

ARCHAEOLOGY SOUTHWEST *magazine*

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ARCHAEOLOGY SOUTHWEST

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2015

magazine

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Santa Fe Underground



- 3 Santa Fe Underground,** *Cherie L. Scheick*
- 5 Photo Collage:** Above and Below the Streets of Santa Fe
- 8 Change through Time and Historic Events in and around Santa Fe,** *Cherie L. Scheick, Stephen S. Post, Kate Sarther Gann, and Kathleen M. Bader*
- 10 In Brief:** "Their name is on your waters," *David H. Snow*
- 11 Understanding and Managing the Archaeology of Santa Fe,** *Glenda Deyloff*
- 14 In Brief:** Archaeological Review in the City of Santa Fe, *Lisa G. Roach*
- 15 The First 6,500 Years: Archaic Santa Fe,** *Stephen S. Post*
- 17 In Brief:** Ancestral Pueblo Population and Settlement Patterns in and around Santa Fe, *Cherie L. Scheick*
- 18 Pueblo Archaeology of the Santa Fe River Valley,** *Cherie L. Scheick*
- 20 Visualization:** Santa Fe's Life-Supporting Natural Resources: Resource Zones, *Cherie L. Scheick, Catherine Gilman, and Robert B. Ciaccio*
- 24 In Brief:** What Kind of Climate Did Santa Fe's Ancestral Pueblo Communities Experience? *Carla R. Van West*
- 25 What Is Black and White and under Santa Fe?** *C. Dean Wilson and Eric Blinman*
- 26 Where on Earth Was the Original Spanish Colonial Plaza?** *David H. Snow*
- 30 In Brief:** What Is beneath the Palace of the Governors? *David H. Snow*
- 31 Tewa Pottery from Nineteenth-Century Archaeological Sites,** *C. Dean Wilson*
- 33 An Era of Change: Santa Fe in the 1800s and 1900s,** *Matthew J. Barbour and Jessica A. Badner*
- 37 In Brief:** The Curious "Coin" of Santa Fe, *Lonyta Viklund-Galloway*
- 38 Preservation Spotlight:** The Missing Dead of Historic Santa Fe: A Preservation Problem 400 Years in the Making, *Alysia L. Abbott*
- 40 Back Sight,** *William H. Doelle*

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Cherie L. Scheick and Stephen S. Post

ONLINE EXCLUSIVES:

For additional maps, references, and links, visit our website at:

www.archaeologysouthwest.org/asw29-2-3

Cover images: (Top) View facing east along West Palace Avenue, with the portal of the Palace at the left. Image by Kathleen Bader. (Bottom) Coalition period (1172/1225–1300/1350) pit structure at the Agua Fria Schoolhouse site. Courtesy of Southwest Archaeological Consultants.



Archaeology Southwest

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Santa Fe Underground

CHERIE L. SCHEICK
SOUTHWEST ARCHAEOLOGICAL CONSULTANTS

Every city has history, but in Santa Fe, history surrounds us. It is a record not of 100 years, but of several thousand years. From the terraces above town to the river floodplain below, reminders of the city's past inhabitants are woven into the fabric of Santa Fe. As the city expands and development continues, archaeologists uncover ever more evidence of the older center beneath it.

Public concern compelled the city to pass the Archaeological Review Districts Ordinance in 1987 (see page 14). The ordinance requires archaeological studies in advance of ground-disturbing development projects. Because of citizen foresight, much of the city's archaeological record is preserved.

That record includes scattered traces of Archaic hunter-gatherers and pithouse-dwelling horticulturalists (pages 15–17); extensive evidence of early Pueblo farmers (pages 17–19, 22–26); less extensive indications of Apache hunter-gatherers

and traders; abundant evidence of Spanish missionaries and settlers (pages 26–30); and the more prolific manifestations of American Territorial expansion (pages 33–37). Associated sites



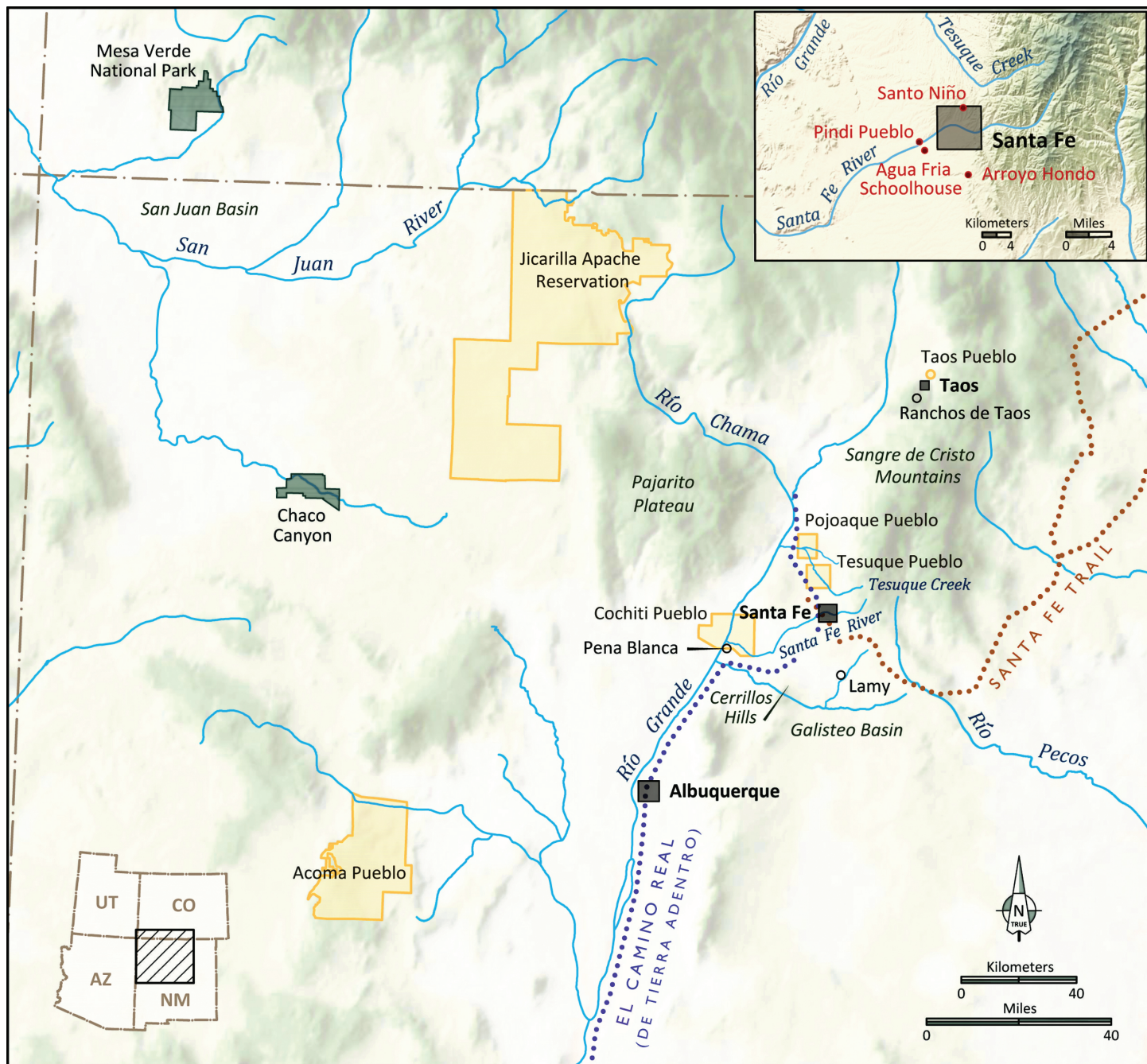
Above: Postcard printed in Boston, circa 1930–1945.

COURTESY OF WIKIMEDIA AND BOSTON PUBLIC LIBRARY. **Right:** Several institutions, consultants, and private companies are active in archaeological and historical research in and around Santa Fe, including that reported here. Our archaeological community is as rich and colorful as the city itself. At right, archaeologists from Southwest Archaeological Consultants document features at the Agua Fria Schoolhouse site (see page 19, 22, and 23 for additional images). COURTESY OF SOUTHWEST ARCHAEOLOGICAL CONSULTANTS



comprise artifact scatters and campsites; isolated pithouses and storage features; fieldhouses and farms; ancient pueblos of 100 to 1,000 rooms; shrines, trails, and agricultural features; mission churches of the 1600s and 1700s; secular structures built in the 1700s; and residential, commercial, and transportation-related structures and hardware from the 1800s.

In this issue of *Archaeology Southwest Magazine*, we hope to introduce readers to Santa Fe and its remarkable history. That story is illustrated in some of the city's names—White Shell Water Place (see page 10), City of Shining Light, and the City Different, to name a few. These appellations reflect its deep history and its changing meanings to past and present inhabitants. □



Major regional locations mentioned in this issue. For maps showing key sites within Santa Fe, see pages 12 and 13. MAP: CATHERINE GILMAN

Above and Below the Streets of Santa Fe

As an introduction to the archaeological finds authors discuss in *Santa Fe Underground*, we have created this photographic collage of artifacts and exposures and their “aboveground” associations—the landmarks that are more familiar to residents and visitors.

—*Archaeology Southwest Magazine*



1

Above: Farmers’ market at the Santa Fe Railyard
IMAGE: DIANNE STROMBERG, COURTESY OF SANTAFE.ORG. **Below:** Architecture from a late-1800s engine house. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES

2

Above: New Mexico State Capitol building. IMAGE: N SALAZAR, VIA WIKIMEDIA COMMONS. **Below:** Figurine found in the historic neighborhood just south of the capitol. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES

3

Above: United States courthouse in Santa Fe. IMAGE: CAMERAFIEND, VIA WIKIMEDIA COMMONS. **Below:** A large pit structure dating to the late 1100s and early 1200s. COURTESY OF SOUTHWEST ARCHAEOLOGICAL CONSULTANTS





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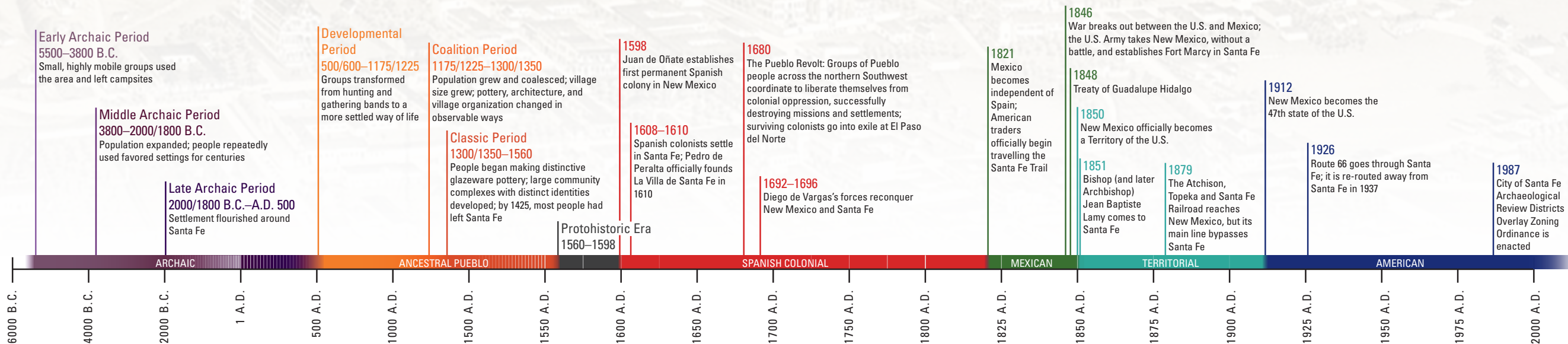
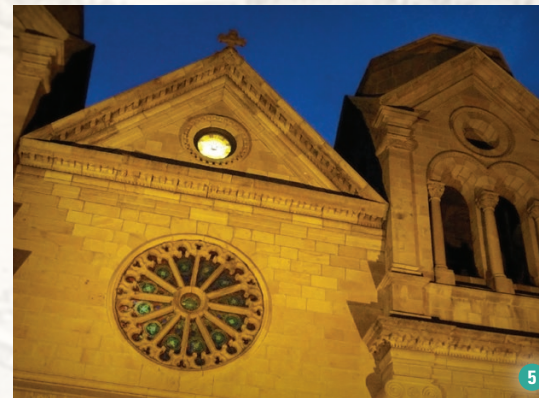
Above: Palace of the Governors. IMAGE: ELLEN HERR. **Below:** (Left) Sankawi Black-on-cream bowl from the 1500 or 1600s. IMAGE: DAVID H. SNOW. (Right) Footings exposed by R. Alexander's 1965 excavation beneath the Palace of the Governors. 4451-21-B, southwest corner showing features 14, 13C, 18, and 22. COURTESY OF THE MUSEUM OF INDIAN ARTS & CULTURE/LABORATORY OF ANTHROPOLOGY

Above: Cathedral Park, next to the St. Francis Cathedral Basilica. IMAGE: JOHN PHELAN, VIA WIKIMEDIA COMMONS. **Below:** Spanish colonial pottery dating from 1680. IMAGE: DAVID H. SNOW

Above: Patio at La Casa Sena within the historic Sena Plaza. IMAGE: JUDITH MOIR, COURTESY OF SANTAFE.ORG. **Below:** Originally thought to be a coin, this merchant seal dates from between 1837 and 1914. IMAGE: DAVID GALLOWAY

Above: Santa Fe Convention Center. IMAGE: CHRIS CORRIE, COURTESY OF SANTAFE.ORG. **Below:** (Left) Exposed foundations of the Enlisted Men's Quarters at Fort Marcy, dating to the mid-1800s. (Right) Bottles recovered from the Fort Marcy officers' latrine. IMAGES COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES





Background: Map of Santa Fe in 1882, the Railroad Era. COURTESY OF WIKIMEDIA AND THE STATE OF NEW MEXICO ARCHIVES
TIME LINE: KATHLEEN BADER

- 1 **Early Archaic hearth.** COURTESY OF NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES AND STEPHEN S. POST
- 2 **Adobe room at the Agua Fria Schoolhouse site.** COURTESY OF RIO GRANDE FOUNDATION FOR COMMUNITIES AND CULTURAL LANDSCAPES
- 3 **Conquistador at the Santa Fe Fiesta.** IMAGE: ELLEN HERR
- 4 **Statue of Our Lady of Guadalupe.** IMAGE: ELLEN HERR
- 5 **Cathedral Basilica of St. Francis of Assisi, built by Jean Baptiste Lamy.** IMAGE: KATHLEEN BADER
- 6 **Santa Fe's residents continue to celebrate the deep and varied cultural roots of the City Different, including its Native arts and artists.** IMAGE: CHRIS CORRIE, COURTESY OF SANTAFE.ORG

Change through Time and Historic Events in and around Santa Fe

When describing change through time in the past, archaeologists often refer to classification schemes or chronologies developed in earlier eras of scholarship. As new information becomes available—particularly chronometric dates (such as from tree-rings or radiocarbon dating)—we usually divide time into narrower and better-defined intervals, leading to the disorienting array of period and phase names and date ranges we attempt to communicate to nonarchaeologists. Although archaeologists use labels from such schemes, we are (or should be) contin-

ually revising and refining our understanding of the timing, pace, location, and meaning of change—what was and was not changing in people's lives, and why.

