Río Alamosa was a point of contact between the Northern (Anasazi) and Southern (Mogollon) Pueblo traditions, beginning with the co-

occurrence of Mogollon Red-on-brown and San Marcial Black-on-white in the Early Pithouse period. A central research question is: Did this well-watered canyon support a biologically and culturally continuous population through time, or was the canyon repeatedly occupied and abandoned despite the steady flow of water?

Our ongoing research indicates that the upper Cañada Alamosa was reasonably well populated during the Early Pithouse period, almost abandoned during the Late Pithouse period, and subsequently used extensively by groups affiliated with both the Mimbres (south) and Socorro (north) ceramic traditions during the eleventh and early twelfth centuries. Then, during the late twelfth and early thirteenth centuries, the valley became home to more-aggregated communities affiliated with the Tularosa tradition. Finally, a population affiliated with the Mesa Verde carbon-paint tradition entered the valley during the latter part of the thirteenth century, perhaps initially sharing the valley with the Tularosa phase population but who were later the sole occupants of the valley.



Karl W. Laumbach

Excavation of a Tularosa phase room at the Victorio site, LA 88889.

Pithouse villages, pueblos, Apache rancherías and homesteads line the terraces of this southwestern oasis. Although the area was visited by the indefatigable Herbert Yeo in the 1930s (see page 12), it was not until the early 1990s that a National Park Service–sponsored study by Human Systems Research, Inc. (HSR), began the process of comprehensive documentation. The reconnaissance survey recorded a range of sites, including a previously unrecorded 440-room pueblo known to the locals as the Victorio site, in honor of the last Warm Springs Apache leader, who made the area his home.

Most of the sites are on private land and have survived the bulldozing of the last 20 years only because access is difficult and the owners protective. Alarming, in the early 1990s, a small ranch containing a cluster of the major sites was offered for sale. HSR prevailed on the realtors to offer it as a preservation property. The effort bore fruit when, in 1998, Dennis and Trudy O'Toole, veterans of museum work at Colonial Williamsburg, in Virginia, purchased the property. Founding the Cañada Alamosa Institute, the

History from the Ground Up

Dennis O'Toole, Cañada Alamosa Institute

PEOPLE HAVE LIVED in the place now called Cañada Alamosa, or Monticello Canyon, for many centuries. The basic reasons for this are clear. Alamosa Creek, fed by the deep springs at Ojo Caliente, provides a year-round, abundant source of water. Natural forces built the place, and humans came, group after group, struggling to make a living and then giving way to those who came next.

My wife and I are among the people most recently drawn to the canyon. The unspoiled beauty of the place attracted us both. So too did the traces that past inhabitants of Cañada Alamosa, both distant and recent, left behind. Those traces were so abundant that even our untrained eyes could see them when we first set foot on the place. I don't believe in ghosts, and I don't think I'm very suggestible. But when I walked across the Victorio site for the first time, wandering between the overgrown mounds of its collapsed stone buildings and, unavoidably, spying pieces of pottery and holding them in my hand, I began to wonder about the people who built, lived in, and then left this place. These would be our neighbors, in place if not in time, and I wanted to get to know them.

It is not surprising, I guess, that I responded this way. I am an educator and historian and spent most of my career working in American History museums. History is about people, and museums have collections of things that can be powerful tools for helping people connect with those who came before them. Here, along Alamosa Creek, were pieces and piles of everyday things once made and used and then abandoned by people who lived, over the centuries, in this place. Theirs is a 2,000-year-old tapestry that is still being woven. And the process of uncovering, analyzing, and interpreting these sites and objects can be a potent educational tool. These and other, more mundane attractions proved irresistible, and we moved west to New Mexico.

This year marks our sixth season in the field, in the laboratory, and before the public. The Cañada Alamosa Project has become a small chapter in the still-unfolding saga of Southwest archaeology, a more than century-old enterprise with a record of achievement that merits comparison to that of any other region in the Americas. We've seen archaeology's power to reach and to change people demonstrated again and again with the volunteers who have come from near and far to work on the project and with the audiences of local people who have attended our lectures and workshops. We've also tapped, to good effect,



John Fitch

The last of the Black Range drainages to be explored in recent times, Alamosa Creek is fed by a warm spring that produces 2,000 gallons per minute from a deep aquifer. The result is a permanent stream lined with cottonwoods and sheltered by the high rocky walls of the Cañada Alamosa.

the arsenal of sophisticated analytical tools available to archaeologists today. Still, because our ambitions are large, there are important research initiatives and public programs we have yet to undertake.

We aim to learn and tell the histories of the people who made a home for themselves in Cañada Alamosa from the first seasonal settlements to the present day. We want particularly to understand how these culturally diverse groups dealt with environmental challenges and how their efforts to sustain their way of life affected the environment in turn. To do this, we need to gather much more environmental data than we have so far. Our approach also needs to be interdisciplinary, and the means found to capture and express the more recent history of the canyon's inhabitants. Some of this is already in the works: an oral history program aimed at those who carry the canyon's recent history in their memories, and a conference on frontiers and migrations.

We want the stories of the peoples of Cañada Alamosa, dug from the earth and pieced together with care and imagination, to be part of the everyday awareness of those who live and work in the canyon today. Their stories have relevance, too, for voters and policymakers making decisions about scarce resources and the needs and wants of contemporary people in the desert Southwest. Finally, their stories deserve to find their place in classrooms and in the myriad publications and programs where history is presented to the general public. In these ways, lives lived long ago in a high desert canyon can enrich and illuminate the lives of the many who could never know them and will never walk their ground.

Pinnacle Ruin

Stephen H. Lekson, University of Colorado

FOR DECADES, TRAVEL BROCHURES and coffee table books touted “The Mystery of the Anasazi: Where did they go?” Despite the clichéd phrasing, that question remains valid. Thousands of people left Mesa Verde and the Four Corners area in the thirteenth century. Where did they go?

