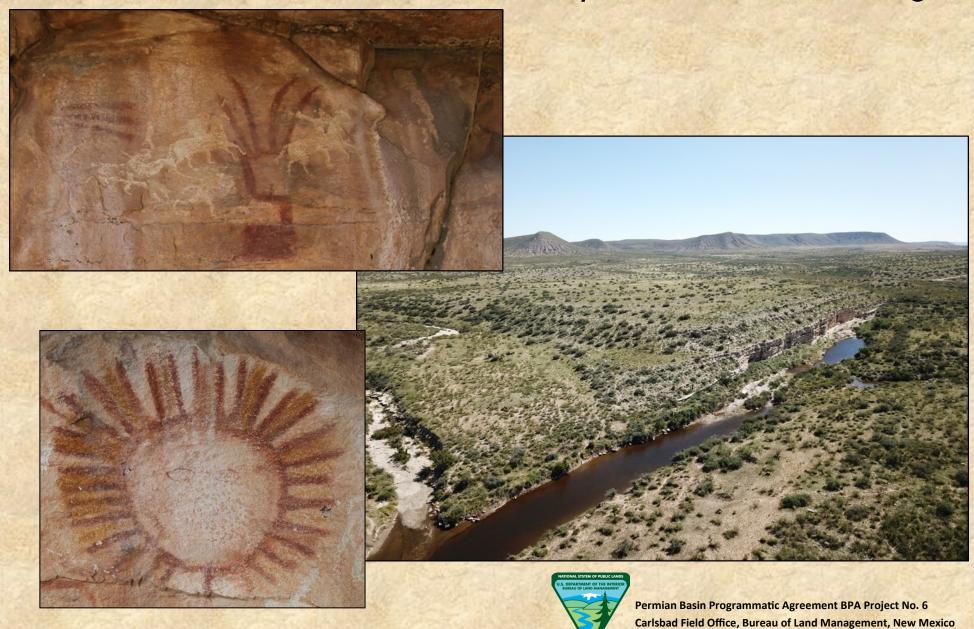
Rocks Telling Stories:

Rock Art in New Mexico's Guadalupe Mountains/Carlsbad Region





Versar. Inc.



Sacred Sites Research, Inc.



Bureau of Land Management Carlsbad Field Office New Mexico

October 2019

The Permian Basin Programmatic Agreement is the mechanism by which the Bureau of Land Management complies with Section 106 of the National Historic Preservation Act of 1966, as amended, in permitting energy extraction in the Basin. It is an agreement among the Advisory Council on Historic Preservation, the New Mexico State Historic Preservation Officer, the New Mexico State Office of the Bureau of Land Management, the Mescalero Apache Tribe, the New Mexico Archeological Council, the New Mexico Oil and Gas Association, and the Independent Petroleum Association of New Mexico to identify and preserve historic properties eligible for listing on the National Register of Historic Places, while streamlining the process for new oil and gas extraction.

This publication is in compliance with Section 508 of the Rehabilitation Act of 1973, as amended (29 U.S. C. 794d).

Rock Art: The Earliest Books

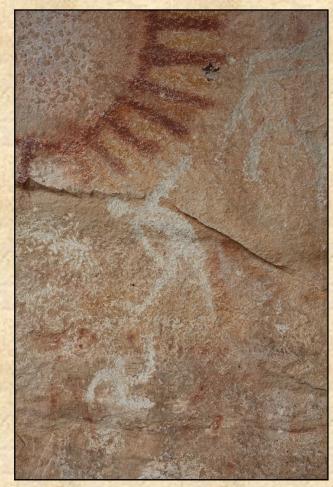
Humans have drawn or pecked or etched art on rocks throughout time. This art is commonly called "rock art." Rock art is a means of visual expression practiced by humans since at least the Upper Paleolithic Period of prehistoric Europe and Asia of 40,000 years ago. It is an expression of past beliefs and ways of engaging the social, natural, and spiritual worlds—although certain modern theories suggest that the social, natural, and spiritual cannot be separated. As such, rock art sites were an intrinsic part of the manner in which past peoples engaged with and experienced the world around them.

ied during the project. However, it is noted here that the term "deep history" is gaining traction as a way of avoiding the artificial separation of history and "pre" history, particularly when it comes to rock art that often represents a symbolic and narrative account of past beliefs and experiences, or what Carolyn Boyd (*The White Shaman Mural*, 2016) has called the earliest "book" in North America.

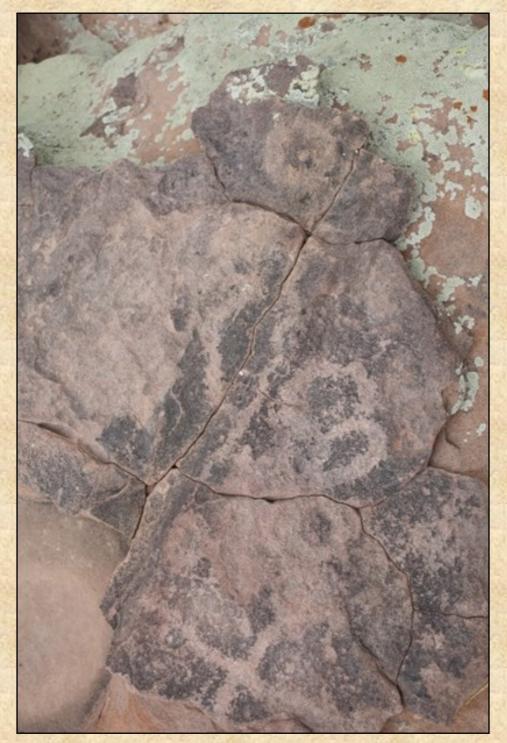
Both prehistoric cultures and historic Native American tribes (most likely Apache, Comanche, and Kiowa) created the rock art at the 21 sites stud-