As the early archaeologists working in the northern Rio Grande region in New Mexico began recovering more and more data from precontact Pueblo sites, they realized the descriptive patterns of A.V. Kidder's Pecos Classification (1927)—derived from sites in the Four Corners and San Juan Basin regions to the west—were not consistent with their

own observations. In 1955, Fred Wendorf and Erik K. Reed published an alternative framework for describing patterns and changes in the northern Rio Grande region: the (possibly) Basketmaker II (now known as Late Archaic), Developmental, Coalition, Classic, and Historic periods.

Archaeologists in the region continue to use labels from the Rio Grande Classification, just as the Pecos Classification remains in other areas, but decades of archaeology since the inceptions of these systems have brought exponentially more information to light. There is much variability, change, and even transformation yet to understand, and it does not always fit a framework originally (but necessarily) built on material markers of change and few chronometric dates. Today, with many more

chronometric dates, archaeologists are in a better position to test these classificatory systems and their associated ideas about changes in material culture, architecture, and settlement patterns—as well as the reasons for those changes.

So, as you consider the precontact Pueblo eras labeled on this time line, know that archaeologists now recognize some patterns that cross “endings” and “beginnings,” as well as social and economic differences among contemporaneous communities in different settings. The seeming divisions are more flexible than might be apparent.

—Cherie L. Scheick, Stephen S. Post, and Kate Sarther Gann

"Their name is on your waters"*

In a land where water is life, it is not surprising that all Native people who have lived in or passed through the Santa Fe River valley have names for it and stories about it. Pueblo, Navajo, and Jicarilla Apache peoples know Santa Fe and its environs well; to them, the sanctity of the place is undiminished. Pueblo groups in the Santa Fe region speak different languages and dialects based on each group's deep history. Tewa and Tiwa are among the Tanoan languages. Keres is a separate language with different roots.

Santa Fe is in the heart of the Tewas' traditional territory. Tewa speakers call the place and its river *Ogapoge* and *Kuapoge*, or *Poge*. Tiwa speakers call it *Hulpana*. Each of these names translates as '[white] shell-bead water', perhaps an echo of the association of seashells with warriors.

Olivella Flower Boy, a hero of Tewa tales, kills invading witches, and people string olivella shells around images of the War Gods. The Water People at Northern Tiwa-speaking Taos Pueblo say they came as fish up the mountain streams, then down Santa Fe Creek—*Hulpáná*, 'shell river'—and up the Rio Grande to Ranchos de Taos.

To the Keres people, the world is square and flat, with Santa Fe at the northeast corner: *Ya'takana*, the home of Mockingbird Youth. It might also be the same place called White Shell Pueblo, which a Cochiti story says was destroyed by Tewas. The bird and the youth are intimately associated with war in Keres belief, and Mockingbird is the name given one of the adjunct War Chiefs at Acoma Pueblo. Mockingbird represents Echo Boy of Taos, perhaps one of the Twin War Gods.

Navajo (Diné) people refer to the Santa Fe area as *Yoh tob*, 'bead-water', from whence the *yoo'ó dine'é*, the (shell) Bead People's clan originated. The Diné's five worlds are supported by columns of white shell at the east. A Jicarilla Apache might say, *sqn da xe ye*, 'at Santa Fe'.

Finally, and perhaps in a deeper sense, "Quaking Leaf Water" was a Pueblo shrine at Santa Fe. It was usurped by those of a different faith, who established yet another holy name for the place, *La Villa de Santa Fe* (not *La Villa Real de Santa Fe de San Francisco de Assisi*, as is sometimes mistakenly stated).

— David H. Snow

*Lydia H. Sigourney, "Indian Names" (1841).



Spanish colonists established a series of acequias—irrigation ditches—to channel water from the Santa Fe River to their fields. Self-governing acequia communities ensured that members followed the rules and properly maintained the ditches. Four working acequias remain in the City of Santa Fe, and their acequia communities proudly continue centuries-old traditions. This shows the Acequia Madre, which has existed in some form since before 1680. IMAGE: ELLEN HERR

Understanding and Managing the Archaeology of Santa Fe

GLENDAY DEYLOFF
SOUTHWEST ARCHAEOLOGICAL CONSULTANTS (RETIRED)

In 1982, Curtis Schaafsma published *A Window on Santa Fe's History*, an article about the precontact and historic remains revealed by excavations preceding construction of the First Interstate Bank downtown. Since the 1987 enactment of the City of Santa Fe Archaeological Ordinance (see page 14), archaeologists have opened many such “windows.” Small and large, often disturbed, these individual windows are like puzzle pieces—studied in isolation, they rarely advance our understanding of the entire puzzle.

Moving forward, we require a platform for analyzing each archaeological locale within the context of the much larger place that is Santa Fe. Enlarging our interpretive scope is especially critical for studying the city's ancient past. A citywide research design and GIS (Geographical Information Systems) database are essential for better managing Santa Fe's archaeological

Management Layer

The management layer will benefit planning and permitting staffs and the Archaeological Review Committee (ARC; see page 14) by providing immediate access to data. This will support efficient review and evaluation of archaeological remains for a particular property and surrounding properties. It will allow planners to more effectively evaluate a project by indicating what exists or might exist on a property, as well as what depth remains might lie at. Because this same information will be available for surrounding lots with completed archaeological projects, added context will inform better decisions. The database will also assist project planning by identifying areas of high archaeological potential, allowing city planners and citizens to anticipate archaeological impacts and their potential costs.

For permitting, this layer will provide information on the status of a property's archaeology (in other words, completed or not) and whether a property has archaeological clearance. It will also alert staff to archaeological easements or archaeologically sensitive areas (for example, an unmarked cemetery or a previously recorded archaeological site) within a project area.



Santa Fe's history is important to its economy, drawing thousands of tourists each year. Understanding that history is instrumental to sustaining visitors' interest. Just as street signs help us navigate where we are within a city, a GIS platform will help us place artifacts, buildings, and documents of interest within the greater context of Santa Fe's history. IMAGE: ELLEN HERR

Historic Research Layer

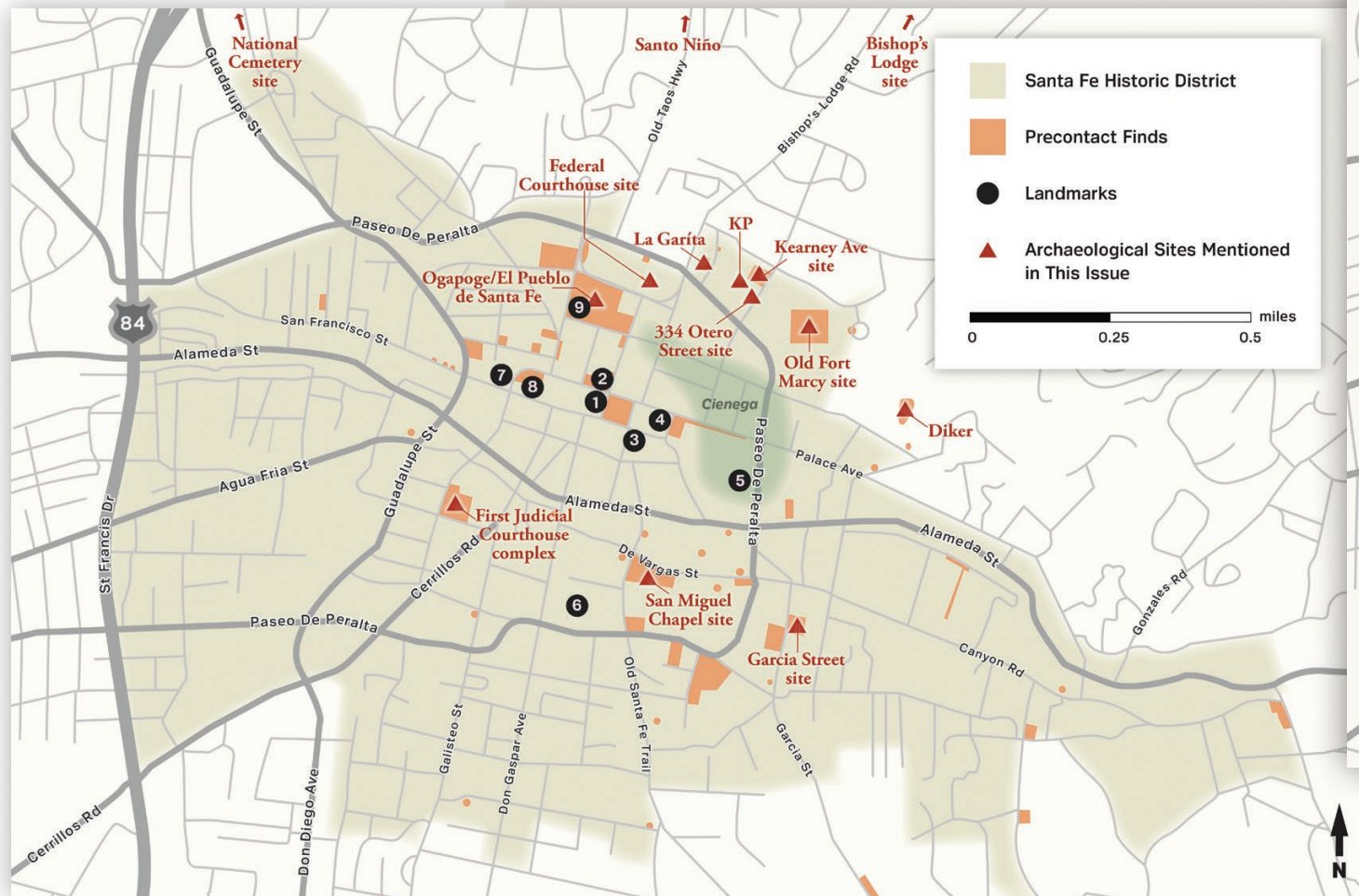
The historic research layer will centralize previously acquired research for the downtown area, help identify the level of existing research for a property and its surroundings, and allow tailoring of research requirements—all resulting in cost savings for private and public landowners. This layer will have individual grant-boundary overlays and links to report references. Thoroughly researched properties, such as the Lencic Theater, will have spatial boundaries linked to references. If a property falls within a well-researched area, the ARC could limit or modify research requirements to, for example, a chain of title and specific land-use history. This would reduce redundancy and focus research on gathering new information and integrating it within existing historical frameworks.

resources, fulfilling the requirements of the archaeological ordinance, and improving the interpretive potential of archaeological and historical research.

The research design will facilitate study of the city's past as an integrated whole, because each archaeological and historic research activity adds a puzzle piece to a more coherent picture of past life here. The GIS database will support more effective and informative research, while also promoting better management of the city's cultural and historical resources. (Currently, archaeological data are available only in paper form. They are not centralized, and accessibility is limited.)

LANDMARKS

- | | |
|---------------------------------------|--|
| 1 First Interstate Bank | 5 Drury Hotel |
| 2 New Mexico Museum of Art | 6 State Capitol |
| 3 La Fonda Hotel and Parking Facility | 7 Eldorado Hotel |
| 4 Museum of Contemporary Native Arts | 8 Lencic Theater |
| | 9 Santa Fe Community Convention Center |

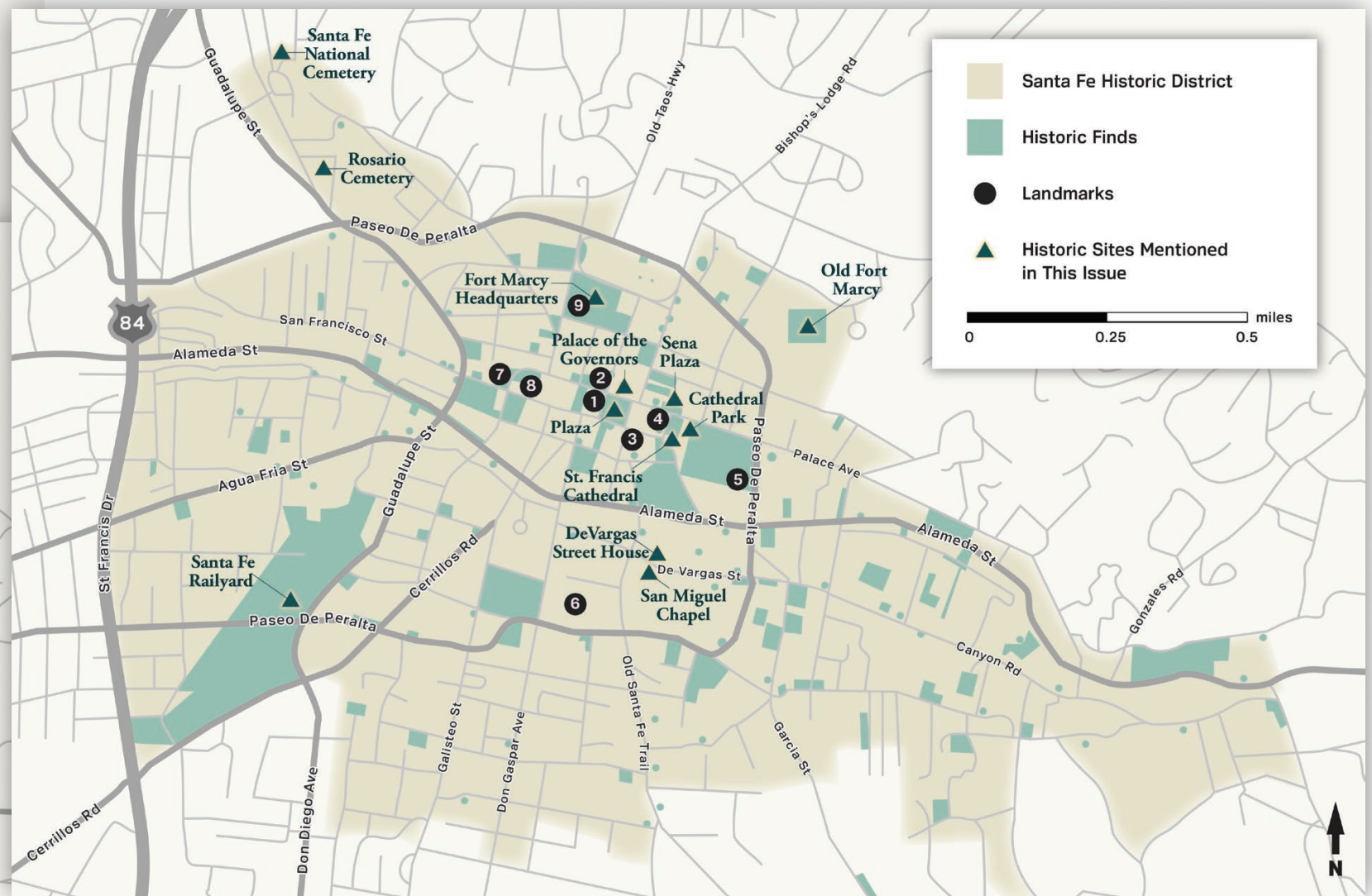


The first step in the project is construction of a citywide database. Years of effort by archaeologists and organizations working in downtown Santa Fe have resulted in the award of a Certified Local Government grant to the city for building a comprehensive and interactive GIS database. Initially, efforts will focus on the Downtown Historic District, eventually expanding to the city's other archaeological districts.