Many people from the Four Corners went to the various Pueblos of New Mexico and Arizona. But some people did not go directly to where the Pueblos are today. Pueblo

the site to research, and they develop strategies and methods appropriate to their tasks.

Pinnacle Ruin sits atop a butte consisting of a 100-foot-tall butte of rhyolite. Rubble mounds (presumably pueblo rooms) are massed around a cleared area on the butte’s top. More rubble spills down the steep east slopes, and may represent additional rooms terraced down the side of the butte.

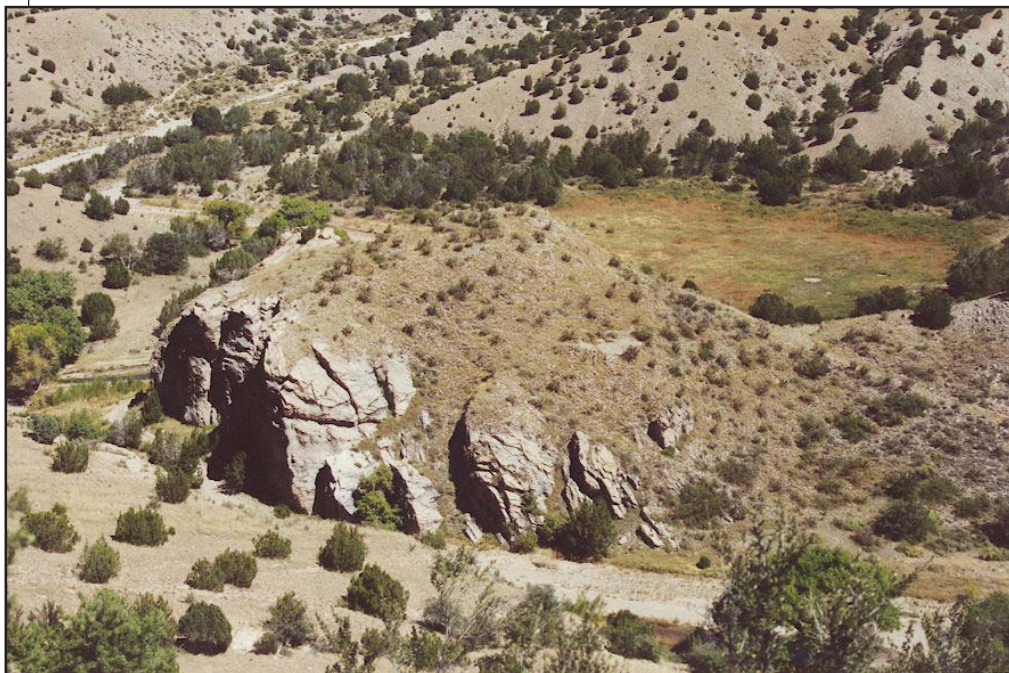
Pottery was the principal attraction of the site, particularly the black-on-white

sherds that resembled the Mesa Verde type sherds. We wanted large collections of sherds from undisturbed contexts, and we found those in the midden (see page 8). After examining the sherds, Toni Laumbach, the project ceramic analyst, concluded that the black-on-white pottery resembles the Mesa Verde tradition ceramics.

Dating the site and its pottery is very important. We have had no luck with tree-ring samples, but three carbon-14 dates on corn recovered from various parts of the site indicate that Pinnacle Ruin was occupied around A.D. 1300, within the interval that the Four Corners area was “abandoned” (circa 1250–1300).

The site is quite large and determining its size accurately has been complicated. The butte is covered with rubble, and we are attempting to determine how much of the rubble represents rooms, as well as how much rubble has spilled down the slopes from rooms above. Another complicating factor is depth: one of our research questions has concerned whether the rubble we can see on the surface is the site’s only architecture, or if there are earlier ruins buried beneath it.

Devin White directed the mapping of exposed walls and oversaw remote sensing using aerial photography of rubble areas. White determined that most of the rubble areas of the site are pueblo rooms—including rooms terraced down very steep slopes. Some of the walls on slopes may be terracing (and not pueblo rooms), but the total number of rooms at Pinnacle Ruin is still very impressive, certainly more than 200 and perhaps as many as 300.



John Fitch

Pinnacle Ruin, which sits atop a rhyolite butte, juts out into the Cañada Alamosa drainage.

traditions suggest that migrations were long and convoluted. We believe that substantial numbers of Mesa Verde people went 250 miles south of what is now the national park, to three large sites in southern New Mexico. These sites have black-on-white pottery that looks very much like that from the Mesa Verde region, and bear no resemblance to southern New Mexico’s Mogollon sites.

At the invitation of the Cañada Alamosa Institute, and in partnership with Human Systems Research, Inc., the University of Colorado (CU) has been exploring Pinnacle Ruin, one of these three “Mesa Verde” sites. Beginning in 2000, we mapped and excavated small portions of the ruin. Since 2002, Pinnacle Ruin has been the site of CU’s archaeological field school, training students in field techniques. The work is directed by Steve Lekson and Karl Laumbach, but most of the research is the product of CU graduate students. All students have a project or an area of

To determine the site's history, we excavated deep units in the east and west halves of the site. The east excavations, directed by Brian Yunker, were conducted next to a wall partially exposed by a pot hunter's hole. Yunker's excavations showed that the wall stood 1.5 meters high, with an additional 40 cm of foundation. The room was built on artificial fill that leveled out the ragged bedrock of the butte. There was no earlier ruin beneath this part of Pinnacle Ruin. Deep excavations in the west, directed by Curtis Nepstad-Thornberry, also demonstrated that the black-on-white pottery deposits began directly on the bedrock of the butte. We think that Pinnacle Ruin was the only large structure built on the butte.

