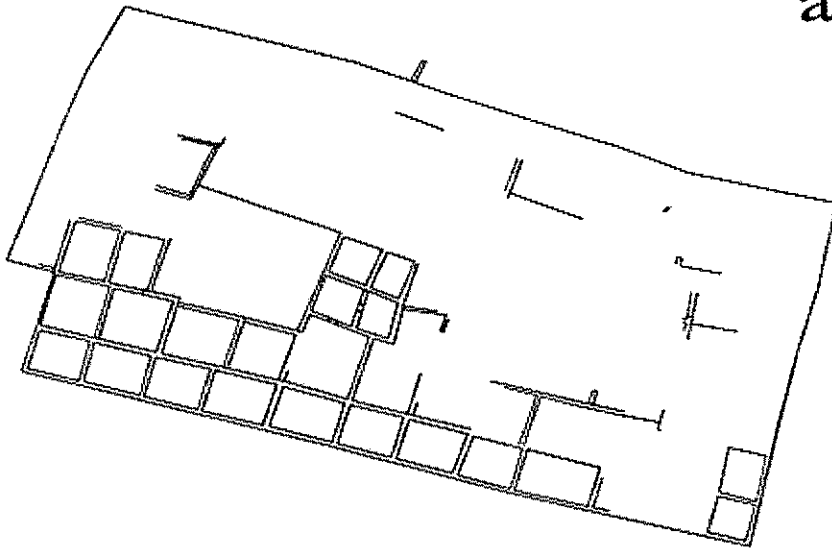


Interpreting the Prehistory of Lyman Lake State Park



Rattlesnake Point Pueblo and Petroglyph Trail Guides



Lyman Lake State Park
St. Johns, Arizona

Trail Guidelines

- Stay on the marked trails. Loose rocks, rattlesnakes, and other dangers are best avoided in this way.
- Do not touch or walk on any of the petroglyphs. Oils from your hands may make dating impossible and continued abrasion degrades the images, despite the hardness of the stone.
- Do not copy the petroglyphs by rubbing, or enhance the images with chalk or any other substances. Shade or a polarizing filter may improve photographs.
- Do not climb on prehistoric walls or into excavated rooms at Rattlesnake Point Pueblo. It is destructive to the site and can be dangerous to you.
- It is illegal to remove or deface any of the petroglyphs, to damage any prehistoric walls, or to collect any pottery, stone tools, or other artifacts in the Park.
- If you see any artifacts on the ground, you may examine them and replace them where they were found. Even small pot sherds and pieces of stone are useful to archaeologists when left in their original locations.
- Take plenty of water. It is often hot on the trails and you may stay longer than expected.
- There are no restrooms on the trails; plan accordingly.



Interpreting the Prehistory of Lyman Lake State Park

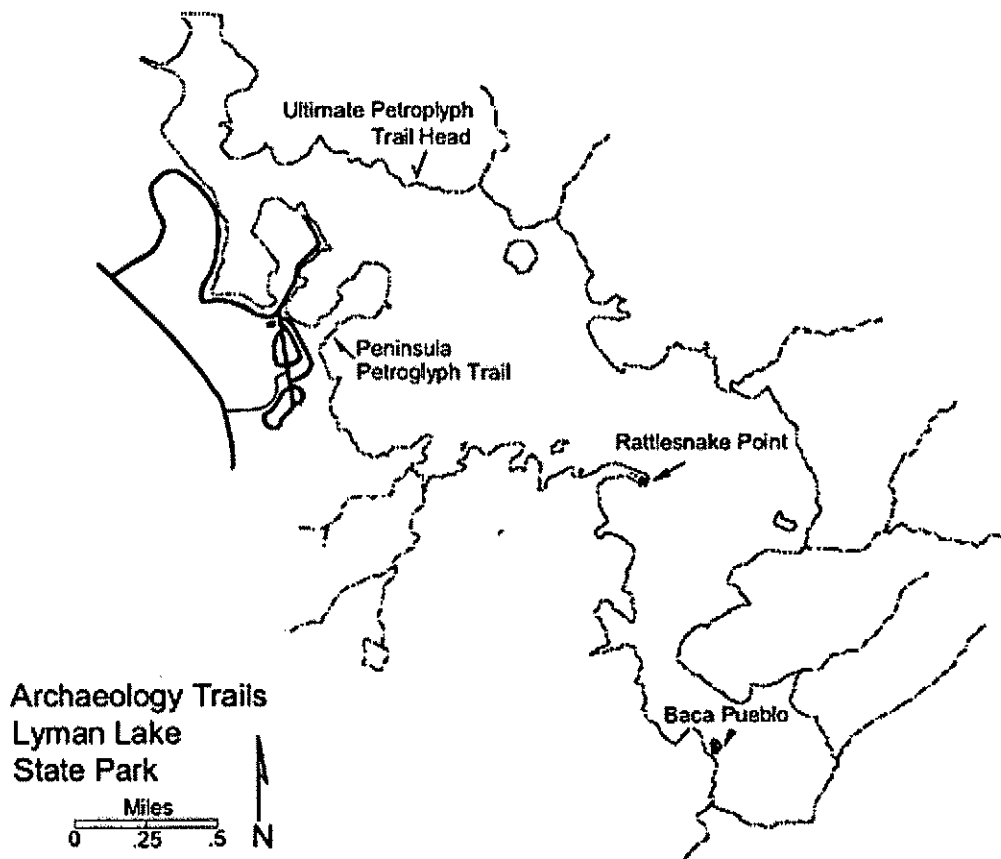
The prehistoric inhabitants of the upper Little Colorado River drainage left a rich material record of their time in the valley. The ruined buildings, artifacts, and petroglyphs (“rock art”) provide the scientific evidence that permits archaeologists to understand the area’s history. Hopi people see the abandoned houses, broken pottery, and markings on the rocks as a record left by their ancestors during the migrations described in Hopi oral tradition. Scientific archaeology and Hopi oral tradition provide two ways of assigning meaning to the physical record of human occupation of this area.

Science provides a framework for seeking testable answers to an evolving set of questions. For scientific archaeology, these questions concern past human behavior. The artifacts, the architecture, and the petroglyphs that archaeologists study provide the evidence that allows them to answer the questions they pose.

Hopi oral tradition provides, for Hopis, a different way of knowing the past. At Hopi, each clan has a narrative of its own history, from emergence, through migration, to eventual settlement on the Hopi mesas. These clan narratives, passed down in both secular and sacred contexts, together comprise Hopi history. This knowledge of the past is deeply grounded in religion, reinforced through ritual, and made apparent in ruined villages, ancient pottery, and the marks left on the rocks.

This guide provides historical insights from both Hopi oral tradition and from a scientific tradition. These are different cultural constructions of the past; in this presentation, neither is privileged over the other.

This guide was written by Arizona State University archaeologists and by representatives of the Hopi Tribe’s Cultural Preservation Office. In this guide, where Hopi views are distinguished from archaeological interpretations, the text appears in a plain type face. ■ Hopi perspectives are preceded by a fret design and \ Archaeological interpretations are preceded by a trowel design.



Interpretive Trails in Lyman Lake State Park

Petroglyph Trails. This guide discusses the ways that archaeologists and Hopi people understand the petroglyphs of the Park. While all the illustrations are from panels along these two trails, this guide does not discuss each panel separately. Appreciation of the petroglyphs is best gained by reading the petroglyph section of this booklet prior to walking the trails.

Peninsula Petroglyph Trail: This ¼ mile self-guided trail is accessible from the camp ground and is open during daylight hours every day. The trail requires a mild climb.

