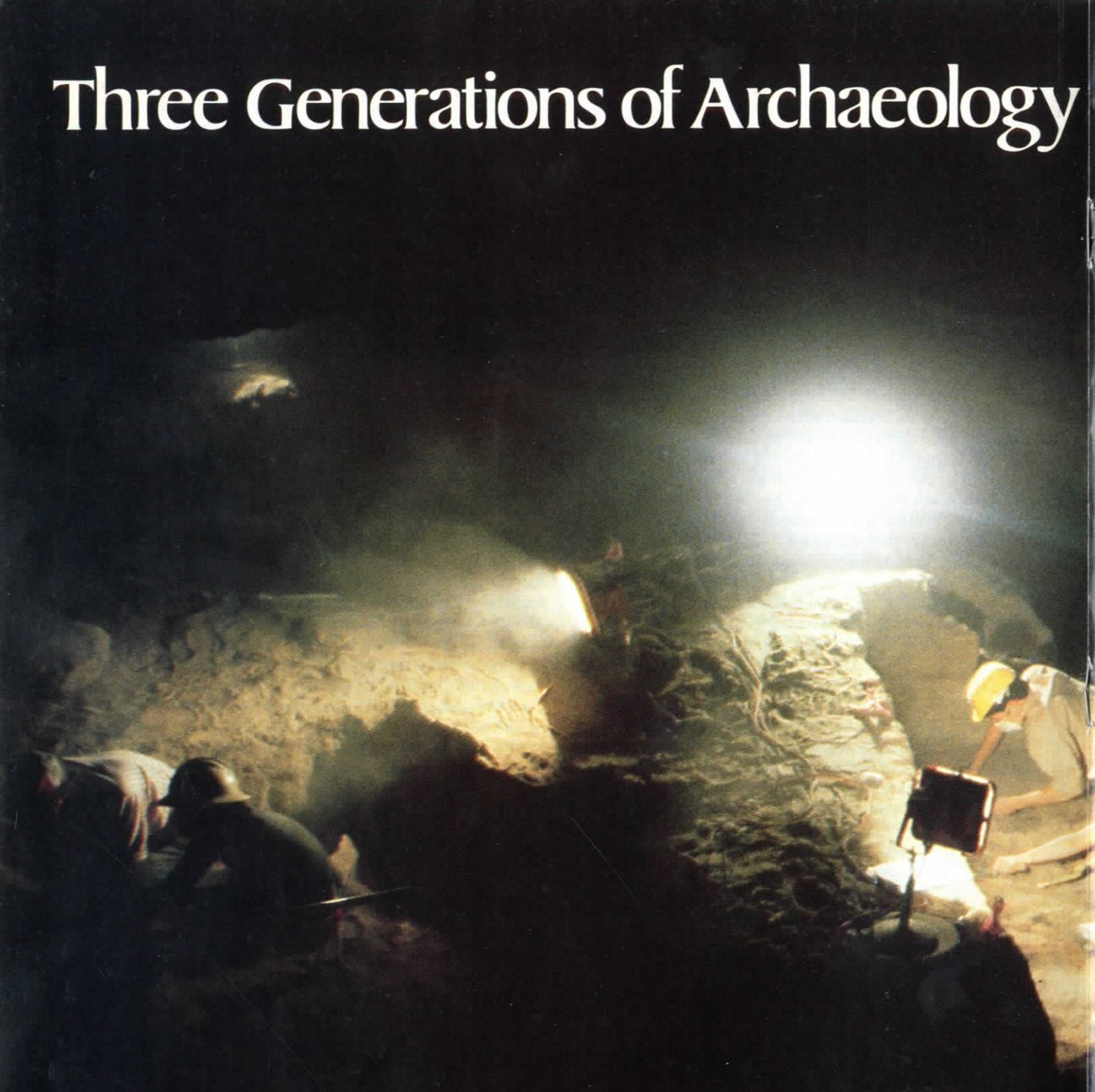
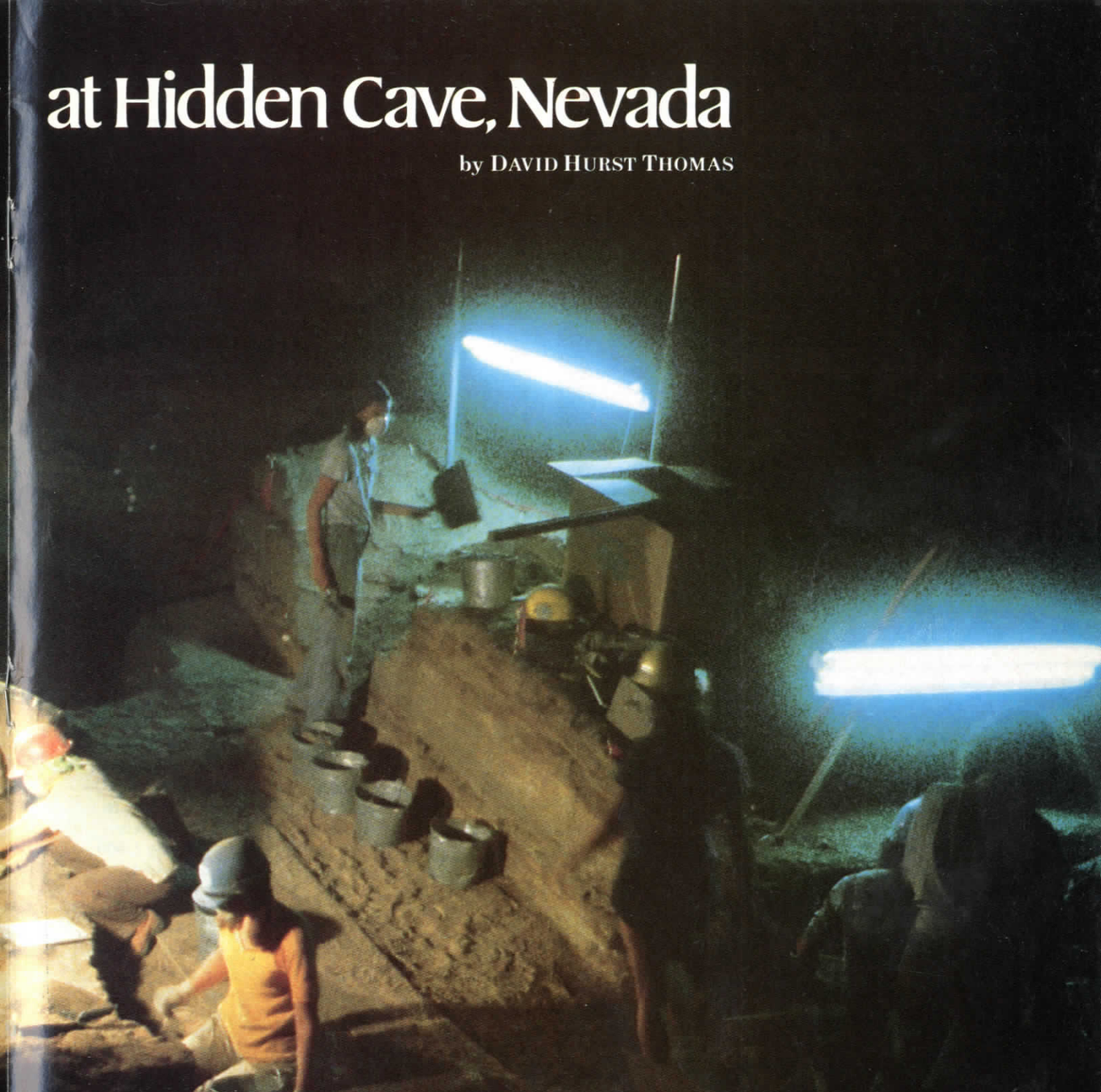
# Three Generations of Archaeology at Hidden Cave, Nevada