Kivas—small, round rooms presumed to have ritual functions—are characteristic of Mesa Verde sites, such as Cliff Palace. We looked for kivas at Pinnacle Ruin, particularly in a rubble-free level area atop the butte. Gail Bleakney, who directed this work, found that the level area was actually more pueblo rooms, which may have been razed and leveled off with fill in ancient times. We cannot say that kivas are absent from Pinnacle Ruin, but they were

not present where they most likely would have been. Perhaps this is not surprising. We find very few of the small Mesa Verde kivas anywhere in the Southwest after 1300. Apparently, the people who left the Four Corners area ceased using small kivas when they arrived at their destinations.

Together, Pinnacle Ruin and the two other large “Mesa Verde” sites in southern New Mexico contain more than 1,000 rooms. That is too few rooms to accommodate all of the 5,000 to 8,000 people who left the Mesa Verde region between 1250 and 1300, but Pinnacle Ruin and the other sites constitute the largest definable post-Mesa Verde community.

Textbooks describe the “abandonment” of Mesa Verde in terms of trickles and spurts: a family here, two families there, drifting off to join distant villages on the Río Grande, at Acoma, Zuni, and Hopi. But, according to Pueblo people, whole towns and clans moved, and Pinnacle Ruin may represent one of the large groups that left the Mesa Verde region in the late thirteenth century and resettled far to the south.

Previous Research in the Black Range

Karl W. Laumbach, Human Systems Research, Inc.

RESearch in the Black Range was almost unknown before the 1970s. Anthropologist Adolph Bandelier passed close by in the winter of 1883–1884, but his focus was the ruins in the nearby Mimbres Valley. While there, he met a miner from Fairview (now Winston), who made a sketch of a ruin with a semicircular wall. That ruin was recorded in 1933 by an amateur archaeologist, Herbert Yeo, as LA 923. Yeo was an engineer employed by the Bureau of Reclamation in the 1930s (see page 12).

In the 1970s, while Steven LeBlanc and others began to explore Mimbres archaeology, field projects sponsored by New Mexico State University excavated a large, Tularosa phase pueblo on the Cuchillo Negro (LA 923), a Classic Mimbres room block on Berrenda Creek, and another near Kingston. Intrigued by the results of these projects, Karl Laumbach and David Kirkpatrick, of Human Systems Research, Inc., conducted a sample survey of New Mexico state lands in 1982 and 1983. The survey defined the basic patterns of material culture in the area. First, there were a moderate number of Late Archaic and Early Pithouse sites, and then only minimal activity during the Late Pithouse period. The Mimbres phase saw a significant expansion in both site numbers and land use. Finally, the survey defined a clear frontier between the cultures of the Cibola branch of the Mogollon on the north and the adobe sites of the El Paso and Black Mountain phases to the south. Sites representing the historic Apache, mining, and ranching activities completed the picture.

Research in the area has increased dramatically since 1983. Steve Lekson and, later, SWCA, Inc. (see page 11), provided survey data for the Río Grande area. A project conducted by Margaret Nelson and Michelle Hegmon, of Arizona State University, has explored the Classic Mimbres sites in the central Black Range and also defined a pattern of Postclassic Mimbres land use as well (see *Archaeology Southwest* 17[4]). Recent excavations by archaeologists from the University of New Mexico provide data from an Early Pithouse village (see pages 9–10). On the northern periphery, the Cañada Alamosa Project (see pages 4–8) is currently exploring culture change through time on a prehistoric frontier. Finally, the Historic period has been explored through archaeological survey, oral history, and archival research, as exemplified by the work at the mining town of Lake Valley (see pages 14–15) and the preservation of the legend of Francisco Bojorquez (see page 13).

Travel Note: In downtown Truth or Consequences is the Geronimo Springs Museum, sponsored by the Sierra County Historical Society. The museum contains exhibits on specific themes including Pueblo, Apache, mining, ranching, Hispanic, military and geologic history. It is also the center for the Geronimo Trails Scenic Byway that leads through Black Range.

Layers of Time in the Pinnacle Midden

Curtis Nepstad-Thornberry, University of Colorado, Boulder

A DEEP, STRATIFIED MIDDEN on a steep-sided butte in Mogollon country is providing a unique snapshot of life at Pinnacle Ruin in A.D. 1300 (see pages 6-7). The midden initially appeared mounded, and researchers initially believed it was room fill that had been piled up by pothunters. After a series of small test excavations at the site in 1999—by Karl Laumbach and six members of an Eastern New Mexico University field school—work continued the following year, and we began to realize how important the midden was.

Work at the Pinnacle midden has resulted in the excavation of six units: four in the center of the midden and two on the northern edge. Approximately 26 soil samples and 54 charcoal samples were taken over the course of two field seasons. Nearly 5,200 sherds have been recovered, including almost 30 pottery types.

Magdalena Black-on-white was the most common painted pottery type in the midden and was found in every stratum, top to bottom. Reserve Indented Corrugated was common throughout all the levels; however, Seco Corrugated was present in the uppermost levels. Zuni Glaze Polychromes and late White Mountain red wares were also recovered in greater frequencies in the upper levels. Only one Tularosa Black-on-white sherd was found, at the base of the midden in a crevice in the bedrock. Unlike the painted pottery from the upper levels, however, this sherd likely predates the midden.

Maize was a significant component of the diet. Nuts and wild plants also contributed important calories. Several varieties of corn were identified, including 8-, 10-, and 12-rowed varieties, and wild nut-producing species were also exploited, including walnut. Other key plant resources include *Opuntia*, *Prosopis*, and *Cenopodium*. A few riparian species, such as bulrush, were also observed in a few samples. Fuel wood included wal-



The Pinnacle midden, which was 1.28 meters deep, covers approximately 60 m² on the southern slope of the site.

nut, cottonwood, ponderosa pine, pinyon pine, saltbush, juniper, and Gambel oak.