Ultimate Petroglyph Trail: This ½ mile, steeper, trail on the east side of the lake can only be accessed by boat. Tours are available through the Ranger Station on a seasonal basis. The trail ends at Ultimate Rock, a large petroglyph-covered boulder.

Rattlesnake Point Pueblo Trail: Rooms at this 14th century ruin can be viewed from a short trail. Tours are available through the Ranger Station on a seasonal basis.



Petroglyphs

Petroglyphs are designs carved into a rock. Pecking or otherwise removing the dark exterior surface of the rock (called patina or desert varnish) exposes the lighter, less weathered stone below. In Lyman Lake State Park, most of the petroglyphs were made by pecking. No designs painted on rock (pictographs) have been found.

While the petroglyphs are evocative and meaningful to Hopi people, archaeologists approach them with caution because they lack the knowledge to understand the meaning of specific elements and panels. Archaeological discussions have generally been restricted to tentative identifications of animals, grouping image types into styles, and relative dating.

Petroglyphs are classified into styles, broad groupings based on differences in the elements (for example, geometric shapes, specific animals, masked figures), the ways in which they are drawn (such as outlined or solid animals), and the techniques with which they were made (i.e., pecked, incised, scratched, or painted). The styles are roughly dated by comparing the elements with those appearing on dated pottery types, by the fact that glyphs that are more heavily weathered are likely to be older than fresher-appearing glyphs on the same rock, and by noting that earlier styles may consistently be drawn over by later styles, but not vice-versa.

The presence of different petroglyph styles in the Park indicates that more than one prehistoric culture made the glyphs, or that the style used by one culture changed through time. The earliest petroglyphs in the Park seem to date from the Archaic (6000 BC to AD 300) and Basketmaker (from about AD 300 to 700) periods. Most of the petroglyphs date to the Pueblo periods (AD 700 through 1400), with the majority produced during the final three centuries of prehistoric occupation.

Recently, some archaeologists have begun to see petroglyphs as products of shamanistic rituals. While this interpretation is useful for some times and places, all petroglyphs are not associated with shamanism. Neither the ASU archaeologists working in the Park nor the Hopi would interpret the Lyman Lake petroglyphs as shamanistic.

Look for this Panel on the Ultimate Petroglyph Trail



\ This panel displays petroglyphs mostly belonging to the Abstract Style, associated with Archaic hunter-gatherers who lived in this region from about 6000 BC to AD 300. As the name suggests, the Abstract Style has no clearly identifiable creatures or objects. Zigzags, sets of parallel zigzags, wavy lines, concentric circles, circles with dots, one pole ladders, rakes, and nets are all common.

Tutuveni

Tutuveni is the Hopi word for petroglyphs. It means "clan marks of the Hopi people" (who migrated through an area). These clans ultimately came together on the Hopi mesas to form what is known today as Hopisimom (the Hopi people).

Hopi people interpret many of the petroglyphs in the Park as records of the migrations of their ancestors through this area. In many cases, the designs are associated with particular clans and events that took place during their migrations; others are clan symbols. While panels may not have the same meaning for every clan, the selected interpretations presented here convey the general nature of Hopi readings of the glyphs.

Hopi clans emerged from below and undertook migrations before arriving at the Hopi mesas, the spiritual center of the earth. Hopi clans traveled different routes and made as many as four directional migrations before arriving—at different times—at the Hopi mesas. Other clans never reached the Hopi mesas, but settled elsewhere and are now identified with non-Hopi cultural groups.

Each Hopi clan has a history of its own from emergence, through migration over the land, to settlement on the Hopi mesas. Clan migration stories name rivers and topographic features as well as ancestral villages occupied during their migration. Some names are closely associated with known locations, while for others, the specific locations remain uncertain. The Eagle, Sparrow Hawk, Crane, Squash, Parrot, and possibly the Katsina clans all locate parts of their migrations in this region.

When a clan was on a migration, they would look for a sign that would tell them where to settle down. Once they saw that sign, they would settle in the area. Oraibi (the oldest of the Hopi villages) tradition says that a clan was required to stay somewhere for a minimum of sixteen years. Sixteen (four times four) is symbolic of four, an important number in Hopi tradition. Settlement for this period of time allowed the clan to regain physical strength, to properly establish a small community, and to farm and stock up on food. After sixteen years, the clan waited for signs telling them what to do and where to go next.

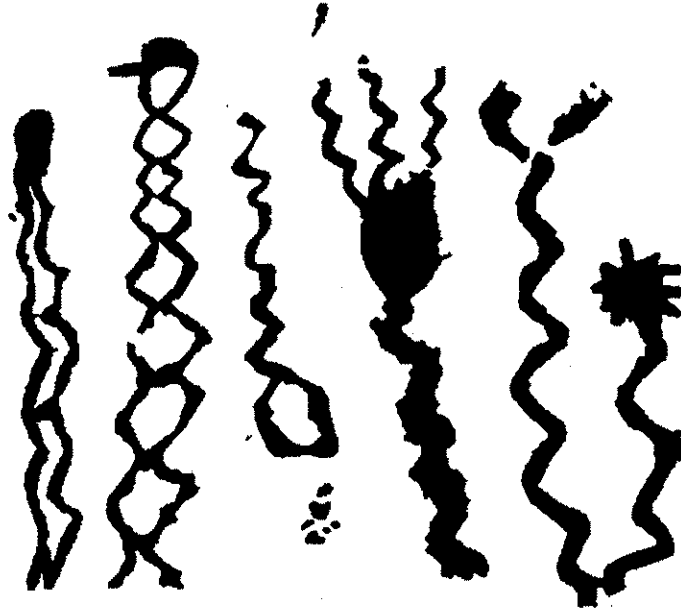
Look for this Panel on the Peninsula Petroglyph Trail



■ This panel explains how Hopi ancestors were able to survive in this area. The central petroglyph is the water serpent. When Hopi ancestors were given a sign to stop and settle in an area, sometimes there would be no water. So these people, through ceremony, would pray to the water serpent underground. The water serpent, whose domain is under the ground, would answer by churning around, which would force water to seep out of the ground. The figure on the right is a man holding corn. The figure on the left is a woman giving birth. The other figures may represent a successful hunt. As a whole, the panel tells us that the people were able to grow corn, hunt, and have children in this area because the water serpent answered their prayers for water.

Look for this Panel on the Peninsula Petroglyph Trail

🔍 Based on the style, researchers would date this panel to the Basketmaker period (AD 300 to 700). This is probably among the earlier panels in the Park.



📖 The "zigzag" element on the far left, and others in the area, are probably snakes. Although snakes can indicate the presence of the Hopi Snake Clan in the region, caution is offered for this particular interpretation. The snake, representing the water serpent, is an important symbol to many Hopi clans. The third element from the right represents a migrating group that split into three or went off in three different directions. The element at the far right depicts a clan that was on its migration when it saw the blue star, a sign to start the final trip home to the Hopi mesas.

