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DEVIL’S GATE, a narrow cleft carved by the Sweetwater River, lies just north of the historic trails passing through central Wyoming. Although the gap was impassable for wagons, many emigrants camped nearby, and almost all took the detour to inspect the gorge. It’s now a National Historic Site.

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Joining forces with a government agency, the Conservancy acquires Fort Adams.

**45 new acquisition**

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The Conservancy signs an option to obtain Fort Parker, a 19th-century site where the Crow were forced to adjust to a new life.

**46 new acquisition**

**PRESEVING A REMARKABLE ROCK ART SITE**

The 3,000-year-old Shavano Valley Rock Art site is considered the most important site of its type in the area.

**48 point acquisition**

**SAVING THE FAMILY FARM**

The Blanchard farm has been cultivated by families since the early 1900s. Centuries earlier it was farmed by ancient people who built a mound group there.

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**COVER:** Devil’s Gate, a narrow cleft carved by the Sweetwater River, lies just north of the historic trails passing through central Wyoming. Although the gap was impassable for wagons, many emigrants camped nearby, and almost all took the detour to inspect the gorge. It’s now a National Historic Site.

**Credit:** Bureau of Land Management ARRA Historic Trail Inventory
Looting of archaeological sites is a worldwide problem. But in most every nation, sites are protected by laws wherever they happen to be located. Not so in the United States, where our fervent belief in private property rights allows private owners to pretty much do as they please with ancient ruins. Why does this tradition make the enforcement of the federal Archaeological Resources Protection Act of 1979 (ARPA) so difficult? In this issue we explore some of those problems (see “Fighting Archaeological Crime,” page 18).

ARPA protects archaeological sites found on public and Indian lands. It does not apply to private lands. That means law enforcement officers must either catch the looters in the act or prove that the stolen artifacts came from public lands, a very difficult task. Sophisticated looters and dealers have become expert in fabricating a paper trail that “authenticates” a private provenience for stolen items. In order to have a successful prosecution, officials must successfully discredit that paper trail. Better trained officers and scientific advances are now making a big dent in that big problem. Archaeologists have developed methods to identify trace elements that can link a stolen pot, for example, to a particular site.
Earliest Exploitation of Ground Sloth

I found your News article “Earliest Evidence of Humans in Ohio” (Summer 2012) interesting, but disappointing. Evidently archaeologist Brian Redmond and his colleagues didn’t adequately review the literature involving his statement that “This discovery provides the first direct evidence for early human (Paleo-Indian) exploitation of Jefferson’s ground sloth.” Actually, I published the first record in 2009 in Central States Archaeological Journal.

David A. Easterla Ph.D.
Distinguished University Professor of Biology
Northwest Missouri State University

Brian Redmond Responds

David Easterla is incorrect in his assertion that we did not conduct an adequate review of the literature in the course of our study. In fact, we read his article and cited his work on page 95 of our paper. Unfortunately, we found his presentation of evidence for butchering of the Iowa specimen incomplete and unconvincing. I stand by my statement.

Brian G. Redmond, Ph.D.
Curator and John Otis Hower Chair of Archaeology
The Cleveland Museum of Natural History

Skeptical of the Solutrean Hypothesis

Dennis Stanford and Bruce Bradley wove a story from half truths, misquotes, and absolute fiction in their book Across Atlantic Ice and then published it as scientific research. (“See Iberia, Not Siberia?” Summer 2012). On top of this they did not even use original ideas but just rehashed old and often Anglocentric claims from decades ago which have already been debunked.

Readers need to be wary and understand that just because an individual is connected with a big name entity (Stanford is a curator of archaeology at the Smithsonian), it does not automatically mean what they write should be taken seriously.

Dixie Dringman
Rock Island, Washington

American Archaeology welcomes your letters.
Write to us at 5301 Central Avenue NE, Suite 902, Albuquerque, NM 87108-1517,
or send us e-mail at tacmag@nm.net.
We reserve the right to edit and publish letters in the magazine’s Letters department as space permits. Please include your name, address, and telephone number with all correspondence, including e-mail messages.

Richard Hansen, an archaeologist who is directing the excavation of El Mirador, a Maya site in Guatemala, once told me that Maya researchers used to focus on “stones and bones.” But that’s changing. Hansen is one of a number of researchers who practice what’s often called community archaeology.

The concept behind community archaeology is that local people participate in the project. In some cases, the locals have a voice in the research objectives, in others the archaeology serves as a sort of engine that drives economic development to help impoverished people.

This brings me to Christian Wells and his project on the Honduran island Roatán (See “Revealing the Real Roatán,” page 30). Wells is searching for stones and bones and the like, but his ambitions go well beyond recovering and interpreting artifacts.

Little is known about Roatán’s past, so Honduran officials asked Wells, an American, to investigate the island to better understand its history.

If that weren’t enough to keep him occupied, Wells is also assessing the impact of mass tourism on the island’s cultural resources. Roatán gets plenty of cruise ship traffic, and it’s been given a phony Maya pedigree to appeal to tourists. So, in a related project, he’s working to promote heritage tourism. That entails getting the island’s real indigenous peoples—such as the Pech and Garifuna—to value their heritage, and to have the cruise ship crowd value it as well.

Some people think archaeologists shouldn’t engage in such extracurricular activities, and Wells expressed some concern about his role as archaeologist/activist. But he, like Hansen and others, is pressing ahead, pushing the boundaries of what archaeology can achieve.

Michael Baraga
Why Save Archaeological Sites?
The ancient people of North America left virtually no written records of their cultures. Clues that might someday solve the mysteries of prehistoric America are still missing, and when a ruin is destroyed by looters, or leveled for a shopping center, precious information is lost. By permanently preserving endangered ruins, we make sure they will be here for future generations to study and enjoy.

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The Role of the Magazine:
American Archaeology is the only popular magazine devoted to presenting the rich diversity of archaeology in the Americas. The purpose of the magazine is to help readers appreciate and understand the archaeological wonders available to them, and to raise their awareness of the destruction of our cultural heritage.

How to Say Hello: By mail: The Archaeological Conservancy, 5301 Central Avenue NE, Suite 902, Albuquerque, NM 87108-1517; by phone: (505) 266-1540; by e-mail: tacmag@nm.net; or visit our Web site: www.americanarchaeology.org
**NEW EXHIBITS**

**Fenimore Art Museum**

Cooperstown, N.Y.—Revealing the extraordinary range of art produced by Native American cultures, the stunning exhibit “To Great Acclaim: Homecoming of the Thaw Collection of American Indian Art” surveys the extraordinary achievements of North America’s first artists in more than 100 objects of transcendent beauty, including ritual objects, ceremonial clothing, pottery, and basketry. In 1995, the museum added their American Indian Wing designed to house the extraordinary gift from Eugene and Clare Thaw of their collection of American Indian Art. The collection has continued to grow and today numbers almost 850 objects representative of a broad geographic range of North American Indian cultures including the Northwest Coast, Woodlands, Plains, Southwest, Arctic, California, and the Great Basin regions. (607) 547-1400, www.fenimoreartmuseum.org (Through December 31st, 2012)

**Arizona State Museum**

University of Arizona, Tucson, Ariz.—View a sampling of the world’s largest collection of American Indian basketry and other woven wonders in the new exhibit “Basketry Treasured.” The exhibition of 500 pieces represents the depth and breadth of the museum’s collection of some 25,000 woven items. Examples of 2,000-year-old sandals, a rare coiled bifurcated burden basket, an ancestral Puebloan twilled basket mirroring today’s Hopi ring baskets, and other examples of early basketry and cordage products demonstrate basketry’s deep roots in the American Southwest. O’odham, Apache, and Hopi voices enrich the exhibit’s discussions of materials, technologies, traditions, and the many functions basketry has served and continues to serve in native communities. (520) 621-6302, www.statemuseum.arizona.edu/exhibits (Through June 1, 2013)

**Canadian Museum of Civilization**

Gatineau, Quebec, Canada—The ancient Maya civilization rose to incredible heights over 1,500 years ago, then mysteriously faded away, leaving behind its jungle cities, grand pyramids, and wondrous artifacts. Who were these people and what became of them? The landmark exhibit “Maya - Secrets of Their Ancient World” explores this mystery, examining the sacred roles of divine Maya rulers, their elaborate writing and counting systems, the cycles of life and death, and the 2012 end-of-days legend. Featuring nearly 250 outstanding artifacts drawn from museums in the Americas and the United Kingdom, the exhibit includes some of the most recent and significant archaeological discoveries linked to the Maya Classic Period, when the civilization was at its peak. Some of the artifacts are on public display for the first time ever. The exhibition was co-produced with the Royal Ontario Museum in collaboration with Mexico’s National Institute of Anthropology and History. (800) 555-5621, www.civilization.ca/maya (Through October 28)

**Field Museum of Natural History**

Chicago, Ill.—The museum’s groundbreaking exhibition “The Ancient Americas” takes you on a journey through 13,000 years of human ingenuity and achievement in the Western Hemisphere, where hundreds of diverse societies thrived long before the arrival of Europeans. Discover how and why certain cultures changed over time, developing farming, creating new forms of artistic expression, and forging mighty empires. Step into the windswept world of Ice Age mammoth hunters, walk through a replica of an 800-year-old pueblo dwelling, explore the Aztec empire and its island capital Tenochtitlan, and see more than 2,200 artifacts, fantastic ice-age reconstructions, and dozens of videos and interactive displays that depict the amazing ingenuity with which ancient peoples met the challenges of their times and places. (312) 922-9410, www.fieldmuseum.org (Long-term exhibit)
Pueblo Grande Museum Archaeological Park
Phoenix, Ariz.—The new exhibit “Living in the Desert: Decisions and Consequences” explores the trade-offs made in the quest for desert sustainability in ancient, historic, and modern times. The exhibit, which resulted from collaboration between the museum and Arizona State University, includes a focus on water use from the Hohokam canal system through the allocation of Colorado River water today. The population of the Southwestern United States can learn from the experiences of the Hohokam 1,000 years ago. (602) 495-0901, www.pueblogrande.com (Opens October 12)

Peabody Museum of Archaeology and Ethnology
Harvard University, Cambridge, Mass.—“Encounters with the Americas” explores the native cultures of Latin America before and after 1492, when the first voyage of Christopher Columbus initiated dramatic worldwide changes. The exhibit considers 16th-century native responses to military and religious missions, the introduction of new plants and animals, and the tragic toll of new diseases. Exploring the unique, pre-1492 civilizations, exemplified by the Classic Maya and Post Classic Aztec, the exhibit presents the continuing struggle of contemporary Maya, Panamanian Kuna, and Amazonian native groups to maintain their values and autonomy. (617) 496-1027, www.peabody.harvard.edu/exhibits (Long-term exhibit)

CONFERENCES, LECTURES & FESTIVALS

Plains Anthropological Conference
October 3–6, Delta Bessborough Hotel, Saskatoon, Saskatchewan, Canada. The annual conference will address recent research in the Plains region through paper presentations, poster sessions, and symposia. A pre-conference tour of Wanuskewin Heritage Park will be held on October 3rd, followed by an opening reception at the hotel. Guided tours will take participants to the Herschel Petroglyphs and Tipi Ring Sites, the Heron-Eden bison kill and butchery site, and other areas. Contact Margaret Kennedy at marg.kennedy@usask.ca, or visit www.pacsk2012.com

Mogollon Archaeology Conference
October 4–6, Western New Mexico University, Silver City, N.M. The conference will focus on Mogollon archaeology, including Jornada Mogollon and Northern Chihuahua. Papers and mini-symposia will be presented Friday and Saturday. A special mini-symposium “Celebrating the Nan Ranch Collection: The Past, Present and Future” will be held Friday, highlighting the vast collection of Mimbres pottery that was recently donated to the museum. A dinner social is planned for Friday night at Bear Mountain Lodge. Go to for more information and to register, or contact Cynthia Bettison at bettisonc@wnmu.edu or (575) 538-6386, or visit www.wnmumuseum.org

Midwest Archaeological Conference
October 17–21, Michigan State University, East Lansing, Mich. A range of papers, poster sessions, symposia, and workshops will focus on the latest research in Midwest archaeology. Fieldtrips to local sites will take place on Sunday. www.midwestarchaeology.org

Great Basin Anthropological Conference
October 17–21, Stateline, Nev. Symposia, paper, and poster presentations will be held, as well as fieldtrips to the Talimena historic sites and Hidden Cave. http://gbac.wshsites.net

Pueblo Indian Studies Symposium
October 25–26, Indian Pueblo Cultural Center, Albuquerque, N.M. Hosted by the Indian Pueblo Cultural Center, the School for Advanced Research, and the Leadership Institute at the Santa Fe Indian School, the symposium will highlight current research in the field of Pueblo Indian studies in honor of noted Pueblo historian Joe Sando. (505) 954-7205, iarce@sarsf.org, http://sarweb.org/?2012_pueblo_indian_studies_symposium-p-symposiums

Eastern States Archaeological Federation Annual Meeting
October 25–28, Holiday Inn – French Quarter, Perrysburg, Ohio. Hosted by the Ohio Archaeological Council, the annual meeting includes paper presentations, posters, thematic sessions, and workshops on topics related to archaeology in the Eastern United States. Contact Martha Otto of the Ohio Archaeological Society at tm3542@aol.com, or visit http://esa-atarcheology.org

Southeastern Archaeological Conference
November 7–10, Hilton Baton Rouge Capitol Center, Baton Rouge, La. Paper and poster presentations and symposia will focus on the latest research in the region. A reception will be held Thursday evening, a Friday night dance will take place in the hotel’s ballroom, and Saturday afternoon features field excursions to local archaeological sites. Contact Rebecca Saunders at (225) 578-6562, rsaunders@lsu.edu, or visit www.southeasternarchaeology.org
Radiocarbon dating of human coprolites associated with Western Stemmed projectile points from Paisley Caves in south-central Oregon indicate that the points are as old as those produced by the Clovis people, who were once thought to be the first Americans. Western Stemmed points, which look different than Clovis points and were previously thought to be younger than them, were apparently produced by a different group of Paleo-Indians.

