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Cover image: Distinctive elements of Fremont material culture include rock art styles and anthropomorphic figurines made of unfired clay. Figurines, from left to right: 42Ga288 FS 69.1, Natural History Museum of Utah; CEUM 1728 and CEUM 1729, Utah State University Eastern Prehistoric Museum; and 88.65.80.1, Museum of Peoples and Cultures, Brigham Young University. Images: David T. Yoder. Rock art panel with group of almost life-sized figures, Uintah County, Utah. Image: Troy Scotter.

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Introducing the Fremont

JAMES R. ALLISON
BRIGHAM YOUNG UNIVERSITY

“Fremont” is a label archaeologists use for the northern contemporaries of Ancestral Pueblo people. Fremont peoples lived mostly in what is now the state of Utah, in the eastern Great Basin and on the northern Colorado Plateau. Their range extended slightly beyond the modern borders of Utah.

Sometime during the first few centuries A.D., people began growing maize (corn) in the region. The first farmers might have been immigrants from the south, or indigenous hunter-gatherers who incorporated maize into their diet; most archaeologists think evidence shows a combination of both patterns. Over the next several hundred years, people across the Fremont region became more sedentary (living in one place year-round), and they adopted material culture (pottery, architecture, tools) appropriate to this more settled lifeway.

By about A.D. 1000, small settlements of Fremont farmers extended from just west of the Utah–Nevada state line into northwestern Colorado, and up the eastern side of the Great Salt Lake to a little north of the modern city of Ogden. Fremont peoples across this region shared styles of pottery, architecture, rock art, figurines, and moccasins. Ceramics, obsidian, and marine shell artifacts circulated among local Fremont groups.

Despite broad similarities across the region, Fremont peoples were not a homogeneous cultural group. Local Fremont populations probably did not all speak the same language, and they varied in other ways. Some lived in sedentary villages and relied on maize as much as any ancient Southwestern society. Others were more mobile and less reliant on domesticated crops.

Settlement patterns, architecture, and some details of material culture also vary geographically, with notable differences on either side of the mountains that divide the Great Basin from the Colorado Plateau (pages 18–19). Most of the largest villages are in the Great Basin, adjacent to good water sources. Many such villages are along streams that issue from the Wasatch Mountains, with especially large settlements in the Parowan, Sevier, and Utah valleys. This pattern suggests that many Fremont farmers in the Great Basin did not rely solely on rainfall to water their crops. Instead, they planted where the water table was high, or they relied on small-scale ditch irrigation. Archaeologists have documented a few large Fremont villages in the Uintah Basin and elsewhere on the Colorado Plateau, but settlements on the Colorado Plateau were generally smaller and more dispersed.
At Fremont villages in the Great Basin, people built semisubterranean pithouses and aboveground adobe storage structures, and they occasionally constructed adobe houses. Many villages included one or more structures that were so large, communities probably cooperated in building them and used them for communal activities (see pages 6–8). Some are pit structures as much as four times the size of an average pit structure, and others are aboveground central structures. Settlements on the Colorado Plateau have similar kinds of structures, but their builders frequently made them of stone. Away from villages and other permanent settlements, Fremont peoples sometimes used ephemeral brush wikiups, and they built isolated, nearly inaccessible granaries in rock shelters and cliff ledges.

Like Ancestral Pueblo and other Southwestern farmers, Fremont farmers also gathered wild plants and hunted game (pages 12–13). Interactions between farmers and full-time foragers must have been especially important in the Fremont region. Over the thousand years or so that Fremont farmers endured, the frontier of maize horticulture in western North America ran through the Fremont region. To the north and west, beyond this frontier, hunter-gatherers inhabited the rest of the continent. In the northern part of the Fremont region,
hunter-gatherers lived in the marshes along the east side of the Great Salt Lake, in close proximity to farming villages.

Influences from the south are manifest in people’s adoption of maize and other cultigens, in pottery designs (pages 8–9), and in the occasional occurrence of Ancestral Pueblo pottery at Fremont sites. At about the same time Ancestral Pueblo people left the Four Corners region (ca. 1240–1300), Fremont farming ended, population dropped, and most of the distinguishing characteristics of the Fremont disappeared from the archaeological record. Current archaeological data do not provide clear indications of the fates of Fremont farmers and their descendants.