Look for this Panel on the Peninsula Petroglyph Trail



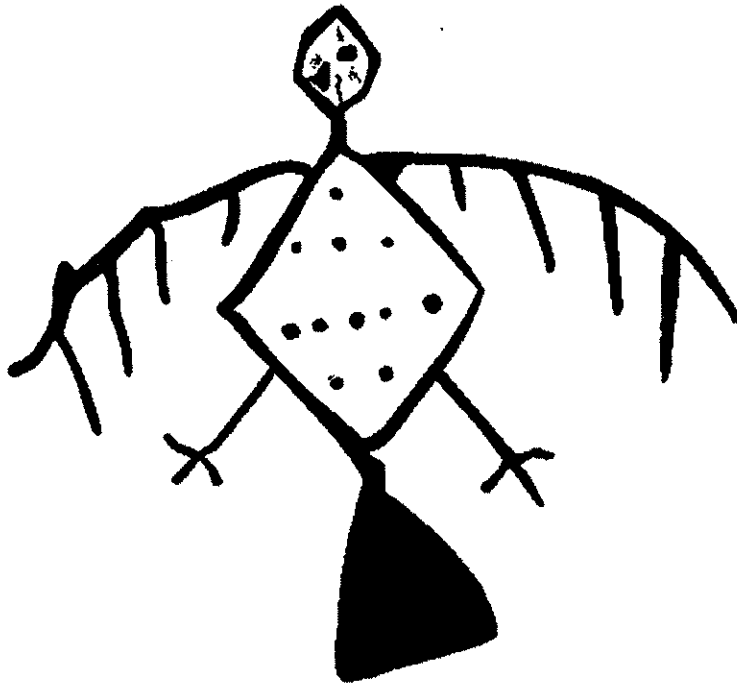
■ The complex element on the right represents a sort of map left by the people traveling through the area. It shows a line of settlements along the [Little Colorado] river (top), a major settlement off to the north (left) and another cluster of four settlements to the south or west (right).

■ "People can listen to me talk all they want. And they can probably say 'Well, that's tradition, that's legend'. But what people don't realize is that a lot of what we talk about today in Hopi country is still supported in ritual and ceremony. There are still living cultures that associate petroglyphs with what's happened in the past."

Leigh Kuwanwisiwma
Director, Hopi Cultural Preservation Office

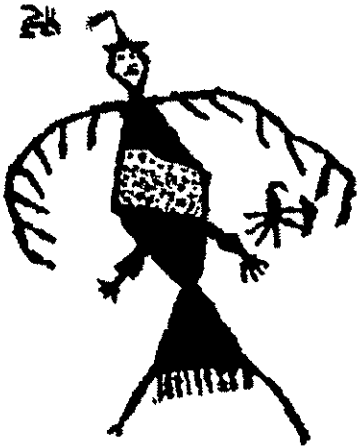
Look for this Panel on the Ultimate Petroglyph Trail

☐ This single large petroglyph represents the Hopi Grey Eagle Clan. Although there is more than one type of eagle clan at Hopi, the speckles suggest that this is the grey eagle. Grey Eagle Clan stories refer to this area as part of their migration route. This petroglyph, and a similar one farther up the trail (on the opposite page), were probably left to mark the clan's presence in the valley.



✍ This eagle is part of the Reserve Petroglyph Style. This style is believed to date between AD 1000 and 1300, based on similarities in design with dated pottery. Other designs in the Reserve style include singular footprints of animals and humans; depictions of animals and stick-figure humans that have legs pointing forward or up; flute players; and animals with long tails thought to be mountain lions or coyotes. Large heads and eyes and long snouts associate these creatures with the Mogollon rather than the Pueblo tradition. Look for the mountain lion/coyote (opposite page) farther up this trail.

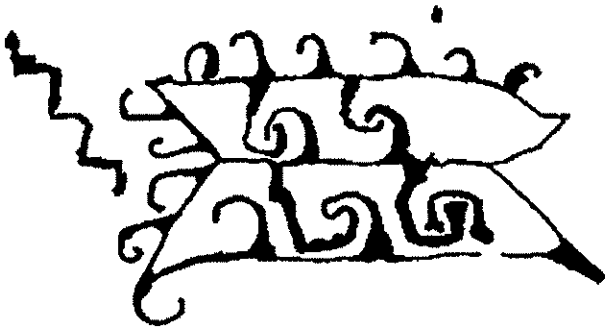
Look for these Elements on the Ultimate Petroglyph Trail



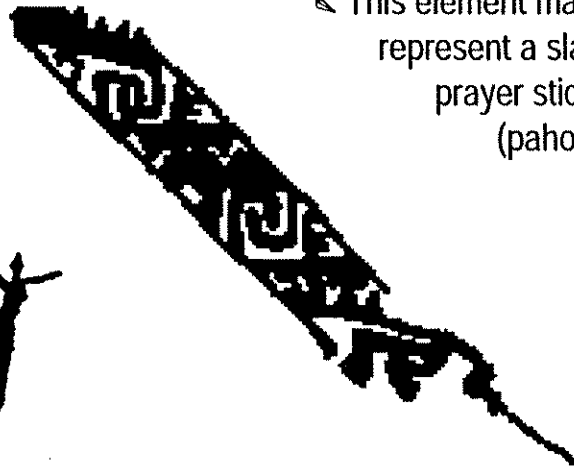
■ Eagle indicating the Eagle Clan's presence in the area.
↘ Some researchers would identify this bird as a turkey.



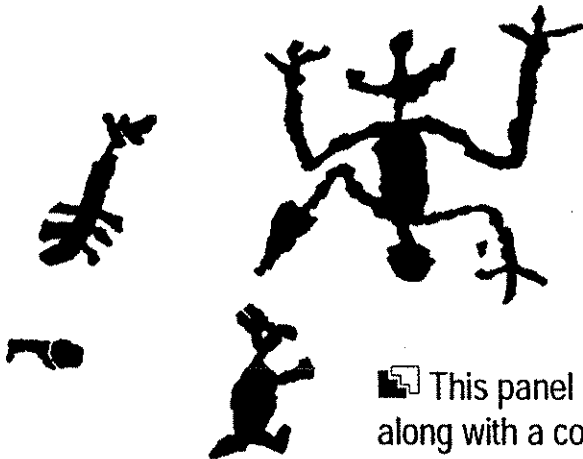
↘ Mountain Lion
■ Coyote or Mountain Lion



■ Water Clan symbol with waves depicted on the top.



↘ This element may represent a slab prayer stick (paho).



■ This panel may depict a birthing along with a coyote or an antelope and a scorpion.

Ultimate Rock

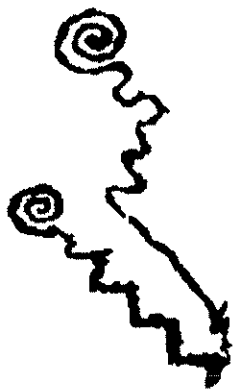
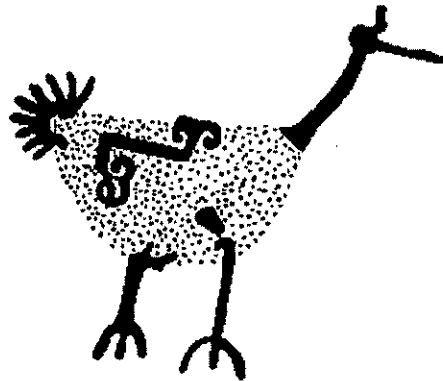
These petroglyphs appear on "Ultimate Rock" at the end of the Ultimate Petroglyph Trail on the east side of Lyman Lake.

■ The spiral is the Hopi symbol for clan migration. The number of full loops indicates which of the four migration cycles the clan was on at the time the petroglyph was carved.



■ Although popular literature refers to hump-backed flute players as Kokopelli, in fact they are cicadas—an important insect related to fertility in Hopi tradition. Kokopelli, a Hopi Katsina, has a hump back but never plays the flute.