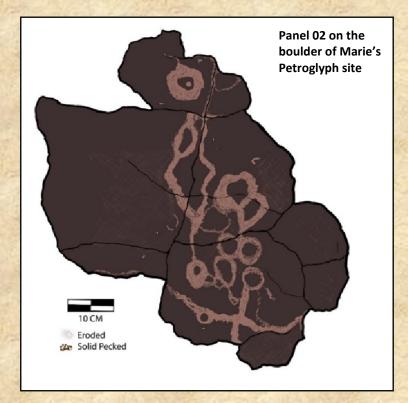


Horned serpents and prickly pear cactus on Panel 30 at the Cacti Canyon site



Human figures in dynamic poses on Panel 11 of Cacti Canyon





Photograph, drawing, and view of petroglyphs at Marie's Petroglyph site, located on a prominent outcrop of sandstone. The site provides an expansive vista of the plains. The art was created on the flat rocks looking upward at the sky. It may be one of the oldest examples of rock art in the region possibly created some 4,000 years ago. Wild tobacco plants left by the people who created the art are still growing in profusion around the boulder.



Rock art always seeks to provide information and stories using images, not words

If the art is painted on the rock, researchers call it a "pictograph." When the design is created by hitting the rock surface with a heavy, pointed tool or etching it with something sharp, the image is called a

"petroglyph." "Petro" comes from the Greek word petros meaning stone; "glyph" is from the Greek word gluphē meaning a figure etched into stone to provide information without words. Rock art is found around the world. In caves in France, some pictographs have been dated to around 40,000 years ago. In Australia, rock art is known to have begun 20,000 years ago. Art on hard surfaces is still being drawn today. We often call it graffiti—some is drawn to be disrespectful but graffiti can also be lovely. In all cases, the art seeks to provide information and stories using images not words.

Petroglyphs of human-like figures pecked on a panel at the Cacti Canyon site

In the Guadalupe Mountains-Carlsbad area of southeastern New Mexico, rock art—both pictographs and petroglyphs—has been found on rock cliffs, rock shelters, isolated boulders, and even small stones. This rock art is known to date from approximately 4,000 years ago to the 1900s. Some sites with rock art are on land managed by the Bureau of Land Management (BLM) through their Carlsbad Area Office. The BLM needs basic information about all archaeological sites on the lands it manages. It needs to know where they are located on the landscape,

what they contain, and what their condition is. To get this information, the BLM contracted with Versar, Inc. and Sacred Sites Research, Inc. to inventory and evaluate 21 sites with rock art in the Guadalupe Moun-

tains-Carlsbad area. This public brochure is based on the technical report of that work.

At each of the 21 sites, the images on the walls, ceilings, or floors had meaning for the people who created them. That meaning is not always clear to us today. We say the designs are "abstract" because of our inability to say what they mean. We do know that the people who made the figures recognized them. For them, the images represented an object, entity, or idea. And, we know that the images relate to the belief systems of the people. Thus, regional rock

art specialists have had some success in understanding some messages left on the rock because the images tell stories. Here, we focus on two types of stories:

- Stories about the people who created the art; and,
- Stories about the beliefs of the people.
- Some of the 21 sites have rock art left by settlers and ranchers, but this brochure focuses on the rock art created by Native Americans.

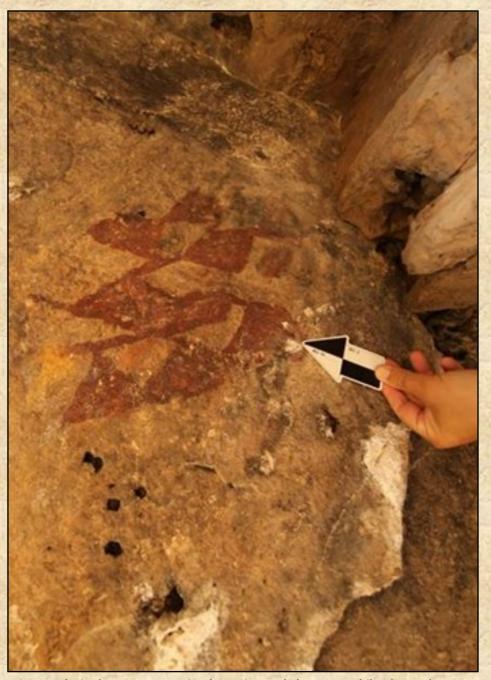
For thousands of years Native Americans skillfully hunted animals and gathered nutritious plants. These people were highly mobile, often moving from place to place to ensure they did not exhaust all local plants and animals, and building small huts on the surface of the ground during nasty weather.

Around A.D. 600, that mobile lifestyle began to change. In part, the changes reflect new technologies (pottery manufacture, use of the bow and arrow, and cultivation of corn and other domesticated crops) that had emerged centuries earlier in regions to the north and west. The people here were aware of those changes. Likely the changes were an often discussed topic of conversation as they went about their daily chores debating their advantages and disadvantages. Archaeologists hold two competing theories about how and why the changes were made.

Under the first theory, the groups in the area chose to adopt some of these new ideas, but slowly, cautiously. By A.D. 600 spears were discarded in favor of the smaller bows and arrows.

Around A.D. 1100, these people adopted yet other changes—construction of structures in pits and growing corn and other crops. The Cacti Canyon site (LA 71992) in this study contains such pit structures, called "pithouses" by archaeologists. Other changes took place around A.D. 1300. They manufactured their own pottery. Rooms built side-by-side on the ground surface became the preferred domestic structures until around A.D. 1450.