Many Fremont people might have joined Ancestral Pueblo groups in migrating south. Others might have remained in the area but ceased farming. Evidence of dramatic changes at about 1300 leads many archaeologists to infer that new populations moved into the area. The Ute, Paiute, and Shoshone people who now live in the area usually claim descent from the Fremont. If some Fremont remained in the area after the end of farming, then both possibilities could be correct.

Food for Thought...

“...of what value are objects of a past people if we don’t allow ourselves to be touched by them. They are alive. They have a voice. They remind us what it means to be human; that it is our nature to survive, to be resourceful, to be attentive to the world we live in.” —Terry Tempest Williams, foreword to David B. Madsen, Exploring the Fremont (1989)
Like residents of any small town, Fremont peoples gathered for special occasions, sometimes inviting neighbors from nearby settlements. Many such events took place in structures that were similar to ordinary dwellings, yet much larger, and bearing unusual characteristics. Although these special buildings might have doubled as homes of village leaders or shamans, they were probably built, maintained, and used by the entire village.

In general, these people built two types of community structures: oversized pit structures and central structures. Both were typically located in the middle of the village near a plaza. These types of structures were probably used contemporaneous-ly. When both occur at a single site, they are usually in view of one another.

Oversized pit structures were similar to residential pit structures. They were semisubterranean, and some had atypical architectural features, such as the tunnels on the eastern and western sides of Structure 2 at Wolf Village, and the antechamber on Structure 1 at the Barnson site. All oversized pit structures had large hearths. Based on the number of postholes archaeologists find, people remodeled these structures several times.

Because oversized pit structures were roofed and enclosed, a limited number of community members could have participated in the activities occurring within. These structures might have been spaces where only men gathered, like kivas in historic Pueblo villages in the northern Rio Grande region. Inside oversized pit structures, archaeologists typically find bifaces and projectile points, along with large quantities of small flakes—probably from retouching and sharpening stone tools.

In contrast to oversized pit structures, central structures were surface buildings. Most were built of adobe, but some also included masonry, large boulders, or parts of cliff faces as walls. Like oversized pit structures, central structures were frequently remodeled.

Several documented central structures had only three walls; they were not completely enclosed. This suggests that the entire community could view activities hap-
pening inside. Objects found in central structures do not reveal much about what those activities were, but some artifacts—including beads and exotic materials such as turquoise and shell—suggest that people conducted ritual or religious activities inside central structures or nearby.

Many activities associated with communal structures might have incorporated the plaza, as well. This is particularly true for central structures, where many activities might have started inside and moved outside so that even more people could take part. Some of these activities probably included feasting and dancing.

Although community feasts might have occurred for many reasons and at different times of year, evidence suggests that feasts were especially important when central structures and oversized pit structures became too dilapidated to use. The roofs on these large structures would have been heavy, and the main support posts surely began sagging after only a few years. Though smaller support beams were
Shared Style: Design and Fremont Painted Pottery

KATIE K. RICHARDS
WASHINGTON STATE UNIVERSITY

Fremont potters produced painted ceramics in two different zones within the region: southwest Utah, where people made Snake Valley Black-on-gray (a–d on facing page), and central Utah, where people made Ivie Creek Black-on-white (e–h). Despite the distance between those production zones, designs painted on the vessels were structured in very similar ways, which probably reflects variations on an overarching Fremont painted design style.

Even though Fremont potters commonly produced bowls, jars, and pitchers, they reserved painting almost exclusively for the insides of bowls. In fact, painted bowls are among a suite of artifacts that display distinctive Fremont style. Snake Valley Black-on-gray bowls have smooth, polished gray interiors, and Ivie Creek Black-on-white bowls often have a white slip on the interior.

Although both types were widely distributed across the Fremont region, Snake Valley bowls have the widest distribution, and they occur at a greater number of sites.

Painters executed the designs according to a kind of design “grammar”—an underlying set of rules that guided what could be painted on a vessel. I focus on two aspects of that grammar here: design layout and motifs. Design layout refers to how a painter conceived and divided space on the bowl. Motifs are the designs used to fill the layout.

More than 80 percent of all known Fremont painted bowls have a banded layout design, meaning that the ceremonial retirement, not unlike closing ceremonies documented for Ancestral Pueblo kivas.