by DAVID HURST THOMAS





*Exterior light barely penetrates the central alcove of Hidden Cave, and anyone crawling even 15 feet inside is engulfed in disorienting darkness. Excavators used a combination of fluorescent and quartz-halogen aircraft landing lights to provide artificial daylight everywhere in the cave.*

"Yup, this is the cave I found back in 1927. No doubt about it."

I wanted to believe him. After all, Dick Wisenhunt had lived in Nevada's Carson Desert all his life. But when he claimed to be the first white man ever to crawl into Hidden Cave, I was skeptical. The site is a classic. Three generations of archaeologists have worked there, and this old-timer claims he found it? Still, his story rang true. As a boy, Dick Wisenhunt lived at a ranch located not far from Hidden Cave, just west of where the "Lazy B" brothel stands today.

Local legend has it that years ago, after the stage was robbed nearby, the thief confessed to hiding the money in a cave at Grimes Point. The holdup story lured four youths, including Wisenhunt, to explore Grimes Point on horseback some time in the mid-1920s. Tired of climbing among the various caves and crevices, the boys began a rock fight, more out of boredom than anything else. Rocks were flying thick and fast when somebody took cover behind a large rock. Feeling cold air coming from the base of this boulder, he looked down to see a small dark crevice leading directly into the mountainside. All of them wanted to explore the opening, but they were afraid to crawl in "because of the wildcats." They cautiously rocked up the hole and waited six months or so before returning.

When Wisenhunt first entered the cave—in 1926 or 1927—the opening was so small he could barely squirm in, convincing him that nobody in recent history had beaten him to the cave. The young explorers dug out a small entry shaft and finally got inside, but they were "skeptical and afraid" to venture toward the center (Wisenhunt thought that rattlesnakes lurked below). When they tried lighting up the cave by burning pitch on large torches, the combined fumes and dust quickly drove them back outside. Pledging one another to secrecy, they piled rocks across the entrance. The large cave in Eetza Mountain remained their secret hideout for the next five years.

Like many desert caves, Hidden Cave was mined for bat guano in the mid-1930s. A miner named McRiley mailed a guano sample at the Fallon Post

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Office but, unable to address the package himself, he asked the postmaster for help. In the course of conversation, McRiley commented that digging would go much quicker "if it weren't for all that Indian junk."

In 1935, archaeologist M.R. Harrington and his assistant, S.M. Wheeler, got wind of the find from Peg Wheat, an expert on local geology and archaeology. But for all their skittering over the scree-covered hillside, they couldn't find the rocked-in entrance. After examining several promising ledges, Harrington commented, "This is certainly one hidden cave!" The site now had a name.

Once they finally found their "Hidden Cave," its great archaeological potential was clear. More than 150 feet deep and at least half as wide, the cave was filled with stratified lacustrine and colluvial sediments. Artifacts of all descriptions, including basketry, carved wood and leather, protruded from the surface.

Five years passed before S.M. Wheeler, by then archaeologist for the Nevada State Highway Commission, returned to excavate Hidden Cave, accompanied by his wife, Georgetta. Occasionally assisted by men from the local Civilian Conservation Corps, the Wheelers usually worked alone through the summer of 1940. Bedeviled by blinding dust inside the cave, the Wheelers breathed through a variety of masks and bandanas. They tried both carbide and electrical lighting to purge the cave's darkness, but no solution was particularly effective.

S.M. and Georgetta Wheeler are hardly household names, even in the archaeology classroom. Yet their excavation techniques were exceptional for the day, and have provided invaluable data for subsequent generations of archaeologists. Their photographs and field notes document the skill and care with which they dug, proceeding by natural levels and piece-plotting all *in situ* artifacts. Nearly 1,500 specimens were collected that summer. Wheeler, trained in classical archaeology to view anything north and west of the "Four Corners" area (adjacent portions of Utah, Arizona, New Mexico, and Colorado) as peripheral, saw Hidden Cave as a lower-case version of the well-known southwestern cultures: Basketmaker II and III, Pinto, and Gypsum Cave. Two fossilized horse bones suggested the possibility of Pleistocene occupation as well.

Although S.M. Wheeler is generally given credit for the first excavation at Hidden Cave, the truth is that Georgetta Wheeler spent vastly more time excavating than did her husband, who became increasingly involved with public relations. The initial account of the excavations appeared in a local paper on July 27, 1940. Later, Wheeler wrote that "following the publication of the article in the *Eagle*, we got 26 visitors, no breathing spell from 11:00 a.m. until after 9:00 p.m. We got no lunch and we had to keep one group waiting until we could take time to eat supper. This is not to make a complaint, but merely to show the popularity of the site." Wheeler's guestbook records 753 visitors on site tours in 1940. But despite his occasional protests, he was proud of the public interest in Hidden Cave, boasting that the visitors represented a total of 51 towns and ten states.