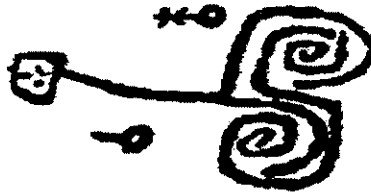
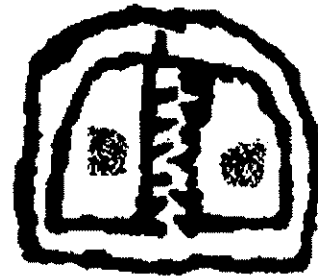
■ The long neck and bill identifies this as a water bird. It may be a marker left by the Crane clan. Bird feathers are important in Pueblo ceremonialism and this bird may have been important for its feathers or as a messenger to the gods. (Great Blue Herons, members of the crane family, are common on Lyman Lake.)



■ The spirals connected by a line represent clans that met during their migrations and then continued on, maybe together or maybe in separate directions.



Three depictions of the Hopi deity Ma'saw. The element below shows two clans meeting Ma'saw here and then pursuing separate migrations.



This star and moon motif appears throughout the Southwest and may record the supernova of AD 1054. This supernova was so bright it could be seen during the day. Alternatively, the star and moon may represent the quarter moon and evening star (Venus), which is brightest during the quarter moon.



This animal

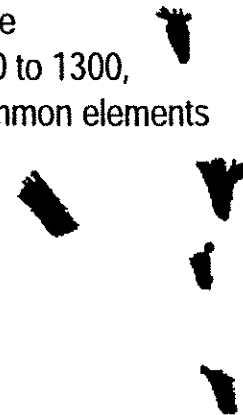
may be a dog, coyote, or mountain lion. Dog burials found at prehistoric pueblos, indicate dogs' importance to prehistoric people. Modern Pueblo groups revere the mountain lion for its hunting prowess; prehistoric groups may have similarly recognized the mountain lion.



The scorpion does not play a large role in Pueblo oral tradition. It may represent the power of these dangerous creatures or may be a personal or clan symbol.

Scorpion.

These tracks are associated with the Winslow Tradition, dating from AD 1000 to 1300, that is associated with the prehistoric Pueblo people. Other common elements include humans with large hands and feet; circular scrolls and spirals; sheep, deer and antelope; and centipedes and scorpions. Many petroglyphs on Ultimate Rock belong to this tradition.



Rattlesnake Point Pueblo Trail

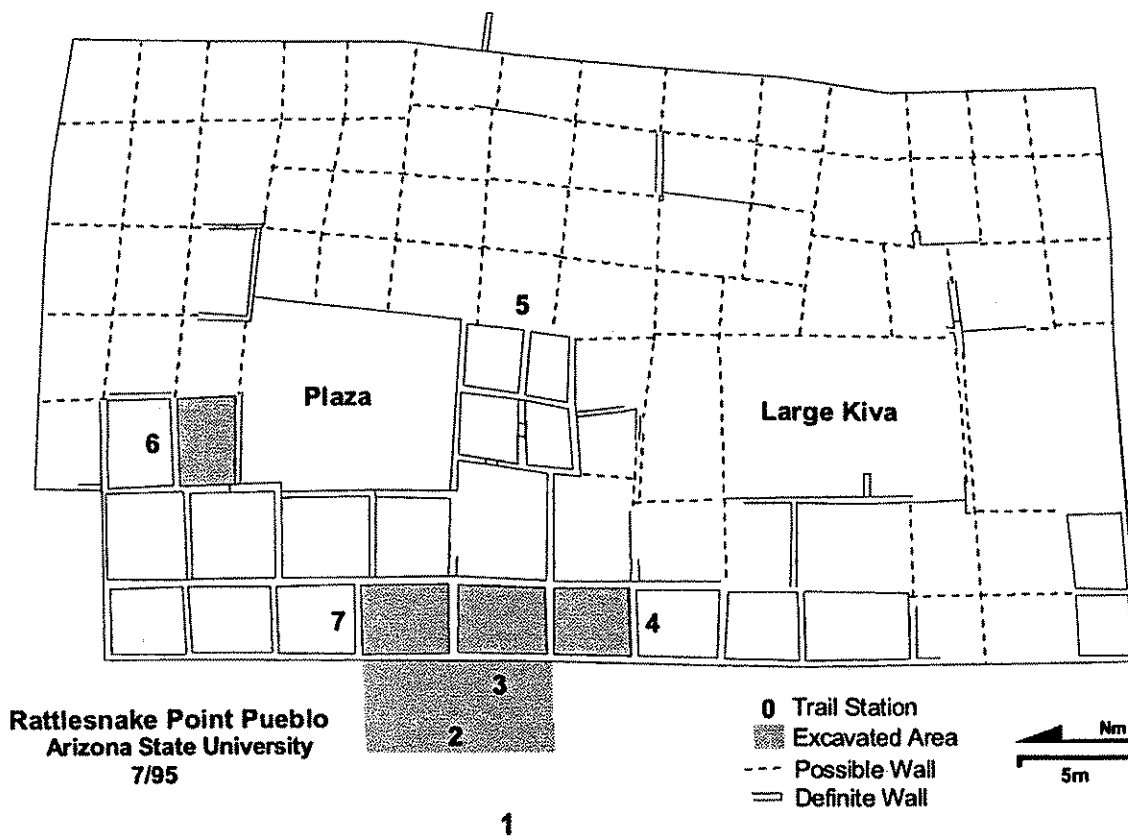
The following pages discuss Rattlesnake Point Pueblo and serve as a guide to the trail at the pueblo. If you are following the trail, numbers on the map (opposite) are keyed to the following text. Some of this information is duplicated on signs. Rattlesnake Point Pueblo is the ruin of a compact pueblo village built and occupied by the ancestors of the Hopi and perhaps other modern Pueblo Indian groups. It had about 85 rooms and was occupied between about AD 1325 and 1390. The pueblo sat on a long ridge overlooking the Little Colorado River (the lake is formed by a dam built in 1915). The fertile floodplain along the river was almost certainly farmed by the people living at Rattlesnake Point. Its location is shown on the map on page 3 of this guide.

Information about Rattlesnake Point Pueblo comes from professional excavations conducted by archaeologists from Arizona State University during the summers of 1993 through 1995. While only four rooms remain open, many more were excavated. The exhibit in the park office presents results of this archaeological research and displays excavated artifacts. Funding for the excavation and the exhibit was provided by a Heritage Fund Grant administered by Arizona State Parks, a grant from the city of St. Johns, and matching funds from Arizona State University and the Hopi Tribe.

This booklet presents information learned from the excavation and provides some explanation of how archaeologists use controlled excavation to answer questions about prehistory. It also discusses the continuing importance of archaeological sites such as Rattlesnake Point Pueblo to contemporary Hopi people. If visitors appreciate the potential of archaeological sites to contribute information about the past and the traditional importance of these places to modern Indian people, we hope that they will help preserve these important pieces of our heritage.

Pueblo Architecture

Rattlesnake Point Pueblo was a medium-sized village that was home to about 15 families between AD 1325 and 1390. It was only one story tall and had between 80 and 90 rooms. When occupied, the architecture would have resembled that of historic pueblo villages such as those at Hopi, Zuni, and Acoma.



Pueblo architecture consists of stone-walled rooms constructed in a compact, apartment-like style. Many pueblos had rooms surrounding an open area, or plaza, where ceremonies (including Katsina dances) could be viewed by the residents of the village. At Rattlesnake Point Pueblo, all of the rooms are contiguous and surround a small plaza. Based on the ways in which the walls were built, it appears that most of the pueblo was built at the same time.