A team led by Dennis Jenkins of the University of Oregon’s Museum of Natural and Cultural History published their research in *Science*, where they also state that they have confirmed the authenticity of 14,300-year-old human coprolites (fossilized feces) that were discovered in the caves.

Unlike the long, fluted stone projectile points characteristic of the Clovis culture, the points recovered from the Paisley Caves have narrow stems and were shaped by a different flaking technique. Western Stemmed points have mostly been found on the West Coast and in Idaho, Nevada, Utah, and Wyoming. The oldest Western Stemmed point found in the caves was in the same stratum as a 13,200-year-old human coprolite. “At this stage we have dates that are very sound on Western Stemmed points,” Jenkins said.

Jenkins sees a scenario in which the Clovis may have arisen in the Southeastern United States, where the majority of Clovis points have been found, and then moved west, while the Western Stemmed tradition began in the West and then moved east to the Plains.

Although the researchers’ recent *Science* article does not address the routes First Americans may have taken into the New World, the DNA extracted from the Paisley Caves coprolites continues to point to Siberia-east Asia origins, with the human mitochondrial DNA deriving from haplogroup A, which is common to Siberia and found, along with haplogroup B, in Native Americans today.

The Paisley Caves complex is a system of eight caves located in Oregon’s arid northern Great Basin. The researchers have conducted DNA analysis on 65 coprolites, and 190 radiocarbon dates were obtained from material at several of the caves, including bones, sagebrush twigs, and artifacts. Jenkins first discovered 14,000-year-old human coprolites in 2008, but at that time some researchers voiced doubts that humans produced the coprolites. But with the results of the recent DNA testing, he and his colleagues believe they have now proven that the coprolites are the oldest biological evidence of humans in the Americas. — Tamara Stewart

These are examples of the Western Stemmed points recovered from Paisley Caves.
Florida archaeologists recently announced the discovery of the lost mission of Potano and the earliest known and largest assemblage of artifacts related to Hernando de Soto’s exploration of the New World, pinpointing for the first time the midpoint of the Spanish explorer’s trail through Florida in 1539.

“It’s one of the most important discoveries from the historic period at a New World site that’s been confirmed in the last decade,” according to Ashley White, a member of the Governing Board of the American Institute of Archaeology, who found the sites on his family’s 700-acre property near Ocala, Florida.

White first discovered a copper Spanish coin minted between 1497 and 1504 in a clump of pine trees near a creek after storms caused the bank to erode in 2005. Since then, a team of archaeologists and volunteers, including White’s wife Michele, who is a bioarchaeologist, his son Ethan, and field school students from the College of Central Florida, unearthed two more copper Spanish coins minted between 1471 and 1504, links of chain mail armor and rosary beads made in the early 16th century, and a domesticated Spanish pig jaw, radiocarbon dated to 1539.

According to historical accounts, de Soto and his men stayed at the Indian town of Potano for three weeks, beginning August 11, 1539. Based on the age of the artifacts, the proximity of Potano, and other evidence, archaeologists are certain that de Soto and his men left the objects behind.

About 200 yards away from the creek site, the Whites also discovered the site of the lost Mission San Buenaventure De Potano, which Spanish priests established on the site of the Indian town in 1607. The finds there include evidence of a building, a cache of over 100 medieval coins minted between 1566 and 1665—the largest deposit ever discovered in the New World from that era—colorful glass beads, and Spanish Majolica pottery pieces.

Although researchers have assumed that Potano was located near Ocala, until now, the exact location of the town has been a mystery. “Pinpointing its location takes the guesswork out of reconstructing de Soto’s trail through central Florida,” White said. It could also help identify new archaeological sites. Tallahassee is the only other confirmed Florida location on de Soto’s route.

Most researchers agree that de Soto landed near Tampa Bay and then marched through Florida searching for gold and food, stopping at Potano, and eventually Utinamocharra (near Gainesville), before wintering in Tallahassee. He continued his unsuccessful quest for riches through the Southeastern United States until he died on the banks of the Mississippi in 1542. — Paula Neely
Largest Maya Dam Found at Tikal

The dam stored water delivered by a sophisticated catchment system.

Archaeologists studying the ancient city of Tikal, in Guatemala, have discovered a waterworks system and the largest known dam built by the Maya in Central America. The discoveries shed new light on how the Maya conserved and used natural resources to sustain a populous, complex society in a tropical environment for over 1,500 years, despite drought and other environmental challenges.

Since rainfall was seasonal and extended droughts were not uncommon, the Maya carefully integrated expansive plazas, roadways, buildings, and canals into a sophisticated, long-lasting water collection and management system, according to lead researcher Vern Scarborough.

Scarborough, an archaeologist at the University of Cincinnati, said Tikal’s paved plaza and courtyard surfaces were sealed with plaster and canted in order to direct and sluice rainwater runoff into a descending series of reservoirs. The largest reservoir is the Palace Dam, one of several built to contain the water. More than 260 feet in length and about 33 feet high, the dam held about 20 million gallons of water. Constructed from cut stone, rubble, and earth around A.D. 250, the dam was augmented several times until about A.D. 800.

The top of the dam also served as a roadway that still connects parts of the city. It was considered primarily a causeway for a long time. “We were the first to prove that it was also a dam, though others had suggested it” Scarborough said. He noted that many other Maya cities may also have causeways that served as large dams, but they haven’t been studied, yet.

The team also discovered layers of quartz sand in sediment corings from Tikal’s reservoirs, which are now dry. Scarborough said the sand would have been used to filter and purify water. The find was unexpected since quartz sand is not naturally found in the Tikal area; the Maya had to travel at least 20 miles to obtain it and bring it back.

Filtering the water through a berm or box of sand as it entered the reservoirs would have made a “big difference,” he said. “They were catching almost all of the water running off the city’s surfaces, and it would have been somewhat polluted.” Approximately 60,000 to 80,000 people lived in the central city and five million people lived in the greater southern Maya lowlands.

The archaeologists also identified a switching station that allowed the Maya to control the flow of water, found evidence of how water was released from reservoirs, and unearthed the deepest rock-cut canal in the Maya lowlands.

“Looking at these systems is the future of archaeology,” Scarborough said, adding that some aspects of them could be deployed today in developing countries faced with similar challenges. —Paula Neely
Analysis of organic residue in ancient beakers discovered at Cahokia, a massive Mississippian site in Illinois with over 200 mounds, has revealed that a beverage called “black drink” was used for ritualistic purposes as early as A.D. 1050. “It’s the earliest known use, and it’s the first time black drink residues have been found at an archaeological site,” according to archaeologist Patricia Crown of the University of New Mexico.

Crown explained that early European explorers documented Native Americans in the Southeastern U.S. consuming black drink, a tea made from Yaupon Holly leaves, in the 1500s. Based on the explorers’ accounts, native men drank it from shells and then vomited during ritualistic purification ceremonies before they went to war or prior to other important events. Black drink contains caffeine, so it would have kept them awake and provided energy, but it should not have caused vomiting, she noted.

It’s also the first time use of the caffeine-laced drink has been documented at a site where the tree does not grow, she said. Cahokia is about 300 miles north of the tree’s range, so the leaves would have been imported. “People traded widely for coffee-like substances in other areas. I believe it might have been an important exchange item in North America,” she said.

During the past two years, researchers tested residue from distinctive Cahokia beakers that date from 1050 to 1250 that were unearthed in and around Cahokia, according to archaeologist Thomas Emerson of the Illinois State Archaeological Survey. The unusual beakers are made from local clay with a black or red glossy finish. Many are engraved with swirls and spirals that are symbols of water and the underworld. Since they make up a small percentage of the Cahokia collection, archaeologists assumed they were used for special purposes.

The residue was analyzed using a technique known as liquid chromatography-mass spectrometry/mass spectrometry by chemists Jeffrey Hurst of the Hershey Technical Center, and Jiyan Gu and Tim Ward of Millsaps College. They found ursolic acid, a biomarker that helped them identify that the drink was made from the Yaupon Holly, which grows along the coast in the Southeastern U.S.

Emerson said the discovery supports earlier suggestions that Cahokia played an important role in the development and spread of rituals that elevated the use of black drink throughout the Southeast. As many as 20,000 people lived in the center of Cahokia during its heyday around A.D. 1100. By the mid-1300s, it was abandoned.

The beverage is prepared by plucking the holly leaves, toasting them, boiling them in water and then frothing the brew. The drink was consumed historically in parts of the Southeast, according to Crown, and may still be consumed today. —Paula Neely
Based on DNA studies, an international team of researchers has found that Native American populations from Canada to Chile arose from at least three migrations of people from Asia. But most Native Americans descended from a single group that crossed over Beringia, a land bridge between Asia and America that existed during the Ice Age roughly 15,000 years ago, according to the study.

“For years it has been contentious whether the settlement of the Americas occurred by means of a single or multiple migrations from Siberia,” said Professor Andres Ruiz-Linares, of University College London. “Our research settles this debate: Native Americans do not stem from a single migration. Our study also begins to cast light on patterns of human dispersal within the Americas.”

Led by Ruiz-Linares and Professor David Reich of Harvard Medical School, the team analyzed DNA samples obtained during the past few decades from living donors from 52 Native American and 17 Siberian groups. Studying more than 300,000 specific DNA sequence variations called single nucleotide polymorphisms, they examined patterns of genetic similarities and differences between the populations.

According to the study, most of the Native American populations arose from the first migration, referred to as “First Americans.” Ruiz-Linares said it is difficult to pin down exactly where they came from due to the complex population history of East Asia and the limited sampling they have of the region.

The second and third migrations, whose DNA is most closely related to present-day East Asian populations, left an impact only in Arctic populations that speak Eskimo-Aleut languages and in the Canadian Chipewyan who speak a Na-Dene language.

Researchers noted that Eskimo-Aleut speakers and the Chipewyan also derive their DNA from First Americans, reflecting the fact that the two later streams of Asians mixed with the First Americans after they arrived in North America.

However, since most of the DNA samples studied are from South America, Ruiz-Linares said there could be more than three migrations. “More studies of North American populations are needed,” he said.

The study also identified that once in the Americas, most people expanded southward along a route that hugged the coast with populations splitting off along the way.

Reich and Ruiz-Linares noted that the study was challenging because of the widespread occurrence of European and African mixture in Native American groups. “We developed a method to peel back this mixture to learn about the relationships among Native Americans before Europeans and Africans arrived, allowing us to study the history of many more Native American populations than we could have done otherwise,” Reich explained.

—Paula Neely
Witchcraft and sorcery were commonly practiced in ancient Mesoamerica, and scholars are learning they were used for various purposes.

By Julian Smith

When Moctezuma II sent a welcome feast to Hernán Cortés and his fellow conquistadors in 1519, the emperor offered the very best products of the Aztec empire to his guests in their heavily guarded camp. He also sent a number of attendants whose duties were anything but welcoming: *nanaoalti*, witches who sneaked up on victims by transforming into animal alter egos called *nabualli*, *tlatlacateculo* or “owl men,” skilled assassins who attacked at night with the stealth of nocturnal birds of prey; and *tetlachivianime* (“those who do things to someone”), experts in poisons and biological pathogens.

This was Moctezuma’s first and best chance to strike at the invaders, but he made a critical miscalculation, said Timothy Knab of the Universidad de las Américas in Puebla, Mexico: he also sent sacrificial victims whose blood was spat- tered on the food, to honor the Spanish in case they were gods, and probably also to show them what befell Aztec captives. Disgusted, the Spanish refused the meal and its hidden
toxins. Within two years the Aztec Empire had fallen and Moctezuma was dead.

Moctezuma’s missed opportunity was a dramatic example of state-sponsored black magic. The practice of witchcraft and sorcery was widespread throughout ancient Mesoamerica, said Jeremy Coltman of California State University at Los Angeles. There is evidence that it was practiced by the Aztec, the Maya, the Eastern Nahua, and possibly other cultures. The tradition continues today, on a smaller scale, in villages from Mexico to Panama, where curanderos (healers) and brujos (witches) reach out to the spirit world for power to both help and harm. Magic and witchcraft was, and still is, used to exercise social control and political power, and to maintain the physical and spiritual health of indigenous communities. Scholars are studying ancient Mesoamerican art for clues to these practices, and their place in the culture and worldview of some of the New World’s most successful ancient civilizations.

Images of disembodied human heads are common in ancient Mesoamerican art, said Coltman, and considering the head’s powerful symbolism, “there is good reason to assume that the act of decapitation may have been associated with sorcery just as it is in other parts of the world.” (Amazonian cultures like the Shuar in Ecuador are known to have taken heads to gain power or avenge sorcery.) In Costa Rica and parts of Nicaragua and Panama, indigenous groups were recorded taking human heads as trophies in both large battles and targeted raids. In this region, the earliest effigy heads were made of ceramic around A.D. 300–700, when priesthoods were emerging and religious practices were being standardized in increasingly complex societies.

Complex stone carvings called flying panel metates, resembling elaborately carved tables or seats, date to the same period. Decorative scenes carved into the legs and around the edges of the rims show stylized heads being pecked at by toucans or clasped between jaguars’ paws. Others show

This Maya illustration dated to A.D. 755 depicts a were-jaguar bound to scaffolding (lower left) while others dance. A glyph above identifies it as a supernatural being known as a wahy, depicted here as a person in jaguar form.
human figures holding bodiless heads or axes. These may be mythological scenes of creation, but in practical terms the metates, whose upper surfaces are polished from use, “were undoubtedly used for the preparation of something other than food,” said John Hoopes of the University of Kansas—perhaps rituals involving the preparation or display of heads taken in battle, or grinding bones to use in magical potions.

Sites dating to A.D. 1000-1550 in the highlands and Caribbean lowlands of Costa Rica have produced sculptures in volcanic stone that clearly depict naked figures brandishing or wearing severed heads. Monumental statues from western Panama show fanged beings holding trophy heads in their hands or on cords across their chests and backs. Other examples of trophy heads have turned up sculpted in gold, jade, and greenstone.