Vandalism was a constant problem, and Wheeler devised an ingenious strategy to protect his site. He persuaded several friends to file mining claims on the sand, gravel and guano deposits inside Hidden Cave. A "Location Notice" was filed on June 1, 1940, claiming Hidden Cave as the "El Vera Placer Mining Claim." Six weeks later, Wheeler filed a "Proof of Location Work," certifying that at least $20 worth of labor, work or improvements were performed "on the development of the guano deposit." Later that summer, the so-called mine owners then "quit claimed" their deeds, awarding legal claim to the Nevada Department of Highways. Ironically, Hidden Cave, the guano mine, received considerably more legal protection than did Hidden Cave, the archaeological site.

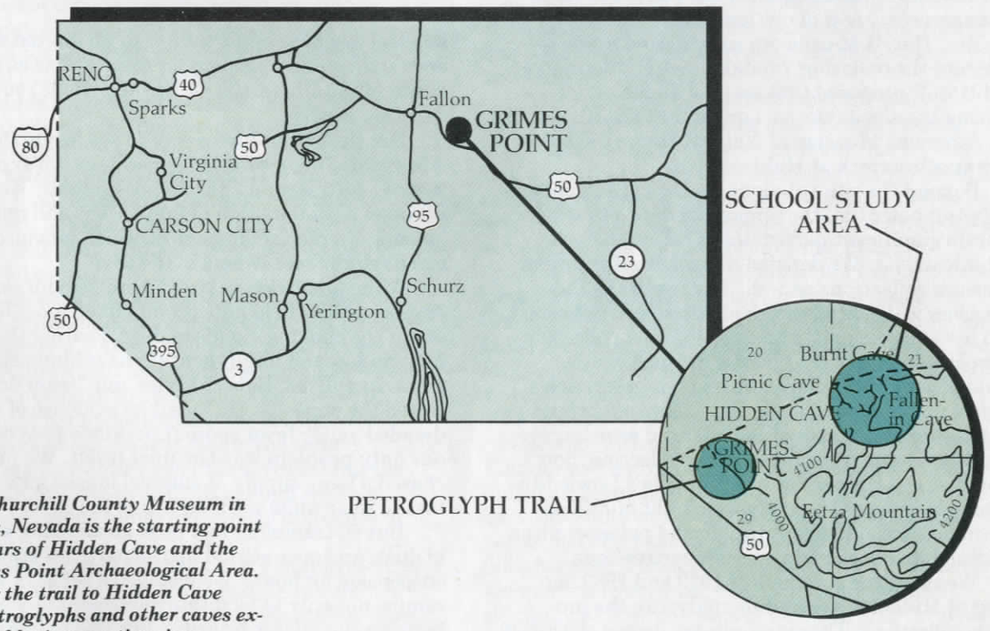
At the end of the 1940 season, their work at Hidden Cave completed, Wheeler built an iron gate across the cave's entrance. Later inspection showed that "these 'destroyers of history' had succeeded in digging around the barrier," he wrote. "Fortunately, the cave deposits are such that they soon became discouraged and little actual damage was done." Wheeler might be gratified to know that his iron gate remains intact today. Unfortunately, the vandalism continues as well.

Ten years passed before geologist Roger Morrison arranged for two University of California graduate students—Gordon Grosscup and Norman Linnaeus Roust—to resume digging at Hidden Cave in 1951. The two received financial support from the U.S. Geological Survey through the University of California to work with Morrison while he studied the Pleistocene and recent geology of the Carson Basin, helping him date some of the more recent formations. When they first visited Hidden Cave, Wheeler's iron gate was in place, but it was silted in and could not be opened. Pothunters had burrowed in alongside the gate.