As you walk the trail down Rattlesnake Point to the ruin, you see a large mounded area with a few rooms that have been stabilized and roofed. This mound contains what remains of the prehistoric village.

1 BACK WALL OF THE PUEBLO. *At station 1, you are standing on the level of the ground surface when Rattlesnake Point Pueblo was built. In front of you is the outside rear wall of the village. (The village probably faced the river.) Although the wall now stands three to four feet high, it would have been about twice this high when the pueblo was occupied.*

After the residents left, years of rain, snow, and wind caused the roofs to deteriorate and parts of the walls to collapse and fall into the rooms. As the building gradually collapsed, wind-blown sand came to rest against the

collapsing walls and the ground surface rose until the mound was as high as the remaining walls.

Visitors to prehistoric pueblos often see excavated rooms with floors well below the surface of the ground and conclude that the pueblos had been dug into the ground. Although earlier villages in this area were composed of pit houses, homes that were partially excavated into the ground, Rattlesnake Point Pueblo (and other masonry pueblos) were built from the ground up.

Dating the Construction of Rattlesnake Point

Rattlesnake Point Pueblo was built in the 1320s, and occupied for about 70 years. Considerable evidence was found that allows archaeologists to accurately date this construction. During the excavation, archaeologists recovered hundreds of fragments of wood that came from the pueblo's roof beams.

Some of these pieces of wood were dated by the Laboratory for Tree-Ring Research in Tucson. It is possible to date wood specimens of some species of trees using patterns in the widths of the annual growth rings of the tree (tree-ring dating). The exact date that the tree was cut down can be determined if the bark or outer ring of the tree is preserved.

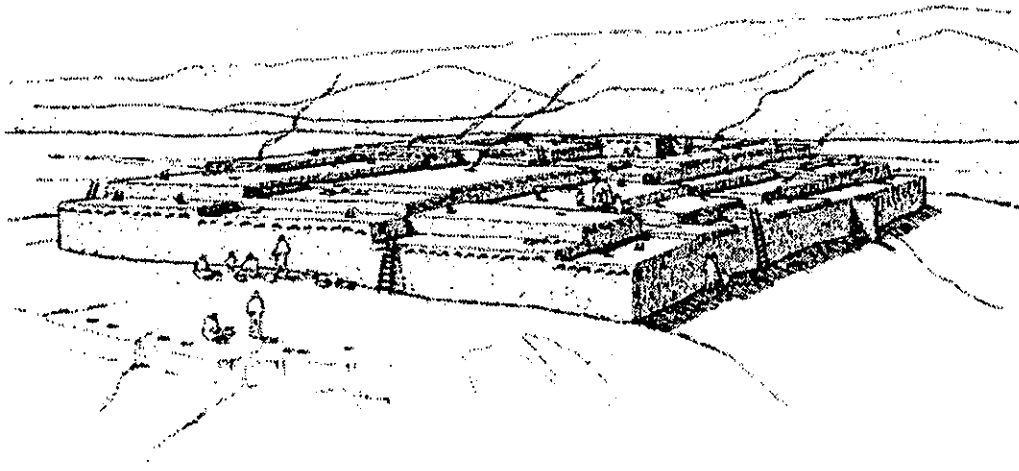
Trees used to roof Rattlesnake Point pueblo were cut down in AD 1272, 1320, 1321, 1328, 1337, 1338 and 1340, and one was cut down in 1370. It seems likely that the pueblo was constructed in the 1320s, and had repairs to the original roof in the late 1330s and 1340. This seems plausible as wood-roofed pueblos usually require maintenance every 15-20 years. The AD 1272 beams probably indicate a reuse of beams from an earlier (abandoned) pueblo nearby. While some minor variations on this interpretation are plausible, the pueblo must have been built by the late 1330s.

The beam cut in 1370 is evidence that beams were occasionally replaced throughout the life of the pueblo and that people lived here until at least 1370. While there is no direct evidence that people lived at Rattlesnake Point Pueblo after 1370, it is likely that they lived there for some additional time without leaving any evidence that the archaeologists happened to find. Since only part of the site was excavated, and not every piece of wood could be dated, the village may well have been occupied until about AD 1390.

No prehistoric sites above the Mogollon Rim have dates after AD 1390, so archaeologists believe that all of the towns along the upper Little Colorado River and along the Mogollon Rim (near Show Low) were abandoned by that date. By that time, all of the people in this area had moved to the historic Hopi and Zuni villages and, perhaps, some had

moved out of the region. Although after 1390, there were no longer any permanent settlements, this area continued to be used by the Hopi and Zuni for religious and economic purposes.

2 EXTERIOR WORK AREA. *The excavated area underneath the shelter, but outside the back wall, initially served as a work area bounded by at least two low walls. At some point during the occupation of the pueblo, this area fell out of use and this side of the pueblo became an area where household refuse was thrown. Broken pots, pieces of chipped stone, ash from fireplaces, and animal bones from meals were discarded here, probably tossed off the roofs.*



Artist's reconstruction of Rattlesnake Point Pueblo, looking from the south.

Outside the Pueblo

The area outside the main pueblo wall was used by the residents of Rattlesnake Point Pueblo as an outside work area and may have been covered by a light roof. Based on the kinds of ceramics found on the prehistoric ground surface (the earliest level), this area was used for outdoor activities for about 30 years, starting at the time of construction. About AD 1350, it was converted to a trash midden. The back wall of the pueblo, including this area, was used for refuse disposal until the occupants left the pueblo.

This area with mounded household refuse—called a “midden” by archaeologists—was excavated to answer questions about how the people at Rattlesnake Point Pueblo lived. Middens usually accumulated over the period of occupation of the village, providing a chronological record of the kinds of plant and animal foods people ate, and the kinds of pottery and stone tools that they used.

The excavation of the midden at Rattlesnake Point Pueblo revealed thousands of pieces of ceramics, chipped stone and several hundred pieces of animal bone. You might find pieces of pottery or other artifacts in this area while walking around. Please return them to where they were found after you examine them.

3 ROOM 2. *This room was used much more intensively than either of the other rooms still open from the excavation. Numerous artifacts suggest that it was used regularly for cooking, eating, the manufacture and use of stone tools, food storage, and possibly sleeping.*

The fireplace (hearth) in this room indicates that this was a room used on a daily basis. Rooms without hearths were probably not used all of the time as they would have been cold in the winter without a fire. Two decorated bowls found in the southeast corner of the room were probably used for serving and eating. One of these, a small red bowl with black paint, is in the exhibit. East of the fire pit were two larger, undecorated jars that were used for cooking and storing food. One or both of these appears to have been full of various plant foods, including yucca buds, corn, and beans. Towards the southwest corner of the room, chipped stone debris was recovered. Several stone tools were also found on the floor in this area. Some of these, with saw-like edges, were probably used for cutting wood, meat or hides. A few pieces of antler were found nearby. Antler hammers were used in making stone tools, and the chipped stone debris suggests that someone made stone tools in this corner.

The fireplace was filled with ash and numerous pieces of animal bone, and was used for cooking as well as for heat. The remains of what appears to have been a reed mat were located on the floor in the northwest corner of this room. It was probably made from cattail reeds, and the fluffy part of the plant may have been used to make a soft sleeping mat. Cattail pollen was recovered from the soil in this part of the room.