Starting with early Spanish accounts, head iconography in Mesoamerican art has usually been explained as images of trophy taking and warfare. The lack of archaeological context for many of the artifacts makes them difficult to interpret, said Hoopes, but certain details suggest the practice was linked to ritual or sorcery, starting with the sheer prominence of the images. The heads are often associated with elaborately costumed, fanged, and presumably supernatural figures, some of whom may be usékaris from Costa Rica’s Bribri culture, shaman-priests who protected communities from evil and wielded the power of black magic themselves. (In the Amazon this kind of maleficent magic has been called “assault sorcery.”) Usékaris were so powerful their own heads could supposedly survive being cut from their bodies. A Bribri story has it that a severed Usékar head attacked its foes.

Together with their living sacrifices and blood rituals, these sent a clear message to would-be rivals. “It’s a form of terrorism,” said John Pohl of UCLA who, along with Coltman, is coediting an upcoming book on Mesoamerican sorcery and witchcraft. “They were taking something that had existed in Mesoamerica since Olmec times and elevating it to something that would absolutely terrify people they were trying to conquer.” Early colonial writers recorded how Aztec rulers invited kings of enemy states to large festivals where captured warriors were slaughtered in front of them. “The explicit statement was, this is what you get if you don’t join the empire.”

The Aztec also used skull racks called tzompantli as state-sponsored displays of terror. The Classic Maya used skull racks as well, and they left head iconography in places like the stucco façade at Toniná in Chiapas. There the “frieze of the dream lords” shows a skeletal supernatural being, known as a wahay, called Turtle Foot Death holding a head in one hand as two more dangle from a leafy bower in which he stands. At Chichén Itzá, a mural in the Temple of the Warriors shows what may be Tlahuizcalpantecuhtli, the Central Mexican deity of war and decapitation, holding a head. A common scene on Late Classic Maya bowls and vessels shows a
wahy in the midst of sawing through his own neck.

The clear link between wahy beings and decapitation is a strong argument for a ritual aspect to beheading among the Classic Maya, said Colman. These spirit beings were closely associated with witchcraft, and since the wahy glyph was deciphered in 1989, ethnographic and literary evidence of the demonic and harmful side to their magic has been steadily accumulating. (Some wahy personified diseases.) Their appearance on drinking vessels suggests that sorcerers may have tried to conjure them by drinking intoxicating beverages and entering a dreamlike state.

Another common theme in Mesoamerican magic is an overlap of positive and negative effects—the idea that the same powers that could hurt could also heal. This duality shows up in the process of diagnosing and curing diseases affecting the Eastern Nahua of Puebla and Veracruz in Mexico, said Pohl. Like many early Mesoamerican cultures, the Eastern Nahua believed that sickness and death were caused by interference in the spirit world, and so only a sorcerer could cure a patient, essentially fighting magic with magic.

Even today the Eastern Nahua blame disease on spirit forces called ebecatl, whose domain is weather phenomena like wind, rain, and lightning, or else on malicious sorcerers meddling in the supernatural realm. Making diagnoses involves things like reading maize kernels cast onto a cloth, often with the help of hallucinogens, stimulants, intoxicants, and animal poisons that help the diviner visualize and commune with the supernatural. The ritual also includes a feast, flower decorations, and incense meant to distract unwelcome spirits before getting rid of them.

“We shouldn’t be surprised to see that major themes expressed on ancient Eastern Nahua drinking vessels concern both sorcery and hallucinogenic intoxication,” said Pohl, especially given how important ritual intoxication still is. Eastern Nahua bowls, basins, goblets, and plates were ornamented with body parts like skulls, hearts, and hands, along with identifiable species of poisonous insects, snakes, and psychoactive plants like sinicuichi, a flower in the loosestrife family the Eastern Nahua called the “Sun Opener.”

Eastern Nahua sorcerers had a long list of mind-altering substances to choose from, starting with mild ones like native tobacco and cacao, whose main alkaloid, theobromine, has a caffeine-like effect. Octil was a drink made from fermented agave, sometimes amplified by adding ground seeds of ololiubqui, a species of morning glory. The seeds of this climbing vine have an effect similar to LSD, and were sometimes mixed with the body fluids of poisonous spiders, snakes, and insects to make a paste called teotlacualti that was smeared over the body. Hallucinogenic mushrooms in

This Maya monument from Yaxchilan, in Mexico, represents a royal woman named Lady Xoc conjuring the spirit of a deceased warrior ancestor from a bowl containing blood-letting instruments. Sorcery may have been the means by which many royal women participated in the factional disputes between Maya royal houses, sending the spirits of warrior ancestors to defeat an enemy while the warlords fought on battlefields.
the genus *Psilocibe*, whose native name teonanacatl meant “sustenance of the gods,” also helped bring on visions and communicate with the spirit world. The curing ritual often involved transformation into animal forms, a concept that eventually spread throughout the Americas. Helped along by the hallucinogens, shamans would take the forms of jaguars, eagles, snakes, or crocodiles and enter the supernatural realm to identify and fight the cause of sickness—“a form of supernatural espionage,” said Hoopes. If the source was found to be a practitioner of black magic, one solution was to decapitate the person, an act that if repeated enough could lead to large-scale conflict.

Warfare, in ancient Mesoamerica, may not have been strictly conventional. The application of magic and witchcraft at the state level is a relatively new area of study, said Coltman. “Recent research suggests maleficent magic was a significant component of the ideologies of complex Mesoamerican societies.” It’s easy to imagine a witch putting a curse on someone or a healer curing a relative or friend, he said, since that is still going on in many parts of the region. “It’s very different to think about a Maya king throwing down a hex on his enemies or conjuring personified illnesses,” as Moctezuma II tried to do to the Spanish.

Evidence like the decorated ceramics and sculptures—used by the elites, not common people—implies that cultures like the Maya, Aztec, and Eastern Nahua used sorcery to advance the goals of the state. Some cultures even had distinct types of healers and sorcerers for different scales of magic. In Costa Rica, the Bribri had both usékars, who dealt with community-wide sickness and imbalance, and *awás*, who treated personal illnesses.

The prevalence of the wáhy glyph shows how the elite invested in the occult, incorporating into their belief system the spirit beings that participated in assault sorcery, said Pohl. Other cultures around the world incorporated concepts of sorcery into their perspectives, albeit with beasts and demons that were largely peripheral or protective agents.
But Mesoamerica’s state-sponsored monuments and cults celebrating the magical and macabre were unusual, he said. “We don’t see this commemoration at this level in other civilizations, it’s really the peoples of the Western Hemisphere, especially the Aztecs, who make it institutional in their art and ritual.”

The explanation may lie in the relationships between those at the top: closely knit elite classes formed around kinship groups, like the Classic Maya, that couldn’t afford to destroy each other when quarrels erupted for fear of bringing the whole system down. “The façade of witchcraft is so prevalent in the iconography of Mesoamerica that it would actually work as a sophisticated intellectual system for the resolution of factional disputes,” said Pohl. When these groups were unwilling or unable to go to war against each other, they resolved their differences using more clandestine methods, namely witchcraft and sorcery. This shifted responsibility for assassinations or political murders from individuals or kinship groups to a “third party” in the supernatural realm.

In discussing witchcraft and sorcery in ancient Mesoamerica, it’s important to keep the cultural context in mind, said Hoopes. Casting spells, changing into animals, drawing power from an enemy by possessing his head—all of this was done (and some still is) within the context of a belief system that, to its adherents, was internally consistent and entirely rational. Sensationalism over some of the more extreme practices, like Aztec heart sacrifices, has been used to denigrate indigenous cultures as irrational and barbaric. But “the cutting off and displaying of peoples’ heads wasn’t wanton savagery and violence,” said Hoopes. “These old guys in the Ecuadorian Amazon who tell stories about taking heads aren’t regarded as psychopaths or homicidal maniacs. They undertook it as necessary evil they did for benefit of their communities.”

Outsiders always bring their own preconceptions, said John Monaghan of the University of Illinois at Chicago, starting with the 16th and 17th century Spanish friars who brought a complex taxonomy of superstition from the Old World that they applied—not necessarily accurately—onto Mesoamerican religious practices. In the 20th century, the works of Carlos Castaneda brought Mesoamerican spirituality worldwide attention, but his questionable approach earned the scorn of scientists even as it sparked an influx of New Age and counterculture seekers with money to spend.

Anthropologists who study the modern practice of witchcraft find it veiled in secrecy, especially the deadlier varieties, whose goals would be considered homicide. It may not accomplish its ends, and the issue of shifting responsibility is still crucial. “The very act of witchcraft is couched in a complex metaphorical framework designed to absolve practitioners of the moral stigma of their acts,” said Knab.

In Hoopes’ view, the ancients’ focus on psychological manipulation and the use of fear to influence behavior echoes today in everything from color-coded terror alerts to anxiety over digital hacking. (Pohl noted the significance of the Mexican drug cartels’ practice of beheading enemies: “It’s clear they’re fully aware of this is part of an ancient, if not traditional, psychology.”) Sorcery and all, Hoopes said, ancient Mesoamerican societies weren’t completely alien from our own. “We can understand those cultures by looking more carefully at our own, and vice versa.”

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The first break in the case came when motion-sensing cameras caught the 52-year-old man sneaking into Petersburg National Battlefield with his dog, a metal detector, and a gunnysack. It would be a month before authorities finally caught John Jeffrey Santo in the act of digging up Civil War artifacts. But once they did, they were stunned by the scope of his looting. A search of Santo’s home turned up more than 9,000 Civil War artifacts—including four live artillery shells—and a hand-written journal documenting 1,014 looting forays in the previous four years, including 122 incursions into the national park. For his crimes, Santos got a year in federal prison, and was ordered to pay $7,356 in restitution—the damage caused by his illegal excavations. (Officials were unable to trace any of the looted artifacts to the park, so their value was not factored into the restitution.)

Not all violations of the Archaeological Resources Protection Act (ARPA) take so long to solve. Sometimes, the hard work comes later. In a single day, three Lewiston, Idaho, men spray painted drug-related graffiti over a 70-foot-long gallery of ancient pictographs—ancestral symbols of the Nez Perce that had decorated a cliff above the Snake River near Hells Gate for 2,500 years. That was the vandals' first mistake. Their second was signing their names in neon-colored paint. Apprehending them was easy. Taking stock of the damage to the Red Elk Rock Shelter was more complicated. Restoring the ancient art will take a team of conservators at least six weeks, the major portion of what is expected to total as much as $250,000 in damages, most of it paid by the U.S. Army Corps of Engineers, which manages the site.

Both cases are examples of the successes authorities have had in combating archaeological crime in recent years. They also illustrate the challenges of investigating and prosecuting the vandalism, looting, and illicit trafficking in artifacts that threaten the nation’s cultural heritage. Congress passed the Archaeological Resources Protection Act in 1979 to protect sites, but the law placed a new burden of proof on the government. In addition to catching the perpetrators of such crimes, authorities now also had to calculate the value of the resources that were damaged, destroyed, or stolen.

Since ARPA was enacted, no case has been complete without investigations on both fronts. And for most of that period, authorities have turned for advice and counsel to Martin McAllister, the founder and owner of Archaeological Damage Investigation and Assessment, a Missoula, Montana, firm that specializes in archaeological crime-scene investigations.

A former U.S. Forest Service archaeologist, and a private
Martin McAllister, the owner of Archaeological Damage Investigation and Assessment, stands next to two reproductions of Mimbres-style bowls that were used in undercover investigations.
consultant since 1985, McAllister has coached federal, state, local, and tribal officials—teaching nearly 8,000 attendees in more than 200 classes—on the ways of enforcing laws against archeological crime. These days, an entire generation of law enforcement officials, whether they use 21st-century technology or tried-and-true gumshoe detective work, can trace their basic training in “time crime” to McAllister and his colleagues.

That training is, in many ways, the gift that keeps on giving. Sergeant Ray Darty of the Mississippi Department of Wildlife, Fisheries, and Parks credits McAllister’s training course, which Darty took 10 years ago, for his ability to turn a tip about artifact hunters into the arrest earlier this year of two men who were looting Indian mounds along the Tennessee-Tombigbee Waterway. “Without Martin’s course, we wouldn’t have known what to look for or where to look for it,” Darty says.

And when it comes to sizing up the damage from such crimes, McAllister literally wrote the book on it. A decade ago, when the courts grew restive over what one judge called “the fiction” of archaeological value, McAllister chaired a Society for American Archaeology task force that developed the first professional standards for setting dollars-and-cents values on damaged cultural resources.

“Like most archaeologists, I initially recoiled at the idea of putting a value on priceless resources that can never be replaced,” says McAllister. Nevertheless, the methodology he was instrumental in developing has become the basis for federal prosecution of archaeological crime—a three-part assessment that includes the market value of the artifacts, the cost of scientifically studying the site had it remained intact, and the cost of repairing the damage and restoring it. Because ARPA mandates that if these costs amount to $500 or more the crime is a felony, damage assessment plays a key role in determining whether an offender gets his hands slapped or goes to prison.

In another time, for instance, the defacement of the Red Elk Rock Shelter—an act that moved some members of the Nez Perce tribe to tears—might have been dismissed as another “boys will be boys” incident. Instead, prosecutors pursued felony convictions and, as so many have before, sought McAllister’s help.

Recognizing that documenting damage to the rock shelter with drawings and photography would take weeks,
McAllister brought in a team of technicians from Land-Air Surveying of Roswell, Georgia. Using a state-of-the art 3-D laser scanner that records 300,000 data points per second, they mapped the vandalized site in a day. The digital record of the damage, complete with global positioning co-ordinates, gave conservators the detailed information they needed to determine the $250,000 restoration cost—and that, in turn, provided prosecutors with the basis they needed to win felony convictions against the vandals, including $33,000 in restitution each of them will pay.

McAllister has no illusions that his efforts, and those of the officers he has helped train, have brought an end to archaeological crime. Overall, the statistics are daunting. Interpol, the international police agency, estimates that illicit trafficking in antiquities is now at least a $6 billion a year industry, making it the fourth-largest illegal market in the world. In the United States, the remoteness of archaeological sites and the chronic shortage of law enforcement officers—for example, the Bureau of Land Management, the government’s largest land agency, has one ranger per million acres—assures that most crimes are never detected. By the time they are discovered, most sites are “cold” crime scenes, with the looters and vandals long gone. Of the 800 or so archaeological crimes detected on federal lands each year, only a few dozen end with arrests. And even fewer result in convictions.