The digital database will have multiple layers tailored to meet the management and research requirements of Santa Fe's archaeological ordinance. Proposed layers are Management, Historic Research, and Archaeological Resources (see sidebars with this article). Because it will store all the puzzle pieces in one place, the database will expand archaeological knowledge of the city and enable better synthesis and dissemination of that information to the public. ■

Archaeological Resources Layer

The database's foundation is the archaeological resources layer, which will serve as the primary vehicle for researchers. It will focus on data collected by projects and will link to reports. This layer will provide context for proposed projects from surrounding properties, helping archaeologists structure their investigations. Archaeologists and historians may conduct original research and spatial analysis on a range of topics about Santa Fe's deep history, and use their findings and interpretations to address broader questions about continuity and change.



Left: Map of Santa Fe's Historic District showing locations of finds dating before the arrival of Europeans. **Above:** Map of Santa Fe's Historic District showing locations of historic-era finds. To view a map of Spanish colonial-era finds, visit archaeologysouthwest.org/asw29-2-3. MAPS: KATHLEEN BADER, ADAPTED FROM MAPS BY GLENDA DEYLOFF. COURTESY OF SOUTHWEST ARCHAEOLOGICAL CONSULTANTS

Archaeological Review in the City of Santa Fe

Enacted in 1987, the City of Santa Fe Archaeological Review Districts Overlay Zoning Ordinance was among the first municipal archaeological protection ordinances of its kind in the United States. Adoption of the law acknowledged the threat rapid development posed to the wealth of archaeological sites and cultural resources within its jurisdiction. The ordinance incorporated archaeology into the development review process as a critical step in preserving knowledge of the buried remains of Santa Fe's past. Until recently, the City of Santa Fe was the only municipality in New Mexico with such an ordinance.

In the late 1970s and early 1980s, development of the First Interstate Building, the La Fonda Hotel Parking Garage, and the Eldorado Hotel (see maps on pages 12–13) prompted public interest in creating an archaeological protection ordinance. It was not until 1986, however, that efforts to write regulations began in earnest. Following numerous subcommittee meetings, study sessions, and public hearings, the governing body passed the ordinance.

The regulation delineates three Archaeological Review Districts within the city limits. Each district has specific development thresholds that trigger review by an appointed volunteer-based Archaeological Review Committee (ARC), which comprises archaeologists, historians, and real-estate professionals from the community. As the city's staff liaison to the ARC, I review development applications and work with city-approved archaeologists to ensure compliance.

Santa Fe's ordinance adds a locally driven layer of archaeological review to the development process, beyond that required by the New Mexico Cultural Properties Act or the National Historic Preservation Act. Its purpose is to engage the community in preserving a record of its past before elimination by development. Historic preservation is a key component of community identity in Santa Fe, and it is within this context that the archaeological ordinance has safeguarded the city's stories for generations to come.

— Lisa G. Roach, *City of Santa Fe*
Archaeological Review Committee Staff Liaison



The community still gathers in its beloved historic Plaza. IMAGE: ELLEN HERR

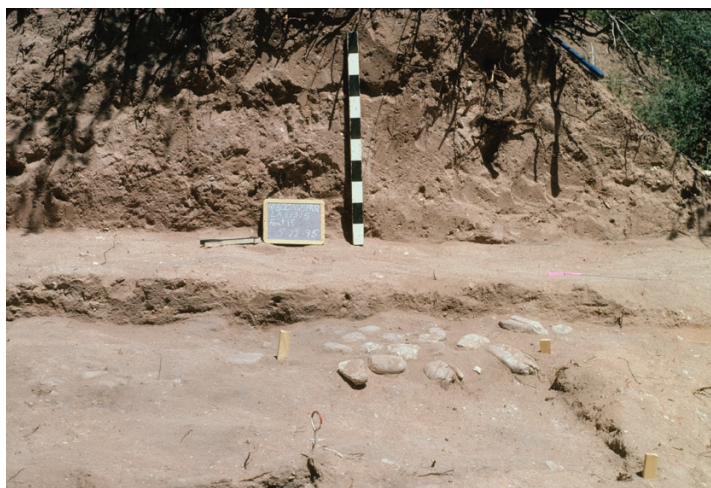
The First 6,500 Years: Archaic Santa Fe

STEPHEN S. POST
ZIA ARCHAEOLOGY

Santa Fe has long been a favored place to visit or live. The Santa Fe River and its tributaries and the spring-fed cienega offered seasonally rich biodiversity, a reliable water source in the high desert, and deep soils for farming and irrigation (see pages 20–21). Yet what should have been a highly favored place for Archaic hunter-gatherers is virtually bereft of the dense and abundant camp remains we would expect after 6,500 years of use. A major natural factor contributing to this apparent invisibility is the Santa Fe River's historic propensity for violent floods, which regularly scoured the floodplain and its margins, overrunning cienegas and washing away everything in its path. Adding to the mystery, however, is the absence of evidence of Archaic lifeways on protected river-terrace settings, now residential and commercial neighborhoods.

Because of the wealth of aboveground sites to study in the Santa Fe area, early archaeologists had little knowledge of the 6,500 years when bands of hunter-gatherers roamed the region. Momentum gathered slowly as limited but intriguing evidence emerged during geomorphological studies (origins and development of specific topography) of Tesuque Creek's floodplain in the 1950s; with Cynthia Irwin-Williams's landmark work south of town in the 1960s; and through examination of hunter-gatherer locations at the Cochiti Dam and Reservoir in the 1970s. Then, in 1987 and 1988, Santa Fe ordinances (see page 14) opened private land along the Santa Fe River and its piedmont tributaries to archaeological study in advance of development. With more archaeologists looking and more areas available for searching, the Archaic "dam" burst, so to speak.

The first major Archaic period settlement found was near the Santa Fe Municipal Airport, south of the river. Archaeologists discovered a cluster of four sites comprising multiple house pits with hearths, food parching and roasting pits with fire-cracked rocks, manos and metates, flaked stone tools and manufacturing debris, and charred wild seeds and nuts. The sites dated from 1740 to 940 B.C. There was no



Above: Collapsed and flattened Early Archaic cobble-lined hearth. The camp (LA 61315) was initially visible as a linear charcoal-infused soil stain at the base of a modern erosion channel. IMAGE: NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES. COURTESY OF STEPHEN S. POST

Right: Looking across an excavated Middle Archaic camp (LA 61289) with cobble-lined roasting pits. **Far Right:** A structure in the camp containing a small, unlined hearth is superimposed by a later Middle Archaic cobble-lined roasting pit. People commonly re-inhabited Middle Archaic camps over the span of hundreds of years. IMAGES: NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES. COURTESY OF STEPHEN S. POST



Early Archaic Period, 5500–3800 B.C.

Situated along tributary arroyos in the piedmont north of the Santa Fe River, Early Archaic campsites have been documented at four locations. These locations represent single-episode family camps with one or two hearths, a small amount of fire-cracked rock, usually fewer than twenty-five flaked stone tools and pieces of debris, and no evidence of return stays. The campsites seem to indicate that small, highly mobile groups used the area at that time.

Middle Archaic Period, 3800–2000/1800 B.C.

Middle Archaic sites demonstrate population expansion and people's tendency to return to favored settings for hundreds of years. Sites often share locations with earlier Archaic sites. Early in the middle period, people dwelled in semisubterranean huts (which appear in the archaeological record as house pits) with interior hearths for heat, and they worked and processed foods outdoors. Through time, house pits seem to become less prevalent, which might reflect site visibility or archaeological work within project limits, rather than ancient people's choices. Seed-parching pits with fire-cracked rock, cobble-lined fruit- and nut-roasting pits, and deep, unlined meat-roasting pits cluster; their spacing suggests a few people returning to a location, rather than a large group living there all at once. By the end of the period, sites became smaller with fewer thermal features (hearths, and pits for roasting and parching food), and there is less evidence that people returned and reused the sites.

Late Archaic Period, 2000/1800 B.C.–A.D. 500

By 1500 B.C., settlement flourished around Santa Fe. Archaeologists have documented seasonal residential camps from the westernmost extent of the piedmont at 6,200 feet in elevation, up onto the Tano Divide at 7,300 feet. House-pit sizes and layouts vary. Sites inhabited for a short time have few exterior features and low artifact counts, but semipermanent residential sites have discrete work and discard areas, abundant tool-manufacture debris, and a variety of scrapers, blades, dart points, and expedient tool flakes. Small manos and basin metates people used to process foods are usually present, too.

Although more complex sites in the rest of the northern Southwest often bear evidence of domesticated plants by A.D. 500, this is not so in the Santa Fe area. By that time, in Santa Fe and throughout much of the northern Rio Grande region, only a few widely scattered sites presage the adoption of domesticates. Environmental and demographic factors contributed to this apparent lag. The relatively scattered distribution of residential sites suggests that low population levels, combined with a resource-rich landscape, precluded a need to add new food resources. Climatically, a colder annual temperature pattern from A.D. 500 to 800 made farming unpredictable above 6,500 feet, delaying the northward movement of farmers living south of La Bajada Escarpment (more generally known as La Bajada Hill) into the Santa Fe area.



Excavated Late Archaic site (LA 127578) with two superimposed house pits and multiple interior hearths, pits, and postholes. IMAGE: NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES. COURTESY OF STEPHEN S. POST


evidence that inhabitants processed or ate domesticated plants, but we do know they lived there in late summer and fall. This fits a widespread pattern of larger and increased numbers of Archaic sites across the Southwest. In many areas of the Southwest, people began to cultivate and even rely on some domesticated plants (such as corn) at this time, but Archaic groups in and around Santa Fe did not.

Over the last twenty-five years, archaeologists have recorded or investigated more than 100 Archaic sites within the greater Santa Fe area, yielding dates spanning from the Early Archaic (5500–3800 B.C.) to the Late Archaic and early Developmental periods (A.D. 1–800; see time line on pages 8–9). We see elements of traditions (Oshara and Cochise) archaeologists have documented elsewhere in dart points, thermal features, and house-pit design. But the Santa Fe Archaic is not distinctly Oshara or Cochise; instead, it is an amalgamation, reflecting its geographical position as an intersection for people coming from the Pecos River valley to the southeast, the southern Rocky Mountains on the north and east, and the middle Rio Grande valley to the south.

We have also learned a lot about where to look for Archaic sites, and about how Archaic lifeways around Santa Fe compare with regional patterns. We have better information on the best settings for Archaic sites. With that, a strong pattern of long-term use of favored locations has emerged, which serves as a caution to archaeologists: a site might have evidence of more than one episode of habitation or use, spanning hundreds or even thousands of years. Excavations of deposits (specifically, charcoal-infused soil lenses) in eroded settings have yielded extensive residential and foraging camps dating to all Archaic periods, allowing us to make stronger arguments about the significance of such deposits, as well



as about the need to study or preserve similar deposits recently noted during archaeological surveys on public and private land.

Importantly, our recognition that patterns observed elsewhere in the American Southwest are not precisely duplicated in the Santa Fe Archaic record means we must continue studying piedmont sites and redouble efforts to find additional evidence of people's transition to farming along the margins of downtown's cienega and the Santa Fe River. Moreover, we must do a better job of communicating to residents and visitors the important chapter these early sites contribute to the story of Santa Fe's rich and ancient past. 



Final excavation photo of Feature 358, an early Developmental period oxidized, bell-shaped storage pit at the Santa Fe Community Convention Center Site. IMAGE: NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES. COURTESY OF STEPHEN S. POST

Earliest Inhabitants of Santa Fe

Amazingly, the first evidence of Archaic life in downtown Santa Fe was not discovered until 2006, during my own [Post's] excavations at the Santa Fe Community Convention Center site. We discovered five oxidized (fire-reddened) pits with archaeomagnetic dates (signatures of Earth's magnetic field at various points in time) ranging from A.D. 400 to 700. We recovered flaked-stone debris, tool fragments, small mammal bones, and five sherds of plain gray pottery from four bell-shaped pits and one deep basin-shaped pit. Charred corn or bean plant remains were present in three of the features.

The features we identified are similar to Basketmaker III (A.D. 500–750) features found at Colorado Plateau sites and to early Developmental period sites (A.D. 500/600–1000); see pages 18–19) in the Albuquerque, lower Jemez River, and Pena Blanca areas. Archaeologists interpret this combination of oxidized storage features and domesticated plant remains as the advent of early farming and increased sedentism (living in one place, year-round). This find is the earliest in downtown Santa Fe, and it is the earliest evidence yet found of the shift toward agriculture in the greater Santa Fe area.