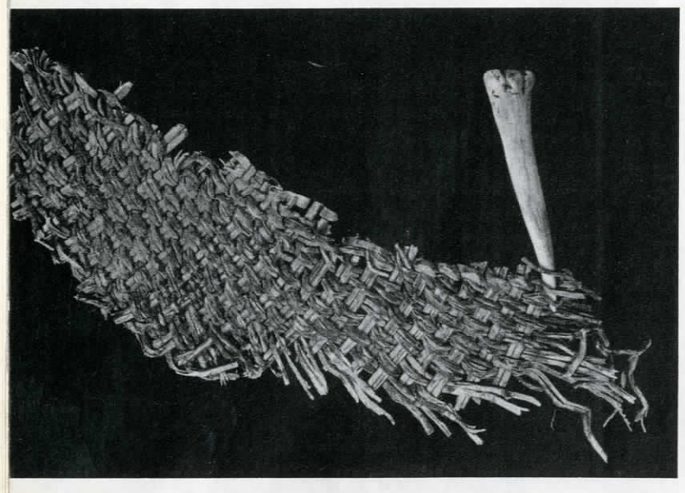
Working virtually alone, Roust and Grosscup toiled for more than two months inside Hidden Cave, recovering hundreds of artifacts, coprolites, and animal and vegetal remains. Dust and darkness once again hampered excavations. Carbide and battery-powered lamps proved ineffective, and an electrical generator was eventually installed The dust from bat guano poses a serious health hazard, and they tried a succession of dust masks, air filters and moistened cloths. Their 1951 field notes record that "none of these proved satisfactory, and until some more capable experimenters produce the answer, this problem will remain annoyingly unsolved." During the next two decades, Hidden Cave had more visitors: curious amateur collectors, errant tourists and the occasional archaeologist. The remaining deposits were vandalized still further.

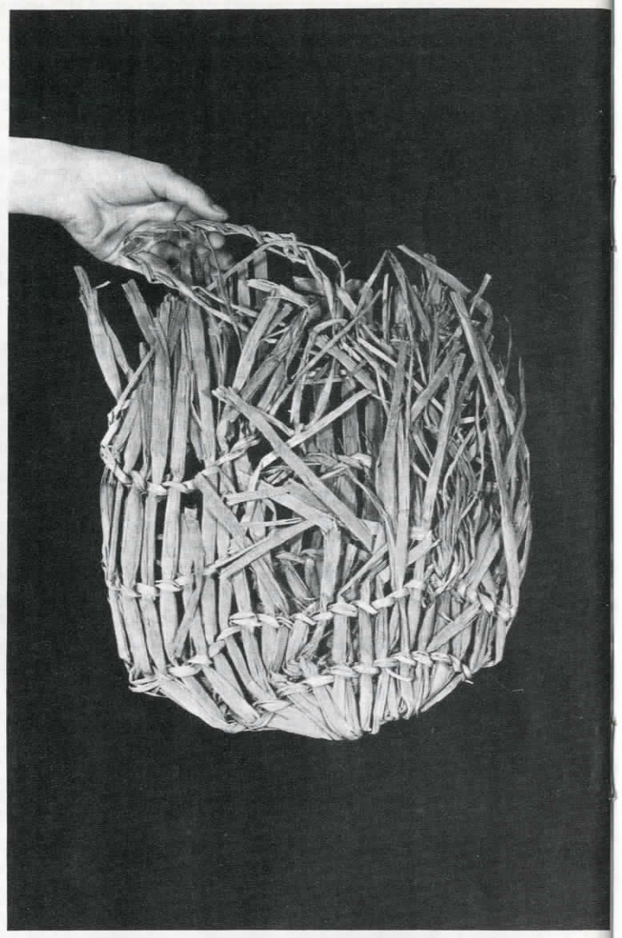
Anxious to see what was left inside this well-known site, I first visited Hidden Cave in 1967 and found Wheeler's jail-like iron gate propped open by rocks. Exploring inside with a small flashlight, I easily located the U-shaped trenches from the 1951 excavations. Despite decades of vandalism and pothunting, however, Hidden Cave retained large portions of intact deposits.

I returned often to Hidden Cave over the next decade, usually with a couple of dozen students in tow. My colleagues and I often discussed how best to tackle the difficult excavations inside. One sug-




***The Churchill County Museum in Fallon, Nevada is the starting point for tours of Hidden Cave and the Grimes Point Archaeological Area. Along the trail to Hidden Cave are petroglyphs and other caves explained by interpretive signs.***





gestion, which we seriously considered for a while, was to blast the front of Hidden Cave with dynamite, literally converting the cave into a rock shelter so that both light and fresh air would be available to the excavators. The cost, danger and destruction involved fortunately discouraged us from proceeding along that course.