Either while the building burned or shortly thereafter, the community gathered for a feast. People ate deer, antelope, and rabbits in large quantities, along with maize and other foods. They threw leftovers, trash, and some cooking vessels atop the burnt, ritually retired structure. These events might have drawn not just the villagers, but also people from around the region, who came to feast and bid farewell to an important place in their lives.
design forms a band around the interior sides of the vessel, leaving an empty space in the middle of the bowl (a–e, g). About a quarter of these bowls have no further subdivisions, leaving what we call an “undivided band” (b). Almost one-third of banded bowls have perpendicular lines dividing the band into panels—what we call a “paneled band” (c and g)—and just over a quarter have a band that is subdivided using interlocking scroll motifs, a “faux-paneled band” (a, d, and e). There are four main motifs commonly found on Snake Valley and Ivie Creek pottery: triangles, interlocking scrolls, stepped elements, and squares.

Even though both pottery types follow the same design rules and exemplify a distinct Fremont style, some differences do exist, and these probably represent regional variations. Many differences are subtle: for example, faux-paneled bands are more common on Ivie Creek bowls, and paneled bands are more common on Snake Valley bowls. Other differences are more apparent: for example, painters of Ivie Creek bowls often used dots as a motif, or to fill in other motifs, but dots almost never appear on Snake Valley bowls.

The archaeological record shows that the two production regions interacted and exchanged material goods. Similarities in design styles indicate that people were exchanging ideas, as well.

Top Row: Snake Valley Black-on-gray painted bowls. Second Row: Ivie Creek Black-on-white painted bowls. A, B, D, E & H COURTESY OF THE MUSEUM OF PEOPLES AND CULTURES, BRIGHAM YOUNG UNIVERSITY; C & G COURTESY OF DIVISION OF STATE PARKS AND RECREATION, FREMONT INDIAN STATE PARK AND MUSEUM, ARTIFACT COLLECTION, SEVIER, UTAH 84766; F COURTESY OF THE HUTCHINGS MUSEUM, LEHI, UTAH. IMAGES: KATIE K. RICHARDS
Archaeologists have long identified anthropomorphic figurines as one of the defining characteristics of the Fremont culture. Although other archaeological remains are important and build our knowledge of the past, the experience of studying a pot sherd or a settlement pattern is very different from looking at a thousand-year-old artifact in the eyes and having its gaze back at you. Fremont figurines are deceptively similar, yet strikingly different. Most are small, fitting easily into the palm of the hand. Because they are made of unfired clay, they are fragile and delicate. Many share the distinctive trapezoidal shape of figures depicted in Fremont rock art (see pages 14–17), and they rarely have arms, hands, legs, or feet. They are male, female, and androgynous forms, distinguished by body shape, hairstyle, dress, and the presence or absence of breasts. Some figurines are quite plain, and others show elaborate clothing, jewelry, hairstyles, tattooing, and body or face paint.

Perhaps the most striking feature of many figurines, however, is the face. The eyes—which appear to be shut, or in trance, or staring piercingly back at the viewer—seem to imbue the figures with personalities. In some societies in the American Southwest and Great Basin, people used figurines in ceremonies, to incur divine aid in reproduction and fertility. Among others, they served as playthings or teaching tools for children. Sometimes, people used figurines to represent spiritual or temporal beings, such as deities, spirits, legendary figures, and ancestors. Sometimes, they seem to personify a gender. Given that figurines are found in a variety of contexts among the Fremont—from garbage pits to pithouses to caches in caves—it is likely they played multiple roles in Fremont culture.

At present, I am conducting a study of all known Fremont figurines. Thus far, I have examined more than 600 examples. My preliminary analyses indicate differences in the use and meaning of figurines across the Fremont world. For example, depictions of the mouth are common on figurines from the eastern Great Basin, but rare on those from the Colorado Plateau. Is this a stylistic difference that might be helpful in probing social and community relationships, or does it have an even deeper meaning, possibly related to how personhood is constructed and represented?

Right now, we simply do not know. But in the years to come, these miniature representations will surely offer greater insights into the lives of Fremont peoples.
Researchers have identified more than 95 wild plant taxa from Fremont sites. Although that list mostly comprises small seed resources that would have supplemented maize’s role as a carbohydrate staple, it also includes fruits, nuts, geophytes (bulbs/tubers), and resources from wetlands and the high desert. Remains of domesticated plants recovered from Fremont sites are not as diverse, but are more abundant at most sites. Archaeologists have found all three major types of maize (harder-kernel flint, softer-kernel flour, and very starchy dent), beans (common and tepary), and the most diverse species of domesticated squash, *Cucurbita pepo*.