The faunal record documents two distinct hunting strategies. The lower levels of the midden contained significantly more deer and fewer rabbits than the upper levels, which exhibited the opposite trend. The overall record, however, reflected a considerable diversity of species, including elk, deer, rabbits, and birds. Groups were able to hunt these animals in a

number of local habitats, ranging from the canyon bottoms to the upland mesas that flank the San Mateo Mountains east of the site.

The environmental data suggest that Pinnacle Ruin's occupants settled in a prime location with plenty of fresh water, a rich riparian habitat, abundant large game, and seemingly little competition for smaller game and local plant resources. The presence of corn and corncobs also confirms that corn was cultivated, perhaps locally

along the canyon floor. Overall, the diversity and richness of all the remains from the Pinnacle Ruin midden suggests that it was home to a small puebloan community living in a relatively pristine ecosystem at the end of the thirteenth century.



Ceramics from the Pinnacle site. Top: Magdalena Black-on-white (carbon paint); bottom: Heshotauthla Glaze Polychrome and Pinedale Polychrome.

The Mystery of the Great Kiva at the Cuchillo Site

Richard Chapman, Office of Contract Archeology, University of New Mexico

A GEOLOGICAL ANOMALY of a canyon, the Cuchillo Negro lower box is incised two hundred feet deep into bedrock. Today, the box's most prominent feature is a huge concrete dam built to stem the occasional pulse of floodwater gathered miles upstream from summer thunderstorms in the margins of the Black Range.

In millennia past, humans congregated at the box itself, perhaps drawn by those same seasonal pulses of floodwater, but instead of building dams they constructed pithouses on high ground overlooking the box, and farmed the valley bottom directly upstream. The Cuchillo site, LA 50548, is one such prehistoric settlement located on the high surface directly overlooking the Cuchillo lower box.

First recorded through a contract survey, LA 50548 was subsequently classified as a Mimbres occupation. On the site's surface were Mimbres Black-on-white ceramics, masonry rooms and *cimiento* foundations, and a large, circular bermed depression measuring 8 meters in diameter, thought to represent a Mimbres great kiva. Such kivas, however, were generally found in association with large Mimbres sites, like Galaz, Woodrow, Harris, or Swartz, all located in the Mimbres heartland 75 miles away.

In the 1980s, in advance of the construction of the dam across the Cuchillo lower box by the Corps of Engineers, archaeologists conducted a series of surveys and test excavations in the area. A radiocarbon date from the great kiva dated it to around A.D. 1180, right at the end of the Classic Mimbres period.

The ceramics from the site's surface consisted of an array of ceramic types, including Mimbres Black-on-white, Alma Plain, San Francisco Red, Mimbres Boldface Black-on-white, Mimbres Corrugated, Reserve Black-on-white, El Paso Polychrome, and Chupadero Black-on-white. The Cuchillo site was beginning to look like a border town on the periphery of the Mogollon, a kind of Gallup or Juarez where the Mimbres Branch and Jornada Branch Mogollon cultures met and mingled, over a long period.

In the late 1980s, archaeologists from the Office of Contract Archeology, at the University of New Mexico, Al-

buquerque, began more intensive excavations at the Cuchillo site. We encountered a great number of circular clearings in the desert pavement that were ever so slightly



The Cuchillo Negro lower box underlies a seemingly endless expanse of gently undulating desert pavement pediment stretching miles from the distant slopes of the Black Range located to the west, toward the barely visible trough of the Río Grande located to the east.

concave—a sure indication of filled-in pithouse depressions elsewhere, but apparently not recognized as such during previous investigations at the site.

Our test excavations in the small clearings verified our suspicions—pithouses abounded at LA 50548. We found

OCA/UNM 1989

11 in all by the time we were through excavating, another seven at a “new site” located directly downstream, discovered by the crew during lunch breaks, still another five at

lated masonry and *cimiento* rooms across the site, sometimes reusing the by-now completely infilled pithouses.

Furthermore, the great kiva contained all the internal arrangements of its sister pithouses—a large central support post with two laterals, a long, narrow ramp entry leading to a small firepit at the entry to the room, and sparse “furnishings” of flat rocks distributed around the perimeter.

There appear to have been two distinct waves of early settlement and house construction at the Cuchillo site. The first was between A.D. 350 and 410, within the Early Pithouse period, while the second was between A.D. 580 and the early A.D. 700s, or during the Georgetown phase of the Late Pithouse period. Radiocarbon dates verify the great kiva at the Cuchillo site was constructed, used, and abandoned during this second era of settlement.

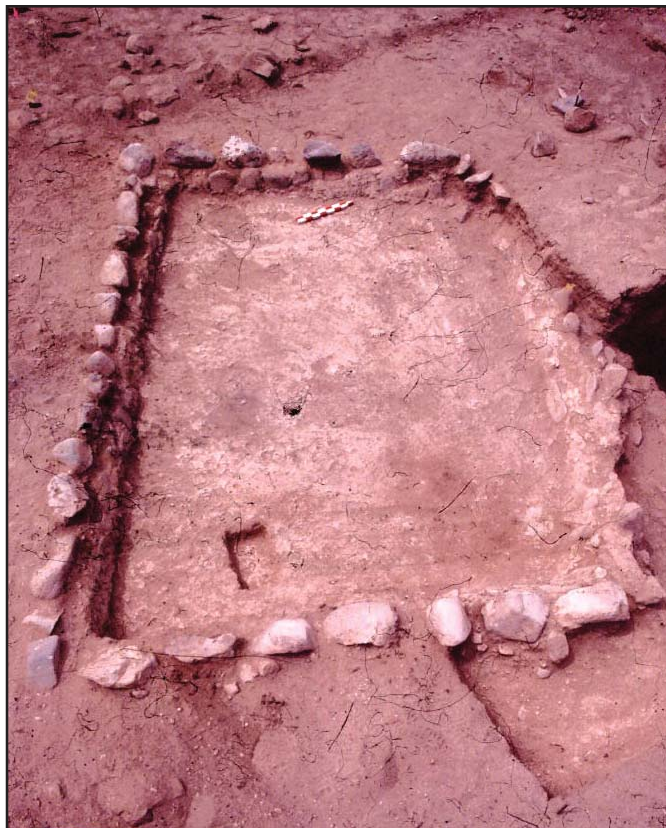
We now would agree that the great kiva at the Cuchillo site is more of a great pithouse, and not a Mimbres great kiva at all. The only mystery surrounding the “kiva” is the anomalous radiocarbon date of A.D. 1180, derived from the earlier test excavations. Similarly, our ceramic analysis showed that the assemblage of ceramics from the Cuchillo site contained overwhelmingly mainstream Mogollon types, with no admixture of Jornada types, as had been indicated by the previous investigations. Some researchers would say that differences in opinion by various Southwestern ceramic specialists is no mystery at all, so perhaps we can dismiss that aspect of the mystery as well.