Techniques of Pueblo Construction

The walls of Rattlesnake Point Pueblo were all made from stones quarried near the site. A sandstone outcrop just below the pueblo (sometimes covered by the modern lake) was a major source of stone for the walls. This sandstone does not break naturally into straight-edged pieces, so the residents used hammer stones to smooth the construction stones on at least one side. If you look closely at some of the stones in the wall, you will see small indentations and grinding marks where stones were first pecked and then ground smooth.

The stones were held in place with mud mortar and the walls were mud-plastered on both sides. Since the locally available building stone was difficult to shape, the stones do not fit together well. Mud mortar fills the spaces, and together takes up half of the wall volume—too high a proportion for a strong stone wall. Without the protection of the roof and maintenance of the plaster, exposure to the elements eroded the mortar, making the walls unstable and subject to collapse.

Some of the mortar visible in these rooms has been applied recently to help protect (stabilize) the walls. Using soils that were excavated from these rooms, stabilization specialists from the National Park Service attempted to match the original texture, but have purposefully discolored it slightly so that it is possible to distinguish original mortar from the modern work. Can you see the difference? Although the exposed walls have been stabilized, they are still not terribly strong. We have built metal roofs over these rooms to protect them from the elements and ask that visitors not stand or climb on the exposed walls—both for their protection and your safety.

Although none of the roofs at Rattlesnake Point Pueblo remained intact, we have considerable evidence that roofs were constructed as they were in Hopi buildings during the 1880s. Generally, large primary beams were placed across the shorter dimension of the room. On top of these were placed smaller, secondary beams, running in the opposite direction. This framework was covered with smaller pieces of wood or reeds, and then topped off with a thick application of mud (or “daub”) to weatherproof the roof.

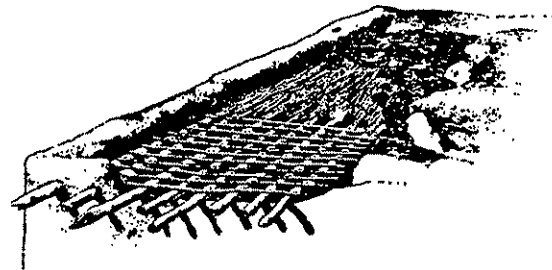


Diagram of roof construction (from Mindeleff 1891).

When the Rattlesnake Point Pueblo rooms were excavated, large pieces of this mud daub were recovered, many of which have impressions of the reeds and secondary beams preserved in them. Below the layer of daub was a layer of beam fragments, often with differing orientations, replicating the pattern seen in the 19th century Hopi and Zuni villages. Some of this daub with beam and reed matting impressions appears in the exhibit.

4 ROOM 18. *This room was primarily used for food storage. Artifacts recovered from this room suggest that it was not used as intensively as Room 2. It contained a few vessels and numerous bone tools. In the lower left corner, near the floor, is a stone with a design pecked into it. This is the only stone of this sort found in the pueblo and the design*

probably held special significance to the builders. Perhaps similar "cornerstones," dedications or offerings were often a part of new construction by Pueblo people.

5 SITE OVERVIEW. *You have now walked up over the back exterior wall of the prehistoric village and are standing near its center. To the east, rooms extend out towards (and usually into) the lake.*

Site Environment

Seven centuries ago, Rattlesnake Point and the surrounding area looked quite different. Lyman Lake was not here, instead, the Little Colorado River flowed where the lake now stands. Lyman Lake was created by damming the flow of the Little Colorado River in 1915, to store irrigation water for the valley between the Park and St. Johns. Prior to this time, the river would have run all year, running through the valley about 100 yards to the east (in the present lake) and about 35 feet vertically below the village. The valley floor was relatively wide and fertile, providing an ideal location for farming with a possibility of irrigation from the river. Despite the name, Rattlesnake Point is not infested with snakes. The name comes from its location on the tip of a ridge that extends into Lyman Lake, giving the land a snake-like appearance on maps and from the air.

The vegetation would look much as it does today from Rattlesnake Point. The grasslands on the surrounding hillslopes and plains would have been present, though some of the grass species might have been different or more abundant (prior to the grazing of sheep and cattle). A path of dense green foliage including cottonwood trees would have followed the river course. The river below Rattlesnake Point probably looked much like the Richville Valley just upstream (south) of the lake along the Little Colorado River or the lush stretch of river below the dam that you see as you leave the Park.

Ponderosa pine, pinyon pine, and Douglas fir were all used as roof beams at Rattlesnake Point Pueblo. However, none of these trees grow near the site today. These species generally grow at higher elevations, primarily in the White Mountains about 25 miles to the south and west (and visible from Rattlesnake Point on the southern horizon). While pinyon pine may have grown closer to the site, the majority of these beams were probably cut in the White Mountains near Springerville and carried to the village (they had no pack animals and no wheeled transportation.)

The midden excavation has provided additional information about the prehistoric environment and the residents' impact on it. The animal bones recovered from the midden excavations indicate that game was relatively abundant throughout the occupation of the site. The Little Colorado River

was probably a good watering place for deer and antelope, and the village's fields would have attracted cottontails and other animals.

Often, when people live in an area for a few generations, they over-hunt certain game animals (such as antelope or deer) and start relying on smaller species like rabbits. When this happens, bones of the more desirable animals are abundant at the bottom of the midden, but are gradually replaced by bones of less desirable species closer to the surface. While this is a common pattern in Southwestern sites, it does not appear to have been the case at Rattlesnake Point. The relatively small number of families that lived at Rattlesnake Point apparently did not have a detrimental impact on the local animal populations.

Bones of fish, including chub, suckers, and Colorado Squawfish, were recovered during the excavations. The fish appear to have been a regular part of the diet, although they were probably only caught occasionally.

Day to Day Activities

As you walk around or examine the map of Rattlesnake Point Pueblo, you will notice very few doorways between the rooms. No openings were found in the exterior wall. Pueblo rooms were entered by ladders through openings in the roofs. Rooms linked together with interior doorways would have all been part of a single household. The three adjacent rooms under the shelter were not connected by doorways. However, they may have had windows in the back wall that were later sealed (walled up). The kiva (Station 6) has a doorway that was sealed during the use of the pueblo.

The roofs were some of the busiest areas of the pueblo during the warmer seasons. Although the roofs collapsed, the artifacts left on them could still be separated from those that had been left on the room floors. Based on the locations of manos and metates (grinding stones) it appears that corn grinding was done on the roofs of several rooms. Grinding corn was a strenuous activity that was probably performed by the women of the pueblo. At times, it would have required several hours a day and working on the roofs may have permitted socializing with others doing the same task.

Making stone tools and arrow points was another roof top activity. Several projectile points (arrowheads) and abundant debris from the stones that were chipped away to create the tools were found on the roof of the room located west of the kiva (Station 6). Chipped stone tool manufacture also occurred within a number of other rooms within the pueblo. People probably made tools as they were needed, using small caches of raw material stored nearby. Tools could be sharpened as they dulled, or replaced as they wore out.

Most of the materials used for stone tools appears to have come from the immediate area. Gravels found all along the Little Colorado River provide an abundant source of chert, a good quality raw material. However, obsidian (volcanic glass) was also used to make tools with very sharp cutting edges. Obsidian does not occur locally, and chemical analyses of some obsidian artifacts recovered from Rattlesnake Point indicates that the obsidian originates near Mule Creek in Southwest New Mexico, located some 90 miles to the south-southeast.

With the available evidence, archaeologists can't determine whether individuals from Rattlesnake Point Pueblo traveled to this distant source to collect the obsidian or if it was collected by others and was traded from group to group, eventually arriving here. In either case, obsidian, the best and most valuable lithic material, constitutes less than 5% of the chipped stone recovered. It was used for both for projectile points and cutting tools.