**How Did They Combine Foods?**

Although stable isotopes and plant remains can help us describe the broader parameters of ancient diet, they do not reveal much about menu—how people combined foodstuffs into meals. Coprolites (desiccated feces) reflect the combined dietary decisions of a person over several meals, enabling us to infer how people incorporated wild and domesticated ingredients into “dishes.” Analysts have examined a small number of coprolites from Fremont sites to date, and they do give an indication of how foraging and farming intersected. A majority of these specimens reflect a diet focused on gathered small seeds, with little or no evidence for maize and other domesticates—yet these specimens are from sites that have abundant maize in their archaeobotanical records. This suggests that wild resources were crucial during the growing season, when stored maize was low and the harvest was still months away.

The remaining coprolite specimens reflect meals dominated by maize. Some of them represent meals that incorporated one of the other two domesticated crops, but most of them show a meal that combined maize with wild resources, mainly small seeds used to stretch maize or wild onions for flavoring.

Like all people, the Fremont had a diverse diet that included foodstuffs consumed for nutrition, for flavor, and for tradition. Their strategy was opportunistic and flexible, befitting the insecurity of farming in the high desert. If we focus solely on caloric return, or “farmers vs. foragers,” we overlook these important aspects of Fremont foodways.
Fremont Rock Art
TROY SCOTTER
UTAH ROCK ART RESEARCH ASSOCIATION

The region’s rock art is among the most stunning and distinctive in the world. Here are my brief answers to the three main kinds of questions I hear:

What Does Fremont Rock Art Mean?

Our brains are pattern-finding engines. Without even trying, we look at a rock art panel and begin to interpret what we see. We face a significant problem in doing so, though. Our cultural background is so different from that of the Fremont people that it is difficult for us to interpret a panel in the same way they might have. (That does not stop me from trying, but I have a healthy disdain for my opinions!)

Rock art researchers use two common terms to avoid interpretation. When we see a figure that looks like a person, we refer to that figure as an anthropomorph (human-like figure). We use that term because although the figure could represent an actual human, it could also represent a mythic figure, a character in a story, the spirit of a dead ancestor, or even a Fremont constellation—after all, we look into the night sky and see Orion the Hunter.

We refer to animal-like figures as zoomorphs for similar reasons. What you and I have in mind when we see “deer” is not necessarily what the artists or observers had in their minds. What “deer” meant in or to their community might be very different.

What Does Fremont Rock Art Look Like?

Researchers identify Fremont rock art with large (life-size) anthropomorphic figures found at numerous sites. These figures often have distinctive features:

- Wide shoulders
- A trapezoidal body that narrows toward the waist and then flares out again
- A bucket-shaped head, sometimes with “tear” lines coming from the eyes
- Elaborate headdresses
- Body decoration, including necklaces and belts
- Sometimes, anthropomorphs have large, round shields that cover most of the body


Above and below: Anthropomorphs wearing jewelry and headdresses. McConkie Ranch, Uintah County, Utah. Images: TROY SCOTTER
Zoomorphs—commonly sheep and occasionally deer or elk—are included in panels. Concentric circles and spirals are common elements, as are abstract figures. Unlike other rock art styles, plant figures are extremely rare.

People created such figures by pecking away the surface of the rock (petroglyphs) and by painting (pictographs). Pictographs are typically painted red, with red ochre as the color base.

Where Do We Find Fremont Rock Art?

Fremont rock art occurs on almost any stone surface, from six-inch-high smooth rock surfaces to boulders and huge sandstone walls. We often find the “classic” version I have described on the smooth, repatinated surfaces of large sandstone walls. The figures are usually south- or west-facing, and they are frequently associated with nearby water or canyon confluences.

We see the classic large anthropomorphic figures in the Vernal, San Rafael Swell, and Fremont River areas. We have documented variations in style, with smaller and less-well-defined figures, in Nine Mile Canyon, Fremont Indian State Park, and much of the area west of the Wasatch Mountain Range.

In border areas between the Fremont and Ancestral Pueblo peoples, rock art contains elements of the styles of both groups.

Online exclusive: Troy Scotter’s guide to Utah’s publicly accessible rock art sites is at archaeologysouthwest.org/asw29. Visit with respect!
As other articles in this issue describe, there are commonalities that distinguish Fremont from other Southwestern small-scale horticulturalist societies. These include, but are not limited to: distinctive pithouse and storage architecture; black-on-gray and some limited black-on-white and red-on-gray ceramic wares; three-piece leather, hobnailed moccasin footwear; basketry (half rod-and-bundle stacked, half rod-and-welt stacked, and whole rod-and-bundle foundations); and broad-shouldered human figures in rock art and as clay figurines, both often elaborately decorated.