“The enforcement of ARPA has clearly not solved the archaeological crime problem, but I think it has had a significant impact in deterring some looters and vandals,” McAllister says. “Most archaeologists would rather be doing archaeology than investigating crime, but our top priority should be to protect these sites.” And archaeologists have an important perspective they can contribute to the effort. “Archaeology is all about context—using physical evidence to understand human behavior,” he says. “That’s equally true for crime scene investigation.”

Few cases make that point as dramatically as an investigation in southern Utah spearheaded by former U.S. Forest Service special agent David Griffel, now a member of McAllister’s team. For four years, the Forest Service had reports of repeated looting of Polar Mesa Cave, a remote prehistoric site in the Manti-La Sal National Forest. They had suspects, but lacked the evidence they needed to make arrests. Griffel took over the case in 1994 and he eventually assembled the evidence that would convict 10 people of 19 felonies—with cumulative penalties that totaled six years in prison, 24 months of home confinement, and 30 years of supervised probation.

Although not an archaeologist by training, Griffel brought a reverence for the discipline and dogged determination to his work. “Once sites like Polar Mesa Cave are looted, we can never put them back the way they were,” he explains. “They are an irreplaceable part of prehistoric culture.”

In the end, it was all about context. Griffel re-analyzed all the old evidence and gathered new data. He rescreened the looters’ excavated dirt for new clues and took fingerprints from tools they left behind. He used undercover agents wired for sound and had the DNA on cigarette butts and dust masks analyzed to tie the suspects to the cave. Search warrants turned up pictures the looters had taken of themselves working in the cave. Bits of confiscated artifacts were matched to fragments left in the cave like pieces of a jigsaw puzzle. And helping to clinch the case was a technique that, at one time, only an archaeologist could appreciate.

When James Adovasio, director of the Mercyhurst
Archaeological Institute in Erie, Pennsylvania, and his collaborators first developed a way to use X-rays and electron microscopes to analyze trace soil components, they were interested primarily in studying tiny stratigraphic levels of cave floor deposits at the Meadowcroft Rockshelter in southwest Pennsylvania, where evidence suggests human habitation as much as 16,000 years ago. Only later did Adovasio recognize that there were other uses for a technology that could detect variations in soil samples as distinctive as human fingerprints.

Griffel says Adovasio’s “soil fingerprints” played an important role in prosecuting the looters of Polar Mesa Cave by conclusively linking artifacts seized in the investigation to the site itself. In another case, Adovasio’s discovery helped prove that dozens of confiscated Anasazi baskets were stolen from a particular ruin in southwest Utah. The tiny traces of soil lodged in the stitches and plaitings of baskets from Horse Rock Ruin helped prosecutors win a six-and-a-half-year prison sentence, the toughest ARPA conviction ever, for Earl Shumway, a notorious looter who raided ruins and burial sites in southern Utah for 20 years.

“So far these analytical techniques have been used in 13 ARPA cases and we have been successful 100 percent of the time,” says Adovasio. In recent years, even the FBI has turned to Adovasio for help in matching soil samples from federal crime scenes. Forensic archaeology, in fact, is playing a growing role in the investigation of many kinds of crime. “Archaeology and crime scene investigation are all about the same things,” says Frederick Snow, president of Forensic Anthropology Consulting Services in Knoxville, Tennessee. “Whether you are excavating a 2,000-year-old Indian mound or a fresh grave, it’s all about context.”

At times, technology takes a back seat to time-honored crime fighting strategies like “the sting.” When 62-year old Kenneth Milette of Newport, Washington, advertised in 2003 that he wanted to sell his artifact collection, National Park Service’s undercover agent Todd Swain contacted him.

Swain, posing as a wealthy artifact collector, was stunned to discover that Milette had a barn and garage full of stone tools, projectile points, beadwork, and burial pipes that he had spent most of his life collecting. Milette wanted $1 million for the lot. Swain talked him down to $750,000, and they shook hands on the deal. First, however, Swain asked Milette to pinpoint where each of the artifacts had been collected. With the deal consummated, the collector was happy to oblige. His list included the Blackfeet, Nez Perce, Coeur d’Alene, and Spokane Indian reservations, as well as Glacier National Park, the Little Bighorn Battlefield National Monument, and other federal properties. Swain and another undercover agent helped Milette wrap the thousands of artifacts

A 3-D laser scanner was used to document the damage that was done by vandals who spray-painted drug-related graffiti over rock art images at the Red Elk Rockshelter site in Idaho. This was the initial use of this technology in archaeological damage assessment.
for transport. Then they went to the bank where Milette, expecting to collect his money, was instead arrested.

Because of his age, Milette’s sentence—three years of probation and $17,000 in penalties—was relatively light. The government retained some artifacts and turned over 1,400 items to the Indian tribes affiliated with them, but most of Milette’s collection had to be returned to him. “It’s not illegal to own most artifacts in this country,” explains Swain. “In ARPA cases, the burden of proof is on the government to prove that each object in question came from federal or tribal lands. For most of the objects in his collection, we couldn’t do that.”

When 150 federal agents descended on the little town of Blanding, Utah, in 2009 to break up a black market ring of traffickers in Native American artifacts, the government got the backlash of such sentiment. Local residents decried “Gestapo-like” tactics when officials rounded up 23 suspects and led some away in chains and leg shackles. With $335,000 worth of confiscated artifacts—including Anasazi burial masks, pottery, and a buffalo headdress—and a paid undercover informant, authorities were hoping for stiff penalties that would send a message to other looters. But the case was turned upside down by the subsequent suicides of two suspects and a shootout with police that left the informant dead. In the end, no one went to trial and a handful of guilty pleas resulted in mostly light sentences that Federal District Judge Clark Waddoups said reflected the fact that artifact collecting was a long-standing and “culturally accepted” practice in the area.

Not all damage investigations are triggered by looting and vandalism. When the Exxon Valdez ran aground in Prince William Sound in 1989 and fouled 1,300 miles of rugged Alaska coastline with crude oil, McAllister was called in to take stock. As cleanup crews swarmed the coast, the number of recorded archaeological sites, initially 283, more than doubled. Although it was impossible to inspect all of them, from a sample of sites, McAllister concluded that damage done by the oil and subsequent cleanup was likely to be less than the heightened risk of looting posed by greater public awareness for the sites. He projected the value lost, and the long-term monitoring program needed to track the sites, at $36.6 million. That sum was eventually aggregated with overall claims of $2.5 billion against the oil company which, in more than a decade of legal appeals, Exxon succeeded in getting reduced to less than $500 million.

Officials in Louisiana, Mississippi, Alabama, and Florida expect similar problems along the Gulf Coast as a result of the Deepwater Horizon oil spill in 2010. So far, there has been no official accounting of damage to cultural resources, but authorities believe that, as in Alaska, the greatest threat will come, not from the oil, but greater public awareness of archaeological sites.

“We had more than 45,000 people engaged in cleanup along the coast and there is no doubt they have come across shell middens and other sites that were not previously public knowledge,” says Louisiana state archaeologist Charles McGimsey. “This is going to be a major issue.”

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The National Trails System consists of more than 800 national recreation trails and 11 scenic and 19 historic trails. The Bureau of Land Management (BLM) has the formidable task of managing over 5,340 miles of 11 of the national historic trails, including legendary ones such as El Camino Real and the Old Spanish Trail that cross some of the most rugged and least developed terrain in the West, areas increasingly targeted for proposed utility corridors, wind and solar farms, and oil and gas production facilities. Especially in southern Nevada and eastern California, much of the desert landscape along the trails is being eyed for energy development, putting the trails and their settings at risk.

Protecting these trails is all the more challenging because for long stretches there appears to be nothing to protect, as segments

A massive project by the Bureau of Land Management documented some 900 miles of the West’s most important historic trade and travel routes.

By Tamara Stewart
of the trails have essentially disappeared. “Most of the 2,700 mile route of the Old Spanish Trail holds little physical evidence of the passage of mule pack trail caravans today,” said Sarah Schlanger, the BLM’s associate manager for the Grand Staircase-Escalante National Monument in Utah. “Although the traders made one or more round trips each year during the 20 years the trail was an economic force for the Mexican colonies, they left little behind.”

In addition to protecting the trails, one of the primary goals of the National Trails Systems Act, which was passed in 1968 and led to the creation of the trails system, “is to be able to provide visitors with high quality trail experiences, including the opportunity to experience historic landscapes that evoke the period of trail use,” according to Schlanger.

To fulfill these responsibilities, BLM used stimulus money from the American Reinvestment and Recovery Act (ARRA) of 2009 to study some 900 miles of the Old Spanish Trail and five other historic trails that cross seven Western states. “The BLM has been working to develop bureau-wide trail management and administration policy and guidance, and saw the advent of ARRA funds as an opportunity to develop some much-needed baseline data for its two co-administered trails, El Camino Real and the Old Spanish Trail, and to field test some documentation methods that it could eventually apply for the benefit of trail management and administration,” said Schlanger, who was one of the project’s leaders. (The BLM co-administers the two trails with the National Park Service.)

She commended the “heads-up thinking” of BLM’s National Scenic and Historic Trails Lead Deb Salt and trails’ program managers in other states for developing a $2.2 million proposal that led to the research, field inventory, and documentation of the hundreds of miles of trails. The project covered 367 miles of the Old Spanish Trail in California, Nevada, Arizona, New Mexico, Utah, and Colorado, and 28 miles of El Camino Real de Tierra Adentro (The Royal Road of the Interior Land) in New Mexico. It also covered 250 miles of the California and Oregon National Historic trails, 125 miles of the Pony Express Trail, and 115 miles of the Mormon Pioneer Trail, all of which are in Utah and Wyoming.

Congress has the authority to add new trails to the system, and when it adds a historical trail, the only thing that’s been verified is its historical significance. The condition of the trail and its associated resources and landscapes and the extent of its documentation may be unknown. “BLM, like other federal agencies, has been managing the trails under federal cultural resource law,” Schlanger said. “That law addresses responsibilities for historic resources, but does not address the protection of trail experiences.”

Prior to the ARRA-funded study, the BLM was meeting most management responsibilities on a project-by-project basis. “Consequently, we had good information on those sections of trails that were in the immediate path of development projects, but we hadn’t had much opportunity to step back and look at the trail resources on a trail-wide basis,” she said. With the stimulus money the BLM developed a

The BLM project covered six historic trails in seven Western states. This map shows where those trails began and ended. The segments of the trails that BLM studied are shown in black.
systematic management program for the historic trails that incorporates identifying and documenting trail resources, including settings and viewsheds, and creating a database of this information.

“Protection of viewsheds is an important endeavor so that the public can gain an understanding of the vastness of the territory that the trail passed through and to get a sense of what it may have been like to be in a situation where you had only yourself and your traveling companions to ensure your safe passage for the hundreds of miles between northern New Mexico and southern California,” said Jon Horn, an archaeologist with Alpine Archaeological Consultants in Arizona, one of several firms hired by BLM to work on the Old Spanish Trail and other routes.

Working in consultation with historians, historic landscape architects, mapping and modeling experts, geographers, trail experts, and Native American and Hispanic groups, the BLM’s study included archival research to locate historic trail documents and maps; identifying and documenting physical traces of the trails and evaluating trail conditions; establishing a system for recording archaeological sites, trail segments, and associated features; and identifying and documenting trail-related cultural landscapes and their scenic quality. A separate effort to develop the Old Spanish Trail Comprehensive Management Plan has involved consultation with over 50 tribes and Hispanic communities with traditional ties to the lands the trail crossed.

The fieldwork, which was done between 2010 and 2011, was coordinated and largely carried out by the international environmental consulting firm AECOM, which subcontracted with Alpine Archaeological Consultants, Statistical Research, Inc., and Metcalf Archaeological Consultants for portions of the fieldwork and analysis. Experts from trails associations such as the Old Spanish Trail Association (OSTA) and El Camino Real de Tierra Adentro Trail Association were also consulted for help in locating and identifying certain trail segments, such as the Old Spanish Trail’s famous “Crossing of the Fathers” route, which was first taken by Spanish missionaries in the 18th century and later used by traders crossing the Colorado River.

Covering some 1,200 miles, the Old Spanish Trail had its heyday between 1829 and 1848, when it served as a mule-pack trade route linking Santa Fe, New Mexico, with Los Angeles, California. It was considered one of the country’s most arduous trails, crossing high mountains, arid deserts, and deep canyons. The trail is so named because Spanish Colonial missionaries and explorers used parts of it as early as the mid-1500s. Sections of the trail in southwest Colorado and southeast Utah were explored by
Juan María de Rivera in 1765 and by Franciscan missionaries Francisco Atanasio Domínguez and Silvestre Vélez de Escalante in 1776. From Santa Fe, the trail split into three routes: the North Branch, the Northern, and the Armijo routes. The North Branch Route proceeded north into Colorado’s San Luis Valley, crossing west over Cochetopa Pass to follow the Gunnison and Colorado rivers to meet the Southern Branch near Green River. The Northern Route headed northwest past Colorado’s San Juan Mountains to near Green River, Utah. The Armijo Route is named after Antonio Armijo, who took mule caravans over the Colorado River at the Crossing of the Fathers.

“There were few places to cross the Colorado River and Santa Fe merchant Antonio Armijo chose to cross at a site in Glen Canyon known as the Crossing of the Fathers used by the 1776 Domínguez-Escalante expedition which explored a route to Monterey, California, but (the expedition) ran out of time due to snow in Utah and then turned back to Santa Fe,” explained former Arizona OSTA director Paul Ostapuk. While Lake Powell currently covers the likely location of the crossing site, OSTA members, in a project unrelated to the BLM’s work, decided to explore the north and south approaches to the crossing that would still be above the lake’s surface.

In 2006, James Page, president of the Armijo Chapter of the OSTA, took a group of volunteers to a site near Padre Bay where they thought the old trail might be found, and there they discovered an inscription: “Paso Por Aqui – Año 1776” (passed by here—year 1776), the only known recorded site related to the Domínguez-Escalante expedition. Experts have done extensive testing; including analysis of lead deposition and layers of desert varnish, to authenticate the inscription, and the site is now under consideration for listing on the National Register of Historic Places.