The other theory of the changes agrees that people in the region adopted the bow and arrow and later began constructing small villages, eventually made their own pottery, and grew corn and other crops. However, recent excavations—sponsored by the BLM—at the Merchant site some 77 miles to the east indicate that the people who did so were not descendants of the hunters and gatherers who had lived in the region for centuries. Rather, they were migrants from the north-



Pictographs in the Roney Cave site drawn in a style known as Chihuahua Polychrome Abstract. Wild tobacco is often found growing below panels with this interlocking diamond design.

west, and they may have created some of the rock art in the Guadalupe Mountains-Carlsbad area. The clues are several. First, the excavations are revealing a large, U-shaped pueblo with a kiva (a place of worship where special ceremonies were held) at its southern opening. Pueblos—large and small—are common in the Tularosa and Hueco basins in the El Paso area and Southern New Mexico. But they differ in architecture from Merchant's architecture. Merchant's village more closely matches those built to the northwest in central New Mexico. Second, the pottery made at Merchant and other pueblos in southeastern New Mexico is corrugated which is unique to the US Southwest, but not to the villages north of Merchant nor to the pueblos in far west Texas. Another clue is the presence of agricultural gardens laid out in a grid pattern. This is found to the northwest of the region, but not in the areas immediately surrounding Merchant.

The other distinctive difference is in the rock art. As noted in this brochure, from A.D. 1300 – 1450, faces or masks were drawn in a few of the sites as were some serpents. These images resemble masks or katsina imagery in central or northern New Mexico. Katsina masks are recognized as very powerful by Puebloan societies and images of them are equally powerful. These images, together with the other evidence, strongly suggests people from northern and central New Mexico migrated to Merchant and other sites in the region. They brought with them their ideas about how to build a proper village. They also would have maintained their ancestors' beliefs and rituals. Those beliefs include pilgrimages to sacred mountains. The Guadalupe Mountains are the closest mountains. This suggests that the people living at Merchant took pilgrimages to gather plants, perform rituals, and create katsina masks at sheltered locations like Cacti Canyon.

Both theories agree something happened around A.D. 1450. The villages were abandoned. No more local pottery was made. Archaeologists continue to search for clues to explain this abandonment. Bison are one possible clue. These people hunted bison but they were not the only

people hunting bison on the Southern Plains. Competition must have been fierce. Burials from a settlement to the east indicate several individuals died from arrow wounds in their torsos, perhaps a harsh warning to leave the bison herds for others. Regardless, the people left these small settlements and did not build new ones. That era was over.

People continued to live in the region, but they were the hunters and gatherers who had long lived in the region.

Finally, in the late 1500s, newcomers—Spaniards and their colleagues—arrived on the landscape. They brought with them animals (horses, dogs, goats, chickens, pigs) and tools (metal knives and pots, guns) that would become valued by Native Americans. But, they also ushered in conflict as Euroamericans settled the land. Ultimately, Native American tribal land was confined to Indian reservations. The Mescalero Indian Reservation is one example. Home to the Mescalero Apache Tribe, other Apache bands were welcomed in the 19th century, including the Lipan, Mimbreño, and Chiricahua Apache.



Petroglyph of horse and Venus star at the Cacti Canyon site

Robert's Rockshelter Site



30 to 40 grooves and over 300 holes drilled into the side of Rockshelter #1

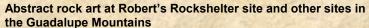
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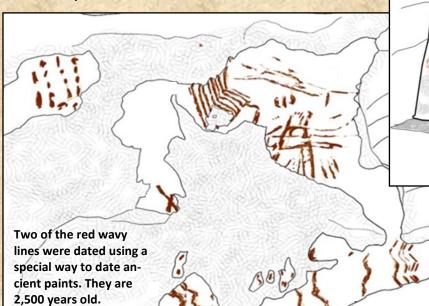
The Robert's Rockshelter site is an interesting rock art site in a scenic setting. The site is located in a striking scenic setting of cliffs near water. Two rockshelters are present in the cliff face. Rockshelter #1 has an unusual rock "art" panel of 30 to 40 grooves and over 300 holes drilled into the rock wall. These were probably used to sharpen stone tools and smooth arrow shafts and other wood tools.

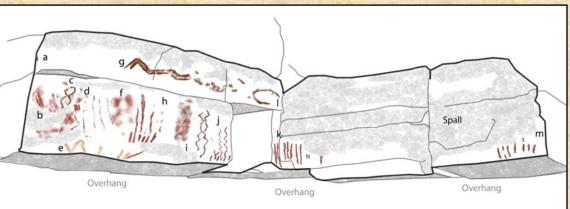


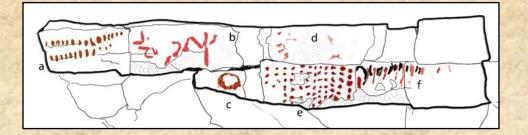
Circular arrangements of rock were built on the flat plain above the cliffs. These are thought to be shrine features where the inhabitants made prayers and offerings to the spirits of the surrounding natural world of stone, cliffs, and water. The rock art of the site is called Abstract. It consists of symbols that had meaning to the people who created it.

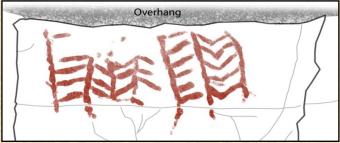




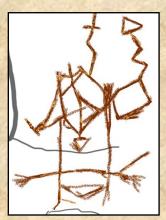


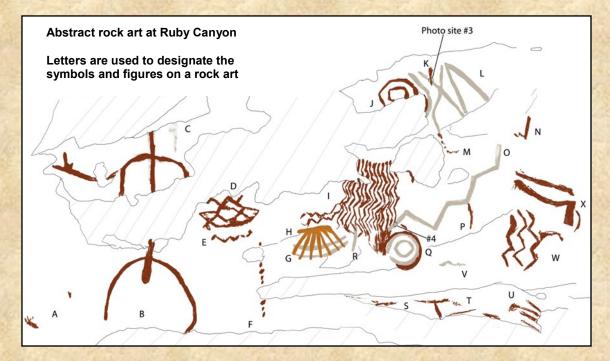












Stories about the People who Created the Art

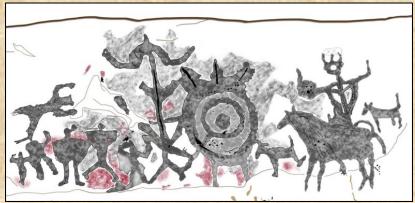
The images recorded on the rock in the Guadalupe Mountains-Carlsbad area represent a form of communication. These images meant something important to the people in their own group, and likely, to other Native Americans traveling through the region. This tells us that these people were planners. Their lives were guided by the ripening of plants and nuts to harvest, and the yearly movement of small and large game to hunt. Yet, knowing the importance of these activities, the leaders—perhaps spiritual leaders—sometimes interrupted that movement cycle to record images that would remind them and others of events, of births or deaths, or of how order is maintained in their cosmos or universe.