Unfortunately, over the last century, archaeologists have struggled to organize spatial, temporal, and scalar patterns in these and other traits, leaving many to default to a simplistic characterization of Fremont lifeways as being highly “variable.” Some have suggested that the variability is so extreme that Fremont is nothing more than a convenient label encompassing groups of people too diverse to have any kind of ethnic or social connectedness. Yet the patterns remain.

A way to address this variability is to treat Fremont as a regional system, similar in many respects to the Hohokam, Rio Grande, Kayenta, and others. Regional systems such as these are not ancient realities, but groups of sites with some degree of social interaction and interrelatedness, as reflected by common material remains, architecture, and symbolism.

The search for regional patterns in the Early Fremont (Early Agricultural) period, A.D. 1–600, and Middle Fremont (Population Expansion) period, 500/600–900, is hampered by a relatively restricted dataset of sites and chronological record. Most Fremont during these early periods lived in dispersed communities of neighboring farmsteads and hamlets.

The Late Fremont (Social Integration) period, from about 900/1000–1300, is the best studied and, for now, the only period for which we can infer a regional system. Concurrent (and clearly not just coincidental) with the expansion of late Pueblo I and early Pueblo II populations, this period marked a significant social shift for these northern-most farmers. Evidence for population aggregation—people coming together in fewer, larger settlements, rather than being dispersed among many small settlements, as they were previously—is accompanied by significant changes in architecture and material culture. This aggregation was spatially asymmetrical, with the
greatest populations occurring in the rich river valleys of the Great Basin/Colorado Plateau transition zone.

At least three subregions in this transition zone exhibit significantly greater population increase during the Late Fremont period, and these were probably important spheres of regional influence (see maps at left and right). Many other intra-valley or neighboring valley community networks probably existed, some within and others well away from this core area of Late Fremont population concentration. In more remote areas away from population centers, households were probably connected in more dispersed community settings.

Still, Fremont populations, no matter how far removed, were never completely isolated from the larger context of interlocking communities across the Fremont region. Socioeconomic relationships and alliance formation seem to have been most pronounced between neighboring communities within the same valley or in proximal valleys, and each local context lent a certain local flavor to patterned variability in the archaeological record. Yet all were connected to a much larger web of interaction throughout the Fremont region.

It is in these subregional contexts, where local and regional influences meet, that household and community identities combined to create localized, patterned variability in the greater Fremont context. Fremont variability is in large part a function of variability through time and across space, and of the ever-changing status of household, community, and regional relationships.

MAP: CATHERINE GILMAN, ADAPTED FROM MAPS BY SCOTT M. URE AND RICHARD K. TALBOT

Centers of Culture, Commerce, and Technology: Fremont Villages in the Parowan Valley

SCOTT M. URE
BRIGHAM YOUNG UNIVERSITY

Located on the east–central side of Iron County, Utah, the Parowan valley was first documented by Francisco Atanasio Domínguez and Silvestre Vélez de Escalante in 1776. Eventually, the “Old Spanish Trail” was worn into the Parowan valley floor as part of the route to circumvent the Rockies on the way to destinations in the west.

In the early- to mid-1800s, explorers such as Jedediah Smith, Kit Carson, and John C. Fremont travelled through the area, paving the way for others headed to California. In 1850, the first group of Latter-day Saint settlers arrived in the Parowan valley, establishing Iron County in 1851. Many of these early explorers noted the numerous mounds dotting the landscape. During a visit to the Parowan valley, Brigham Young noted that “ruins were scattered over a space about two miles long and one wide. The buildings were about 120 in number.”

Naturalist Edward Palmer undertook expeditions to the Parowan valley between 1869 and 1877. In addition to collecting specimens for the National Museum (now the

Archaeology Southwest
Archaeologists from the College of Southern Utah (now Southern Utah University) excavating remnants of a collapsed pithouse roof at Evans Mound (also known as Summit) in 1967. Evans Mound is a large accretional mound that is part of a larger Fremont settlement near the town of Summit. Several multiyear excavation projects at Evans Mound by UCLA (1960–1963), College of Southern Utah (1966–1968), and the University of Utah (1970–1973) exposed dozens of superimposed structures and several burials. Fremont burials rarely contain grave goods, but one adult male at Evans Mound was buried below the floor of a pithouse accompanied by the remains of a Great Horned Owl and nine magpies, along with numerous other artifacts, including pottery, projectile points, and a worked bone whistle. Image: Richard Thompson. Courtesy of Southern Utah University.
Brigham Young University established the current Parowan Valley Archaeological Project (PVAP) in order to organize and analyze the artifacts collected from the various UCLA and SUU excavations. We now know that, for centuries (ca. A.D. 900–1300), the Parowan valley was home to several large Fremont villages inhabited by farmers. They grew a variety of crops, including maize, beans, and squash. They resided year-round in large villages comprising numerous subsurface and surface dwellings, including some “room block”-style structures.

