Rock Art Ranch in northeast Arizona has more than 3,000 petroglyphs. Researchers are studying the ranch and the surrounding area to understand who made the rock art and what these images meant to them.

This image depicting a woman giving birth is one of the amazing petroglyphs at Rock Art Ranch.
Escaping from the blistering desert heat, we are drawn down the worn stone steps into Chevelon Canyon, toward the cool oasis of flowing water and lush vegetation, where we stare up in awe at the sandstone cliffs densely covered with ancient imagery. Known as Chevelon Steps, the location boasts one of the largest concentrations of rock art in the middle Little Colorado River Valley of northeastern Arizona. The surrounding landscape is rich with evidence of the Paleo-Indian, Archaic, and Pueblo peoples who occupied the land for millennia. But until recently, the 5,000-acre, privately-owned Rock Art Ranch and the adjacent public land had seen no professional research aside from recording the images.

This past summer, a University of Arizona field school completed another season of work at, and around, the ranch, which is located about 25 miles southeast of Winslow. Field school students have been surveying the ranch since 2011, and excavating a prehistoric pueblo known as Multi-Kiva, which is roughly 10 miles southeast of the ranch, since 2013. The focus of this project, which is codirected by E. Charles Adams, a University of Arizona archaeologist and a curator at the Arizona State Museum, and Richard Lange, a research specialist at the museum, is learning how people used this region over the past 13,000 years, and why they migrated to and from it. The researchers also want to know who made the rock art and the significance of these works to their creators.

Adams approached Brantley Baird, the owner of the ranch, about conducting research there in 2010, and Baird, whose great-grandmother was Cherokee and who has a great respect for native cultures, quickly agreed. It’s a working
The rock art in lower Chevelon Canyon dates from at least 6000 B.C. through about A.D. 1250, just before the area’s inhabitants appear to have moved south to establish the large pueblos of Homol’ovi I and II, Chevelon, and Cottonwood Creek Ruins. The images were pecked into the desert varnish covering the area’s Coconino sandstone. The varnish then grows back at a relatively constant rate, a process known as repatination. The petroglyphs are all dated by relative methods such as style, subject matter, and the extent of repatination. Many are located high up the steep canyon walls in areas that are mostly inaccessible today, and most are highly repatinated.

Anthropomorphic figures are by far the most common images found in the canyon. Some are as tall as four feet, and have detailed facial features and decorated clothing. Many hold implements such as S-shaped throwing sticks. They are often shown clustered together or in rows holding hands or joined at the feet. There are also numerous animals, including deer, big horn sheep, pronged horn antelope, beaver, and water birds, as well as insects and fish. Researchers have identified three distinct rock art styles at Chevelon Steps: the Palavayu Anthropomorphic style (4500 B.C.-A.D. 250), the Chinle Representational style (A.D. 250-800), and the Ancestral Pueblo style (A.D. 800-1250). Chevelon Steps is the type-site for the Palavayu style. ‘In a place like the Steps, there is a strong ritual overlay where many groups may have
“This could account for the number and variety of glyphs and the lengthy use of the Steps during eras when groups were still quite mobile.”

Because of its visibility, rock art served as an expression of social identity and a means of marking territory. Rock art “conveys to groups moving through the landscape that others have been here before and claim this space,” says Adams. “Identity is conveyed by details of the petroglyphs in this case.” For the Hopi, for example, most identifiable glyphs represent known clans. “This is social identity. These groups, by being known by others in the area, then can also indicate by their marks that they have rights to that area.”

“We are very interested in documenting Hopi visitation to this area,” he says, adding that the Hopi council of elders comes out to the ranch every couple of years to visit the Steps. While the archaeological evidence suggests no new rock art was created after the mid-13th century, many of the petroglyphs appear to have been modified after that time, indicating that they continued to serve ceremonial purposes.

“We want to put the petroglyphs into context,” says Adams. “That is, to understand where the individuals who carved the glyphs lived, when they were there, and what activities they were involved with.”

The researchers have surveyed about half of the 5,000-acre ranch, discovering 120 sites, most of which are artifact scatters that, in some cases, cover more than five acres. Roughly 60 of these date to the pre-ceramic period, prior to A.D. 500. The sites are concentrated along the shallow canyons that
dissect the ranch, where the occupants could have dug wells to get water. Adams and his colleagues assume that, because of the stable geology, various trees similar to those standing there now would have stood in the canyons in ancient times, providing firewood and building materials.

The students show me an area they call “the quarry,” because ancient people fashioned numerous projectile points and other lithic tools from its high-quality stone. They’ve found two Clovis points in and around the quarry, “indicating 13,000 years of use here,” says Adams. The various “diagnostic finds are helping us date and better understand the context in which the petroglyphs were made.”