From central Utah, the Old Spanish Trail trended southwest, crossing southern Nevada and passing through the Mojave Desert to San Gabriel Mission and Los Angeles. The middle part of the trail that stretches through Nevada and California was blazed by trappers led by Jedediah Smith around 1827. In 1829, stitching together a southern variant of the route that connected those of earlier Spanish expeditions with Smith’s explorations, Armijo led a party of 60 men and 100 mules to California, officially opening the trail to trade. After his return to Santa Fe, the governor of New Mexico announced his success, naming Armijo “Commander for the Discovery of the Route to California.” Beginning in the 1850s, Mexican and later American traders brought their woolen goods west over the Old Spanish Trail by mule train, returning east with mules and horses from California for markets in New Mexico.

New Mexico-California trade continued along the trail into the mid-1850s, when a shift to freight wagons and the development of wagon trails made the old pack trail route obsolete. In the 1850s and 1860s, the western portion of the Old Spanish Trail witnessed Mormons migrating to Utah and beyond. The trail braided and changed over time as its use changed, making it hard to determine the original route and the actual trail segments in use during the trail’s period of historic importance.

When religious persecution prompted Mormon Church members to migrate from their headquarters in Nauvoo, Illinois, to Salt Lake City, Utah, the great Mormon migration of 1846-1847 created the Mormon Trail across Iowa, Nebraska,
Wyoming, and Utah. Later known as the Church of Latter-Day Saints, the Mormon religion was founded in 1830 by Joseph Smith. After Smith and his brother were killed by an angry mob in 1844, church member Brigham Young and the thousands of Mormons living in Nauvoo planned their exodus, and by 1846 the Mormon migration had begun. Over the next 20 years some 70,000 Mormons migrated along the 1,300-mile trail to settle Salt Lake City.

The Oregon and California Trails were both established in 1841 by the same emigrant group, the Barelson-Bidwell Party, which set out from Missouri, but split when they reached Soda Springs, Idaho, with half the party proceeding to the Willamette Valley in Oregon and the other half continuing on to California. Part of the general route that crossed Nevada was used for the Central Pacific portion of the first transcontinental railroad, and in the 20th century the route was used for modern highways such as US 40 and later Interstate 80.

The trickle of emigrants along the California and Oregon trails before 1848 became a torrent when gold was discovered in California. Gold rush traffic continued along the trail through the following year, combining with the numerous settlers that came by sea to form a sufficient population base for California to become a state in 1850. The first large-scale cholera epidemic in the United States hit in 1849, and is thought to have killed thousands along the trail on their way to California, most of whom are buried in unmarked graves in Kansas and Nebraska. Plains Indian attacks were the second leading cause of death along the trails, with an estimated 500 to 1,000 people killed between 1841 and 1870. The practice of burying the dead in unmarked graves along or even in the trail was common and served to protect them from being dug up by the Indians or animals.

Because so many people were moving westward in the
mid-1800s, there was a need for a fast mail service beyond the Rocky Mountains. Thus the Leavenworth & Pike’s Peak Express Company, subsequently known as the Pony Express, was created. Though it operated for only 18 months between April 1860 and October 1861, the Pony Express played a vital role connecting the East to the West.

In the era before electronic communication, young men rode horses on the Pony Express Trail carrying mail from Missouri to California in a remarkably fast 10 days. But shortly after it began, Congress authorized the building of a transcontinental telegraph line to connect the Missouri River and the Pacific Coast, creating a faster means of communication that led to the demise of the Pony Express.

Unlike some of the other historic trails, about which travelers wrote extensively in their journals, there are few accounts of journeys on the Old Spanish Trail, and therefore little is known of this route other than certain documented historic events that took place there, making the archaeological evidence even more significant. About 200 miles of the Old Spanish Trail cross Utah, and for the most part no vestige of it can be seen. The BLM study did find 25 miles of trail, consisting of two tracks or narrow swales, that are exceptionally well preserved. Sections of the trail were also found in several other states. Features and artifacts identified along the trail include rock cairns, glass bottles, mule and horse shoes, nails, petroglyphs, as well as combs and other domestic artifacts.

“We had critical work to do—documenting what BLM lands had in the way of historic trail resources, and what condition those resources were in, including the landscape settings that are so much a part of an historic trail experience—before we could protect the resources and manage them efficiently,” Schlanger said.

While most cultural resource management projects are driven by Section 106 of the 1966 National Historic Preservation Act, which requires that federal agencies take into account the effects of their undertakings on significant historic properties, this project was much broader. “Being able to do this project in the manner that it was done was a wonderful situation to be in and is rare in cultural resource management,” Horn said. “We would not have been able to do what we did if we were not given the ability to take a landscape approach and to fully assimilate all of the historical data and other resources.”

“This is the single biggest field project ever put together to investigate and document the historic trails that cross BLM-managed lands,” Schlanger said. In addition to the huge amount of data the project generated, “the documentation protocols developed that integrated standard archaeological field recording with assessments of trail condition, cultural landscapes, and trail settings, will not only change the way the Bureau is able to manage trail resources, but provide a model for all others, including federal, state, and tribal agencies, to manage historic trails for the benefit of the public and future generations.”

All of this information has been entered into a geographic information system database where it will assist land managers with further trail documentation, condition assessments, and long-term management. Signing and interpreting the trails for the public will be undertaken in the future.

“Developing these trails for public use requires not only a good management plan, but local interest, energy, and of course, some financial commitments,” Schlanger said. “The national historic trails, and the Old Spanish Trail in particular, give us the chance to explore, to challenge ourselves to learn, and to experience history-soaked landscapes. These trails help to keep the story of how our country came to be alive for us and for generations to follow.”

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Field school students Klark Sammis (left), Mary Weigel, and project director Christian Wells (right) examine stone features at Augusta, an 18th-century British settlement. The features may be related to architecture that was part of the entrance to the settlement.
In July of 1502, during the course of his fourth and final New World voyage, Christopher Columbus visited what are now the Bay Islands off the north coast of Honduras. He was accompanied by his young son Ferdinand, who recorded an encounter between the natives and his father’s crew.

Ferdinand noted that “by good fortune there arrived at that time a canoe as long as a galley and eight feet wide, made of a single tree trunk like other Indian canoes; it was freighted with merchandise from the western regions around New Spain.

“Amidships it had a palm-leaf awning like that which the Venetian gondolas carry; this gave complete protection against the rain and waves. Under this awning were the children and women and all the baggage and merchandise.”

This canoe, which could have come from present day Belize or Mexico’s Yucatán Peninsula, was apparently a Maya vessel laden with goods for trade. With the strokes of his pen, Ferdinand unwittingly began the Mayanization of these islands, the largest of which is Roatán.

Some 500 years later in 2003, more than 150 ceramic bowls, plates, and jars from Roatán were rediscovered in a storage closet in the University of South Florida’s anthropology department. These items, which were in cardboard boxes labeled “Maya,” were donated to the university in 1990 by a family who has resided on Roatán since the late 19th century. As it was assumed they were of Maya origin, Christian Wells, an archaeologist at the university who has worked at a number of Maya sites, appeared to be the right man for the job of analyzing them. But upon studying them, Wells came to the surprising conclusion that they were not Maya but Pech, one of the island’s indigenous peoples.

There is no evidence that the ancient Maya inhabited Roatán (they did live in the western portion of the Honduran mainland), nonetheless, the notion that they did persists. This is not by accident. In a 2010 article in NACLA Report on the Americas, a bimonthly political magazine, Darío Euraque, the former director of the Honduran Institute of Anthropology and History (IHAH), wrote that, since the 1970s, IHAH worked closely with the Honduran Institute of Tourism “as the government began to emphasize tourism, including ‘culture tourism,’ as a means of generating hard currency.”

“The institute,” he wrote, “originally planned as a serious endeavor in both research and nation building, came to produce a vision of our national identity that was functional to the needs of the international tourism industry. I call this the Mayanization of Honduras.” Mayanization, he continued, served “the purpose of constructing a national identity, while ignoring the lived realities of the contemporary indigenous peoples of Honduras.”

Tourism is essential to Roatán’s economy. It’s a port of call for cruise ships that, in 2010, delivered close to one million visitors, and its coral reef system, the second largest in the world, attracts myriad divers. “There’s the perception that anything that’s not Maya is not interesting to tourists,” Wells, a soft-spoken man with a sly sense of humor, said of the island’s history. Which is to say, it’s assumed that tourists will pay for Maya, but not for Pech, and therefore it’s in Roatán’s interest to embrace its Maya myth.

The most ostentatious example of this embrace is Maya Key, a small, private island just off Roatán’s shore. The most notable of its several attractions is a full-scale replica of parts of the Maya site Copán, a UNESCO World Heritage site on the mainland of Honduras. The cruise ships dock at Roatán, and passengers can elect to take a short boat ride to Maya Key, where they will spend their time until returning to the cruise ship to depart for the next port of call. Having seen nothing of Roatán, these passengers could conclude Maya Key’s Copán is representative of Roatán’s history and culture.

Though propagating this and other familiar and appealing myths—the Pirates of the Caribbean movies, Indiana Jones’ crystal skull, and the Aztecs all serve to grease the skids of commerce—may seem financially savvy and otherwise harmless, Wells, IHAH (which refocused on the country’s indigenous people during Euraque’s tenure), and many of
the island’s natives, see this matter quite differently. “They’re homogenizing native identity,” said Wells.

In 2008, the University of South Florida’s Pech collection was returned to Honduran officials. Prior to the repatriation, Wells investigated the provenience of the collection, determining that it came from a site called El Antigual, and, based on the styles of the items, it’s likely 600 to 1,000 years old. That same year, Eurauque invited Wells to excavate El Antigual and the surrounding region, and thus began Project Roatán, an investigation of a number of the island’s archaeological sites. One of the project’s goals is to reveal the true history of the island. Another is to determine the effect of mass tourism on Roatán’s culture and its past.

Roatán has been occupied for some 1,300 years. Due to the lack of research, the identities of the island’s prehistoric denizens are still a matter of debate, but thus far Wells’ excavations have revealed that most of these occupants were Pech, a group from the northeastern Honduras mainland. They were later joined by English, French, Dutch, Spanish, Miskitu, and Garifuna—a mix of Arawak, Carib, and West African peoples.

The island appears to have been a trade center in prehistoric times, according to Wells, who has examined artifacts collected by a number of its residents. “Just from looking at people’s private collections, we’ve seen material from Costa Rica, Nicaragua, mainland Honduras, Belize, and maybe Yucatán,” he said, adding that these items are known locally as yaba ding dings.

When excavating El Antigual, Wells uncovered ceramic items such as incense burners that were presumably used for rituals. These discoveries, and the paucity of evidence of residential settlements, led him to conclude that it was a “special site” that could have been a destination for pilgrims. He sees parallels between Roatán and Cozumel, an island off the eastern coast of Mexico’s Yucatán Peninsula, that’s thought to have served as a ceremonial center for the Maya. Both islands have archaeological sites on hilltops, dating primarily to A.D. 1000-1500, that have yielded burials and various ceremonial artifacts, and both have evidence of small residential settlements. Wells said Roatán’s trade and ceremonial functions were not incongruous, explaining that a number of places in Mesoamerica served both purposes.

The Spanish arrived in the Bay Islands in the early 1500s, attracting French buccaneers who attacked Spanish convoys, forts, and settlements in the first half of the 16th century. Later that century, Dutch and English buccaneers joined the fray. These attacks were so effective that the Spanish reportedly evacuated all indigenous Bay Islanders to mainland Honduras and Guatemala in the mid 17th century. As Spanish and English conflicts continued to escalate, the British founded New Port Royal, their first military settlement on Roatán, in 1742.

The British established several other military settlements, one of which, Augusta, Wells is currently investigating. He was drawn to Augusta because one of his research objectives is to understand the political and economic relationships between England and its colonies in the Americas, relationships that affected both their colonists and the researchers uncovered this fragment of a hand-blown, olive-green glass bottle at Augusta. Hundreds of these English mallet bottles, which were produced around 1730-1750 and once contained spirits such as rum, wine, or beer, have been found at the site.
indigenous peoples. Colonial settlements in the Caribbean, such as Augusta, were essential in facilitating the spread of early capitalism and globalization.

Wells has excavated sites in Honduras for 17 years, and though he loves working there, he’s faced his share of challenges. During his first season at El Antigual in 2008, he had to contend with a 7.5-magnitude earthquake that occurred off the northeast coast of Honduras. Trees and telephone poles were felled. “The roads were barely passable,” he said. That was followed by a political earthquake in 2009: a coup by the Honduran army that overthrew President Manuel Zelaya. Though Wells’ field school was scheduled to continue for another week, due to an evacuation order from the U.S. State Department, he and his students had 24 hours to pack up and leave the country. “We raced to the site and had to backfill everything.”

They also hastily packed up the artifacts that were being analyzed in their laboratory. Ordinarily, those items would eventually be sent to a government repository on the Honduran mainland, but there was neither time nor a functioning government, so Wells did the next best thing—he hid them under the bed in the house he was renting.

On a hot June day he and his crew chief, Lorena Mihok, directed about a dozen field school students at Augusta, a remote hilltop site overlooking the Caribbean. Two police officers stood guard as they worked. (Honduras can be dangerous, but there’s no need for security here, according to Wells. The officers simply enjoy observing the dig.) Augusta was occupied from 1742-48. It began with about 250 people who came from Port Royal, Jamaica, and was eventually expected to swell to some 5,000 residents, but Wells surmised that it never reached that size.

The researchers have discovered bricks, nails, bottle glass, cups, plates, and myriad pipe stems. “A lot of smoking going on,” he observed. They also found pottery and other artifacts produced by Miskitu Indians, one of Honduras’ indigenous peoples. “They just didn’t come here to build the settlement and leave,” he said of the natives. “They were occupants,” which is quite unusual. That, and the paucity of historical information about prosaic interactions between Europeans and Caribbean peoples, have piqued his curiosity about their interactions at Augusta.