As an example, the pecked and painted images above in Panel 11 at the Cacti Canyon site tell the story of one event—a fight between Native Americans and a horse-riding Spaniard using large dogs to intimidate and attack. This event probably took place around A.D. 1670, based on a radiocarbon date on charcoal in the remains of a Native American house near the rock art. The figure on the right is the Spaniard based on the horse and his gear. He is wearing upper body armor (with the cross), carrying a shield on his right arm, and wearing a helmet on his head in the "up" position. The red color in the scene represents blood. This was painted on the wall prior to pecking the human figures. The human figures on the left appear to be Native Americans. One appears to be dead or severely wounded, with part of his leg gone. This story could have taught subsequent generations caution in their dealings with the Spanish.

Yet another story is told by this scene. A turtle was applied later—possibly by an Apache—and superimposed over other images. Turtles represent strength to Apache and other Native Americans. The turtle at

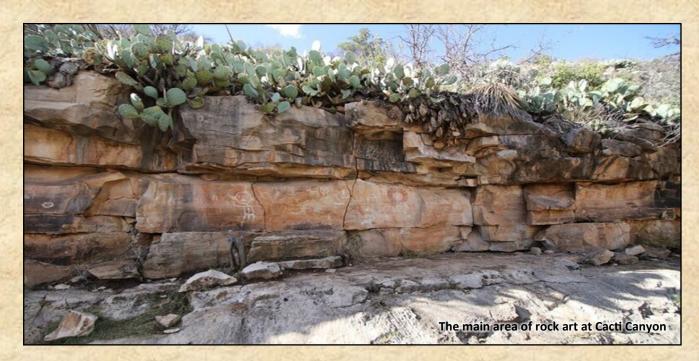
Cacti Canyon seems to imply that an Apache warrior, upset by a scene of Spanish war dogs attacking human beings, superimposed this power symbol on the picture to purge it of its evil content. The message to the Spanish was: if they use dogs on humans again, they would suffer the strength of Apache warriors.





The scene on the upper right side of Panel 11 tells the story of a battle between a Spaniard and his dogs against Native Americans. A turtle image was incised over the battle scene at a later date.

Panel 23 at Cacti Canyon has a group of earlier abstract figures painted in red that were covered by petroglyphs at a later time. The petroglyphs portray a finely-pecked scene of three horses with riders bearing shields and feathered lances. They are shown as attacking two unmounted, running figures, one who seems to have been speared with a lance. The pecking is so detailed that the feathers on the lances and headdresses can be seen. It probably recounts an historic event by a Kiowa, Apache, or Comanche group.





Goodbar Cave is located in an eroding sandstone outcrop along the Pecos River valley. Several panels show scenes of horses, humans, buffalo, and other animals. Based on certain features of the horses and their accessories, the rock art is thought to have been made by the Comanche.

Scene of animals and human figures at Goodbar Cave



Stories about the Beliefs of the People

As mentioned above, all of the sites studied contain evidence of ritual. The creation of art was a religious activity. There are likely hundreds

of sites in the study area. Yet, a mere 21 contain art. This underscores the religious importance of these localities. People were busy. But the message in the art, and the act of painting or pecking it, was so important that people stopped at these locales to gather a variety of pigments or make tools—in some cases to make scaffolds to reach the ceiling—in order to create that message. In other words, the images and the messages they communicated were of significance and were revered. At the same time, rituals were held at these localities. The evidence of rituals includes the construction of agave roasting pits, rock cairns, rock enclosures, and even rock walls at the entrances to some shelters. Robina

A portion of a panel at the Walt Canyon site that has what is called the Chihuahua Polychrome Abstract style of rock art. This style is found at rock art sites across a wide area of southern New Mexico and west Texas. It is at the Walt Canyon site, and is often found on pottery made in the greater El Paso area from A.D. 1300 – 1450. The site is in a shallow overhang above a drainage where travelers would be able to see and "read" the stories of the ancestors.

Draw is but one example. The site is not confined to the rock shelter with its art, but extends to the probable shrine and several large agave roasting pits constructed on the cliff above the shelter.

Rock cliffs, rock shelters, rock overhangs, and boulders are found

Carlsbad area. Yet, again only 21 locales were chosen to communicate messages. Once traditional, spir-

throughout the canyons, hills, and valleys in the Guadalupe Mountains/

itual places were established on the landscape, often they were visited again and again. For example, Robert's Rockshelter site has abundant rock art in 26 panels on the cliff face. Also present are numerous agave roasting pits, circular alignments of cobbles, rock cairns, and two rockshelters (one with rock art panels). Radiocarbon dates confirm it was re-visited over a long period of time. A fragment of a pictograph in one shelter dated to around 500 B.C. But, two dates from the trash in front of the other shelter date from around A.D. 880 - 1000. These dates indicate that generation after generation knew of, and were drawn back, to the same spiritual place

on the landscape.