6 THE KIVA, ROOM 31. *This room is called a kiva, a ceremonial room used in religious practice and for the gathering of groups. There is a sealed doorway that suggests that this room was remodeled while it was in use. It probably started out as a room that was used for some other purpose and had a doorway. Sometime later, the pueblo occupants sealed off the doorway and paved the floor, converting the room to a kiva. (The damage to the wall next to the doorway was done by recent looting. Looters dug through the wall; several beer bottles were buried in this area.)*

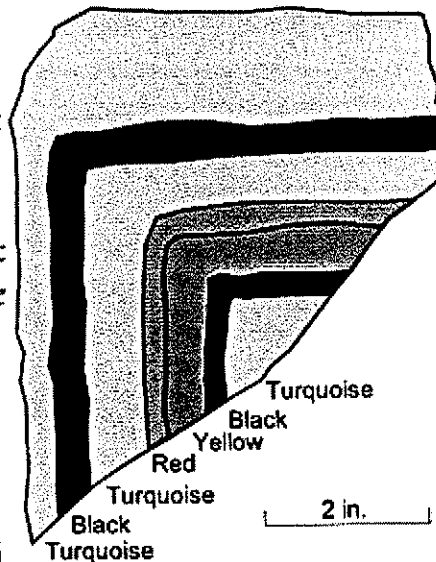
Several unique architectural features are used by archaeologists to recognize kivas. These include the bench, or altar, that is present. Another unique feature is the stone paved floor. The entire floor of this room was probably covered with large pieces of flagstone; the corner of the room without stone was damaged by looting. There are also several niches, or small compartments, located on the bench. These may have been places for objects important to the users of this particular room. Due to its size, we assume that this was probably used by the religious leaders from a segment of the village. There may be one or two other small kivas similar to this one at this site, although they were not encountered during excavations.

A much larger kiva structure was also discovered during excavations. Noted on the map as the large kiva, this structure was only partially excavated. It appears that this kiva was probably used for larger gatherings, possibly involving most of the village residents or visiting neighbors. While the Pueblo was still occupied, this large Kiva fell out of use, was partially dismantled, and filled in with debris. Flagstones that had lined the floor appear to have been removed, and the beams that made up the roof may

have also been reused. The debris used to fill the kiva probably helped to stabilize the walls of adjacent rooms (some of which were quite bowed), but may also have been a practice associated with the closing down of an important ritual facility. The fill deposits contained bowls decorated with masked images and the legs of a bobcat, both of which are special items also associated with abandonment of kivas at the ancestral Hopi sites at Homolovi Ruins State Park near Winslow. The timing of this “decommissioning” is uncertain, but it may have been related to the choice to leave the this area at about A.D. 1400.

7 ROOM 6. *This room appears to have been used for storage of religious items or as a place where preparations for ceremonies were undertaken. It had an unusual inventory of artifacts and an unusual architectural features that provide clues to this function.*

In contrast to the rooms that were used regularly (such as Room 2), this room contained relatively few artifacts and does not have a fireplace. However, near the center of the outside wall is a small protruding stone that may have been used as a ledge to support an altar. In front of this ledge was a fragment of what has been identified as a stone altar. The altar was made from a sandstone slab that was shaped, ground smooth, and then painted with a geometric design in black, yellow, red, and turquoise alternating bands. This resembles a particular altar used in Hopi



pueblos. On the floor below the ledge is a small compartment that may have been a place for storing important objects and is similar to those seen in the bench of the kiva. This small feature was completely lined with flat stones, and although it was empty, a small stone was still covering it when it was excavated. Whatever was stored there was probably taken by the residents when they left.

On the opposite wall of the room (to your left) is a small hole through the wall that may be difficult to see because it was not completely excavated. On the floor immediately in front of this hole is part of an upright stone. This combination of features is interpreted as a ventilator and a deflector stone. The hole in the wall would allow fresh air into the room, and the upright stone would serve to spread it out. This kind of system is most frequently found in rooms that have a fireplace, and it is

possible that this room had a small fireplace that was not as permanently built as those visible in the other two rooms you can see at the site.

At Rattlesnake Point Pueblo, rooms used for everyday activities generally have abundant artifacts from those activities left in place. Only two undecorated jars and one painted bowl were found on the floor in the northeast part of room 6; other artifacts recovered were a bone tool and a few pieces of chipped stone. Almost no animal bone or food remains were found. Apparently, people did not use this room for making or using stone tools, storing or preparing food, or doing other activities that ordinarily leave visible traces.

Abandonment

As discussed above, the evidence suggests that the inhabitants of Rattlesnake Point Pueblo left the area by about AD 1390. Frequent mention of the upper Little Colorado River area in Hopi oral tradition suggests that at least some of the residents moved from Rattlesnake Point Pueblo to the Hopi mesas where they joined an already substantial population.

The pueblo was burned at abandonment. While the evidence is not clear-cut, it appears that it was intentionally burned by the inhabitants at the time that they left. The fact that some rooms contained debris that had not been cleaned up suggests that the abandonment may have been planned. The presence of so many ceramic vessels, grinding stones, and other artifacts left on the floors suggests that a long-distance move was planned (otherwise these items might have been carried away). Finally, the thoroughness of the burning—every excavated room had evidence of burning—indicates that the burning was intentional. However, the lack of religious paraphernalia and of personal items left in the rooms suggests that this was neither an accidental fire nor one set by enemies.

By AD 1390, the inhabitants left Rattlesnake Point Pueblo. No permanent settlements remained in the upper Little Colorado drainage or along the Mogollon Rim. However, as people moved to their ultimate destinations at Hopi and elsewhere, they left shrines and continued economic and religious use of this area. What archaeologists (and others) call archaeological sites are ancestral homes to the Pueblo people. What Anglos call “rock art” is the historical record of their ancestors’ migrations that has great meaning to the Hopi people. The Hopi people have no concept of abandonment; the areas through which their ancestors traveled remain part of the Hopi economic and spiritual landscape today.

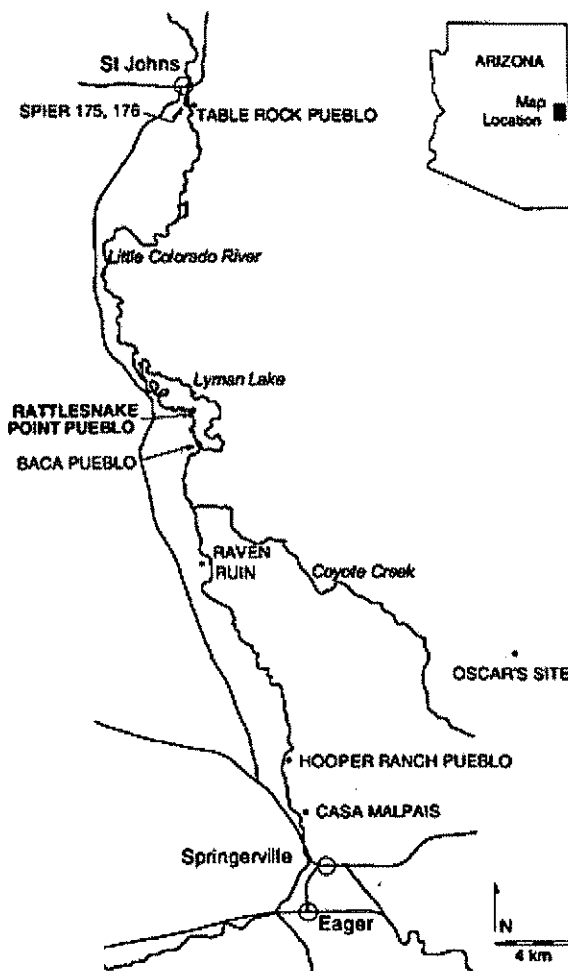
Rattlesnake Point Pueblo in Regional Context

The residents of Rattlesnake Point Pueblo undoubtedly interacted with several contemporaneous villages along the upper Little Colorado River between St. Johns and Springerville. Contemporary with Rattlesnake Point Pueblo were the sites known as Spier 176 and Table Rock Pueblo in St. Johns, Baca Pueblo in Lyman Lake State Park, and Raven Ruin in the Richville Valley. The well known sites of Casa Malpais and Hooper Ranch Pueblo, both north of Springerville, had probably been partially abandoned before Rattlesnake Point Pueblo was built. With the exception of the Raven Ruin, these villages were similar in size and layout with 60 to 100 rooms arranged in a compact plan.