Ancestral Pueblo Population and Settlement Patterns in and around Santa Fe

Between A.D. 500/600 and 1450, area settlement transformed from dispersed activity areas and single-family settlements, to small extended-family farmsteads and villages, to large pueblos of related and unrelated family groups. Populations grew in concert with changing environments and social circumstances, leading to an “explosion” around 1200. Most archaeologists agree that this surge resulted from a combination of local population growth and immigration from the west and northwest.

As population continued to grow into the late 1200s and early 1300s, major settlements appeared along the reaches of the Santa Fe River valley. By 1350, populations began consolidating into fewer, larger pueblos at lower elevations in well-watered areas. Communities built hundred-room pueblos arranged around central plazas, and those villages developed into multistoried pueblos with hundreds of rooms

surrounding multiple plazas. By 1450, however, most people had left the Santa Fe River valley for neighboring areas.

Explanations for these changes include decreased precipitation coupled with increased population; immigration; intensified agricultural water-management strategies; intercommunity strife; and the rise of regional trade networks. Combined, these changes created resource and cultural stresses. Communities became even larger, and new ways of holding communities together emerged, such as formalized religion and sophisticated ceremonialism. Established trade networks shifted directions.

These events, together with associated changes in group and population composition, eventually led to large Pueblo communities just beyond the Santa Fe valley in the mid- to late 1400s. Those were the communities Spanish expeditions encountered in the mid-1500s.

— Cherie L. Scheick

Pueblo Archaeology of the Santa Fe River Valley

CHERIE L. SCHEICK
SOUTHWEST ARCHAEOLOGICAL CONSULTANTS

Archaeologists have documented a single early-phase campsite (A.D. 685–1005) in the downtown area. Located within the footprint of Santa Fe National Cemetery (see map on page 12), the site comprises a surface scatter of pottery and a roasting pit. A similar, but slightly later (A.D. 910–1030) site lies south of the river on Garcia Street. This small, middle-phase campsite also consists of informal hearths, plain grayware sherds, and flaked stone.

Most Developmental period sites in Santa Fe date to the middle and late phases. Archaeologists have documented a cluster of them on the first terrace above the river on the city's north side. This group of sites on and around Fort Marcy Hill probably represents a small- to medium-sized community of the 1000s and 1100s. Archaeologist David Snow (see page 10 and pages 26–30) thinks this community developed as Santa Fe's cienega (now gone; see map on page 12) formed. The Diker, Fort Marcy, and 320 Kearney Avenue sites (see map on page 12) bear evidence of the community, whose members probably inhabited favored locations repeatedly over generations.

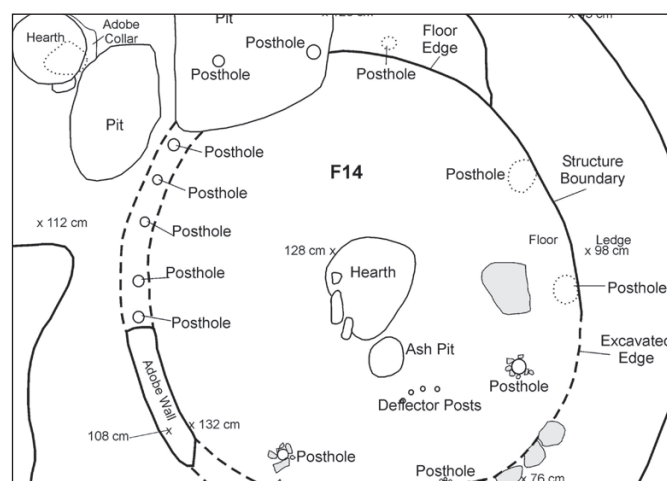
On the same terrace, behind the Scottish Rite Temple, is the KP site. The single pit structure and associated midden (trash deposit) at this late-phase site yielded plant and animal remains suggesting generations of residents lived there year-round between 1041

Up and down the Santa Fe River valley, from La Bajada Hill to downtown Santa Fe, archaeologists have documented Ancestral Pueblo sites. Until passage of the city's archaeological ordinance (see page 14), we did not know much about possible sites within the city limits. Since then, however, we have found evidence of several Ancestral Pueblo sites in Santa Fe. The result is a fuller understanding of the complexity of the area's archaeological sites and the people whose past they represent.

Developmental Period, A.D. 500/600–1175/1225

The Developmental period represents the beginning of what we identify as the Pueblo way of life. In this era, over generations, groups of people transformed from loosely organized hunting and gathering bands to a more settled way of life. They adopted the bow and arrow; they continued to move to lower elevations near fertile lands; and they shifted from building isolated, belowground, straight-walled pit structures, to constructing pit structures with aboveground jacal (pole-and-mud construction) storage structures. By the end of this period, they lived in aboveground adobe

Right: The Diker site on Santa Fe's north side. This image shows a pit structure with central area and antechamber. It dates to the middle to late Developmental period (A.D. 1000–1100). COURTESY OF SOUTHWEST ARCHAEOLOGICAL CONSULTANTS



Left: This large (100 square feet), relatively deep pit structure at the Federal Courthouse site on the Santa Fe's north side had a silled ventilator opening fronted by an adobe-collared hearth, multiple ladder-hole impressions in the plaster floor, a plastered wall niche, and a surface-accessed, attached storage feature. It dates to the late Developmental–early Coalition era (1100–1200). Archaeologists found the earliest known cotton in the area on this floor. COURTESY OF SOUTHWEST ARCHAEOLOGICAL CONSULTANTS

The Agua Fria Schoolhouse site comprises multiple two-story adobe room blocks and plazas with pit structures and proto-kivas. This image shows a Coalition–early Classic period room remodeled to create a storage area. Archaeologists have documented 143 features dating to the Coalition period, including structural remains and outdoor pits and middens (deep trash deposits). They also found a surface that was probably an open outdoor work area. In the room blocks, rooms are stacked on top of each other, but the layouts of the ground floor and upper story are different. Some of the small (65 square feet) rooms of narrow-coursed adobe have packed-dirt or clay-plaster floors with basin-shaped fire pits, as well as adobe-lined and adobe-collared hearths and food-processing bins. Other rooms have no features inside. COURTESY OF RIO GRANDE FOUNDATION FOR COMMUNITIES AND CULTURAL LANDSCAPES



pueblos of ten to twelve rooms with associated pit structures.

Although people still relied on a variety of wild plant and animal resources, those foods became supplementary as people incorporated corn, beans, and squash into their diets. Pottery, ground stone, and storage technology show that groups were increasingly dependent on maize. This shift most likely represents a response to changes in local demography, climate (specifically, a warming trend and changes in moisture availability), resource availability, and group mobility, as well as improvements in local corn strains. As mobility became more restricted, people inhabited greater numbers of residential locations closer to water on a semianual, if not year-round, basis. In the Santa Fe River valley, many such sites dot the high terraces above the river.

By the end of the period, communities in Santa Fe had made an uneven transition to a life-way increasingly focused on cultivated crops. Nonetheless, mobility continued to be important, as is evident in the presence of artifact scatters, flaked-stone quarries, hunting and gathering sites, and possibly farming plots within the diverse settings of the surrounding ridges and mountains.

Coalition Period, 1175/1225–1300/1350

Three trends mark the Coalition period: substantial population growth and instability, expansion of permanent settlements into high-elevation settings, and large increases in village size. Also apparent are changes in pottery, architecture, and site organization, as well as greater variety in artifacts and the materials people used to make them.

(continued on page 22)

and 1214 (radiocarbon dates) and 1116 and 1120 (tree-ring dates). Residents grew corn and squash, raised turkeys, gathered wild plants, and hunted game animals. In the same area is La Garita Pueblo, a substantial late Developmental–Coalition period pueblo with multiple rooms and an apparent kiva (ceremonial room) or pit structure. Pottery dates that site to the late 1100s.

The discovery of Developmental period remains under El Pueblo de Santa Fe (also known as *Ogapoge* [see page 10]) was surprising. Archaeologists found oxidized pits, a series of outdoor pits, a hearth, and time-sensitive pottery at this site, which appears to be a camp (see map on page 12).

Downslope, on an old terrace, is the late Developmental and early Coalition period Federal Courthouse site. People ceased to use the large pit structure and eight outdoor food-processing pits sometime between 1195 and 1240, but we have some evidence that the former inhabitants moved quite nearby. Cotton pollen recovered from the site is the earliest known cotton in the region. Residents also cultivated corn and squash, gathered at least thirty wild plant species, collected piñon nuts and hackberry seeds, kept turkeys, and hunted large and small mammals.

Other artifacts from the site include awls and awl manufacturing debris, *bítsitsi* whistle halves (the name comes from similar objects used in ceremonies at Zuni Pueblo), beads,

(continued on page 22)

Visualization of Santa Fe's life-supporting natural resources. MAP BY CATHERINE GILMAN, ILLUSTRATIONS BY ROBERT B. CACCIO,
TEXT BY CHERIE L. SCHEICK





Resource Zones

In the high-mountain spruce-fir forest, people hunted game and gathered edible grasses, berries, and seeds.



The lower mixed conifer and ponderosa pine forest provided building materials for Pueblo, Spanish, and Mexican dwellings. These wooded uplands were vital hunting grounds for elk, deer, rabbit, mountain lion, and other animals.



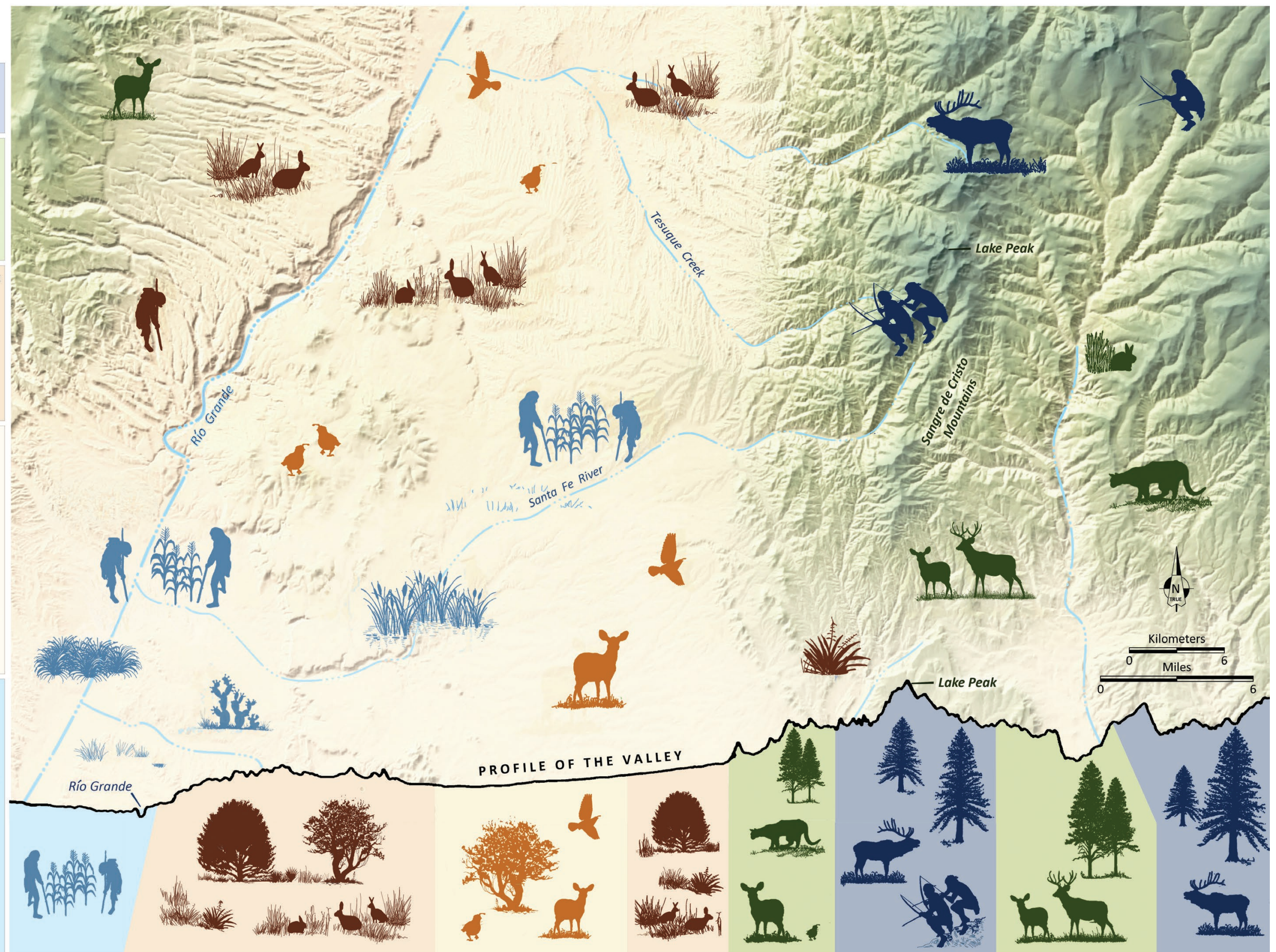
Piñon-juniper woodlands following the rolling foothills at the base of the Sangre de Cristo Mountains provided firewood, small game, an understory of nutritious grasses, and raw materials for flaked and ground stone tools. Fieldhouses and pit gardens suggest local groups farmed here, as well.



Between the foothills and river are shrub-grasslands of rolling piedmont terraces, dissected slopes, and dry arroyos. Deer, quail, and dove were hunted in ancient and historical times. People found raw materials for stone tools, clay for pottery, and abundant grasses and other native plants for greens. The leaves, bark, and fruit of juniper provided firewood, medicine, food, ceremonial items, and wood for tools and houses. Important plants include buffalo gourd, yucca, and beeweed.



Along the river, agricultural fields were watered by rainfall or floodwater. In historical times, people farmed terraces, irrigated by acequias. Native plants on the terraces include various grasses, shrubs, and cacti. Riparian species such as cattail, sedge, hackberry, horsetail, and cottonwood or willow provided food resources, ceremonial plants, basket-weaving materials, and construction materials. The deep sandy soils of the river's floodplain support heavy grass growth, cacti, yucca, snakeweed, rabbitbrush, and herbaceous annuals and perennials.



(continued from page 19)

minerals, jewelry, and miscellaneous objects of turquoise, ocher, and mica. Some finds led archaeologists to infer that residents of the Federal Courthouse site experienced restricted access to surrounding areas—in other words, groups might have recognized something like territories.