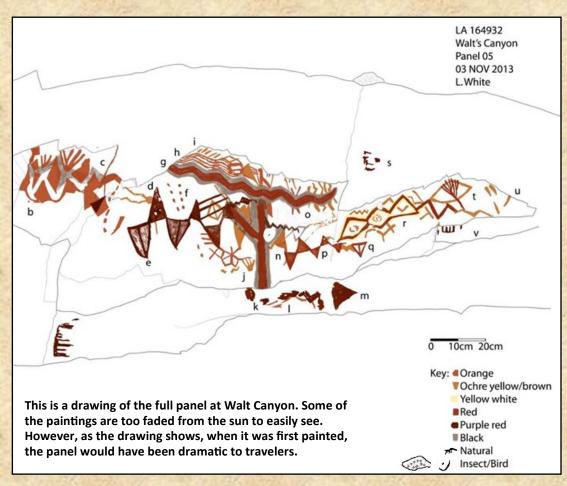
As noted above, cairns and agave roasting pits are evidence at some of the sites with rock art that large numbers of people gathered together in these locales. The large agave roasting pits were used to bake mescal in these locales. The large agave roasting pits were used to bake mescal or agave roots and other desert succulents. The size of some agave roasting pits is huge, with estimated counts of up to 1,000,000 burned rocks around the pits.

It takes several days to collect the roots, dig the pit for cooking, place the roots and the fire within the pits, cover the pits with rocks, and then bake the food. Combined, the evidence shows that long ago many people gathered here for several days to feast, celebrate, and conduct rituals traditional to their group. One ritual was either creating the art or reading the stories the art told them to reaffirm their beliefs. It is even thought that a symbol consisting of several lines leading from a point might have been meant to portray an agave plant.

It was and remains a sacred space.

The shelters themselves are also considered locations of ritual. First, the art within them exhibits sacred messages. Faces or masks are found in rock art panels in regions to the west and northwest of the Guadalupe Mountains. Large numbers are present at the Hueco Tanks State Park near El Paso, Texas. Most represent *katsinas* (*kachinas*) that are recognized as very powerful divine beings by Pueblo groups, and images of them are equally powerful. They are also found at some of the 21 sites, including Cacti Canyon and Kee's Painted Shelter. They underscore the message of sacred space.

A huge burned rock midden agave baking pit at Robert's Rockshelter site. The burned white limestone rocks were used to cover the agave or other roots and the fire atop them. A pictograph symbol found at the Robert's Rockshelter and Robina Draw sites might have been meant to portray the sacred agave plants that were baked in the pits.









Pathways to the Spirit World

In addition to the rock art, there are other features and discoveries that provide a glimpse of how past people interacted with the natural world and spiritual landscapes of southeastern New Mexico.

By observing these types of features, we can gain a deeper understanding of how the people who once lived in the region connected with the natural world around them.

The presence of shrines and cairns on terraces above the rock art reflects the fact that the creators of the rock art engaged with landscapes that extended far beyond the boundaries of the rock art panels.

Working with Native American consultants, the field team recorded the natural environments surrounding each rock art site. This included the "viewshed" of each site, or the landscapes that were visible from inside rockshelters, rock art panels, and other features.

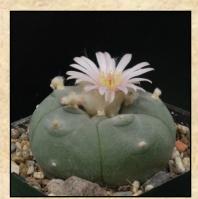
The view from inside the rockshelter of the Dark Canyon #1 site. A prominent

peak is visible in the left background. The figure at the right is a drawing of Panels 5 and 6 on the wall of the rockshelter.

The viewshed from inside the rockshelter of the Dark Canyon #1 site had a prominent flat-topped peak in the distance. The Native American consultants thought this prominent natural feature might be a sacred location. A member of the rock art recording team and the Native American consultant climbed to the top of the peak, where they found a large circle of stacked cobbles on the limestone rock of the summit. The feature could have been a lookout, but it is also possible that it served as a shrine. Such a shrine feature would have served to spiritually link the rock art in the rockshelter to a place of power on the landscape.



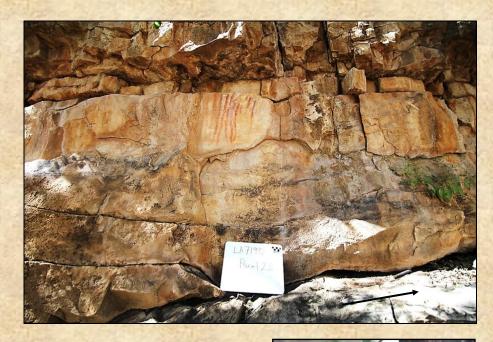
Plant communities were documented at each rock art site. Special attention was paid to finding plants that had medical or ceremonial uses. The Native American field consultants were of great assistance in locating plants of special significance. Special plants identified include wild or desert tobacco, datura (Jimson weed), Texas Mountain Laurel, morning glory, and marigold. At least one of these five plants was identified at 16 of the sites. Each of these plants has well-documented mind-altering qualities and were known to have been used to achieve altered states of consciousness for rituals and ceremonies. The widespread and specific association of these plants with rock art localities indicates they were sometimes used as part of rituals performed during the creation of, and revisits to, the rock art localities by religious specialists or groups seeking communal experiences.



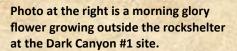


Cactus flower painting at Kee's Painted Shelter

One of the few non-abstract paintings at Kee's painted shelter may have been meant to portray a flowering peyote cactus. Peyote does not grow in the region today, but might have been present in past times and past environments.



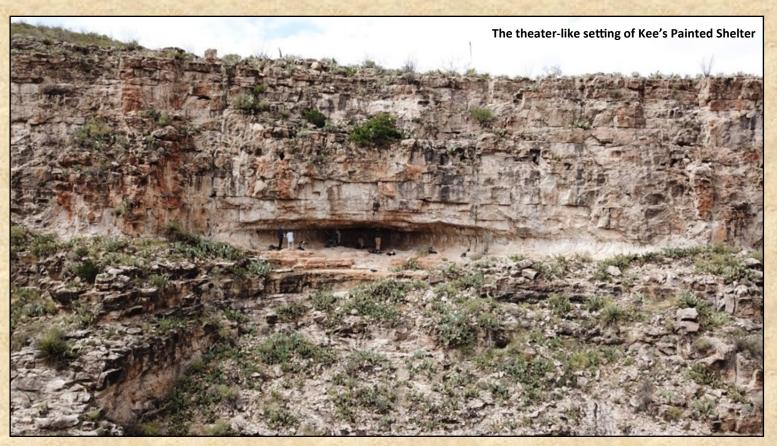
Photograph above shows a wild tobacco plant (designated by arrow) growing on a rock art panel at Cacti Canyon.