We got serious about Hidden Cave about six years ago. Brian Hatoff, my former student who is now District Archaeologist for the Bureau of Land Management, knew of our long-standing interest in the site. The BLM came up with limited funds to mitigate the on-going vandalism at Hidden Cave, and Hatoff proposed that we pool forces. After visiting the site again, we agreed that the BLM and the American Museum of Natural History should take another crack at Hidden Cave.

Beyond the site's obvious geological and anthropological potential, the remaining deposits would contain significant palaeontological and palaeobotanical data. We decided to do some digging in museum collections as well. The results of the Wheelers' 1940 excavation had never been published, and few archaeologists knew of the vast collection from Hidden Cave that is now at the Nevada State Museum. Similarly, we had read Morrison's important stratigraphic findings, but the correlative archaeological aspects of the 1951 dig were largely unanalyzed and unreported. This collection, now stored at the University of California's Lowie Museum, also awaited re-analysis in light of refined chronological and stratigraphic and palaeoenvironmental data obtained in our new excavations.

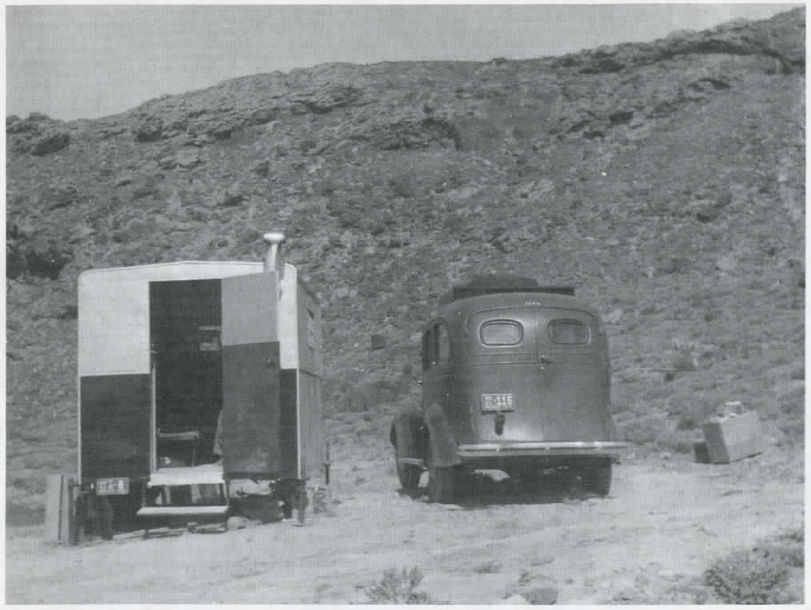
We spent the summers of 1979 and 1980 digging at Hidden Cave and re-analyzing the museum collections. The extraordinary degree of artifact preservation and the textbook stratigraphy created an ideal teaching opportunity, so we invited several dozen students to join the excavations as participants in the University of Nevada (Reno) summer field course.

But first we needed a way to see inside the cave. After installing a series of generators, we experimented with several lighting possibilities. We finally hit upon a combination of fluorescent and quartz-halogen aircraft landing lights, which provided artificial daylight everywhere in the cave.

Although darkness posed a problem for earlier excavators, their field notes complained most bitterly about the choking clouds of dust. Fearing that the dust and guano might contain hazardous spores or microorganisms, Robert Myles, our "team doctor," tested the deposits. He found no evidence of the dreaded valley fever spore *(Coccidioidomycosis),* so our only problem was the dust itself. We purchased a large supply of surgical masks for excavators to wear while working inside the cave.

But 60 trampling feet raise an amazing amount of dust, and once stirred up the particles stay in suspension for hours. We installed a series of wooden ramps, not only to facilitate movement of wheelbarrows and bucket-brigades, but also to keep busy feet off the fine-grained silt deposits. A 24-inch blower





***The prehistoric hunting and gathering people of Nevada's Carson Basin used Hidden Cave as a safe place to keep their valuables. Among the many hundreds of artifacts found in the cave are*** **(far left)** ***a basketry fragment and a bone awl used in making baskets and*** **(center)** ***a bag made of bullrushes.*** **(Right)** ***Archaeologist S.M. Wheeler and his wife Georgetta camped outside Hidden Cave throughout the summer of 1940. They fought blinding dust and darkness to retrieve more than 1,500 artifacts in that single season.***

was also hooked up to circulate fresh air throughout the cave. Although colleagues ribbed me about "air conditioning" our site, the ventilator kept the cave relatively dust free during working hours. Even so, we conducted all specialized sampling (for fossil pollen, for example) at night after the dust had settled from the day's excavation.