The density of debris dating to the early Coalition period at La Garita Pueblo suggests people lived there periodically, if not permanently. Evidence from the Santo Niño site north of downtown (see map on page 12) shows that pottery associated with the Coalition period might have its roots somewhat earlier. Located south of the river, the First Judicial District Courthouse Complex consists of a late Coalition–early Classic period jacal surface room, a pit structure, thermal features, and five human burials. People used this farmstead over multiple or consecutive growing seasons. Repeated seasonal residence throughout the growing season might have been an effective way for a household or family to acquire and control productive agricultural land.

Insights into large Coalition residential sites come from the Agua Fria Schoolhouse site, roughly six miles downriver from Santa Fe (see map on page 4). Dating from the mid-1200s to 1425/1430 (Coalition and Classic periods), the site sprawls over ten acres. During the site's history, residents shifted settlement from near the river, to a higher terrace, and back to low-lying slopes. At some points, people lived across the entire site.

Two interesting finds of this period reveal more about people's daily lives. At the Agua Fria Schoolhouse site, archaeologists recovered a cotton pollen grain and a cottonseed. These suggest that residents either obtained raw cotton through exchange with distant groups, or grew it themselves in

(continued from page 19)

These characteristics have lead many researchers to suggest that population immigration was at the heart of this phenomenon. Others believe it was a local response to new ideas coming from elsewhere, and still others argue it was a combination of both. In any case, we know that a substantial indigenous Pueblo population inhabited the area before any immigrants arrived. Still, given the number and sizes of sites, some portion of the marked population growth must have been due to depopulation of Chaco Canyon and the northern San Juan and Mesa Verde regions. Archaeologist Kurt Anschuetz recently suggested that accommodation of the immigrants led to a distinct cultural landscape densely populated by Tewa people (see page 10) after 1250.

Over a period of about 150 years, the number of villages in the Santa Fe area increased, and rectangular rooms arranged in small surface room blocks largely replaced pit structures. People increasingly settled in narrow drainages within or at the base of mountain foothills, and these locations developed into substantial year-round settlements. Older settlements continued to grow, and people established large new pueblos, as well.



*Two views of a large pit structure at the Agua Fria Schoolhouse site. **Top:** Note the support-post holes in the near foreground. **Bottom:** The sideways figure-eight-shaped feature comprises a hearth (larger lobe at left) and a ventilator opening (smaller lobe at right). Note the possible foot drum (larger rectangular depression) and screen alignment (represented by adjacent small support holes). This was one of two Coalition period pit structures at the site with remodeled hearths, ash pits, deflectors, ladder holes, and rectangular and circular subfloor features (such as cists, pits, and channels). COURTESY OF SOUTHWEST ARCHAEOLOGICAL CONSULTANTS*

By the early 1300s, most people lived in a few large settlements with multiple room blocks along high and low portions of the Santa Fe River valley and its tributaries. This move to upland settings probably resulted from changing social and environmental conditions, coupled with population pressure. People also were farming areas away from large residential centers, as the many fieldhouses and small- to medium-sized pueblos along drainages in surrounding areas attest. For the first time (that we know of), area farmers used water-control features and rock-bordered grids for floodwater farming. A drought in the 1340s probably forced people to leave many small settlements along tributary drainages.

Santa Fe's archaeological record for this period is extremely rich and diverse. Archaeologists have documented hundreds of sites within the city limits, including a wide variety of resource-extraction and processing locales, agricultural fields, pottery kilns, and small dwellings set apart from large villages. Within downtown Santa Fe are isolated pit structures, numerous fieldhouses, artifact scatters, small pueblos or villages, and at least one large pueblo. Elsewhere around Santa Fe, archaeologists have uncovered adobe walls, jacal structures, human burials, midden deposits, fieldhouses, and artifact scatters dating to the Coalition period.

Classic Period, 1300/1350–1425/1450

Archaeologists mark the onset of this period as the time when area residents began to make glazeware pottery. Two important characteristics of this period in the Santa Fe region are maximum population size and the emergence of large community complexes with multiple plazas and room blocks. These complexes were home to several hundred to a thousand people.

Early on, people began to reside in multistoried towns. Although town plans exhibit great variation, most have one or more room blocks, each with a plaza. Plazas generally contained a single large kiva (semisubterranean ceremonial structure) and several smaller

garden plots. Quite possibly, the site contains substantially more evidence of cotton; if so, then people were significantly investing in cotton production. Another special find came from the Bishop's Lodge site above Santa Fe, where a shallow circular depression yielded maize pollen. The depression was probably a Coalition-era planting bed.

Of the tens of Classic period finds within the downtown area, the best known are the deep, complex Coalition and Classic period deposits identified as El Pueblo de Santa Fe, or *Ogapoge* (see map on page 12). This site represents a very large, complicated, long-term residential community dating from 1200 to 1450. Most Classic period archaeological finds in the downtown area are artifact scatters, some with a few features and fieldhouse sites. Other major Coalition and Classic period remains lie under San Miguel Chapel and under Santa Fe's "oldest house" (the De Vargas Street House). The dense south-side Coalition deposits seem to have included room blocks centered roughly where San Miguel stands now. As at the Agua Fria Schoolhouse site, historic and modern use has probably removed substantial evidence of the Classic period.

From mostly sliver-sized exposures, archaeologists from many different organizations have attempted to characterize and interpret El Pueblo de Santa Fe's extensive buried deposits. The site intermittently served as a seasonal and a permanent residence. Associated pottery shows that Classic period networks extended north and west to the Tewa Basin and Pajarito Plateau, southeast to the Galisteo Basin, and perhaps as far west as the Zuni pueblos. Pueblo residents were probably multicultural, and perhaps multilingual, reflecting the fluid and cross-cultural nature of the 1300s and 1400s along the Rio Grande and across much of the northern Southwest.



Early Classic period construction at the Agua Fria Schoolhouse site. This image shows a large adobe storage room with a pottery vessel and ground stone on its floor. Excavators also found fifty pieces of turquoise on the floor. COURTESY OF RIO GRANDE FOUNDATION FOR COMMUNITIES AND CULTURAL LANDSCAPES

kivas, but these were not always present, or structurally uniform. Interestingly, people did not reside in these towns continuously, or even year-round. Besides proximity to surface water, these vast settlements were near agriculturally optimal areas at springs or along perennial streams, and in areas with favorable growing seasons. Residents also chose areas near wood resources, abundant wild foods, and raw material sources.

People continued to build and use small structures, fieldhouses, and farmsteads in the surrounding areas, but not to the extent their forebears did. Farmers engineered diverse agricultural field systems for harvesting and conserving water. Still, agriculture proved unreliable over the long term in the area's high-elevation settings, where cooler temperatures decreased frost-free days. People built, inhabited, and left settlements within a generation or two, except at the largest,

best-located communities in the area, including El Pueblo de Santa Fe, the Agua Fria Schoolhouse site, and Arroyo Hondo Pueblo.

By the mid-1400s, as in other regions of the Southwest, populations were declining in the Santa Fe area. People left many farmsteads and fields after the droughts of the 1400s and early 1500s, and population centers shifted to lower areas along major river valleys. Within Santa Fe, few pueblos had residents after 1450. The continuation of some large towns into the late 1400s was probably due to their strategic positions for good agricultural land, longer growing seasons, greater precipitation, extensive wood resources, and ready access to plentiful food and raw material resources. The onset of cooler temperatures, population influxes, and competition over land and trade networks also influenced settlement relocation. ■

As we went to press, Cherie Scheick and the Rio Grande Foundation for Communities and Cultural Landscapes submitted a nomination for the Agua Fria Schoolhouse site to be included on the National Register of Historic Places. Visit nps.gov/nr to learn more about the National Register.

What Kind of Climate Did Santa Fe's Ancestral Pueblo Communities Experience?

To reconstruct the climate residents of Agua Fria Schoolhouse site (see pages 19 and 22–24) might have experienced, I examined the potential of prevailing climatic conditions to influence agricultural success and sustainable economic patterns. Located on the Santa Fe River's south side, the site has a climate profile very similar to that of Santa Fe. I used tree-ring data to reconstruct precipitation and temperature patterns in the Santa Fe area from the 1200s to the 1400s.

The results indicate that—given adequate rainfall and the site's proximity to reliable water supplies—residents were in a good position to withstand excessively warm periods, including warm droughts. In contrast, villagers were probably more susceptible to crop loss and crop failure during excessively cool periods, whether such periods were accompanied by greater-than-average precipitation (cool and wet periods) or less-than-average precipitation (cold droughts).

Periods characterized as “cold and dry,” “cold and wet,” “warm and dry,” and “warm and wet” would have presented different opportunities and constraints for successful maize growing. Of all combinations of temperature and precipitation, the *most* favorable would have been warm and wet

periods. The exception is extremely wet conditions, which would have presented a host of problems associated with plant pathologies, flood and rain damage, and changes to the river channel and floodplain that would have negatively affected field locations and water conveyance facilities. The *least* favorable combinations would have been cold and dry periods. Cold-air drainage in portions of the river valley, short growing seasons, and deleterious droughts would have affected crop production with resulting consequences for human and nonhuman animal populations. Warm-dry droughts and cool-wet periods would have had intermediate effects, depending on field location and farming methods.

In short, the most challenging intervals for villagers at the Agua Fria Schoolhouse site and other contemporaneous communities in the Santa Fe area would have been the long, extremely cold, and often dry period between 1330 and 1364, as well as the intensely and consistently warm period with its many extremes between 1415 and about 1430. The most climatically benign periods for Santa Fe-area villagers were those dating from the late 1290s to the late 1320s, and again from 1400 to 1415.

— Carla R. Van West,
SRI Foundation and University of New Mexico



What Is Black and White and under Santa Fe?

C. DEAN WILSON AND ERIC BLINMAN
NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES

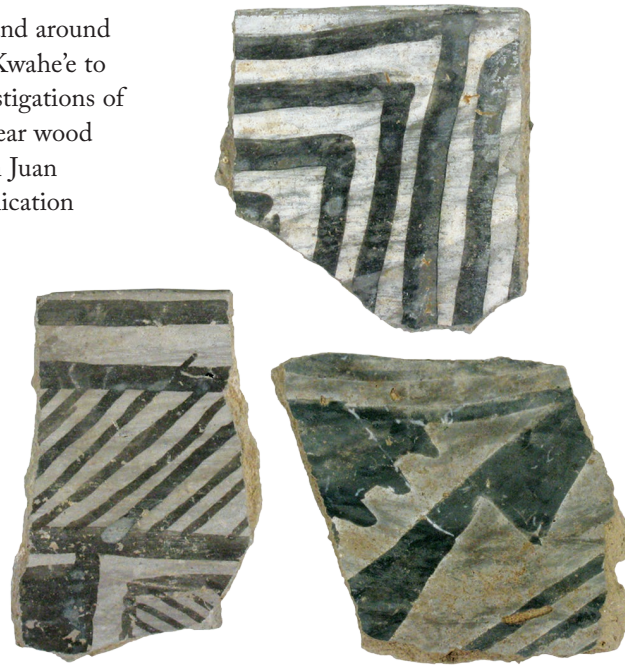
Lots of interesting pottery, if you ask us! Archaeological investigations across the City Different have yielded a thousand years of changing pottery technology, culminating in the traditions made and sold to tourists and collectors today. In the middle of this long tradition of northern Rio Grande pottery is the city's namesake type: Santa Fe Black-on-white. Locally abundant, the type is varied, long lived, and widely distributed along the Rio Grande valley.

The northern Rio Grande pottery tradition began with mineral-painted vessels (Kwahe'e Black-on-white), similar to whiteware produced on the Colorado Plateau but made with local clays and tempers. Most northern Rio Grande clays are rich in volcanic ash, and they differ from Colorado Plateau clays in that they fire at lower temperatures. The Kwahe'e and Santa Fe black-on-white types were each made with fine, dense, dark pastes with inclusions. ("Paste" is the fabric of the vessel—including clay and tempering materials potters might have added to the clay.) In some pastes, inclusions occurred naturally (self-tempered); in others, temper was added by the potter to control excessive shrinkage. Inclusions, whether natural or added, provide clues to where the pottery was made.

Paste variations define numerous local production traditions within Santa Fe Black-on-white. Compositional studies indicate the presence of at least three temper groups: sand, volcanic tuff, and crushed sherds. These resources were available to potters at short distances from their villages. We interpret the range of tempering materials as reflecting production at the household level (people producing pottery for their own use), as well short-distance distribution of vessels among communities.

Around 1200, northern Rio Grande potters, including those working in and around Santa Fe, rapidly adopted organic-paint technology, marking the shift from Kwahe'e to Santa Fe Black-on-white—but why? A clue comes from Stephen Post's investigations of pottery-firing features on the outskirts of Santa Fe, away from villages and near wood resources. Rather than firing in the formal pit or trench kilns used in the San Juan region to the west, Rio Grande-tradition potters fired in shallow basins. Replication experiments demonstrate that northern Rio Grande clays fire at much lower temperatures than the shale-based clays of the San Juan region, which explains why organic paint was attractive to northern Rio Grande potters: the high temperatures required to produce well-fired mineral-painted vessels would risk damage from over-firing.

Although we believe most Santa Fe Black-on-white vessels result from a long, local northern Rio Grande development that began by the 900s, other archaeologists believe the origin of the type lies in the mass emigration of groups from San Juan region villages during the 1200s. Several lines of evidence cast doubt on the latter scenario. One is mounting evidence that substantial local populations were producing black-on-white pottery in the northern Rio Grande at least by the



Santa Fe Black-on-white vessels are represented overwhelmingly by bowls with slip (a thin layer of clay that forms a surface coating), polish, and painted decoration limited to interior surfaces. Designs are banded, similar to those of contemporaneous traditions elsewhere in the northern Southwest. Although Santa Fe Black-on-white is the predominant decorated type at Coalition period sites (see pages 19 and 22–23) across the middle and northern Rio Grande regions, it can occur as early as 1150 and as late as 1420. By 1200, northern Rio Grande potters predominantly used organic paint on vessels. After 1375, potters living north of Santa Fe switched to distinctive volcanic ash-derived clay to produce lightweight Biscuit Ware. The examples of Santa Fe Black-on-white pictured here are from excavations at Santa Fe's Community Convention Center. IMAGE: MIMI BURLING AND KATHY MCREE. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES

Pindi Black-on-white is distinguished by the presence of large pumice temper particles and dark gray paste, thin soft-white to gray-streaky slip, slightly thicker vessel walls, and relatively crude solid-painted designs. Pindi Black-on-white represents the last precontact pottery type produced in what is today Santa Fe. It occurs in increasing relative amounts, along with generic Santa Fe Black-on-white, in deposits dating from 1300 to 1350. The examples of Pindi Black-on-white pictured here are from excavations at Santa Fe's Community Convention Center. IMAGE: MIMI BURLING AND KATHY MCREE. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES



1000s. Another is the continuity of designs and manipulations *within* the northern Rio Grande that are unlike those of Mesa Verde Black-on-white from the northern San Juan. For example, the majority of pottery assigned to Santa Fe Black-on-white exhibits tapered, undecorated rims that contrast with the flat, ticked rims of Mesa Verde Black-on-white. It is certainly possible that both indigenous and immigrant potters made some of the pottery we identify as Santa Fe Black-on-white, but most potters who made it were indigenous.