The Fremont villages of the Parowan valley were undoubtedly centers of culture, commerce, and technological advances without rival in the Fremont cultural area. Three of these villages, which archaeologists have named Paragonah (see pages 26–27), Parowan, and Summit, were among the largest in the Fremont cultural area. The Fremont population in the Parowan valley might have ranged from 750 to 1,500 or more people.

The Parowan valley Fremont maintained strong trade networks by producing and distributing black-on-gray painted bowls and corrugated jars across the Fremont cultural area, and they almost certainly traded many other goods. Trade fairs attracting many visitors would have facilitated this economy. There is also strong evidence that the Fremont living in the Parowan valley were trading with their Ancestral Pueblo neighbors.
Wolf Village: New Insights on the Fremont

James R. Allison
Brigham Young University

Wolf Village is remarkable for its architectural diversity, its large and diverse artifact assemblages, and the insights into Fremont social organization and ritual practices it offers.

Officially designated 42UT273, the site is on and just below a hill adjacent to Currant Creek, near the town of Goshen at the south end of Utah valley. From 2009 through 2013, the Brigham Young University archaeological field school spent five field seasons there, uncovering the remnants of seven semisubterranean pit structures and two adobe surface houses. People built and used those structures in the A.D. 1000s or early 1100s, although the radiocarbon dates are not precise enough to indicate how many structures were in use at the same time.

Most of the excavated structures are pithouses with floor areas of about 200 square feet. They have hearths, small storage pits, and artifact assemblages suggesting they were domestic residences. People burned many of the pithouses when they abandoned them (or soon after), and we found burned beams from the collapsed roofs lying directly on the structures' floors. Postholes and the patterns of the fallen beams show that the pithouses had roofs supported by four main posts.
More-elaborate rituals marked people’s abandonment of two other structures. One of these is Structure 6, an adobe house with several unusual architectural details, including a vent shaft (normal for a pit structure, but usually unnecessary for an aboveground structure), and external beams that lean into the north wall of the structure and seem to have functioned as buttresses. Like other structures at Wolf Village, Structure 6 was oriented to the cardinal directions. Its abandonment involved placing two figurines along the north wall of the structure, evenly spaced on either side of the structure’s north–south axis. People placed other figurine fragments in the vent shaft from inside the structure, along with other artifacts, including several articulated mandibles of juvenile deer. Villagers then burned the structure, and subsequently filled the collapsed structure with midden (decomposing trash) soon after it burned.

Structure 2 is a large pit structure that people also abandoned in a complex way. With a total area of about 850 square feet, it was more than four times the size of a typical pithouse. Its size and unusual architecture suggest that the community cooperated on its construction and used it for communal rituals (see pages 6–8). Two large, deep tunnels entered the structure below the main floor level, and the floor was riddled with postholes. Some of these clustered around the four main roof supports, and they probably represent shoring up of the heavy roof. Other postholes mark the locations of frequently remodeled interior walls that would have screened the tunnel entrances from the rest of the structure. Larger subfloor features included four pits at each of the cardinal directions from the centrally located hearth, and an isolated, posthole-sized feature directly north of the hearth that might be a sipapu (symbolic feature).

After Structure 2 burned, people buried it, probably with trash from a nearby midden that had accumulated over years of activities within the structure. The burned roof collapsed right onto the floor. A layer of trash extraordinarily rich in artifacts was directly on top of and intermingled with the roof. This layer contained more than 15,000 potsherds, 40,000 pieces of faunal bone, and 200 projectile points, as well as worked-bone gaming pieces, marine shell beads, figurines, pipes, and many other items. It was capped by light-colored
silt from the hill above. The lack of silt deposits below the top of the midden layer indicates that people filled the structure not long after the roof had burned.