He notes the “incredible amount of ground stone out here. Even before they were full-time farmers, the inhabitants ground a lot of seeds from the local grasses and other plants—more than I’ve seen anywhere else in the Southwest.” Fifteen varieties of grasses with edible seeds now grow across the varied terrain of the ranch, many of which were likely consumed by ancient people. The consumption of these seeds, and the apparent hunting of deer and antelope that migrated in the fall, suggests that people made frequent, short-term forays here for food and for ceremonial purposes.

When corn was introduced to the area around 1000 B.C., the sizes and density of the sites increased, presumably because its production could support larger groups for longer stays. The researchers have also documented six pueblos on the ranch, three of which they’ve excavated. The excavated pueblos date to between about A.D. 1225 and 1255, and cluster around land that appears to have been farmed.

At the end of the 2011 field season, Arizona site steward Darlene Brinkerhoff brought the researchers to Multi-Kiva, a nearby prehistoric pueblo she had been monitoring on state land. Perched on a ridge south of Rock Art Ranch, the site was being vandalized, so the researchers decided to conduct a mapping and documentation project to complement the survey being done of the ranch property, and to provide information for better managing and monitoring the site.

Multi-Kiva Pueblo is a complex settlement with multiple occupations and structures of two different architectural styles—pithouse and pueblo. The site consists of a nearly square, compact, 25-to-30-room pueblo that dates to roughly A.D. 1200. There are several open plaza areas, and two large, circular depressions southwest of the main room-block, one about 33 feet and the other 65 feet in diameter. Numerous ash concentrations, rock alignments, and artifact scatters extend across the ridge top north and south of the pueblo, the vestiges of an earlier occupation dating between about A.D. 500 and 950.

At first it appeared that the extent of vandalism at the site was relatively small, involving only three large holes in the main pueblo, but then the researchers discovered that portions of the main room-block had been heavily damaged. The archaeologists used the looters’ pits to scrutinize the sizes of structures, the nature of the remaining deposits, and the condition of the floors. Due to the height of the rubble
rooms are also quite large, averaging 13-by-13 feet, considered very unusual for the Colorado Plateau region, but much more typical for villages found along and below the Mogollon Rim to the south.

This, along with other evidence such as the styles of ceramics and projectile points, suggests people initially migrated into the area from the Mogollon region to the south or east, and obtained decorated pottery from other Anasazi people living in the Hopi Buttes area, and to the east along the Little Colorado River.

While investigating Multi-Kiva, the researchers also surveyed 640 acres surrounding the pueblo to better understand its cultural and spatial contexts. They wanted to know if there were other villages nearby, and if so, how large they were, when they were occupied, and what their residents were doing. They discovered a number of sites that are mostly contemporaneous with Multi-Kiva, although some are considerably older. Most of these sites consist of surface artifact scatters, some of which could be the remnants of buried pithouse villages.

Multi-Kiva appears to have been the central pueblo of an extensive community of small farmsteads that marked the area’s last intensive occupation before the mid-13th century. Despite its name, it has no traditional kivas, however “it does have an interesting and varied array of ceremonial structures that were used for purposes similar to kivas,” according to Adams. “Such variety is typical of western Mogollon groups.”

Multi-Kiva’s ceramics, as well as those from pueblos at

mound in some areas, the pueblo is thought to have stood two-stories high.

The eastern exterior wall of the pueblo is massively built, about 10-inches thick and nicely coursed and faced, with abundant chinking stones in some parts. The double-coursed, 14-inch-thick north wall is even more substantial. Vertical seams, differential coursing and stone selection, and differential use of chinking stones from section to section, indicate that the eastern wall was built in several episodes. Evidence of a white caliche-based mortar and plaster suggests the pueblo was once gleaming white.

“This pueblo threw us a couple of curves at first,” says Lange, who is directing the excavations. One of the walls collapsed, and because of its size, they were uncertain at first whether one or more walls had fallen, and what had caused it. “But after more deliberation,” he adds, “the massive wall fall seems to be something we can probably blame on intentional destruction of the site by pushing over the walls—either a closing of the site by the residents at the time of their departure, or a destruction of the site by someone else who was intent on removing evidence of the previous occupants. In any case, the residents had an orderly departure; they essentially totally cleaned out the rooms before they left, burned the roofs, and then the walls came down.”

“The biggest shock to us was that there were massive, double-coursed walls built throughout the site, especially the outer walls of the pueblo,” Lange says. “That translates to really massive walls and construction efforts.” The masonry
Rock Art Ranch, strongly resemble corrugated pottery from Homol’ovi. “This leads us to speculate that groups who occupied Multi-Kiva Pueblo and others in the surrounding region joined groups migrating from what today are the Hopi mesas to form multi-ethnic pueblo communities in the late 13th and 14th centuries that Hopi refer to as Homol’ovi,” Adams says. Since the Clovis period, ancient peoples have used this area for various purposes. “For millennia, Chevelon Canyon was more than a resource for subsistence needs,” he adds. “It was a place of reverence and ritual power that Hopi continue to utilize to this day.”

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