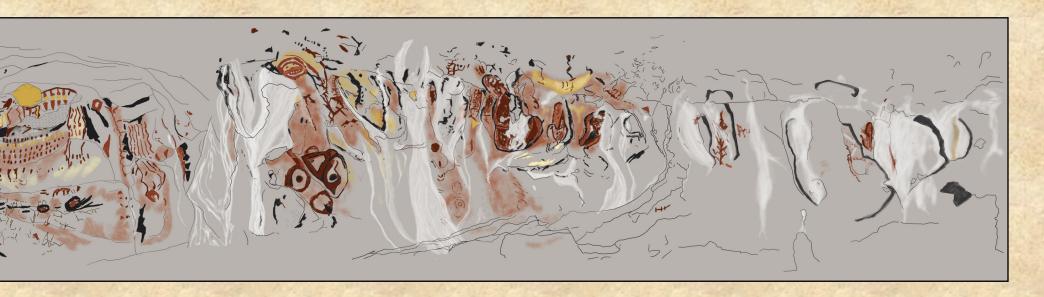




Photograph to the left shows young tobacco plants growing below a rock art panel at the Walt Canyon site







Kee's Painted Shelter gives evidence that it was and remains a sacred space. No artifacts are at the site, but, as shown above, there is abundant art painted across 40 feet of the back wall with some on the ceil-

ing. Two images in the art have been radiocarbon dated to A.D. 200 – 400, some 1,600 years ago! The art is faded and some areas are coated with white calcium deposits from seeping water, but the panel is still one of the most complex and amazing rock art paintings in New Mexico. It includes red, black,

yellow, and orange images. While most figures are abstract, insect and plant figures are also present. Mortar holes and grinding areas are present on the shelter's floor, likely areas where pigment was ground.

On top of the cliff above the shelter are two rock enclosures and a rock alignment which may represent shrines. The lack of artifacts anywhere at the site is strong evidence the site is sacred space. It appears the

to leave anything to detract from the messages the art was communicating.

Sometimes, the physical appearance of a rock shelter suggests power and ritual. The rockshelter has a wide, open theater-like appearance with a flat area in front. It is easy to image the prehis-

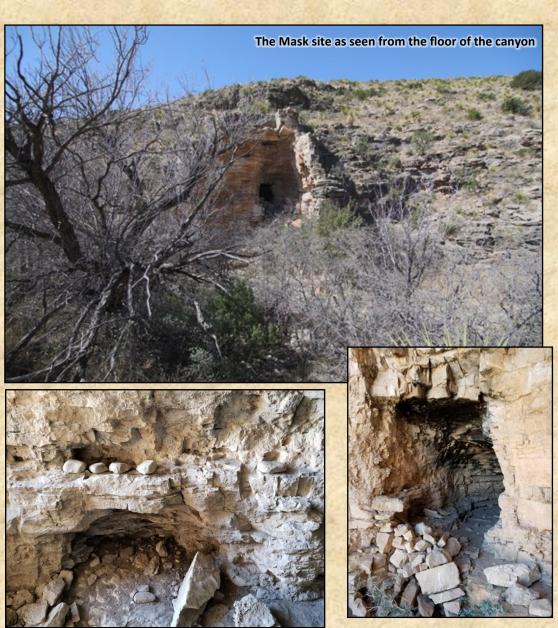
toric inhabitants of the region gathering in front of the shelter to experience the art and its meanings over 1,600 years ago.



The Mask Site

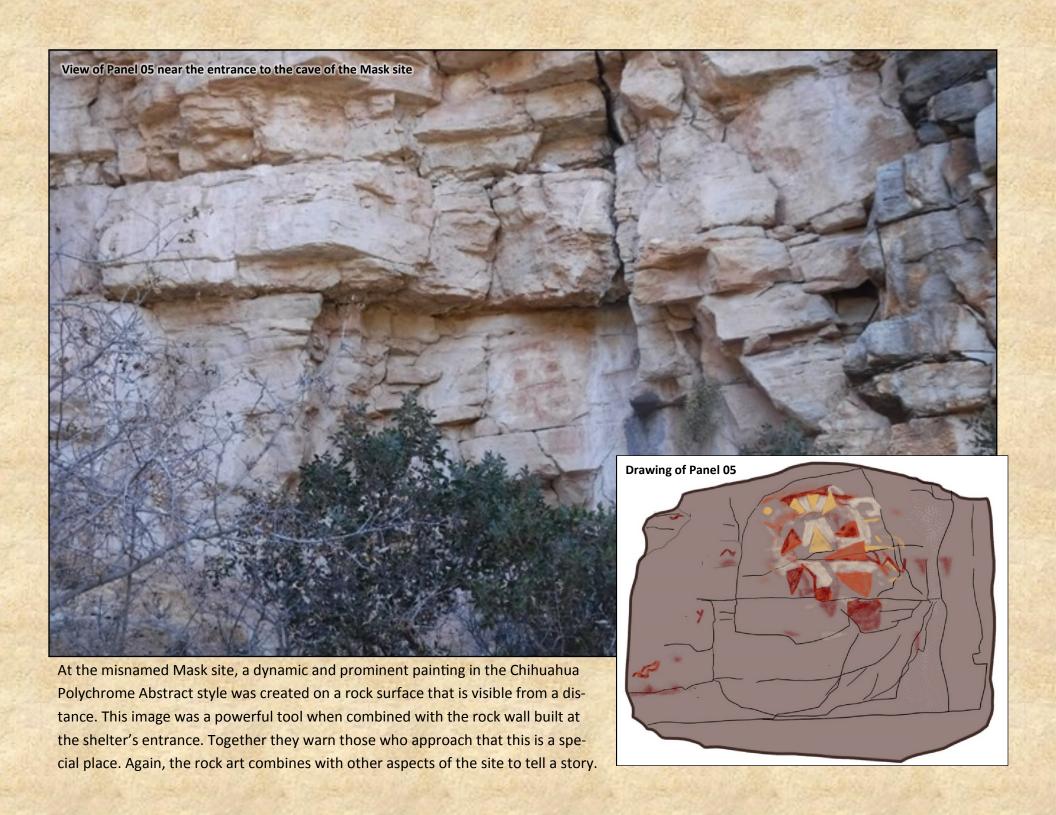
As stated before, the physical appearance of a rock shelter suggests power and ritual. This is the case with the Mask site pictured on these pages. The site was named "Mask site" because the large multicolored (polychrome) painting near the entrance was thought to be a mask or face. After careful study and use of DStretch to being out the faded colors, the rock art team discovered that it is an abstract image of many triangles and lines. This is an example of why the proper recording and study of rock art requires detailed work in the field and laboratory.