The purported “great kiva” at the Cuchillo site was found, upon further examination, to be a “great pithouse” instead.

the other Mimbres sites located in the construction zone for the proposed dam, and even more found across the box to the south when the construction plans were modified.

In addition, although the great kiva had been dated to 1180, we found, as we excavated it, that instead of being square, as a Mimbres great kiva should be, the kiva was circular. The great kiva, as well as the associated pithouses, showed the same pattern of occupation, abandonment, and slow infilling with no evidence of any human occupation at the site for centuries. Then, suddenly, a new burst of occupation by the Classic Mimbres people, building small iso-



An example of an isolated cimiento room.

Archaeology of the Río Grande in Sierra County, New Mexico

David A. Phillips, Jr., Maxwell Museum and University of New Mexico

Signa Larralde, Bureau of Land Management

IN SIERRA COUNTY, NEW MEXICO, most of the Río Grande floodplain is under Elephant Butte and Caballo reservoirs. Fortunately, much of the local archaeology has survived.

Substantial use of the area began in the Late Archaic period (1800 B.C.–A.D. 200). Many of the Late Archaic sites form a cluster near Fort Craig; others are scattered

and contemporary sites near Fort Craig. The southern site cluster appeared after 600 and may represent colonists from the Mimbres Mogollon heartland of southwest New Mexico. The next few centuries saw an increasingly intensive use of the area by the Mimbres Mogollon.

Archaeologists once assumed that the Mimbres tradition ended by 1150, but Margaret Nelson and Michelle Hegmon, of Arizona State University, argue that for decades afterwards, the Mimbres continued as an identifiable group. Their evidence comes from sites west of the Río Grande; our data suggest that the Mimbres population also continued to live along the Río Grande itself. After 1200, the local population merged with the Jornada Mogollon tradition. By 1450, this Mimbres-Jornada population left the area for parts unknown. Recent work by archaeologists from SWCA, Inc., documented hundreds of sites. During the current drought, archaeologists from Statistical Research, Inc., learned that there are at least two pueblos beneath the waters of the Caballo Reservoir, in the Río Grande floodplain.

Except for a few Apache sites, there appears to have been no use of

the Río Grande area, south of the Piro Pueblos, for several centuries. The few Mexican period colonists were soon chased away by the Apache. In the late 1800s, under the protection of Forts Craig and McRae, Hispanic villagers and Anglo ranchers settled along the river. The new arrivals tended to live in the valley bottoms, and most of their sites have been lost. However, historical records help to fill in some of the gaps (see page 13).

The final archaeological chapter for the area consists of the remains from a dam construction camp that was abandoned in 1916 and from Civilian Conservation Corps activities—reflecting the federal government's conversion of the local river valley into Elephant Butte and Caballo reservoirs.



Elephant Butte and Caballo reservoirs sit between high alluvial terraces, and local prehistoric people often built their camps and homes on those terraces rather than next to the river.

downstream. The Archaic sites often occur in dunes on the east side of the Río Grande. Some dune sites contain a few sherds of plain brown pottery, suggesting that the local Archaic lifeway continued into the early Ceramic period (200–1400).

The Fort Craig site cluster is actually the south end of a much larger occupation centered on adjacent Socorro County. The Fort Craig area was abandoned about 1000, during a northward contraction of the population. The same group expanded back into the area after 1300, as the protohistoric Piro Indians, who again withdrew to the north in the 1600s.

In central and southern Sierra County, a second site cluster is present, with an obvious gap between that cluster

Herbert Yeo's F Sites

Stephen H. Lekson, University of Colorado, Boulder

WHILE MAPPING ALONG THE RÍO GRANDE in the 1930s, for the Bureau of Reclamation, engineer Herbert Yeo found himself captivated by the archaeological sites he encountered. This interest led him to many more sites, by following his nose or upon the advice of local ranchers (see page 4).

Yeo's legacy consists of dozens of well-mapped sites and corresponding collections sent to H. P. Mera, then director of the Laboratory of Anthropology, in Santa Fe. Mera assigned types to the sherds and entered Yeo's maps and short site descriptions into the laboratory's database. The LA site numbers for these sites range from the 900s to the 1200s.

Yeo categorized the sites he found by time period, architecture, and other attributes. To him, one group of 28 sites seemed to hang together: they were located on buttes or hilltops with long, often surrounding, walls of dry-laid stone masonry. Yeo called these the F sites (F perhaps stood for "fortified"). Most of Yeo's F sites are located on the northern end of the Black Range study area, from the Río Grande to the high country. Twenty-seven of Yeo's F sites are in southern New Mexico. His twenty-eighth F site was Tumamoc Hill, near Tucson, Arizona, which Yeo must have visited on a vacation or business trip.