Pottery from later Coalition period deposits (1300–1350) reflects a more diverse range of types and wares that we think of as “regional specialties.” Communities exchanged such pottery widely. Some exchange patterns reflect the emergence and consolidation of distinct regional communities, possibly a result of formalized reciprocal transactions. Potters created what could be considered varieties of Santa Fe Black-on-white—including Galisteo, Wiyo, Talpa, Rowe, and Pindi black-on-whites—which reflect regionally distinctive pastes.

In Santa Fe-area sites dating after 1350 and as late as 1420, Pindi Black-on-white occurs in very low relative amounts with Biscuit A and Agua Fria Glaze-on-red, the earliest types of new wares potters produced north and south of the Santa Fe River valley, respectively. The last Santa Fe Pueblo villages inhabited before the arrival of the Spaniards were involved in exchange networks anchored by communities in the Tewa Basin to the north and the Galisteo Basin to the south. Residing in these distinct pottery provinces were proto-Tewa communities to the north (who made Biscuit Ware) and a fascinating adjacency of Tano (Tewa) and Keres (see page 10) ethnic groups to the south (who made Rio Grande Glaze Ware). Even in the 1400s, these neighbors might have perceived Santa Fe valley residents as a City Different. ▢

Where on *Earth* Was the Original Spanish Colonial Plaza?

DAVID H. SNOW
INDEPENDENT SCHOLAR

Would you believe, we do not yet know? With a few exceptions, pre-1693 Santa Fe—the original Spanish colonial villa and the pueblo that Tano Indians built over it after the Spaniards’ 1680 retreat—has simply returned to the earth. This also is true for most of the structures built by the Spaniards upon their return, although several of those relics remain.

Many surviving documents, together with discoveries stemming from the city’s archaeological ordinance (see page 14), enable researchers to reconstruct the configuration and content

of Santa Fe from the 1700s to the early 1900s. Nevertheless, after more than 400 years of nearly continuous habitation, ideal “layer-cake” archaeological deposits reflecting that history are difficult to reconstruct. Still, at the bottom of some future test pit or utility trench, there exists a piece of the “true cross”—another fragment from the first seventy-five or so years of colonial settlement.

When we find such fragments, they lie 6 feet or more below ground surface around the downtown area. The present ground



slope from east to west—from Paseo de Peralta to about the New Mexico Museum of Art (formerly Museum of Fine Arts)—is about 4 feet. Thus, the depth to early deposits lies nearly 10 feet or more below grade in places. (A 1911 newspaper noted that the descent from east to west in the Palace of the Governors is “fully four feet.”) Jesse Nusbaum’s 1916–1917 work where the Museum of Art now stands, for example, located a piece of an engraved ivory pocket sundial at about 10 feet below the surface, as well as an apparent Native American burial at a depth of about 8 feet.

The few surviving documents from the 1600s provide scarce details of the villa’s structure and general outline prior to the 1680 Pueblo Revolt. Conventional wisdom and speculation notwithstanding, we have yet to identify more than just an occasional remnant of the seventeenth-century *villa real*, and those are usually potsherds! Aside from investigations beneath the floors of the Palace of the Governors, archaeologists have documented only a handful of identifiable structural or other possible remains of the early villa.

Squaring up the villa

A settlement of indeterminate purpose and function, simply called a plaza, was established at Santa Fe as early as 1604 or 1605—but whether “plaza” meant a military post or just a motley collection of families from Governor Juan de Oñate’s colony at San Gabriel is unclear (see time line on pages 8–9). In 1609, the viceroy instructed Governor Pedro de Peralta to lay out a formal villa at this location, presumably according to specifications conveyed in the 1573 *Ordenanzas de Descubrimiento, Nueva Población y Pacificación de las Indias dadas por Felipe II*. The centerpiece of such a new town—the plaza, with streets emanating in each of its four corners—has eluded archaeologists’ efforts to locate and identify it.

We are, therefore, ignorant of the configuration and extent of Peralta’s efforts (and modifications to those efforts) over the next seventy or so



The present Plaza might not lie in the same footprint as the original pre-Revolt plaza. IMAGE: JACK PARSONS. COURTESY OF SANTA FE.ORG

years. In 1620, Governor Juan de Eulate advised the viceroy he intended to “*poner la dha Villa en defensa en quadro terreno con quarto Cubos...*” [square up the Villa with four towers]. This ambiguous statement might suggest that Peralta did not strictly follow instructions.

The discovery of a substantial wall footing beneath the courtyard of the Museum of Contemporary Native Arts, opposite St. Francis Cathedral Basilica (see map on page 13), is suggestive of Eulate’s 1620 concern. The footing runs roughly northwest–southeast and lies well below grade. Nearby, at a similar depth (about 6 feet) and within the Museum’s footprint, archaeologists encountered a hard-packed surface overlaid by nearly a foot of pre-Revolt pottery and a lead pistol ball. Might this be the floor of the original plaza, or the kiva built in the plaza after the Spanish exodus?



Recovered during excavations in Cathedral Park, this Spanish colonial pottery predates the Pueblo Revolt (1680). The example at left shows the foot (base) of the vessel. IMAGE: DAVID H. SNOW

A short distance east, in the center of today's Cathedral Park, at a depth of almost 2 feet, archaeologists encountered another deposit, about a foot-and-a-half thick, of pre-Revolt ceramics (see images on page 27) and faunal remains (animal bones) of domesticated species. Adjacent to the park's northeast corner, almost 4 feet below grade, was a cobbled surface of a probable north-south colonial street that might have passed in front of the pre-Revolt church.

In 1703, Santa Fe's *cabildo* (the villa's administrative body) observed that nothing remained in the villa in the manner and form in which Diego de Vargas had found it in 1693 when he reconquered the settlement for Spain; all had been demolished by Governor Rodríguez Cubero, Vargas's successor. Prior to his replacement, Vargas had refurbished the buildings and plaza occupied by the Tanos—those same *casas reales* ('royal houses', the original Palace complex) and, presumably, the adjacent plaza taken in 1680. Rodríguez evidently razed the entire complex and, as Vargas notes, subsequently erected "six low and six high ones" (buildings?), but just where those stood is unknown.

Evidence of tidying up the razed buildings and the debris of twelve years of pueblo life should be visible in the archaeological record. Immediately east of the present Palace of the Governors, archaeologists have identified substantial accumulations of trash (faunal remains, pottery, burned adobe fragments, charcoal, and so on) purposefully dumped or pushed into what was once the edge of Santa Fe's cienega (see map on page 12). Elsewhere, archaeologists have found large trash-filled pits under the La Fonda Hotel parking facility, and as noted previously, large quantities of seventeenth-century trash in the center of Cathedral Park. Archaeologists also documented nine trash-filled pits beneath the present Palace of the Governors.

A 4-foot-thick deposit of debris—including food bones and eighteen arrow points—revealed in test units in the present Plaza in 2010 might also represent Rodríguez's trash removal.

There is a disparity between interpretations of the archaeological record and information in extant documents of the pre-Revolt period. Popular belief (for at least 100 years) holds that the present Palace of the Governors was constructed in 1610. If Governor Diego de Vargas's successor built the present Palace of the Governors (*casas reales*) on a *new* location at some point between 1697 and 1703, then the seventeenth-century plaza also might lie elsewhere. The 1628 observation that a gunpowder tower attached to the *casas reales* was "*en cubierto con el convento y iglesia*" [in the shadow of the convent and church] suggests very close proximity of the two structures. The east end of today's Palace is at least 450 to 600 feet from the suspected location of the original parochial church of St. Francis. In 1750, heirs of recently deceased Alonso Rael de Aguilar described the house purchased for his second wife as contiguous with the villa's convent and church and facing the *plaza de armas* (see page 30). The same property was described in an 1824 declaration as "*por haber sido la plazuela de la Yglesia primera qe desde la conquista la rededicaron los pobladores a su Sor Patron*" [for having been the little plaza of the first church which, since the conquest, was rededicated by the settlers to the Patron].

Clearly, the *plaza de armas* recalled in 1750, adjacent to the reconquest church, is not today's Plaza. Possibly, Santa Fe's original 1604–1605 establishment was, in fact, a small garrison of citizen soldiers, and the *plaza de armas* noted by Aguilar's heirs might reflect the original 1604–1605 footprint, and the location of Vargas's battle to regain the *casas reales*. (I do not mean to downplay the historical significance of the existing Palace of the Governors—recently proclaimed a National Treasure by the National Trust for Historic Preservation—but simply to note that we require more data to bridge the apparent gap between documentary and archaeological interpretations.)

An old molar

At a depth of from five to ten feet the interesting relics of Santa Fe's early citizens are being daily uncovered. It is supposed that the skeletons are those of the early Indians. The digging is going on right beneath the floor of the Old Palace...

— November 26, 1909, account in the
Santa Fe New Mexican



Sankawi Black-on-cream bowl recovered during excavations in the Palace's west end. Potters produced this ware from the early 1500s to the late 1600s. IMAGE: DAVID H. SNOW

One theory suggests those human remains represent the seventy or so Pueblo rebels executed behind the *casas reales* by order of Vargas following his recapture of Santa Fe. Proof, perhaps, that today's Palace *is* the one built circa 1610?

The Plaza that fronts the illustrious Palace of the Governors is today the centerpiece of Santa Fe. Identifying the pre-1680 colonial plaza is critical to understanding the age of that “old molar,” as twentieth-century anthropologist and author Oliver La Farge dubbed the Palace, and it is necessary for discerning the original layout of the villa. The present Plaza has existed certainly since the early 1700s, but the location and configuration of the pre-Revolt plaza remain equivocal, despite intensive archaeological probing.

Initial archaeological testing in the present Plaza in 1990—one unit in each of the four quadrants, dug to just over 6 feet at maximum—failed to identify the compacted surface expected of a former plaza. Most of the pottery archaeologists recovered dated from the 1700s through the 1800s. Their report concludes that the present Plaza area might not reflect the original pre-Revolt plaza. Additional test excavation in the Plaza along Palace Avenue's south side resulted in a purported “1600s plaza layer,” about 3 feet above a layer containing a stone-lined *acequia* (irrigation channel). Subsequent testing in 2010 rejected that identification, but noted evidence of a possible military engagement at about 4 feet in depth. The majority of pottery recovered by these two projects reportedly reflects the very late 1600s (post-1680 or post-1693?) and the 1700s, but archaeologists found no evidence of a plaza surface.

The idea that today's Plaza is the villa's original plaza is based on

an assumption that the present Palace of the Governors is the same *casas reales* that faced the villa's square and served the seventeenth-century colonial community. Again, the few surviving seventeenth-century Spanish documents are equivocal in this regard, and tend to cast doubt on the suggestion that the present Palace of the Governors occupies the same spot as its predecessor, fronting a *plaza de armas* established circa 1604 or 1605. Excavations beneath existing structures along the south side of today's Plaza yielded little more than a handful of pre-Revolt ceramics and other representative materials—hardly representative of more than seventy years of residence.

A utility trench dug in front of the Palace of the Governors revealed an earlier trench (perhaps an arroyo?), some 12 to 15 feet in depth, filled with garbage, a mix of pottery from the 1600s through the 1800s, and food bones. Excavating for the foundations of today's Museum of Art along West Palace Avenue's north edge, Jesse Nusbaum recovered Spanish and historic Pueblo pottery, artifacts, and a half-dozen human skeletons. It is likely that Nusbaum had exposed another part of



Joseph de Urrutia's 1766 map of Santa Fe conveys key elements of the community landscape: river, irrigation canals, fields, roads, and dispersed buildings (see page 40). COURTESY OF THE FRAY ANGÉLICO CHÁVEZ HISTORY LIBRARY

the arroyo or trench deposits that contained debris from clean-up efforts after the return of Spanish control.

Archaeologists tentatively identified what might be a similar deposit during excavation of Room 7 in the Palace, adjacent to one of the deep pits filled with seventeenth-century trash. During trenching immediately west in Lincoln Street, excavators encountered floor segments, cobble foundations, a juniper pole, a seventeenth-century Sankawi Black-on-cream bowl, and a Fig Springs Polychrome majolica fragment. Another Sankawi Black-on-cream bowl of the same approximate age was beneath the west end of the Palace of the Governors (see image on page 28). Other archaeologists found additional colonial-style footings at nearly 6 feet deep along the west side of the Museum of Art. Associated pottery included majolicas and pre-Revolt Tewa potsherds.

Recent excavations behind (north of) the Palace of the Governors yielded plentiful seventeenth-century pottery, as well as an apparent “lead-smelting pit”—perhaps a reflection of the “workshops in which...ores were to be worked which had been built since the time that D. [Don] Pedro de Peralta was governor”? Unfortunately, just where those workshops were remains unknown. Also found were stone footings intruded through seventeenth-century trash. Wall footings exposed beneath the present palace floors are unrelated to the present building, suggesting structures were abandoned or razed prior to construction of the present Palace complex.

In sum, the foundations of the *Villa de Santa Fe* remain elusive. And they are disappearing rapidly as the city’s belowground infrastructural features and aboveground construction projects disturb or destroy the evidence we seek. ■

What Is beneath the Palace of the Governors?

Excavations beneath the Palace of the Governors have disclosed colonial wall foundations and other features that do not reflect the present complex’s footprint. Archaeologists also exposed nine deep bell-shaped pits filled with trash dating to the 1600s. Do those footings represent earlier Palace walls, as suggested by testimony given during the *residencias* (formal hearing concerning conduct while in office) of two governors of the early 1700s? Are they remains of former habitations razed to accommodate Governor Rodríguez Cubero’s “six high ones and six low ones”? Or are they traces of colonial residences the Tanos demolished after the 1680 Revolt and used to bury accumulated trash from the previous seventy years of Spanish occupation?