Working at Hidden Cave was no picnic, as three generations of archaeologists can attest. But as it turned out, the hassles of digging taught us lessons useful for understanding how Hidden Cave functioned in the prehistoric past. Whatever people did at Hidden Cave four thousand years ago, they obviously never lived there. Hunter-gatherers live only at carefully selected places which are chosen to satisfy minimal conditions of human life—accessible food, water and firewood, relatively level ground, adequate shelter, and acceptable levels of heat and light. Hidden Cave came up short on nearly all counts.

Our historical and geological investigations show that throughout the time people used Hidden Cave—roughly 4,000 to 2,000 years ago—its entrance was just about as small as when Dick Wisenhunt rediscovered it 60 years ago. Then, as now, exterior light barely penetrated the central alcove. Anyone who crawls 15 feet inside the cave is engulfed in disorienting darkness. Breathing the dust of Hidden Cave is difficult enough without adding the noxious fumes and smoke of torches or open fires.

We surmised that Hidden Cave would have made a poor residence for prehistoric people and the archaeological record bore us out. Despite the thousands of artifacts recovered, we were more impressed with what was *not* there: no ash lenses, almost no flintknapping debris, and little food bone. The debris produced in most prehistoric hunter-gatherer habitation sites was conspicuously absent from Hidden Cave.

If people did not actually live there, Hidden Cave must have been used for other purposes. The archaeological strata are riddled with more than two dozen prehistoric storage pits, most of them emptied of their contents millennia before archaeologists got there. The shape of these pits suggested that tools had been stored inside, and hundreds of prehistoric artifacts were found scattered nearby. But did these artifacts actually derive from the now empty storage pits?

Archaeologist Lewis Binford of the University of New Mexico makes a useful distinction between "active" and "passive" artifacts. An *active tool* is one that is currently and regularly involved in everyday activities. Tools become *passive* whenever they are out of synch with daily reality. Today's American attic or garage contains dozens of "passive" artifacts—skis last used in February, snow tires removed in the spring, the fly rod ready for opening day, the stadium blanket from last fall's football season, the plastic Christmas tree. Passive gear is only seasonally important, but it must be stored and cared for just the same. Passive artifacts are always ready to be upgraded to active duty.

So, too, with the tools of a desert hunter-gatherer. Flat, abrasive grinding stones are used to process hulled crops such as pine nuts. But piñon can be harvested only in the fall, so bulky grinding stones are cached in the piñon groves, ready for the next fall's harvest. These grinding stones are passive for ten months every year. Similarly, squirrels and chipmunks hibernate during the winter, so the deadfall snares used to capture them become passive for several months a year. The more seasonally spe-

*After excavations were completed Hidden Cave lies silent once again, its artifacts now the basis of an extensive research collection which will aid in interpreting the prehistoric past.*

cific the tool kit and the higher the group's mobility, the higher the proportion of artifacts that passes between active and passive states.

Hidden Cave contained hundreds of passive artifacts, often clustered around the cache pits in which they once may have been stored. Projectile points (dart tips and arrowheads), for instance, are common finds in archaeological sites of the desert West. But archaeologists usually find only broken discards. Not so at Hidden Cave. More than 80 percent of the hundreds of projectile points were unbroken and fully serviceable. These points had been heavily utilized—mostly as projectiles, but also as scrapers, knives and drills. More than one-third had been resharpened in anticipation of future use. This was not discarded garbage; these passive artifacts were ready to be retrieved when the time was right. Like the attic, Hidden Cave was a safe place to keep valuables—safe but not underfoot.