Located in a remote canyon of the Guadalupe Mountains, the shelter is a dramatic cleft in the steep limestone hill. The rockshelter does resemble a mask with a mouth which is actually the shelter itself, one eye, and a nose. A person walking the canyon below would be startled and awed at the sight. Trash deposits are within the shelter's mouth and down the slope below, and agave roasting pits—used for ritual—are also on the terrace below. Further evidence of ritual is a rock wall built at the entrance to the shelter (the mouth), as well as the presence of grinding tools left on a shelf in the cave's interior. The multi-colored rock art is evidence that rituals that took place here, and that the location had spiritual meaning and power.



Grinding stones on the shelf inside the rockshelter

A rock wall was built in front of the opening

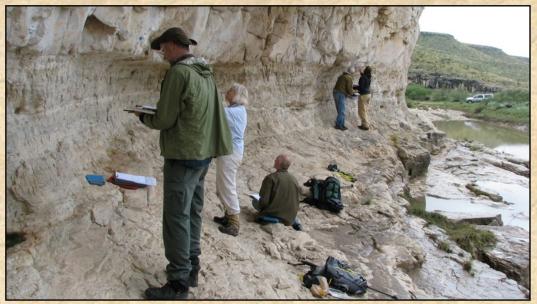


How Archaeology Reveals the Past

It's early morning in southeastern New Mexico. Two archaeological crews are driving from a motel in Carlsbad to begin a day recording sites they know contain rock art and may contain agave roasting pits, rock alignments, or other evidence of the human past in this region. They drive on narrow, one-track dirt roads to get as close to the site as possible. When they do, they get out and begin their trek to the site—often an hour or more through the brush—carrying tools and gear in back packs and in their hands. They intend to gather as much information as they can from each site.

At the site, both crews get a general overview of what is known of this locale and discuss what they see. Both crews know their duty today: record in great detail what the site contains, without damaging the art or the human-created deposits or features. One crew will focus on recording the art. The other crew will record the physical site, noting where panels of art are located but also sweeping the surrounding landscape in the immediate area, including ridges above the art, to carefully record and document all artifacts, house remains, fire pits, and other human-made items. This type of careful documentation is the backbone of archaeology.

Today, both crews will create precise maps and drawings like the individuals on the right at the Serpentine Bends #1 site. Without thorough documentation and modern GIS implements for precise mapping aided by drone aerial photography, the items left behind are mere artifacts. Artifacts alone are not sufficient to understand why Native people used a shelter or cave to display stories of the past in the art, or what those



Sacred Sites Research, Inc. and Versar staff recording the Serpentine Bends #1 rock art site

stories are and how they were displayed in rock paintings and carvings,

This level of documentation may seem tedious, but it is absolutely essential to accurately record what is here. These archaeologists have inspected notes and maps that exist from earlier investigations. Some of the 21 sites in the study were first recorded 80 years ago; others have never been recorded before. Today, they will employ modern equipment, including using GPS and Geographic Information System computer programs to map the site, personal data assistant computers (PDA) to record notes about artifacts, cairns, and other features, as well and aerial drone photography.

The crew documenting the rock art will take equally extensive notes on paper and in their PDAs. As well, they will do intensive photography of the art panels and individual images. Given the faded condition of many images, DStretch photography is taken of rock art images hard to see with the naked eye like the herringbone pattern to the right. DStretch is a digital imaging tool that enhances the art. They will also draw the art in the panels.

The sun is setting, and the crews return to the vehicles. Study of the past is painstaking, but the documentation is a first step to unlocking that past.



An example of high-resolution drone photography of an agave roasting pit on a high ridge above the Robert's Rockshelter site.



Photograph of a faded rock art panel that has been changed using the DStretch computer program. The red pictograph at the lower left was barely visible to the eye. The photograph was passed through the DStretch program and this color version brought out the details of the ancient painting.

Mark Willis launching the drone to photograph a rock art site from the air

Preserve the Past

Native Americans have lived in southeastern New Mexico for nearly 12,000 years. Despite the arid conditions in this region, the archaeological sites are evidence that people lived full, productive lives. They knew this land and raised families here for those many millennia, in turn teaching their children how to lead successful lives.

The only evidence of the Native Americans who lived in southeastern New Mexico prior to the arrival of the Spanish in the 16th century are these same archaeological sites, including those with rock art. These sites represent a precious legacy to teach us about the past. For many Native Americans, the sites with rock art and other evidence of ritual and religious activity represent spiritual and precious places.

Unfortunately, that legacy is threatened. As shown below, at the Cacti Canyon and other sites, human-caused damage is a significant threat.