Adjacent to the end of Structure 2’s eastern tunnel was Structure 1, a multiroom adobe house that was one of the few unburned structures on the site. The largest room had a hearth, a large storage pit, and other features indicating domestic use. This room was connected to a narrow, featureless storage room by a partially preserved doorway. Three smaller storage rooms stood along the north wall of the main room, and adobe walls extended further north, indicating the presence of additional, unexcavated rooms. Because the residents of Structure 1 controlled far more storage space than anyone else and were well positioned to monitor the communal structure next door, it seems likely that Structure 1 was the dwelling of a village leader or other important person.

Maize Growing, Processing, and Storage: Evidence from Nine Mile Canyon

JODY J. PATTERSON
MONTGOMERY ARCHAEOLOGICAL CONSULTANTS

Carved a thousand feet deep into the West Tavaputs Plateau in east–central Utah, Nine Mile Canyon sheltered and provided for more than thirty generations of Fremont farmers. Mostly known for its tens of thousands of pecked and painted rock art images, the canyon also contains hundreds of granaries, tower-like structures, pithouses, and rock shelters.

Fremont population in the canyon probably never exceeded more than a few hundred people, but its inhabitants left a rich record of their daily lives. One of the more interesting aspects of the archaeological record in the canyon is not the rock art or the pithouses, but the field houses and associated activity areas found in the numerous alluvial fans of the canyon’s tributary drainages. (Alluvial fans are fan-shaped accumulations deposited by a river where its flow is slowed or constricted.) The picture that emerges from field areas is markedly different from that of habitation sites. Fan localities include the fields themselves (though physical evidence of the actual field locations is still being sought), field houses, processing areas, and nearby storage facilities, such as granaries.

Recent road construction through Nine Mile Canyon cut through scores of alluvial fans, exposing dozens of buried hearths, roasting pits, and unlined storage pits. In several instances, archaeologists also documented ephemeral semisubterranean structures. Radiocarbon dates from most of these features indicate nearly continuous Fremont habitation from A.D. 500 to 1250. A short break in the radiocarbon dates, coupled with changes in pottery types and architectural styles, indicates a shift in influence.
or interaction, initially from Fremont people in the Uintah Basin in the north, and then from Fremont peoples in the south, around the San Rafael Swell. Even so, farmers continued maize horticulture in these alluvial fans throughout this period.

Field houses were expediently dug depressions covered with simple roofs. Floors commonly have temporary storage pits and grass mats, but hearths are rare. Artifact assemblages differ considerably from habitation sites: most tools found in field houses relate to bead making or small-game hunting. Adjacent to field houses were large work areas where people processed maize and wild foodstuffs. Hearths, storage pits, roasting pits and, in a few cases, bedrock grinding slicks indicate people undertook considerable effort to prepare crops for consumption and long-term storage. Perhaps the most interesting aspect of these processing complexes is the fact that successive generations rebuilt and reused them numerous times.

Tucked into the ledges and niches of the cliffs surrounding the larger alluvial fans are deliberately hidden granaries. Most of the granaries could store fewer than 20 bushels of unshelled corn, but some of the larger ones could have contained three times that amount. The amount of maize farmers could have grown annually on the small alluvial fans could easily fill known granaries and provide for seasonal sustenance. Conservative estimates predict that maize agriculture easily could have supported 50 people for every six or seven miles of canyon floor. Produced, processed, and stored, surpluses could have accommodated one or two years of shortages due to drought or other hardship.

Fremont farmers might have grown crops in multiple locations within the canyon, but their use of small alluvial fans was an important part of their agricultural strategy. Currently, archaeologists are attempting to refine models to identify additional agricultural fields and processing areas in Nine Mile Canyon, and we are examining the level and intensity of subsistence hunting and gathering that occurred in conjunction with maize farming. 

Top: A Fremont granary in Nine Mile Canyon. People hid such storage facilities well. Bottom: Archaeologists in the process of excavating several large storage pits found on the floor of a field house (foreground) and an activity area (background) buried 3 meters (about 10 feet) below the surface of an alluvial fan. A deeper activity area can be seen as a dark stain between the two sets of archaeologists. IMAGES COURTESY OF JODY J. PATTERSON
Early in 2013, through collaboration among numerous state, tribal, and federal agencies, The Archaeological Conservancy (TAC) was able to preserve two very significant sites in Utah: Carhart Pueblo near the Utah–Colorado border in San Juan County, and Paragonah Mounds in Paragonah, Utah.

Construction crews building a light-rail line in Draper, Utah, disturbed part of a 3,000-year-old archaeological site beyond their permitted construction area. The Army Corps of Engineers issued punitive damages to the Utah Transit Authority (UTA), and the imposed fines were allocated, in part, for studying archaeological collections housed at Brigham Young University (BYU). Another portion of the fines was set aside for purchasing land and creating an archaeological preserve.