Residencia of Governor Domingo de Bustamante (1722–1731), testimony of Juan Estévan Garcia in 1731: “...y que tambien Sabe hizo en la misma forma las casas Reales de esta Villa para que los gobernadores bibieren con toda desencia...” (...and that he knew that he [Bustamante] in the same manner made the royal houses of the villa in order that the governors might live in a decent manner...).

Residencia of Governor Gervaso Cruzat y Gongora (1731–1736), testimony in response to question number

17: “...y aun para mayor seguro de esta Capital Villa fabrico a su costa los Valuartes, redificio el palacio, y plaza de harmas en que se han hecho los egercicios militares...” (...and even for the better security of this capital village, he [Cruzat y Gongora] built at his own cost the fortifications, rebuilding the palace, and the *plaza de armas* in which are carried out military exercises...).

Clearly, the *plaza de harmas* [armas] cited above cannot be the same *plaza de armas* referred to in 1750. The plaza mentioned in 1750 (see page 28) was located at the north side of the adobe church completed in 1717 and ultimately demolished by Bishop Lamy (see time line on page 9) to accommodate today’s St. Francis Cathedral Basilica.

— David H. Snow

Footings exposed during R. Alexander’s 1965 excavations beneath the east end of the Palace of the Governors (LA 4451). North side of room. COURTESY OF THE MUSEUM OF INDIAN ARTS & CULTURE/LABORATORY OF ANTHROPOLOGY



Tewa Pottery from Nineteenth-Century Archaeological Sites

C. DEAN WILSON
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Many scholarly perspectives on the development of Pueblo pottery in northern New Mexico during the late 1700s and 1800s are based on studies of beautifully decorated polychrome jars in private and museum collections. Such studies established a sequence of changes in jar shapes and decorative styles linked to distinctive traditions still practiced by modern Pueblo potters, including the Northern Tewa, who reside in villages north of Santa Fe.

Analysis of pottery recovered during archaeological work enables alternative interpretations from those based on historically assembled collections. Recent archaeological investigations of three Hispanic farmsteads near Tesuque and Pojoaque Pueblo, deposits adjacent to the Palace of the Governors, and several households within Santa Fe yielded large assemblages of pottery dating from about 1775 to 1875.

Some of the decorated pottery is similar to the complete vessels used to define the types of the period. Simple, well-made, unpainted forms from two utility-ware groups dominate the archaeological collections, however. Jars with smudged and polished interiors and thin micaceous slips are the most common among the cooking vessels, generally representing about a third of the total pottery. A plain ware executed in a wide range of bowl and jar forms represents about half the total

pottery. This plain ware has pastes and temper (see page 25) similar to contemporaneous polychrome pottery, but it is not slipped or painted. Applying a red slip or smudging surfaces made vessels impermeable, and therefore well suited for many domestic (household) activities. Such surface treatments resulted in effects and appearances similar to those noted for pottery vessels used across much of the Spanish colonial sphere.

Decorated sherds with characteristics similar to those used to define Powhoge Polychrome (see images on page 32) usually represent about one-fifth to a quarter of the pottery from the sherd assemblages. These sherds exhibit at least one surface slipped with a cream to tan clay covered with black organic paint, similar to decorated jars in museum collections. Unlike the museum collections, however, most of the Powhoge Polychrome recovered from excavations consists of bowl and soup-plate forms with interior decoration, and fragments of jars are rare—about one-third to one-fifth of polychrome (slipped/painted with more than two colors) sherds.

Designs on polychrome pottery recovered from nineteenth-century domestic contexts tend to be bold and simple, reflecting conventions that facilitated Pueblo potters' mass production of domestic vessels. We have identified several other traits that reflect such mass production of and bartering for pottery. Until the 1870s, the need for large amounts of household pottery was met through increased production of well-made but expediently produced pottery forms. Created primarily by Northern Tewa potters, this pottery also



Recent examinations of pottery from archaeological contexts dating to the late 1700s and 1800s provide the basis for an expanding perspective about processes and events that influenced pottery production at Northern Tewa (see page 10) villages. Together, studies of vessels in museum collections and pottery from archaeological contexts provide better understanding of the development of the unique forms of modern Pueblo pottery that have long interested scholars and the public. Pictured here are a Polished Micaceous jar (above) recovered from site LA 4968 during the Pojoaque Corridor Project and a Tewa Black jar (left) recovered from excavations at the Palace of the Governors. IMAGES: CAROL PRICE. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES

Our analyses expanded accepted typologies and characterizations of Northern Tewa pottery to include a more diverse range of vessel forms and treatments. These findings from sites of different ethnic groups provide important clues for understanding changes in Tewa pottery—not only in cultural continuity but also in influences resulting from changing patterns of production, acquisition, and use of Pueblo pottery vessels among different social and economic groups in the Santa Fe area. Pictured here are examples of Powhoge Polychrome. An example of a form that might have particularly catered to the tastes of Hispanic consumers is the Powhoge Polychrome soup plate (top) from the Palace of the Governors. It exhibits styles common in majolica vessels made in Spain and Mexico. IMAGES: CAROL PRICE. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES



responded to the demands of rapidly expanding and influential Hispanic communities, or *vecinos*, by blending Pueblo and European decorative conventions.

After 1879, establishment of a railroad system in the New Mexico territory had major impacts on the production and distribution of Pueblo pottery. These changes resulted in the widespread availability of affordable ceramics and other industrially manufactured containers from parts east. At this time, a cash-based market, often controlled by American merchants, replaced the barter system by which most pottery had circulated.

As Pueblo pottery fell out of favor for daily household use, its ancient tradition survived because a new market for aesthetically pleasing Indian pottery was stimulated by the mass arrival of American consumers via the rails. Although some evidence exists for occasional household use of native-produced pottery during this era, this was apparently limited, for the most part, to poorer Hispanic households that might have continued to acquire vessels by bartering.

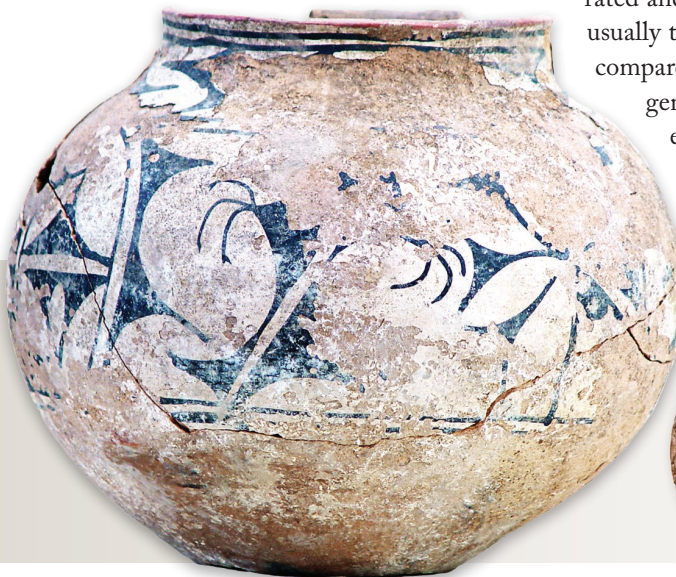
The small amounts of native pottery found at Fort Marcy—the administrative center for a half-dozen American frontier forts from 1846 to 1896—and at scattered Anglo and Hispanic households in Santa Fe provide a glimpse into the changes that were occurring at this time. New forms included elaborately decorated jars, often inspired by earlier jar forms. Some of these jars reflect a revival of more traditional styles that include intricate decorations in black and red paint (San Ildefonso Polychrome) made by skilled artisans for discerning collectors. Interestingly, although San Ildefonso Polychrome often dominates museum collections dating after 1870, potsherds of the type are quite rare in excavated assemblages.

Other pottery forms present in the archaeological assemblages reflect production of new, nontraditional curios for American consumers who desired cheap souvenirs or collectibles. Some of the forms produced during this time, such as flowerpots and certain effigy forms, lasted only briefly, whereas others, such as rain gods, are still made today. Although pottery produced for the early souvenir market was elaborately decorated and shaped, the vessels were

usually thick, soft, and poorly fired compared to earlier forms—and generally unsuitable for everyday use. ▣



Above: San Juan Red-on-tan (soup plate) sherds recovered from LA 4968 during the Pojoaque Corridor Project. **Right:** Powhoge Polychrome jar and Tesuque Polychrome flowerpot recovered from the NCO privy at Fort Marcy as part of the Convention Center project. IMAGES: CAROL PRICE. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES



An Era of Change: Santa Fe in the 1800s and 1900s

MATTHEW J. BARBOUR, JEMEZ HISTORIC SITE
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In 1821, Mexico broke away from the Spanish Empire, freeing Santa Fe's residents from prohibitive trade embargos enforced by the Spanish Crown. Those embargos had restricted imports solely to goods from New Spain. Soon, manufactured items from England, Germany, and the United States flooded the market. Traders established an overland route between Santa Fe and Franklin, Missouri. In time, people knew this as the Santa Fe Trail (see map on page 4).

Historians often cite the opening of the Santa Fe Trail as the first step toward Manifest Destiny and the settling of the American West. For Santa Fe, however, it was more than that. With free trade came a reconfiguration of social life and a transition from an economy based primarily on barter to a modern cash economy. This transformation is visible in material culture recovered during archaeological projects in downtown Santa Fe.

Before 1821, trade was concentrated along *El Camino Real de Tierra Adentro*, the royal road from Mexico City (see map on page 4). The 1,600-mile journey was arduous and unpredictable. As such, Santa Fe's residents thus relied heavily on locally made materials. Their dishes and cooking pots came from local Pueblo potters; their clothes were often of wool and leather from local livestock; and the rarity of metals, such as iron and copper, made flaked-stone tools commonplace in kitchens. In many ways, life in Santa Fe was not unlike medieval Europe.

This changed as Santa Fe's citizens promptly gained access to trade with the United States and all the commodities the industrialized world had to offer. As seen through the 2008 archaeological investigations in Barrio Guadalupe, factory-made English

ironstone replaced Pueblo-produced pottery; machined cloth replaced homespun wool; and knives and other metal manufactured goods became cheap and easy to acquire. Even health-care, which had relied almost exclusively on folk remedies, was transformed. As the archaeological record shows, a cure for any ailment was suddenly only a bottle away.

Fort Marcy was built atop the earlier Spanish Presidio. Here, archaeologists uncover the foundations of the Enlisted Men's Quarters prior to construction of the Santa Fe Community Convention Center in 2006. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES



After the opening of the Santa Fe Trail in 1821, even the poorest residents of Santa Fe could buy mass-produced ironstone dishware. Archaeologists recovered these pieces from Barrio Guadalupe in 2008. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES

When the U.S. Army captured the city in 1846 during the Mexican–American War, the city again changed forever. Before the signing of a peace treaty or purchasing of lands, Santa Fe was already coming under U.S. authority through the construction of Fort Marcy (see map on page 13). A symbol of the U.S.’s power over the former Mexican territory, the fort came to serve as the New Mexico Territory’s administrative and military headquarters. Archaeologists investigated the post in 2005 and 2006, prior to construction of the city’s convention center. These excavations revealed the headquarters’ placement on top of the earlier Spanish Presidio—building upon the footprint of the earlier colonial power. Threats of cannon and rifle held citizens in line as Santa Fe was remade, with new streets and new names given to old landmarks. Change also came as the U.S. government paid wages for labor, infusing cash into a barter economy starved for manufactured goods.

The promise of wage labor enticed many in Santa Fe’s Hispanic population to enlist in the U.S. Army. As seen in the

numerous alcohol bottles and morphine syringes recovered from Fort Marcy’s latrines, some entrepreneurial citizens capitalized on soldiers’ vices. A reciprocal relationship quickly formed, with Fort Marcy pulling Hispanic residents into American economy and culture.

Although the military post was one force in transforming the local population, new groups were also migrating into the area and changing the city’s ethnic makeup: Anglo Protestants, Irish Catholics, and German Jews, among others. Newcomers became merchants, politicians, ranchers, and venture capitalists investing heavily in the promise of Santa Fe and the American West. Results of a 2002 archaeological investigation behind the old Woolworth building provide evidence of this transformation. Archaeologists not only recovered a merchant stamp or seal from Elsberg and Amberg, two Jewish merchants operating out of Santa Fe between 1856 and the late 1860s, but also identified the structure that housed their business. Some of the immigrants brought their families, and others married into

Hispanic and Native American households that had called the city home for generations.

In New Mexico, the American Civil War came and went with relatively little fanfare. Confederate soldiers occupied Santa Fe for barely a month. Scholars have conclusively identified very little paraphernalia associated with this brief occupation, but this might be due to similarities in material culture between the U.S. and the Confederacy. Excavations at a Confederate mass grave at Glorieta Pass Battlefield revealed that, rather than wearing southern regalia,

Below: Excavated in 2005, these bottles from the Fort Marcy officers’ latrine attest to the many “forbidden” materials available to soldiers stationed in Santa Fe. COURTESY OF THE NEW MEXICO DEPARTMENT OF CULTURAL AFFAIRS, OFFICE OF ARCHAEOLOGICAL STUDIES



Right: After establishment of the Santa Fe Trail in 1821, and especially after the coming of the railroad, Pueblo potters pivoted to produce tourist items and knick-knacks, such as this Tesuque Polychrome flowerpot of the late 1800s (also pictured at a different angle on page 32). This situation would change in the 1900s, thanks in no small part to Edgar Lee Hewett’s Museum of New Mexico and Santa Fe’s up-and-coming artist community, both of which celebrated Pueblo pottery as fine art. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES



the Confederate soldiers stationed in New Mexico wore Union uniforms. They distinguished themselves from enemy combatants by reversing the insignia.

In the 1870s, silver was found just south of the city in the Cerrillos Hills. Prospectors flocked to Santa Fe in hopes of striking it rich. New businesses developed as assayers set up shop to rate the various ore qualities and process the material flooding the market. One such business even set up shop in the Palace of the Governors, discarding its cupules in the palace refuse pits for archaeologists to unearth during the New Mexico History Museum's construction in 2002.

Santa Fe grew. With growth came increasing demand for manufactured goods. Soon ox- and horse-drawn wagons traversing the Santa Fe Trail were no longer enough. Santa Fe needed railroads.

In time, three separate rails served the Santa Fe area. The Atchison, Topeka and Santa Fe Railway tied the city (via a spur from Lamy) to urban centers across the nation. Meanwhile, the Denver & Rio Grande, or "Chili Line," and the New Mexico Central, or "Bean Line," hauled agricultural products and distributed manufactured goods to outlying communities.