Some fortified sites are termed *trincheras* sites by archaeologists. Consisting of hills terraced with dry-laid masonry walls, *trincheras* sites are relatively common in southern Arizona, northern Sonora, and northern Chihuahua. But what were they? Many different things, as it turns out: dry-laid masonry running along a contour, looking like a terrace, is a simple idea that served several purposes over thousands of years. The earliest *trincheras* sites in Chihua-

hua date to the Late Archaic, as early as 1500 B.C. Later *trincheras* sites, like Tumamoc Hill, date much later, from A.D. 1100 to 1300. These terraced hills combine defense,

settlement, agricultural terracing, and monumental place making. Other sites with dry-laid stone walls—including many of Yeo's F sites—were not really terraced *trincheras* at all, but rather, they were small, fortified settlements from the Mogollon Early Pithouse period (200–600), or from much later Apache occupations (probably sometime after 1700).

Yeo's F sites may include all of these time periods and functions. At least three, and likely more, were Early Pithouse villages. Several smaller F sites have multiple stone rings (4 to 6 feet in diameter), probably Apache camps. We do not know if any of

Yeo's F sites are Late Archaic villages, but they certainly could be: large Late Archaic villages are found in southern New Mexico, especially on the Upper Gila River. More research will probably reveal the full gamut of *trincheras* sites in New Mexico.

Yeo found these sites on buttes and on isolated hilltops (no mean feat!), and he correctly identified a shared architectural technique (dry-laid masonry walls), although his F sites probably span the entire archaeological sequence in southern New Mexico. They are intriguing because of their visible architecture and their often spectacular settings, and we owe Yeo a debt of gratitude for recording them.



Herbert Yeo—once described as the “fastest alidade in the West”—mapping for the Bureau of Reclamation in 1920.

Rio Grande Historical Collections, NMSU Library

Francisco Bojorquez: Sierra County's Legendary Sheriff

Karl W. Laumbach, Human Systems Research, Inc.

ONE GOAL of Human Systems Research, Inc., has been to teach others about our shared history, particularly the stories of people in New Mexico's past. One such person who deserves to be remembered is Francisco Bojorquez, the legendary sheriff of Sierra County. Until recently, much of what is known today about Bojorquez was contained only in yellowing newspaper columns and the memories of some local *viejitos* (old-timers).

Bojorquez, a *vaquero* from Baja California, was born in 1865 and came to New Mexico in the 1880s. So great was his skill with rope and horse that, in a few short years, he was foreman of the largest ranch in Sierra County.

I had the opportunity to talk to some of the *viejitos* who knew Bojorquez. One claimed that Bojorquez could make a wild horse tame and a tame horse wild just by talking to it. Another old-timer recalled Bojorquez building a large spinning loop with his rope and walking his horse through the loop. In one saddle-bronc competition he wagered that he could place a silver dollar in each stirrup before his ride and that the coins would still be under his boots when he had finished. Bojorquez won the bet.

In 1890, Bojorquez won top prize money at an Albuquerque rodeo by winning the heavy steer roping contest and placing second in the bucking horse category. And in 1912, at the age of 47, he was given a special invitation to compete in Canada's first Calgary Stampede.

Bojorquez's years of public service began in 1906, when he became Sierra County commissioner, and culminated in his being made sheriff. It was said that, due to the respect he commanded as sheriff, he rarely had to use force or draw his gun. On more than one occasion, all trouble

ceased when Bojorquez arrived and began to take off his gloves. When the local citizens heard that neighboring Socorro County had presented its notorious sheriff and hero, Elfego Baca, with a gold badge, they decided that not only should Bojorquez have a similar badge but that the badge "in comparison will make Elfego's look like the light of a tallow dip compared to the dazzling glorious brilliancy of the morning star." On July 4, 1920, the badge was duly presented to their hero. Bojorquez died later that year, of a ruptured appendix.

Recently, Bojorquez's own ranch, near present-day Caballo Dam, in Sierra County, was surveyed by archaeologists for the Bureau of Reclamation (see page 11). The ranch house had been razed, and all that remained was the ruined *capilla* (chapel) built over the tomb of his wife, Rosaura. Her tombstone, which had been broken by vandals, had previously been rescued by Bureau of Reclamation personnel.

I was able to locate two of Bojorquez's grandsons, Jay Bojorquez and Lonnie Rubio, and took great satisfaction in being able to reacquaint them with the site. Rosaura's tombstone is now repaired and placed near that of her husband, the cowboy hero of Sierra County.

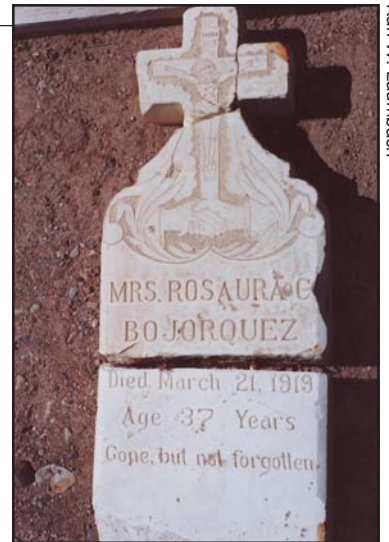
Some lines from a *corrido* (ballad) composed at the time of his death in 1920 say it all:

*Porque alli havia vaqueros
De lo bueno a lo mejor.
(Because here we have cowboys
Of the good, he was the best.)*



Francisco Bojorquez and Banker Gillespie, in Hillsboro. Frank's horse was called *Borrego* (which is Spanish for "sheep") because of its long, curly hair.

Geronimo Springs Museum



The tombstone of Rosaura Chavez Bojorquez now lies near the grave of her husband in Hillsboro.