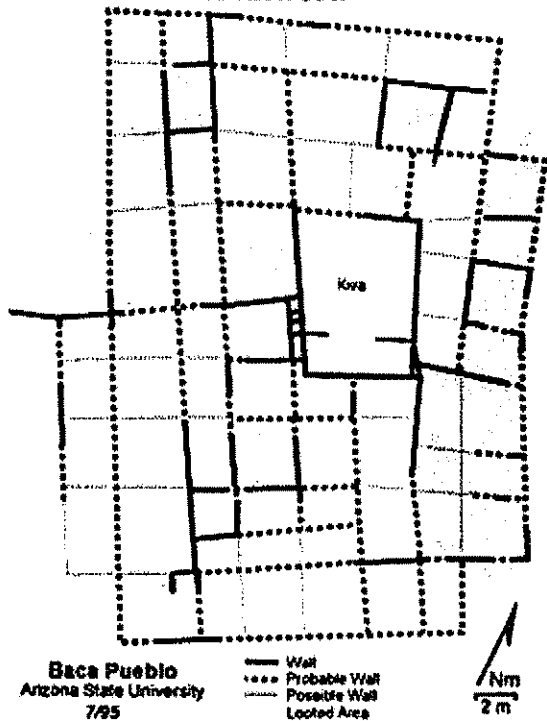
With about 350 rooms, Raven Ruin was considerably larger. Its major occupation began in the late 1200s overlapping the occupation of Casa Malpais and Hooper Ranch Pueblo, as well as a site in St. Johns known as Spier 175. Raven Ruin was almost certainly abandoned about the same time as Rattlesnake Point Pueblo, about AD 1390.

Since the 1950s, there have been substantial excavations at Table Rock Pueblo, Rattlesnake Point Pueblo, Baca Pueblo, Hooper Ranch Pueblo, and the Raven Site. These sites were occupied at the same time and each was at most about 10 miles from its nearest neighbor. Thus, it is remarkable that different kinds of pottery are common at these sites.

Four major groups of decorated types, called "wares" by archaeologists, are common at these sites. These are: Zuni Glaze Ware, generally associated with the Zuni area northwest of St. Johns; late White Mountain Redware associated with the Mogollon Rim Area near Show Low to the west; Salado Polychromes that were made in numerous places; and Hopi



Yellow Ware that is known to have been made only on the Hopi mesas 100 miles to the northwest.

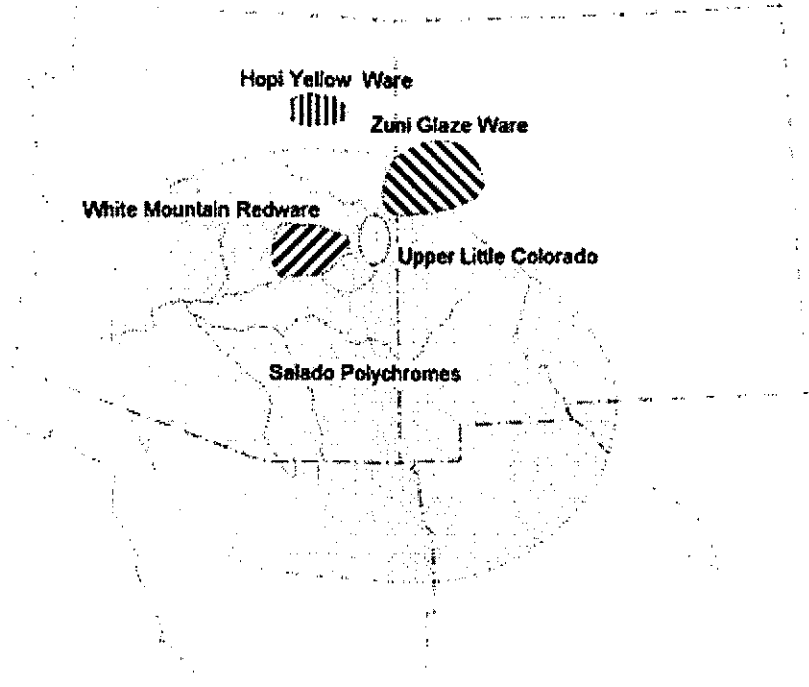


At Table Rock Pueblo, White Mountain Redware is rare but the other wares are common. At Rattlesnake Point Pueblo, Zuni Glaze Ware and Salado Polychromes are common, while White Mountain Redware is present in smaller quantities. Hopi Yellow Ware is virtually absent. At Raven Ruin, Baca, and Hooper Ranch Pueblos it appears that Zuni Glaze Ware and White Mountain Redware are common, that Salado Polychromes are much less frequent than at Rattlesnake Point Pueblo, and Hopi Yellow Ware is almost absent.

Archaeologists use the pottery both to understand ceramic manufacture and trade and to draw conclusions about the political and economic organization of the area. While it is clear that the Hopi pottery was actually made at Hopi, the location of manufacture of the other pottery is less clear. Despite their associations with the surrounding areas, chemical compositional analysis has demonstrated that White Mountain Redware, Zuni Glaze Ware, and Salado Polychromes were manufactured in the upper Little Colorado drainage *and* were also traded in from their supposed source areas.

The fact that these contemporaneous sites have such different collections of pottery does indicate something about the nature of the regional organization. While the Raven Ruin, as the largest and longest-lasting town, may have played a special role for the upper Little Colorado Region, the available evidence does not suggest that it was a political center or capital with authority over the neighboring towns. Rather than having craft production or trade administered from a center, it appears that inhabitants of the individual towns maintained separate trade relationships or manufactured different kinds of pottery and were economically autonomous political units interacting within a valley-wide and regional political landscape. The fact that the final abandonment of such a large area along the Mogollon Rim was apparently almost simultaneous (about AD 1390) suggests that there was considerable social or economic interdependence on a very large spatial scale.

Indeed, Hopi oral tradition suggests an interpretation which fits the archaeological evidence quite well. Archaeologists have long recognized considerable population movement during this period. The upper Little Colorado River



villages might well be the result of the joining together of smaller groups which the Hopi identify as migrating clans. New groups coming into the area would tend to join villages with more closely related people (for example, the same or a related clan). Because groups coming from different places would have different pottery-making traditions and maintain trade relationships with distant kin making different styles of pottery, we would expect the villages to have different proportions of the regional pottery styles. In fact, this is just the pattern we find in the contemporaneous upper Little Colorado River villages.



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