Combined, these operations represented a giant leap forward. Santa Fe entered the industrialized world. Large civic and private undertakings were now possible, as haulers brought brick, stone, and lumber to the city en masse. One of these projects was the massive Atchison, Topeka and Santa Fe engine house, built with cut-sandstone and concrete mortar, explored in 2004 as part of the Santa Fe Railyard Development.

Santa Fe began to take on the appearance of American settlements elsewhere: streetlights and Victorian homes appeared along city streets, and electricity and plumbing soon became available.

With enforcement provided by African American soldiers, a group of Republican politicians and businessmen conspired to

keep southern Democratic interests in check while effectively robbing the local Hispanic population of their traditional lands. The Santa Fe Ring, as they were known, controlled much of the city and surrounding countryside from the Capitol Building. Collectively, these men made sure a certain political rule remained in Santa Fe, and they were pivotal to achieving statehood in 1912.

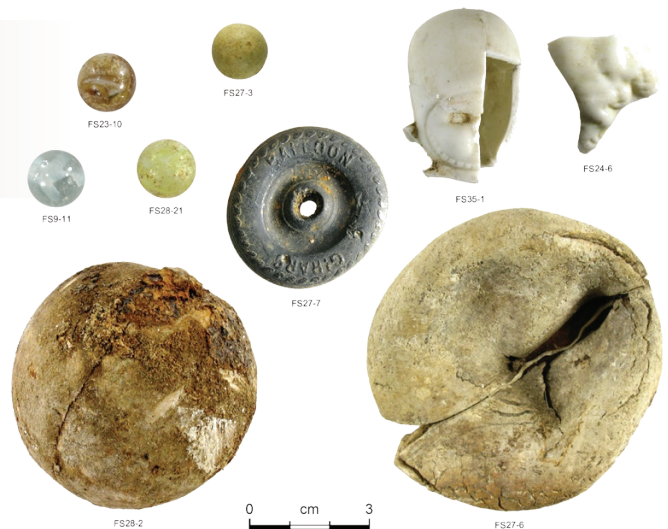


Sandstone architecture of the Atchison, Topeka and Santa Fe engine house, excavated in 2004, provides clear evidence of the monumental construction projects undertaken in Santa Fe after the coming of the railroad. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES



Confederate soldiers stationed in Santa Fe wore Union uniforms, but distinguished themselves by reversing the insignia. This buckle was recovered in 1987 from a Confederate mass grave at Glorieta Pass Battlefield. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES

Children's toys found in association with archaeological investigations of Santa Fe's Maternal Health Center in 2008 represent the families who employed its services. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES



Archaeological excavations in 2008, 2009, and 2011 explored much of the Capitol Complex Historic Neighborhood prior to construction of the Capitol Parking Structure and Executive Office Building. These excavations provided insight into the lives of some of this historic drama's players. Through excavations of property belonging separately to Sheriff Richard Alarid, Judge Frank Parker, and Captain Frederick Muller, archaeologists were able to examine all aspects of affluent life in Santa Fe at the turn of the twentieth century.

At the same time, Santa Fe's role as an economic center was declining. Rather than running its primary rail through the city, the Atchison, Topeka and Santa Fe chose an easterly route that placed large hubs in Las Vegas and Albuquerque. Santa Fe was relegated to a stop fed by a spur rail from Lamy.

In the early 1900s, Santa Fe, like much of the nation, fell on hard times. Fort Marcy closed; the Santa Fe Ring collapsed; and economic development came to a standstill. The citizens of the city banded together, creating several humanitarian organizations to help those in need. One example, the Maternal Health Center, focused on prenatal and neonatal care for poor mothers. The Center achieved a place in history due to its controversial directive to dispense contraceptives, challenging the Catholic Church's position. During excavations for the Santa Fe County Courthouse in 2008, archaeologists discovered evidence suggesting this contentious activity played but a small role in the Center's activities. Instead, the artifacts and architectural remains show a focus on early-childhood development.

These progressive programs helped Santa Fe weather the storm, but cultural tourism pulled the city out of the Great Depression. Edgar Lee Hewett established the Museum of New Mexico in 1909. Its focus on archaeology, and eventually "art, history, and culture," helped anchor the burgeoning Southwest Art movement in the City Different. Many young, upcoming artists such as Georgia O'Keeffe came to Santa Fe, and architects such as John Gaw Meem rebuilt the city in an image—Pueblo Revival—that harkened back to its roots.

In the archaeological record, we see this transformation in the abandonment of functional Native American pottery, such as plates and flowerpots, and in the shift to collectible decorative jars and storytellers (see page 32). Today, this legacy continues, as millions of visitors flock to Santa Fe to partake in its flourishing art market, architectural beauty, and the archaeology and history of its remarkable past. □



Just south of the Capitol Building, the Capitol Complex Historic Neighborhood represented a Republican stronghold in Santa Fe during the late 1800s and early 1900s. Archaeologists recovered these figurines from the Sheriff Richard Alarid, Judge Frank Parker, and Captain Frederick Muller properties in 2008. All three allegedly worked within the Santa Fe Ring. COURTESY OF THE NEW MEXICO OFFICE OF ARCHAEOLOGICAL STUDIES



The Curious “Coin” of Santa Fe

Archaeologists are not the only people who discover artifacts in Santa Fe and add to our understanding of the city’s history. The curious “coin” of Santa Fe was unearthed by Sena Plaza’s master gardener, Barbara Fix. Now a popular shopping and dining place, the plaza-oriented commercial complex began as a U-shaped residential compound of thirty-three rooms built in the Territorial style circa 1850.

The “coin” found on the Sena Plaza grounds proved a rare artifact in Santa Fe and New Mexico, and it was as puzzling and difficult to identify as any obscure antique coin. At peak use, however, it was as common as today’s plastic tabs. The object—just under an inch and a half in diameter—is actually a lead merchant seal that dates between 1837 and 1914. Representing a Royal Warrant, the seal identifies a supplier to the British Crown.

Used in ancient empires to mark commercial property, seals were common in Europe and the Americas through the 1800s, where they identified packages and proved regulation and quality control. Such seals were usually made of lead or a more durable mixture of lead and tin.

The Sena Plaza object probably attached to cloth; typically, such seals were two disks joined by a connecting strip. An agent folded the disks over each side of the cloth and pinched them shut with a stamping device that impressed one and sometimes both sides of the disc with a merchant’s emblem or design. Often, the manufacturer, the merchant, the quality-control inspector, and tax officials attached these seals. Thus, at any one time, a bolt of cloth might have as many as a half-dozen seals on it. Considering most textiles were too expensive to remain as inventory long, seal dates closely indicate the production and purchase of the cloth.

Impressed on the Sena Plaza seal is the British coat of arms, signifying that indeed, the British crown sanctioned

the product’s manufacturer for the Crown. The coat of arms comprises an oval shield with a lion and a unicorn to either side on a Rococo-style curled hide or parchment and the crest of the imperial crown with a lion or leopard at top. Surrounding the shield is a garter signifying that the bearer belongs to the Order of the Garter, with the motto *Honi soit, qui mal y pense*, ‘evil be on him who thinks it’. Below the shield is a banner with DIEU ET MON DROIT (God and my right), and beneath the banner are the Union Rose of England (center), the Scottish thistle (left), and the Irish three-leaf shamrock (right). Within the shield’s four quarters are the lions of England, the rampant lion of Scotland, and the harp of Ireland. Small raised beads encircle the coat of arms at the seal’s edge.

Of the 350-plus lead seals at the British Museum in London, only one is similar to the Sena Plaza example. Although the coat of arms is not exact, the seal in London’s collection is a German merchant’s seal, possibly for cloth made for England, and of sufficient quality that the British crown or a regal family member sanctioned it. The Sena Plaza seal’s size suggests it approved heavy cloth, such as sailcloth or tapestry.

Cloth seals hardly ever made it into consumers’ hands, because

most seals fell off well before purchase. The Spiegelberg Brothers—two of the better-known merchants in Santa Fe—bought directly from European markets. Quite possibly, the Sena family bought the cloth from a local mercantile and brought it home with the seal still affixed. Alternatively, by the 1860s, the Sena family was renting part of the plaza compound to other merchants, and perhaps the lead seal was on one of the merchants’ products.

Today, the seal is in the collections of the Palace of the Governors, donated by Sena Plaza’s current owner, art dealer Gerald Peters.



Not a coin, but a seal. IMAGE: DAVID GALLOWAY

— Lonyta Viklund-Galloway,
Southwest Archaeological Consultants

PRESERVATION SPOTLIGHT

THE MISSING DEAD OF HISTORIC SANTA FE: A PRESERVATION PROBLEM 400 YEARS IN THE MAKING

Cemeteries are wonderful features of historic cities. In such old places, we expect to find individual gravestones, and family monuments of their founders, cared for and documented. We generally hope that historic cities will have cemeteries preserved for generations—a retreat for descendants, as well as historians, archaeologists, and genealogists. The like-minded among us yearn to visit such places, strolling through a city’s history, one gravestone at a time.

In Santa Fe, we can visit the past 150 years of her resting dead at the Rosario Cemetery. No less than Bishop Jean Baptiste Lamy, later archbishop, gave the land next to the Rosario Chapel for the cemetery in 1868. Nearby, the honored military dead since 1870 repose in orderly rows at the Santa Fe National Cemetery.

These two largest and oldest of Santa Fe’s historic cemeteries are the resting places of thousands of its citizens, historic and modern, prominent and ordinary. Yet the existing historic cemeteries are too few and too recent to account for all who must rest beneath the City Different since 1610. How could the locations of historic graves be so completely lost to popular memory? How is it that

in Santa Fe, City of the Holy Faith, even the town’s most celebrated citizen, Don Diego de Vargas, who reconquered the villa for Spain, lies unmarked somewhere under the city?

Where are the missing dead of historic Santa Fe? Although their markers are lost, the graves of Santa Fe’s earliest historic residents are not truly missing. Actual graves yet lie beneath city streets, buildings, parks, and parking lots. Over 400 years, through a process of decay and development, cemetery locations have simply been lost—some with remarkable swiftness. As grave markers fall, survivors also pass away; development advances; and cemeteries are buried, paved, and forgotten. The dead await rediscovery.

We know that some of Santa Fe’s earliest citizens lie beneath the floors of Santa Fe’s historic churches, such as San Miguel Chapel, and within their walled churchyards, or *camposantos*. But the vast majority of Santa Fe’s earliest citizens, and even many of her later dead, repose unmarked and unknown under the city. Even as the historic significance of these “lost” burial grounds remains unexplored, their presence presents an enormous preservation challenge for Santa Fe.

—Alysia L. Abbott,
Abboteck

View of the Manderfield Mausoleum in Rosario Cemetery. Established in 1868, Rosario Cemetery lies within the Santa Fe National Historic District. IMAGE: ALYSIA L. ABBOTT



Cross standing among graves of clergy and Loretto Sisters in Rosario Cemetery. IMAGE: ALYSIA L. ABBOTT



A toppled gravestone in the International Order of Odd Fellows Cemetery. It is not difficult to understand how historic cemeteries are lost. Today in Santa Fe, one can see cemeteries in the midst of a profound preservation crisis. Within the boundaries of every existing historic cemetery, the ravages of time—and often vandalism—are reducing the monuments to rubble, leaving the dead unmarked. Development is squeezing boundaries, and the cost of maintaining cemeteries can be overwhelming. Eventually, a cemetery can become a parking lot. IMAGE: ALYSIA L. ABBOTT



The Santa Fe National Cemetery has been protected since its founding, but this is not true of all cemeteries in the area. Since the city mandated archaeological work prior to development (see page 14), archaeologists, in partnership with historians, are required to research for the presence of historic resources, including gravesites, prior to development or construction. As a result, hundreds of historic and precontact (before the arrival of Europeans) gravesites have been reported, with archaeology continuing to expose burials every year. Chance encounters are grossly insufficient, however, with so many people yet to be documented, or even located, under the city. As archaeologists piece together the residents’ history, only a comprehensive program of ongoing investigation can reveal where they lie, and help plan for their ultimate protection. IMAGE: ELLEN HERR



back sight

This issue of Archaeology Southwest Magazine is the second installment in our ongoing Southwest cities “underground” series. While planning the series, we scanned many early community maps. The 1766 map of Santa Fe by Joseph de Urrutia on page 29 is a beautiful example of what we consistently saw: a central and prominent river, irrigation ditches channeling water to fields, and a scattering of buildings. The mapmakers knew that only full landscape views could convey how such communities survived. Until the late 1800s, access to surface water was the key to survival. In arid lands, water is life—whether in the past or today.

In 2015, California’s multiyear drought and enduring water woes permeate the news. Some 15 years ago, Santa Fe suffered an even worse water crisis. A recent *New York Times* article suggests that Santa Fe’s response may merit widespread emulation. First, Santa Fe dampened demand, mostly by imposing very steep rate increases for Santa Fe’s heaviest water users. In response, the profligate users cut their consumption by an average of 25 percent. Then, Santa Fe applied technology upgrades: “A new \$220 million water treatment project is enabling the city to get more than 75 percent of its water from surface sources like rivers and reservoirs.” (For a link to the *Times* article, visit archaeologysouthwest.org/asw29-2-3.)



The role of surface water in Santa Fe has changed over time. Farmers used a major share in early years, and “industrial” uses, like this remarkable wooden sluiceway to a grist mill, were added in the 1800s. Today, surface water is conserved to support urban lifeways. COURTESY OF THE LIBRARY OF CONGRESS

It is remarkable that Santa Fe’s current population, which is more than 50 times greater than the Santa Fe Urrutia mapped in 1766, can meet the majority of its water needs from the same surface waters that supported the community 250 years ago. Residents draw a supplement from underground that is less than a quarter of their total water consumption.

The community of Santa Fe values and protects another underground resource: its archaeology. Conscientious stewardship of invaluable resources says a great deal about a community. Santa Fe’s commitment to conserving its water resources—though politically challenging—has obvious future benefits. Santa Fe’s commitment to protecting and celebrating its long story—widely and proudly shared, and enforced by ordinance—infuses this issue of *Archaeology Southwest Magazine*. Santa Fe exemplifies that the past is indeed the foundation of a vibrant future, and it is our pleasure to connect with a community that shares our Preservation Archaeology vision. ■

William H. Joelle

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 Archaeology Southwest’s mission.