Karl W. Laumbach

Lake Valley: Echoes of the Past

Neal W. Ackerly, *Dos Ríos Consultants, Inc.*

TUCKED INTO A LONELY, WIND-BLOWN SWATH of desert between Hillsboro and Nutt,

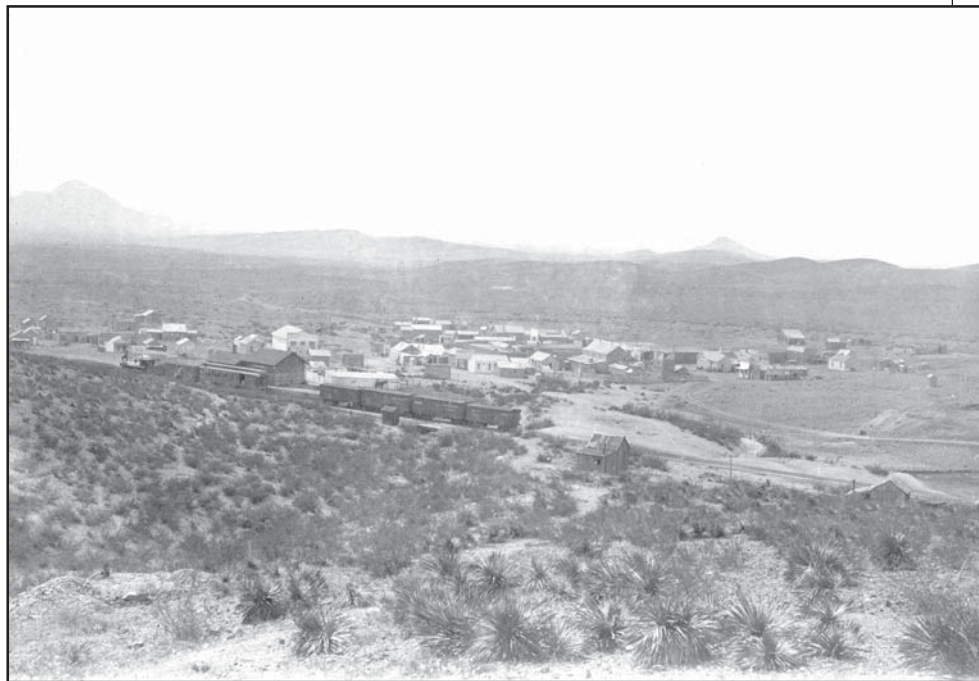
New Mexico, there is little to indicate that the now-abandoned town of Lake Valley was once the site of some of the largest and most notorious silver mining operations of the nineteenth century. Begun by known swindlers, developed by foreign capitalists, and destroyed by national economic policies, Lake Valley once hummed with the sound of mule-drawn ore carts and the babble of a population approaching 400 people, who came from such faraway places as Germany, Scotland, Ireland, France, Wales, and Italy. In every corner, it was blanketed by the thunderous roar of 40 half-ton iron stamps, each pounding at a steady pace of 90 drops per minute, chewing up the ore that promised wealth to some, death to others, and a modest living to most.

The 1879 silver discoveries at Lake Valley—as well as at other locales, like Pyramid, Carlisle, and Piños Altos—were the catalyst for early efforts to settle southwestern New Mexico. Lake Valley’s famed “Bridal Chamber” strike, purportedly containing silver ore pure enough to melt from the mine’s walls with a burning candle, was almost all the incentive that many people needed to face the isolation and hardships that awaited them.

Lake Valley can be divided into two sections: an industrial mining area and an associated residential area. The industrial area contains 20 mining claims extending over almost 400 acres. The residential area, in grand New Mexico fashion, once sprawled over another 40 acres.

The residential portion of Lake Valley is today partially administered by the Bureau of Land Management,

while the industrial portion remains in private ownership. An 1895 fire destroyed much of the original townsite,



Top: Lake Valley as it was circa 1890 (Photograph by Henry Schmidt; courtesy of the Río Grande Historical Collections [NMSU Library], RG84-149/9). Bottom: A photograph of Lake Valley, in 2003, taken from the same vantage point as the 1890 photograph (Photograph by Esther Stuedli).

though some buildings have survived to provide a glimpse into the past. Among these are the original 1880s rock schoolhouse, some private residences, a later adobe schoolhouse, various outbuildings, and, if one peers through the heat waves and brush, foundation remnants showing where hotels, mercantile stores, corrals, and bawdy houses once stood.

The archaeology and history of Lake Valley have been explored by Teresa Hanley, of the Bureau of Land Management, and Lloyd Moiola, of the New Mexico Abandoned Mine Lands Bureau. This past year, Dos Ríos Consultants, Inc., extended these efforts by interweaving, for the first time, detailed documentary studies with on-the-ground archaeological investigations in the industrial part of Lake Valley.

Our documentary studies focused on U.S. census records from 1880 to 1930, some 80 nineteenth-century photographs, unpublished mine supervisor's reports, vintage newspaper descriptions, and ledger books from the Keller-Miller Mercantile store. The ledger books, now archived at our office, were saved from the 1895 fire by a brave bookkeeper who repeatedly rushed back into the burning building, successively placing each of the books in the street as the fire and throngs of people swirled around him.

Jointly, these records provide a comprehensive sense of what the town was like in the closing decades of the nineteenth century, from the people who lived there to the shoes they wore.

The industrial area still contains the supervisor's adobe residence, the foundations of the stamp mill that once rattled the residents' bones, a blacksmith shop, and the still-standing passenger depot of the Atchison, Topeka, and Santa Fe spur line—abandoned in 1934—that once ferried goods into and ore out of Lake Valley. There are, as well, more than 300 shafts (some big enough to swallow pickup trucks), open cuts, and prospects. It is these latter

features that dictated the fortunes of the miners who once worked this ground.

Archaeological investigations found a total of 109 structures or structural remnants in the industrial area, most dating to the late nineteenth century. These ranged from 18-room adobe buildings (still standing), to small wooden residences (barely more than shotgun shacks), to the ultimate in expedient housing, tent pads. Because the miners essentially lived on top of the workings where they labored each day, it is not surprising that the entire area was covered by trash.