Did the British dragoon the Miskitus into working for them, or was there more to their relationship than coercion? Were the British reliant on the Miskitus to an extent that gave the natives a measure of power? Did the Europeans, with their presumed superior culture and technology, adopt some of the natives’ practices in order for their settlement to succeed in this very foreign land?
Wells can’t yet answer these questions, but he’s discovered British bricks and nails juxtaposed with Miskitu wattle and daub, which suggests the settlement’s structures could have been “some kind of interesting hybrid.” He and his crew have also uncovered a possible garden, and they’re analyzing samples of pollen and phytoliths to determine whether European or native plants, or both, were being grown. If native plants grew there, he assumes the British knew of and were possibly practicing, local agriculture.

“We don’t know how the British were treating the Native Americans,” Wells said, but he speculated that, in a remote outpost like Augusta, where the great distance from London made it difficult for the British Crown to impose its authority, the relationship between the colonists and the natives was more “complex” than conqueror and conquered.

Historical documents state the British left Augusta in 1748, and then subsequently returned, only to be driven out by the Spanish. The account of how they were driven out is now open to question. “The written record said (the Spanish) came in and burned everything, but there’s no evidence of that,” Wells said. The absence of evidence of flight—people abruptly abandoning prosaic activities, or hurriedly leaving valuables behind—leads him to suspect the scribe of embellishment. The Spanish may have felt compelled “to report to higher authorities that they did everything they could to squeeze the British.”

Tourism, with its attendant development, has been good for Roatán’s economy, but it also poses a grave threat to its archaeology. Wells surveyed roughly half of the island in 2008-09 and found that nearly a third of the sites had been destroyed, most of them victims of economic growth. “The biggest causes are roads, cell phone towers, and resorts,” he said. And what escapes the developers often falls prey to the looters. Roatán has preservation laws, “but there’s almost no enforcement.”

He foresees this dismal scenario continuing unless officials incorporate a concern for archaeology into their urban planning. The island is divided into two municipalities, one, Roatán, covering the more affluent, better-developed western half, where most tourists stay; and the other, Guardiola, covering the eastern half. Guardiola officials are concerned...
about archaeological preservation, and they’re working with Wells. But there are technological difficulties to overcome for the partnership to succeed. Wells incorporated his survey information into a geographic information system database that he updates as new sites are found, and he made this available to Guardiola’s urban planners. This seemed like a good idea until Wells learned they didn’t know how to operate the database. He hasn’t yet approached officials of Roatán municipality about site preservation, but he intends to. “I think politically it’s a lot trickier” for them because of the financial benefits of development.

Maya Key sits just off the western half of Roatán. The tiny island is an amusement park of sorts featuring an indigenous wildlife center, tropical gardens, a native arts and crafts studio, a large swimming pool, food and drink, two white sand beaches, and the faux Copán. “The owner here wanted to give people an experience of what Honduras has to offer,” said Cindy Carter, Maya Key’s operations manager. The standard admission price is $30, and on average 250-300 people visit the island daily, according to Carter. Many of them are cruise ship tourists. “They love it,” she said. “They’re amazed how much stuff is here.”

Melanie Coughlin, a graduate student at the University of South Florida who works with Wells, conducts ethnographic interviews with tourists to learn their impressions of Roatán and Maya Key. Some interviewees describe Maya Key’s attractions as “sterile,” “antiseptic,” and Disneyesque. She estimated that roughly half the tourists express curiosity about Roatán’s past, though they don’t necessarily try to educate themselves about it. They may do nothing more than spend a few hours on Maya Key, taking in the sand and sun, the jaguar and monkeys, and climbing the replica of the hieroglyphic stairway found at Copán, before being whisked off to another port of call.

If the true history of a place and its people is unknown, then that past is a blank easily filled by myths and fabrications, and that is the case with Roatán. Copán—the genuine article, that is—was once the last stop on a tour of sites in the Maya region known as the Maya Route, but now the final destination is Maya Key and its ersatz ruin. This trumping of historical accuracy by financial interests pleases some but disturbs others. Coughlin thinks this distortion of history is in some cases intentional, in others unwitting, though in all instances it has an effect.

There are people, particularly on the west side of the island, according to Wells, who prize economics over history. It’s these people who have, in one way or another, propagated Roatán’s fictional past, and as a result they’re “taking people’s history and heritage away from them,” he said. “You’re telling them their history and heritage doesn’t matter because it doesn’t sell.” This devalues not only the native islanders’ ancestors, but also the islanders themselves. The destruction of their archaeological sites, which are of little or no value, is another consequence.

Wells said his project is “providing information for native islanders to have a voice” in presenting Roatán’s history that they previously lacked. Wells and his allies aren’t advocating that Roatán discourage tourism, but they note its drawbacks.
as well as its benefits. They suggest abandoning what they call the global tourism model for heritage tourism, in which the islanders offer their true history and culture to visitors rather than fictions.

These islanders, whether on the west side or east, should also benefit financially from tourism. In a paper on Roatán tourism, Wells and his coauthors Alejandro J. Figueroa and Whitney A. Goodwin, two of his former students, wrote: “How can the preservation of the past become an important issue for islanders if the economic benefits of such an enterprise cannot be demonstrated or even begin to ensure the even distribution of such benefits? Why should they trade one model for another if it will make little, if any, difference in their everyday lives and the result is not remotely connected to their personal or group histories?”

If heritage tourism is to become the model for Roatán, the authors note that the island’s “local elite,” who have benefited from the global tourism model, will have to support the change. When asked to measure the progress he and his allies have made toward achieving this, Wells said, “It’s hard to say. Starting out, we didn’t have benchmarks.” He added that they’re talking to more “stakeholders” about the benefits of heritage tourism than they have in the past.

The establishment of the Port Royal National Park could benefit heritage tourism. There are about two dozen sites, including Augusta, within its boundaries, and the park is patrolled by guards to prevent looting. There is the possibility that IHAH, along with other organizations, will build an interpretive center that features the park’s natural and cultural resources, such as archaeological artifacts, that will be seen by visitors.

Not so long ago archaeologists contented themselves with uncovering data and interpreting it. But in the paper he coauthored with Figueroa and Goodwin, they wrote that, in addition to excavation and interpretation, “Archaeology on Roatán needs to be performed from a holistic anthropological perspective that encompasses all of the characteristics that comprise those dimensions—economics, tourism, politics, identity—that anthropology seeks to understand.”

That’s an ambitious goal, and even if he and his colleagues succeed, Wells believes the old myths will die hard. “I think they’ll always be selling Aztec and Maya trinkets at tourists shops,” he said. And as long as there are also Pech items for sale, he has no problem with that.

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The sleepy coastal village of Oak Ridge is one of the communities on the less affluent eastern half of Roatán. Most tourists stay on the western half of the island, where the cruise ships dock. Wells and his colleagues are hoping that, by emphasizing heritage tourism, residents on both sides of the island will benefit.
OF all the Utopian societies in America’s history, perhaps the most widely recognized by both scholars and consumers is the Shakers. An offshoot of England’s Quaker church, the Shakers, who came to America in 1774, are known for their boisterous worship services, gender and racial equality, and, of course, their trademark ladder-back chairs. “They seem to me unusually interested in perfecting things,” said archaeologist Kim McBride. “They wanted to create heaven on earth.” Thanks to the diaries, records, and artifacts they left behind, the Shakers’ place in the country’s cultural memory is secure. Indeed, historians have called the American Shakers one of the most successful religious communal societies of the 19th century.

While these traits may represent a part of the Shakers’ history, McBride has learned that there are elements of Shaker life that can’t be conveyed solely through documents and furniture. “The Shakers are pretty well known and pretty well studied from an historical standpoint,” said McBride, adjunct assistant professor and co-director of the Kentucky Archaeological Survey at the University of Kentucky. “From an archaeological standpoint, not so much.”

For 22 years, she has worked on and off at Pleasant Hill, one of their former communities in Kentucky, revealing how their emphasis on order, work, and religious devotion, and their penchant for innovations, were an attempt at perfecting their lives.

By Kelli Whitlock Burton
Kentucky, once home to the third-largest Shaker community in America, to rectify this situation. Located 30 miles southwest of Lexington, Pleasant Hill was founded in 1805 by a few New England Shaker missionaries and a small group of converts. At its peak, the village had nearly 500 residents who built some 250 structures and cultivated more than 4,000 acres of farmland.

McBride has directed a series of field schools in which more than 100 students have located the sites of former buildings throughout the village, helping to create a more complete picture of how Pleasant Hill once appeared. She has come to appreciate an aspect of Shaker philosophy that is often overshadowed by the goods they produced and their frenzied worship practices—their strong sense of order. Its influence can be seen in everything from the social hierarchy of Shaker communities to the layout of the stone foundations McBride has uncovered over the years.

Founded in Manchester, England, in 1747, the Shakers, who were formally known as the United Society of Believers in Christ’s Second Appearing, were given their informal title because of the frantic dancing and trembling movements they made to purge their bodies of sin as they worshipped. By the 1770s, the Shakers had a new leader, Ann Lee, one of the first women to head a church and a charismatic and outspoken believer who claimed to have spiritual revelations and visions of Christ. In 1774, Lee led a small group of Shakers to America to create a utopian society where men and women were considered equals, all possessions and property were shared, all members practiced celibacy, and work was viewed as the ultimate worship of God. Their first settlement was near Albany, New York. Over the next several years, with their numbers increasing as more converts joined their sect, the Shakers established communities around New England. They continued to flourish after Lee’s death in 1784.

In the early 1800s, church leaders decided to expand westward, and in January 1805, three missionaries set out on foot for central Kentucky. By the end of that year, a small group of Shakers was living on a 140-acre farm owned by new convert Elijah Thomas. The community signed its first family covenant (a pledge to adhere to the Shakers’ lifestyle and ethics) at the end of 1806, and three years later began construction of a permanent settlement on a hilltop not far from Thomas’ farm. They named it Pleasant Hill.

Shaker communities consisted of several families, each with between 60 and 100 unrelated people who lived and worked together as brothers and sisters. Pleasant Hill had five families. Each family had its own dwelling, washhouse, and assortment of outbuildings, and was led by an elder and an eldress, a reflection of the Shakers’ belief that God was both male and female. At the top of the village hierarchy was Centre Family, whose members were considered to be the most spiritually devout, and who had two elders and eldresses.

Unlike the New England Shakers, who largely made their living by making and selling crafts and fine furniture, villagers at Pleasant Hill turned to the region’s rich farmland for their industry. In addition to farming, they manufactured flat...
brooms, shoes, weaving devices, woolen materials, and other goods. They sold and traded their products in towns up and down the Kentucky, Ohio, and Mississippi rivers. Their good fortune lasted decades.

But the outbreak of the Civil War and the appeal of urban life in the mid and late 1800s led to a decrease in membership and economic decline for the Pleasant Hill Shakers. Most of the community elders and leaders had died. Their commitment to celibacy meant the society could only increase its membership through religious converts, and by the 1880s, the number of converts had dwindled and much of the Shakers’ land had been sold. Finally, in 1923, the religious society at Pleasant Hill ceased to exist. The remaining buildings were either sold or fell into a state of disrepair.

That could have been the end of the Shakers’ legacy at Pleasant Hill. But in 1961, a group of Kentucky residents joined forces to save what was left of “Shakertown,” as it was known. They created a nonprofit organization, Shaker Village of Pleasant Hill, Inc., and raised funds to buy more than 2,000 acres of the land that had once belonged to the Shakers. Included were 34 of the village’s original buildings which, although in a sad state, were fundamentally sound due to the solid Shaker construction. Restoration efforts began in 1966 and two years later, Shaker Village of Pleasant Hill was open to the public. It is now a National Historic Landmark that draws more than 125,000 visitors a year.

In 1990, McBride was asked to help locate several buildings and areas that were no longer visible and that had played a key role during the Shakers’ time at Pleasant Hill—the first meeting house, an outdoor worship area that had been used for religious ceremonies, and the home of Elijah Thomas, where the Shakers first settled. Almost immediately, she was drawn to Pleasant Hill’s architectural...
Two perpendicular roads ran north to south and east to west through the middle of the village. The main buildings, which had a precise spatial relationship that McBride found fascinating, lay largely in two rows on either side of the east-west road. "Over time I’ve come to personally focus on this sense of order of the village," she said. "From what I have read about many other communal societies, most grew in a more haphazard way, not as explicitly planned as Shaker communities."

Indeed, when looking at Pleasant Hill, it’s easy to see how the Shakers’ strong sense of familial order influenced its layout. Three main families lived in the heart of the village, the East, West, and Centre families. As their names suggest, the Centre Family was located in the center of the village, directly across from the meeting house where the entire community worshipped, and the East and West families lived to the east and west of Centre Family. The two remaining families—the North Lot and West Lot families—lived a short distance from the others. The village’s industrial operations were based at the West Lot Family area, which the foundation acquired in 1986. Only three of the West Lot’s original buildings remained intact, including a washhouse that would become one of McBride’s first projects.

After they acquired the West Lot buildings, Pleasant Hill’s staff set out to restore the old washhouse and convert it into overnight lodgings for guests. McBride was asked to survey the site for artifacts before restoration went further. She found the remnants of three furnaces clustered around a chimney. These likely were used in the production of candles, preserves, and possibly even smoking pipes, in addition to heating water for washing clothes.

More interesting was the discovery of a lead pipe that ran the length of a channel dug into limestone bedrock beside the house. With the help of gravity, the lead pipe brought water from a nearby spring into the washhouse. Outside the building, they found another channel lined with limestone that was used to drain the wastewater. This discovery was “a complete surprise,” said Larrie Curry, Pleasant Hill’s curator. The Shakers were known for developing new tools and techniques to make their work more efficient, McBride said, and this water delivery and drainage system is a good example of that.

Other excavations over the years have uncovered remnants of an 1808 log cabin where the Shakers initially lived when they moved to Pleasant Hill, a village post office, a boys’ dormitory, the Centre Family’s smokehouse, a brick kiln, and a number of foundations for buildings whose purposes are unknown.

Since 1990, McBride searched for Holy Sinai’s Plain, an outdoor worship area the Shakers used beginning in the mid-1840s for sacred dances and services. Shaker leaders ordered Pleasant Hill and all other communities to destroy their outdoor worship areas. McBride said that most scholars believe this was a reaction to negative publicity these worship services had attracted at some of the Shakers’ northeastern villages.