The Utah Transit Authority asked The Archaeological Conservancy for assistance in identifying archaeological sites in Utah that might fit the preservation component of the Memorandum of Understanding between the Corps and UTA. With the expert guidance of Rich Talbot and other archaeologists at Brigham Young University, we began our search for a willing seller, significant archaeology, and a fair-market price for the land.

Paragonah Mounds comprises approximately 28 mounds located on a 12-acre parcel north of Paragonah, Utah. These mounds are the vestiges of an estimated 400-mound village noted by early pioneers in the late 1800s. It might have been the largest built settlement in the Fremont world. Unfortunately, agricultural and urban expansion has destroyed much of the site. The remaining mounds represent collapsed architectural features attributed to the Fremont.

Scientific investigations of the site began with archaeologist Neil Judd (1915–1917), and limited excavation and research continued sporadically through the 1930s and into the early 1960s. In the late 1950s, the land containing the remaining Paragonah Mounds was donated to the College of Southern Utah (now known as Southern Utah University [SUU]). As the educational focus of the college shifted from agriculture to other curricula, Paragonah Mounds remained untouched by the college.

The importance of the site was well known to Rich Talbot. Talbot quickly connected TAC with James McDonald of SUU and negotiations for the sale of the site soon ensued. After a year of hard work and negotiations, TAC, SUU, and all the tribal and governmental signatories of the Memorandum of Understanding reached consensus about the purchase of Paragonah as an archaeological preserve.

It is important to note that SUU did not simply absorb the revenue realized through the sale of Paragonah Mounds for administrative and maintenance costs. Southern Utah University is using the money for an endowment that will go toward need-based scholarships for Native American or other minority students, and it will help support SUU’s archaeological repository. Furthermore, SUU has contributed $12,000 out of the proceeds to Utah’s Frontier Homestead State Park and Museum. This will help finance an archaeological interpretive center that will include a full-scale pithouse, an atlatl range, native gardens, wikiups, and a series of mock excavation units.

Preservation of Paragonah Mounds is one of the most progressive and positive punitive actions TAC has ever witnessed. It is rare that so much good can come from one small mistake, and the ripple effect carries on today. At The Archaeological Conservancy, we hope that such mitigative action will become standard policy for permit violations in the future, helping us to continue cultural heritage banking for future generations.

—Chaz Evans, The Archaeological Conservancy
How did I get to Ogden, Utah? I asked myself as I sat down to write this essay, thinking of a road trip I made a few years back and the changing landscapes I observed. Ogden is 30 miles north of Salt Lake City, and it is the convenient reference point to mark the northern edge of Fremont (see map on page 19). It is over 600 miles from Tucson.

One element of Archaeology Southwest’s mission, which we pursue most actively through this magazine, is sharing the latest archaeological research across the U.S. Southwest and Mexican Northwest. And the recent work on Fremont reported here provides an overview of an area that often seems simply too far away to be part of the U.S. Southwest. But, as the articles herein make very clear, the relationship to the Southwest is real and strong.

At the heart of that relationship is the fact that the people of the Fremont region practiced agriculture—at least part-time. In the southern Southwest, where so much work regarding early maize and early irrigation has occurred over the past few years, maize was in use for over 4,000 years. In the Fremont area, however, maize is documented a bit less than 2,000 years ago. And while maize was adopted and cultivated for just over a millennium, hunting and gathering ultimately prevailed as the way to make a living by the end of that time.

The great variation across the Fremont area, which Talbot (page 18) notes has been somewhat vexing for archaeologists to fit into a cohesive narrative, is another reason to be very interested in Fremont. In the southern Southwest, maize cultivation and wild food gathering were of roughly equal importance for two millennia before people became primarily farmers. For researchers interested in the complex processes that push (or allow) human groups to move between foraging and farming to support themselves, the environmental, social, and subsistence variation across the Fremont area presents a wide array of “natural laboratories” for intensive study. And Riley’s article (page 13) reminds us that nutrition, flavor, and tradition all played roles in the foraging-farming balance.

This issue highlights Fremont’s intriguing architectural patterns, its breathtaking rock art and figurines, and its pottery, which shows Southwestern ties. We should also be paying attention to Fremont as an area with much to teach us about how groups organize themselves and make a living across a diverse landscape, no matter where our research areas or interests in the past lie.