Hidden Cave is also like grandma's pantry, a place to keep canned goods and preserves. Ideally, hunter-gatherers encounter wild foodstuffs that become available in sequence—fish spawn in the spring, hard-shelled seeds ripen in the summer, acorns and piñon nuts are abundant in the fall. But not all ecosystems cooperate. Sometimes the best resources all ripen during the spring, with little available during summer and fall. One obvious coping strategy is to capture what you can in times of abundance and store what you don't need for later on. The food cache is like a tool cache—it relegates temporarily expendable foods to a "passive" state until they are needed.

Hidden Cave shows how this strategy worked in the past. In one coprolite—a simple piece of desiccated human feces—we found both cat-tail pollen and charred bullrush seeds. Since cat-tail pollen can only be collected in mid-summer and the mature fruits of the bullrush are available only six weeks later, one (or both) had been stored. At Hidden Cave, people lengthened the availability of key resources by storing them.

Another coprolite contained pieces of pine nut hull, bullrush seeds, fish bone, and unidentified seeds. It is true that piñon and bullrush both ripen in the fall. But spatial incongruity can be a problem too. Whereas bullrushes grew near Hidden Cave, the piñon woodland has always been at least 20 miles away (and probably much farther than that). But three millennia ago somebody ate both in the same day. Long-distance transport helped solve the spatial inequalities of the Carson Sink habitat.

Resource storage and transport are two strategies that repeatedly are played out in the archaeological record of Hidden Cave, suggesting that the site must have been a huge prehistoric storehouse. But how long does it take to store a few seeds and stash some tools? Not very long. Yet the site is littered with coprolites, and I was puzzled why nature should call so many, so often, in the few moments they tarried inside the cave.

To complicate matters further, the 1951 field notes describe an "aboriginal latrine"—a pit five feet in diameter, carefully lined with large rocks transported inside one by one from the Eetza Mountain hillside. Inside this pit were hundreds, if not thousands, of prehistoric coprolites. Does it make sense for people to climb halfway up Eetza Mountain merely to defecate indoors?

The late Robert Heizer of the University of California, Berkeley may have provided the answer when he suggested that such deliberately created latrines provided a store of consumed but undigested seeds within the desiccated feces that would be available in times of famine. This so-called second harvest concept derives from the first-hand early accounts of explorers, missionaries and military men. One such report, by Father Johann Jakob Baegert, discussed his mid-eighteenth-century experiences in Baja: "The pitahayas [cactus] contain a great many small seeds, resembling grains of powder, which for reasons unknown to me are not consumed in the stomach but passed in an undigested state.... The Indians collect all excrement during the season of the pitahayas, pick out these seeds from it, roast, grind, and eat them with much joking. This procedure is called by the Spaniards the after or *second harvest*!... It was difficult for me, indeed, to give credit to such a report until I had repeatedly witnessed this procedure.... They will not give it up....[emphasis added]"

"Second harvesting" graphically displays how an embedded procurement strategy works for hunter-gatherers. A few suitable cobbles carried back from a hunting trip can someday be fashioned into tools without requiring a special trip to the quarry; a broken stone tool may someday be reworked into a smaller implement if suitable raw materials are scarce; kindling tucked away inside a rock shelter is still dry when everything else is too wet to burn. Second harvesting may explain the latrine found inside Hidden Cave. The coprolites contain abundant unmilled, undigested seeds, a low-cost insurance policy that created a cheap, always accessible cache of famine food.

At least five people were buried inside Hidden Cave, and at least part of the entire artifact assemblage can be explained as grave furniture subsequently dispersed both laterally and vertically by rodent activity, scavenging carnivores or excavation. The presence of burials might seem to contradict the storage/warehouse hypothesis, but actually the two activities are not so dissimilar. After all, most grave goods are placed there to assist a deceased person in the afterlife. That is, burial caches reflect the deliberate placement of key items into storage for subsequent use by somebody. Looked at this way, grave furniture is only another cache of passive gear.

Hidden Cave displays advance planning against a dynamic if sometimes hostile environment. This well-known locale was visited for a millennium and perhaps much longer. At times, Hidden Cave was a prehistoric attic where people hid tools to be retrieved later, a pantry where temporarily abundant food items were stashed for future need, and a cache where loved ones were buried and equipped with the supplies necessary to cope with the afterlife. The story of Hidden Cave is complex, but more is now known about this famous site as its study moves into the fourth generation. □