The Shakers kept detailed journals dating back to 1806, and these documents described Holy Sinai as an oval-shaped area enclosed by a fence, but they offered conflicting accounts of its location. McBride had been focusing on hilltops because, according to some journal accounts, the Shakers’ leadership encouraged their communities to place worship areas there. But Philippe Chavance, a French architect who was then a visiting scholar at the University of Kentucky, toured a number of other Shaker villages, and

This drawing was done by a member of Pleasant Hill in 1887. It shows the village from the south. On the left side of the drawing, the three Centre Family dwellings are clustered together to the right of the road.
he observed that their outdoor worship areas were not all situated on hilltops.

In 1996, at Chavance’s suggestion, McBride turned her attention to a flat area about a half mile southeast of the village that was mentioned in one account. She found three nails that were likely used to build a fence. The area had been disturbed by years of farming, so she hired a backhoe to remove about 18 inches of plow zone. That done, McBride discovered numerous postmolds from a fence that was arranged in an oval pattern. The post molds, in combination with the nails and journal account, were proof she had found Holy Sinai.

A review of the journals and historical photographs helped McBride accomplish one of her latest research goals: to identify the exact locations of the village’s first meeting house, built in 1810, and the 1812 Centre Family dwelling. The journals told of these structures having faced each other across the north-south road without pinpointing where they once stood. In early May, McBride and a group of 14 University of Kentucky anthropology students began a six-week field school during which they endured 90-plus-degree heat for eight hours a day, Monday through Friday.

Ever conservation-minded, the Shakers often salvaged building materials from structures that were no longer useable. This resourcefulness initially hampered the researchers’ efforts to locate the precise footprint of the meeting house, which burned down in 1839. “We were looking for the kind of intact dressed stone formation you usually see in a building foundation, but instead we found only very small, jagged pieces of limestone,” said McBride. She soon realized those small stones were in fact the vestige of the foundation, and she suspects the Shakers dug up the foundation stones to use elsewhere when the building burned.

The students also uncovered the foundation of the 1812 Centre Family dwelling, which turned out to be intact and in many places just inches below the surface. As the front wall of the dwelling was exposed, it became clear that it roughly lined up with the Meeting House.

Most of the excavations McBride has led at Pleasant Hill have involved exposing a deeply buried building foundation to determine its footprint, and then backfilling it. However, the nature of the Centre Family dwelling foundation, being near the surface, coupled with its location—just yards from the visitors’ entrance to the restored village—offered...
A student excavates the corner of the limestone foundation of the 1812 Centre Family dwelling, which burned in 1932. The researchers determined this corner was precisely aligned with the northeast corner of the opposing 1810 Meeting House.
an interesting opportunity. The team uncovered the entire foundation of the main part of the house. “By exposing the full foundation, we hoped to give the visitors a better sense that Pleasant Hill had changed drastically over time, and that it had a dynamic history of experimentation as it developed,” McBride said.

The most drastic of those changes was reorienting the entire village from a north-south alignment to east-west, which the Shakers did sometime in the 1810s. This resulted in building another meeting house in 1820, and another Centre Family dwelling in 1824, which, in McBride’s estimation, is the Shakers’ finest stone structure in the U.S. The two stand opposite one another on the east-west road and are within view of the 1812 building’s foundation. The Shakers’ journals, curiously, don’t reveal why they took on this Herculean project, but McBride surmised that the lay of the land was such that the east-west alignment was more conducive to expansion.

The old Centre Family dwelling and meeting house were turned into workshops, the former used by the sisters, the latter by the brothers. A number of the artifacts found there—including a bone button and a rare bone button “blank” (a flat piece of bone with circular cut outs), and a thimble, and spool could indicate they were making or repairing clothes in the workshops.

Over the years, McBride has uncovered more than 10,000 artifacts, most of which are fragments of nails, wooden pipes, and window and bottle glass. One of the few intact artifacts is a wrought iron bootscaper that was found a few yards outside the old meeting house. This artifact could have been installed at one of the meeting house doorways—most Shaker buildings have two front doors, one for women and one for men—and it’s an example of their obsession with cleanliness, which is seen in various aspects of their lives, including “cleansing” dances that were commonly performed in mid-19th-century worship services. They were so clean that they hauled away their trash rather than dumping it near their homes, thereby depriving McBride of a rich source of archaeological information.

McBride hopes to excavate the remains of the Centre Family washhouse. The documents state it had two cisterns, one of which is visible, and the other marked by a stone. Large trees have grown around the cisterns and other parts of the foundation, so the excavation will be difficult, but the research potential is significant. Washing the clothes of up to 100 people was burdensome, and the journals suggest that innovations to increase the Shakers’ efficiency were implemented first at the Centre Family washhouse, and then at West Lot and the other washhouses. “With the Centre Family washhouse site, we could really focus on the interpretation of the Shakers’ propensity to innovate and try to make these arduous tasks like laundry for a communal family easier,” she said. This could also give Pleasant Hill’s thousands of visitors a greater appreciation for the Shaker’s desire to achieve perfection.

Pleasant Hill was an “incredibly busy 19th-century village,” said Larrie Curry, and McBride’s work has been very helpful in understanding its activities. The Centre Family washhouse is just one of the projects on McBride’s wish list, one that continues to grow with every new discovery she makes. “Even after doing (archaeology) for 30-something years, there’s still that thrill of discovery,” she said. “I think I’ll always feel that way.”

Kelly Whitlock Burton is a science writer in Columbus, Ohio. Her article, “Putting Down Roots,” appeared in the Fall 2006 issue of American Archaeology.
Partnering to Obtain an 18th-Century Fort

Joining forces with a government agency, the Conservancy acquires Fort Adams.

In signing the Treaty of Paris in 1783 to end the American Revolutionary War, Great Britain transferred all the land east of the Mississippi River to the new American nation. While the British did not consult with their former American Indian allies before this betrayal, neither did they abandon their Midwestern trading posts nor reduce the trade that kept the tribes well supplied with firearms. Unsurprisingly, as American settlers moved into the Ohio country, armed conflict ensued.

Initially, the confederacy of Midwestern tribes soundly defeated two organized military expeditions against them. The second expedition, led by General Arthur St. Clair in 1791, was beaten so decisively that America was left largely without a standing army. Consequently, President Washington reorganized the army and placed it in the command of General “Mad” Anthony Wayne.

In 1794, Wayne launched a third expedition against the Midwestern tribes, traveling down the Ohio River to present-day Cincinnati, then overland to the site of St. Clair’s defeat near the modern Ohio-Indiana state line. After a series of engagements in the heart of the Indian homeland, the American forces defeated the native confederacy at the Battle of Fallen Timbers.

Although the principal places associated with the War for the Northwest Territory have long been memorialized, much remains to be learned about even the most famous places.

Larry Keller, a realtor who listed a wooded tract that encompassed the remains of Fort Adams, an obscure fort built by Wayne’s army to help secure their route from Fort Washington to Fallen Timbers, contacted the Conservancy about purchasing it. The owner, however, wanted to sell the entire 80-acre tract, which threatened to make the project financially untenable. Fortunately, Keller also contacted the Ohio Department of Natural Resources to see if they would acquire the property to preserve its extensive wetlands. The two organizations reached an agreement whereby the ODNR would purchase the 60 acres of wetlands, and the Conservancy would purchase the 20 acres of high ground that includes the area where the fort was located as well as the encampment around the fort. —Paul Gardner
Fort Parker, the first Crow Indian Agency, was established under the terms of the Fort Laramie Treaty of 1868. Located in Montana along Interstate 90 about 40 miles east of Bozeman, the land is currently part of a large cattle ranch owned by a family who has diligently protected the site for four generations. Although ranching is a family tradition, many family members are pursuing other interests and professions, some of them far away from the ranch. The family has a portion of the ranch adjacent to Fort Parker listed for sale, a sign of changes to come.

The original wooden buildings at the agency, constructed in 1869, were destroyed by fire in 1872. Immediately following the fire, adobe and stone structures were constructed to replace the original buildings. The foundations of the later structures are visible today on the surface of the site.

The Fort Parker Indian Agency was established to assist the Crow in their relocation and transition from a traditional buffalo-hunting lifestyle to one of sedentary ranching and farming. These changes were driven by increasing European settlement in the West, decreasing buffalo herds, the discovery of gold in Montana, and the westward expansion of the railroad. Although the treaty promised that the agency would teach the Crow farming skills, and provide them with food, medicine, and educational opportunities for their children, none of these goals were completely accomplished. Floods, grasshopper infestations, and early fall frosts all took their toll on Fort Parker’s fields, often destroying the entire season’s crop. The Crow also suffered raids by the Sioux, Cheyenne, and Arapahoe, some of which resulted in the loss of life.

The Crow relocation to central Montana was marked by hardship as they adjusted to new surroundings and dealt with culture change, and they eventually became dependent upon the government for survival. The Crow reservation was reconfigured in 1873, which led to the establishment in 1875 of a new location for the Crow Agency about 50 miles to the southeast of Fort Parker near Absorkee.

Fort Parker is a place where significant events occurred that shaped who the Crow are today. It is a place that should be known, protected, and preserved, so the Conservancy has signed a one-year option to purchase 20 acres in central Montana that contain the site. The Crow Nation and the Extreme History Project, a local group of Livingston and Bozeman preservationists and educators who have been gathering documentary information, photographs, and oral histories about Fort Parker, are working with the Conservancy to raise public awareness about preserving the site. The Museum of the Rockies in Bozeman is currently hosting a year-long series of lectures featuring Fort Parker and other topics of Montana archaeology and history sponsored by the Conservancy and the Extreme History Project. —Jim Walker

CONSERVANCY
Plan of Action

SITE: Fort Parker
CULTURE AND TIME PERIOD: Crow Indian (a.d. 1868-1875)
STATUS: The site is privately owned and in need of permanent protection.
ACQUISITION: The Conservancy needs to raise $249,000 to purchase Fort Parker, including fencing, closing costs, establishment of a stewardship fund, and an educational program.
HOW YOU CAN HELP: Please send contributions to The Archaeological Conservancy, ATTN: Fort Parker, 5301 Central Ave. NE, Suite 902, Albuquerque, NM 87108-1530.
Preserving a Remarkable Rock Art Site

The 3,000-year-old Shavano Valley Rock Art site is considered the most important site of its type in the area.

The Conservancy is in the process of acquiring the 42-acre Shavano Valley Rock Art site just west of Montrose, Colorado, on the eastern edge of the Uncompahgre Plateau. The site, which dates from the Archaic through the historic Ute periods (1000 B.C.–A.D. 1900), contains numerous petroglyphs as well as artifact concentrations that represent stone tool and resource processing and tool making. It has been at the center of western Colorado rock art research since the early 20th century, having been used to define rock art traditions and styles, and to interpret cultural continuity and change in the region.

Twenty-six petroglyph panels, including representations of the Bear Dance ceremony, the cosmic tree, and other religious iconography that continue to hold significance for Ute peoples today, have been identified on the lower 12 acres of the site on the rim and slopes of cliffs overlooking Shavano Valley. The cliffs rise up to Spring Creek Mesa in the northern 30 acres of the site, where last year the Conservancy conducted a survey with the help of local volunteers. The researchers found numerous lithic processing and tool manufacturing areas, as well as a series of bedrock metates where resource processing likely took place. A well-worn access point through the cliff rim connects the lower and upper portions of the site, allowing passage.
from Shavano Valley up to Spring Creek Mesa. It appears that there was frequent movement between the two areas over a long period of time by Archaic, proto-historic, and historic Ute peoples.

In 2001, the Montrose Community Foundation bought the site from a private owner to protect it from development. The foundation received two grants from the Colorado Historical Fund to fence the lower 12 acres, to gather information for nomination of this portion to the National Register of Historic Places, and to create an interpretive trail and accompanying trail guide. Though the site was listed on the register in 2001, the foundation eventually realized it did not have the resources to make full use of Shavano’s educational, research, and traditional ceremonial potential.

Consequently the Conservancy negotiated a purchase option to acquire the site this year with the intention of managing it as a permanent preserve available to the public for tours and other educational opportunities, as well as to professional researchers, and to native peoples for traditional activities. The Conservancy’s aforementioned survey of the upper 30 acres was part of an effort to expand the National Register of Historic Places listing to the entire 42 acres.

The Conservancy recently received a grant from the Colorado Historical Fund that will be applied to the acquisition and fencing the site, to the development of a long-term management plan, and to the creation of a public educational program that includes displays and regular, docent-led tours through the Ute Indian Museum. Members of the Ute Mountain Ute Tribe, which strongly supports the project, will serve on the management committee, as will local archaeologists, agency and organization representatives, and members of the local community.

—Tamara Stewart

This section of the Bear Panel shows Archaic period animal tracks (right), and a historic Ute period breast plate and medallion (left).
Saving the Family Farm

The Blanchard farm has been cultivated by families since the early 1900s. Centuries earlier it was farmed by ancient people who built a mound group there.

Mound A, in the center of the photograph, is flanked by two farm buildings.

The Blanchard site is located in northwestern Mississippi, not far from the Mississippi River. Blanchard, named for the family who owned it when it was first recorded in 1940, consists of four mounds in a rectangular arrangement on the bank of a bayou. This part of Mississippi is known for its rich soil, and in addition to the mounds the site also contains a family farm headquarters with various barns, storage buildings, a home, and a family cemetery. Since these structures date to the early 1900s, they, too, could be archaeologically significant.

In spite of all the agricultural activity that has taken place around the site over the years, it remains remarkably intact. The current owner, Wanda Fowler, grew up in the farmhouse that is next to one of the mounds. Her parents purchased the property in 1939. Even after she married, she lived nearby. Fowler was always aware of the mounds and their importance. She carefully collected and stored the artifacts she occasionally found at the site and shared her finds with John Connaway, an archaeologist with the Mississippi Department of Archives and History.
Archaeologists with Harvard’s Peabody Museum’s Lower Mississippi Survey visited the site in 1940 and described four mounds on an elevated surface that was “a good three feet or more above the surrounding level.” They also observed that the mounds appeared to be in a rectangular arrangement. The largest, Mound A, had been slightly disturbed by farming and amateur excavations, but it appeared to be a rectangular platform mound. Plowing has also reduced Mound D to a low rise. There is a deep, rich midden beneath the mounds that indicates the site was occupied for some time before the mounds were built.