The photo at the lower left shows gunshot damage to the rock art at this important place. The central photo is of modern graffiti painted near the rock art at the Juniper site. The photo at the lower right is of a secured gate the BLM had to put in place at the Honest Cave site to protect its deposits from illegal digging. Such damages cannot be undone. People dig into sites to take artifacts home with them. They use sacred rock art as a handy target, or write their names over images on the walls that represent important pieces of the past. Each site so affected loses its ability to tell us its story, its history.

The loss of sites to illegal activities diminishes us all. The history of southeast New Mexico has been deeply damaged by these activities. We owe it to ourselves and our children to understand how that disrespect harms us all. Once a site is gone, history is lost forever.

Please help preserve the past for future generations!



Bullet impacts on a horse petroglyph at Cacti Canyon



Locked gate installed by the BLM to protect the Honest Cave site from looters

Further Reading

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Acknowledgments

The Carlsbad Field Office (CFO) of the Bureau of Land Management (BLM) contracted with Versar, Inc., assisted by Sacred Sites Research Inc. to do a detailed study of 21 rock art sites in southeastern New Mexico. This public brochure draws from the technical report of those studies. That report describes rock shelters, caves, and overhangs that long ago were chosen for creating art. This brochure is designed to provide the public information about the people who drew the art and what some of the symbols and glyphs may have meant to them. Their art demonstrates the rich, sacred values the people carried with them when they lived in this region of New Mexico.

The documentation and study of rock art reported in this public booklet is the product of a cooperative and dedicated effort among many archaeologists, archaeological rock art researchers, and artists. First and foremost, the research would not have been possible without the existence of the Permian Basin Programmatic Agreement (PBPA). We are grateful to all who worked to see that visionary agreement come to fruition. The CFO deserves credit for developing the project under the PBPA. Martin Stein, PBPA Program Manager, deserves credit for his unflagging support and encouragement.

Nancy Kenmotsu, Michelle Wurtz, and Myles R. Miller of Versar prepared this brochure. Myles R. Miller served as the Principal Investigator for the studies and is primary author of the technical report.

For project, the ultimate results of the project are only as good as the quality of the information recorded in the field. The superlative written and drawn documentation of the rock art was conducted by Lawrence Loendorf, Laurie White, Greg White, David Kaiser, and Terry Moody of Sacred Sites Research, Inc. Several of Laurie White's panel drawings are worthy of publication in national magazines and journals. The excep-

tional archive of site photography and Unmanned Aerial Vehicle (drone) aerial photography was compiled by Mark Willis. The exemplary site surveys and identification of subtle house structures, rock alignments, and numerous other features was accomplished by Tim Graves and Juan Arias of Versar.

One of the more welcome aspects of the project involved the invaluable field consultations provided by Joel Nicholas of the Hopi Tribe of Arizona and Arden Comanche and James Kunestis of the Mescalero Tribe of New Mexico. We also thank Holly Houghton, THPO, Mescalero Apache Tribe, Dr. Henry Walt, THPO, Isleta Pueblo of New Mexico, Javier Loera, THPO, Ysleta del Sur Pueblo of Texas, and the Cultural Preservation Office, Hopi Tribe of Arizona, for their support and reviews of image archives and reports.

A special note of appreciation is extended to Joe and Janet Cox of the Cox Land and Cattle Company, LLC, for permission to explore and document the Cacti Canyon site. Mr. and Mrs. Cox were gracious hosts and even guided the field crew to other rock art sites in the vicinity.

Several specialists contributed to the study. Dr. Karen Steelman supervised the radiocarbon dating of pigments. Several scholars and enthusiasts of Southwestern rock art deserve mention. Margaret Berrier, Evelyn Billo, Robert Mark, Eric Dillingham, Polly Schaafsma, Suzanne Applegarth, and Mike Bilbo provided insights and documents on their pioneering work in the Guadalupe Mountains.

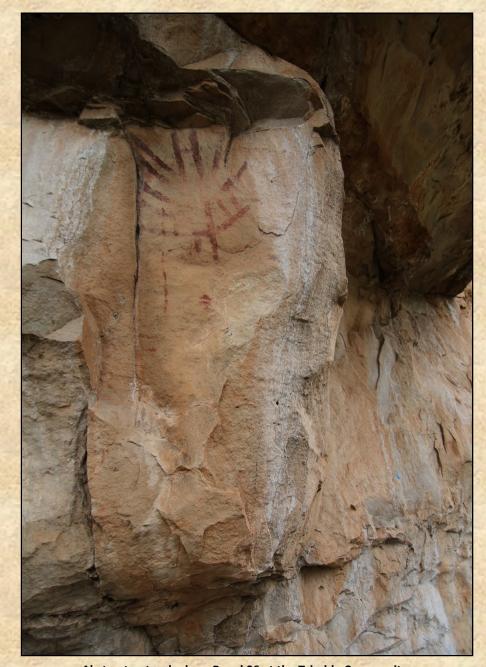
The project could not have been successfully completed without the support and assistance of numerous supervisory and support staff of Versar: Katherine Jones, Laura Short, Anna Banda, Lillian Ponce, and Peter Condon.



Photograph of Panel 20 at Cacti Canyon showing a ancestral spirit (kachina or katsina) mask. The original photograph has been processed with DStretch to bring out the faded colors.



Photograph and drawing of Panel X at the Mask site showing an unusual abstract figure. The original photograph has been processed with DStretch to bring out the faded colors.



Abstract petroglyph on Panel 06 at the Trimble Canyon site.





Bureau of Land Management
Carlsbad Field Office



New Mexico State Historic Preservation Office

Signatory Parties

Permian Basin Programmatic Agreement

Consulting Parties



Mescalero Apache Tribe







New Mexico Oil and Gas
Association

Independent Petroleum
Association of New Mexico

New Mexico
Archaeological Council