Based on surface samples, we estimate that between 2.5 and 5.5 million historic artifacts are present in the industrial part of Lake Valley, with almost as many more in the residential area. Railroad access into the town is reflected in the artifacts that were found: ceramics from England, glass from Missouri and Ohio, and bricks from Scotland.

There are, as well, structures related to manganese mining operations in the 1920s and 1950s. These later operations can be traced to efforts on the part of the U.S. government to replenish stockpiles of manganese—a metal crucial in manufacturing steel—on the heels of World Wars I and II.

The last resident of Lake Valley moved away a decade ago. Yet, hiding in the underbrush and buried in musty documents is information showing just how important Lake Valley was in the mining and settlement history of our state. This one place encapsulates almost all aspects of nineteenth-century New Mexico mining history: the good, the bad, and the ugly. Indeed, on its stony surface and in the diggings that lie so deceptively beneath, one easily finds the very heartbeat of who we are today. As a tribute to its importance, Lake Valley was listed as one of the 10 Most Endangered Heritage Sites in New Mexico in February of this year by the New Mexico Heritage Preservation Alliance.

See the Center for Desert Archaeology website for more information: <<http://www.cdarc.org>>

THE CENTER FOR DESERT ARCHAEOLOGY, a private, nonprofit organization, promotes stewardship of archaeological and historical resources through active research, preservation, and public outreach. The Center is a 501(c)(3) organization and is supported through donations, memberships, and grants from individuals, foundations, and corporations. Center members receive an annual subscription to *Archaeology Southwest*, substantial discounts on other Center publications, opportunities to participate in archaeological projects, and invitations to special lectures and events. For more information or to join, contact Linda Pierce, Programs Manager, at 520.882.6946 or lpierce@cdarc.org.

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Back Sight

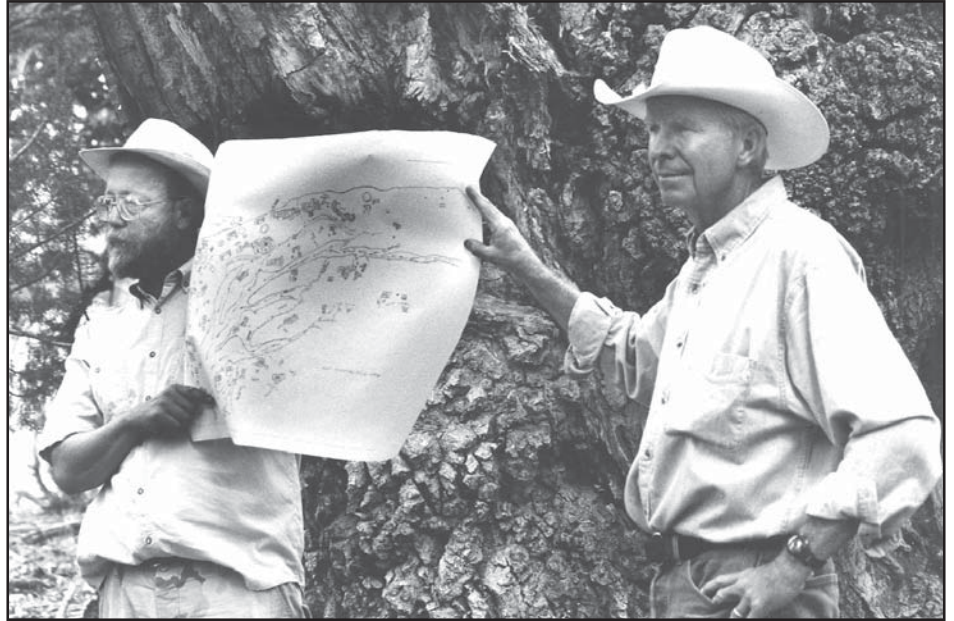
MAKING THE MOST OF even a small opportunity is what Human Systems Research, Inc. (HSR), has been doing for a very long time. HSR's work has taken place in a lesser-known area of the American Southwest—a broad swath of territory both east and west of the Río Grande in southern New Mexico.

I first heard of HSR in my second year of graduate school in 1973, but I never had the opportunity to meet anyone from the organization until nearly 30 years later. After a long conversation with HSR's Karl Laumbach, I was struck by many parallels with the Center for Desert Archaeology's historical trajectory.

HSR was founded a full decade before the Center. As young nonprofit organizations, contract funding was an important source of support for implementing each organization's mission. The Center began a process of redefinition relatively early. After 1989, contracts were no longer pursued in the nonprofit framework. Our emphasis became one of research and public outreach. By the mid-1990s preservation had been added to our mission and in the late 1990s our concept of community-based preservation archaeology had come together.

In southern New Mexico, HSR began in the early 1970s to carry out a research program, and public involvement was soon added to their mix. Throughout its existence, HSR has made it a practice to purchase

and restore historic buildings as its offices. The purchase of an archaeological site to save it from destruction further diversified HSR's preservation program. Because our two organizations have developed similar missions, from home bases in the southern portions of adjacent states, it is high



Karl Laumbach and Dennis O'Toole provide an overview of the Victorio site in Cañada Alamosa. A long-term program by HSR in the Black Range of southern New Mexico has included research, public involvement, and preservation. Commitment to a geographic area allows substantial results to be achieved through a gradual process. It is an institutional strategy that has been used productively by both HSR and the Center for Desert Archaeology.

time that both groups work more closely together.

This issue of *Archaeology Southwest* is a tangible expression that this partnership has finally been initiated.

*William H. Doelle, President & CEO
Center for Desert Archaeology*

back sight (băk sīt) n. 1. a reading used by surveyors to check the accuracy of their work. 2. an opportunity to reflect on and evaluate the Center for Desert Archaeology's mission.

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