Determining a time period or cultural affiliation for the Blanchard site is difficult because, other than a few small surface collections of pottery, no professional investigations have taken place there. Those collections, as well as Fowler’s collections, and the observations made by various archaeologists, are the only evidence of when the site was occupied. The ceramics from Blanchard date from the late Woodland through the Mississippian Period (ca. A.D. 700-1540). The occupation at Blanchard seems to coincide with the introduction of corn agriculture into the area, so it seems likely that these mounds have been surrounded by cultivated crops since they were first built.

After the loss of her husband and her move to an assisted living facility, Fowler decided the time had come to sell her parent’s home. It was her appreciation of and interest in the mounds that motivated her to sell to the Conservancy. While the area around the site is being farmed, Fowler and her daughter, Delta Austin, want to ensure that the site will remain in its current state. —Jessica Crawford
CONSERVANCY  
field notes

Fencing Roper’s Walk

SOUTHWEST—The Conservancy has just completed construction of a new fence around the perimeter of Roper’s Walk, a site acquired in January of 2012. The site is an Apishapa Phase village that dates between A.D. 1100–1450 and is located in Southeastern Colorado. The site was named for the pioneering family that homesteaded the ranch in the late 1800s.

Roper’s Walk consists of nine architectural features, some of which contain the remains of chipped stone tool manufacture and maintenance. These prehistoric features were constructed with masonry forming circular, semicircular, and L-shaped room block configurations. At times the Apishapa would use upright stone slabs to define the outer edges of the rooms. The earliest use of the site is indicated by a 5,000-year-old projectile point. But the majority of the artifacts, including the architectural features, indicate a later occupation concurrent with the Apishapa Phase. If all of the features were occupied simultaneously, there could have been up to 25 people living at the site. Evidence for long distance trade and exchange is demonstrated by the presence of a variety of exotic materials such as obsidian, chert, Alibates, and Catlinite.

As of last July, six newly recruited site stewards, under the direction of lead site steward Elaine West, have conducted six different tours, showing more than 26 people the site. Plans are being made for a tour of Roper’s Walk by students from the Beulah Elementary School. The school is located less than three miles from the site, which makes it a convenient destination for field trips and a tremendous opportunity for students to learn about their local history.
A Field School at Carson Mounds

SOUTHEAST—Archaeologists and students from the University of Mississippi, University of Alabama, and Tulane University joined forces with state archaeologists from the Mississippi Department of Archives and History to conduct a month-long investigation of the Carson Mounds site in northwest Mississippi.

Carson was a major Mississippian site that had over 80 mounds that were recorded and mapped in 1894 by renowned archaeologist Cyrus Thomas. Unfortunately, agricultural practices have nearly destroyed this very important site, but in 2009 the Conservancy acquired approximately 17 acres of the site that includes four of the remaining six mounds, which are referred to as B, C, D, and F.

The investigation focused on three different areas of the site. The excavation of an easement area belonging to the Conservancy uncovered Native American burials, trash pits, and the recording of house structures. The burials, which were previously damaged when the land was leveled, were handled in accordance with Mississippi antiquities law.

Researchers also excavated test trenches and took sediment cores from Mound D, exposing possible stages of its construction. They were surprised to find the burned remnants of a house on top of the mound. Further excavations will be required to determine the dimensions of the structure.

Mound C, the other area of investigation, became accessible to researchers for the first time when the Conservancy removed an historic house that was built on top of it. After clearing away debris from the house, excavators uncovered rows of large postmolds that could be the vestiges of a large structure or posts associated with a stockade. They also found indications of what could be stockade and house wall trenches. The removal of the modern house’s basement walls also provided an opportunity to expose and map profile walls that revealed construction methods and mound layer features.

Wales Triangle Site Expands

WEST—For over a decade, the Conservancy and Greenspace-The Cambria Land Trust have partnered to protect Wales Triangle, one of the best preserved and oldest prehistoric villages on California’s Central Coast. Recently the two organizations again teamed up to preserve a third parcel in the Wales Triangle, which is named after the street adjacent to the site.

With the acquisition of this parcel, the Conservancy and Greenspace add over 1/10 of an acre to the nearly 1/2 acre site in the town of Cambria. The parcel was sold to the Conservancy and Greenspace by Sharon Fujitani. Title to the property will be held jointly by the two organizations, and they will share maintenance and other costs, as well.

According to radiocarbon dating, the site is about 8,000 years old, which is unusually old for an intact shell midden in this area. Most early sites have been lost to intense coastal development or eroded away by wind and waves. Five burials were removed and later reinterred when the site was tested by Stanford University in 1978. Among the recovered artifacts were worked stone and bone tools, projectile points, shell beads, pipes, and stone and shell pendants and ornaments. The site also contains midden deposits over four feet deep.

In prehistoric times, this area was inhabited by the Northern Chumash and the Southern Salinan people. They followed an annual cycle of fishing, hunting, and harvesting wild plants. They traded commodities such as food, luxury items, and tool-making materials.
Jefferson’s Poplar Forest: Unearthing A Virginia Plantation
Edited by Barbara J. Heath and Jack Gary
(University Press of Florida, 2012; 256 pgs., illus., $30 cloth; www.upf.com)

Thomas Jefferson and his wife Martha inherited Poplar Forest plantation from her father in 1773. From then until his death in 1826, Jefferson used it as an investment (growing tobacco and wheat) and as a retreat from his Monticello estate, 90 miles to the north. While still president, he oversaw the development of Poplar Forest, complete with a unique retreat house of his design and pleasure grounds. After his death, Poplar Forest went through a series of owners and deprivations until a non-profit foundation acquired it in 1983 to restore and preserve the historic property. Archaeological research began in 1986 and has continued ever since.

In this volume, Barbara Heath and Jack Gary, the last two directors of archaeology at Poplar Forest, have assembled 10 essays from a group of interdisciplinary scholars to explain what has been learned at the plantation and what that means for larger issues in historical archaeology. The series of archaeological digs reveal details about the lives of Jefferson, subsequent owners and their families, and the slaves and their descendants who built the plantation and worked there.

Using a series of surveys, block excavations, and specialized analysis, the archaeological teams have been searching for the sites of stables, vegetable gardens, plant nurseries, and slave quarters from the Jefferson era. Slavery archaeology continued for the pre-Civil War period and has produced significant results with much new information about the material culture of slaves. All the new information is being used to guide the restoration of Poplar Forest and for interpretive material for the general public.

Jefferson’s Poplar Forest is a fascinating report on cutting edge historical archaeology that ties the written record together with the archaeological findings to produce a much clearer picture of what life at an important Virginia plantation was like in the early years of the republic. Poplar Forest is located near Lynchburg, Virginia, and is open to the public from March through December. See www.poplarforest.org for details.

Late Prehistoric Florida: Archaeology at the Edge of the Mississippian World
Edited by Keith Ashley and Nancy Marie White
(University Press of Florida, 2012; 336 pgs., illus. $75 cloth; www.upf.com)

This collection of 12 essays by some of the most prominent experts in the field examines the latest research and most recent excavations throughout Florida for the Mississippian period – a.d. 1000 to 1600. The editors make it clear that not all of the state is represented by the Mississippian culture during this period. Instead they find a diverse collection of corn-based Mississippian farmers as well as part-time gardeners, hunter-gatherers, and coastal and riverine fisher/shellfish collectors.

According to editors Keith Ashley of the University of North Florida and Nancy Marie White of the University of South Florida, prehistoric societies of the Florida peninsula have been largely ignored during the Mississippian period. In this volume, the leading experts explore the archaeological record to provide the first comprehensive examination of research for this period. It is an extremely important contribution to the literature of an area that is diverse, exciting, and little understood.
Hisat’sinom: Ancient Peoples in a Land without Water
Edited by Christian E. Downum
(SAR Press, 2012; 164 pgs., illus., $60 cloth, $25 paper; www.sarpress.sarweb.org)

The San Francisco Peaks of northern Arizona rise dramatically from the surrounding desert plain to an elevation of 12,637 feet. Despite receiving abundant winter snows and summer thunderstorms, most of this moisture disappears into porous volcanic cinders and fractured sedimentary rocks, leaving little in the way of streams or lakes. The geology of the region is dominated by some 600 volcanoes that include the highest peaks. The early Spanish explorers dubbed the region “Sierra Sin Agua”—mountains without water.

Despite the arid conditions, people practicing corn agriculture began to settle the area around A.D. 400, some 2,500 years later than in other parts of the Southwest. The abundant archaeological record includes the Sinagua and Cohonina cultures. Later, elements of the Chaco culture to the east and the Hohokam culture to the south made their presence known, sometimes on the same sites. Around 1200, the region began a long decline, and by about A.D. 1450 the Sierra Sin Agua was abandoned. Today, thousands of people visit the area’s major ruins including Wupatki Pueblo, Eldon Pueblo, and Walnut Canyon National Monument, each year.

At least 14 Native American groups consider the San Francisco Peaks a holy place, including the Hopis, Yavapais, Zunis, Utes, and Navajos. The Hopi kachinas, spiritual guides and helpers, reside here. The title of this book, Hisat’sinom, is a Hopi term that translates as “those who lived long ago.”

The most recent volcanic activity took place between about A.D. 1068 and 1080. Sunset Crater grew to 1,100 feet above the surrounding terrain and ejected some two billion tons of ash, scoria, and cinders. The local residents must have been terrified by the eruptions and the resulting destruction, and the area was abandoned for a time. Recent studies indicate, however, that these people quickly learned that the new ash and cinders brought agricultural rewards and the population expanded.

In this volume, Northern Arizona University archaeologist Christian Downum has assembled 20 essays by diverse scholars that probe this fascinating region’s people, biology, geology, and legends. Written for the general public and richly illustrated with photographs, drawings, maps and diagrams, Hisat’sinom is both a delight to peruse and a reliable source of the latest information on this most fascinating part of America.

People of the Black Sun: A People of the Longhouse Novel
By Kathleen O’Neal Gear and W. Michael Gear
(TOR Books, October 16, 2012; 384 pgs., $15 cloth; www.amazon.com)

Since 1990, Kathleen and Michael Gear, both trained as professional archaeologists, have been writing best-selling novels about the prehistoric people of North America. In all, they have produced some 33 novels that have sold 16 million copies and been translated into 21 different languages.

People of the Black Sun is the fourth volume of a series featuring the Iroquois of New York, Vermont, New Hampshire, and Ontario. Set in the period just before the European invasion, it follows the five Iroquois nations through endless warfare to the emergence of the Iroquois Confederacy. Based on the latest scientific research (bibliography included), People of the Black Sun tells a tale of Dekanawida, the Peacemaker, and Hiawento, his Speaker, as they seek to bring the last of the holdouts into the peace treaty. They continue to be harassed by warriors of the last hostile group. The alternative is all out war. This is a fun way to experience the trauma and triumph of the past with characters full of vitality and compassion. —Mark Michel
Mesa Verde National Park offers approximately 600 cliff dwellings, including Cliff Palace.

Best of the Southwest

When: September 22 –October 2, 2012
Where: New Mexico, Arizona, and Colorado
How Much: $2,595 per person ($395 single supplement)

The American Southwest is home to some of the best-preserved evidence of prehistoric civilizations in the New World. The magnificent ruins of Chaco Canyon and Mesa Verde are but two vivid reminders of the complex cultures that dominated the region between the 10th and 14th centuries. The Conservancy’s Best of the Southwest tour includes these two settlements as well as other prehistoric sites and modern pueblos where ancient traditions persist.
Belize and Tikal

**When:** January 10-20, 2013  
**Where:** Belize and Guatemala  
**How Much:** $2,945 per person ($425 single supplement)

Our tour begins on the coast of Belize, where you’ll tour Belize City, see Altun Ha, and take a boat ride up the New River to Lamanai, a Maya trading center established before Christ and occupied until A.D. 1641. From the coast you’ll travel to the inner reaches of the country and explore the splendid mountaintop palace of Cahal Pech.

A ferry will take you to the ruins of Xunantunich, which was once an important trading center. There you’ll tour El Castillo, a classic example of the Maya technique of constructing a pyramid over an older pyramid. From Xunantunich you’ll visit the recently excavated ceremonial site of Caracol, the largest Maya site in Belize. You’ll also visit Yaxhá, a city 19 miles southeast of Tikal that features an impressive series of plazas and platform groups. Then you’ll spend two days at Tikal exploring one of the most magnificent Maya centers. Thought to have had a population exceeding 75,000, Tikal, situated in the Petén rain forest, once spanned an area of more than 25 square miles.

Maya of Chiapas and Tabasco

**When:** March 13-23, 2013  
**Where:** Mexico  
**How Much:** $2,945 per person ($425 single supplement)

This tour takes us to some of the more out-of-the-way, but spectacular, Maya ruins in southern Mexico that flourished between A.D. 300 and 900. We begin in the tropical lowlands and end in the fabulous highlands of Chiapas among the modern Maya people. We’ll see tremendous pyramids, unbelievable sculptures and murals, and modern arts and crafts.

We begin our adventure with a visit to the major Olmec site of La Venta and its great earthen pyramid. We will then visit Comalcalco, Palenque, Bonampak, and Yaxchilán. Then we leave the tropical lowlands for a long climb into the Chiapas mountains to the large Maya center of Toninda. The site is dominated by its acropolis, which rises in terraces and buildings some 233 feet up the side of a steep hill. We’ll continue climbing to reach the town of San Cristóbal de las Casas, where we’ll spend two nights. We’ll then visit the charming Tzotzil Maya villages of San Juan Chamula and Zinacantan.
The Archaeological Conservancy would like to thank the following individuals, foundations, and corporations for their generous support during the period of May through July 2012. Their generosity, along with the generosity of the Conservancy’s other members, makes our work possible.

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For more information on how to attain income for life while supporting The Archaeological Conservancy, please contact Mark Michel at (505) 266-1540.
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