

LITTLE PETROGLYPH CANYON TOUR GUIDE

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Visitors to Little Petroglyph Canyon who want to understand the significance of this remarkable display of rock art face what amounts to a three-hour course in desert natural history, anthropology, archaeology, art, and science. We have attempted in the following pages to present the story of the petroglyphs and the early people who made them in a way that will give everyone a better understanding of this unique page in North American history.

The most remarkable thing about the rock art of the Coso Range as seen in Little Petroglyph Canyon, is the breadth of time it represents. Recent dating techniques suggest that the earliest drawings may be as much 14,000 to 16,000 years old. There are similar petroglyphs in thousands of sites throughout the Great Basin, which extends eastward into Utah. In Little Petroglyph (Renegade) Canyon the succession of different rock art styles, both abstract and representational, suggests a continuous cultural tradition that started near the end of the last Ice Age and persisted into the recent historic period. Its dominant artistic motif was the desert bighorn sheep. Human images ("anthropomorphs" to rock art specialists), range from simple stick figures to elaborately decorated shaman effigies. Recent pictographs (rock paintings using mineral pigments) in the desert-Sierra region perpetuate the symbolism of the Coso petroglyphs.

Who created this remarkable legacy in stone? Some anthropologists consider the rock artists of the Coso Range as part of the Great Basin Shoshone population who shared linguistic roots with the Hopi and Pima Indians of the Southwest and even the Aztecs of Mexico. They believe that the prehistoric Coso people originated an artistic style that spread throughout the Great Basin. The unmistakable continuity in the Renegade Canyon record suggests that the proto-Shoshonean culture existed for many thousands of years.

Other scholars dispute this idea, suggesting instead that Numic-speaking groups like the Shoshone entered the Great Basin no earlier than 1250-1450 A.D., long after much of the Coso rock art was completed.

Looking Back to the Beginning

At a point 15.2 miles from the museum the road crests a small hill where a domed camera station overlooks the dry bed of ancient China Lake.

Imagine the valley below as it would have been 10,000 years ago. Glaciers have retreated into the Sierras and streams flow from every canyon into the twelve-mile-long lake that extends from the present site of the Navy's Armitage Field to the lava flows that rim the northern valley. The outlet to this marsh-fringed body of sparkling fresh water is at its southern end, a rocky sill between the Argus Range and Lone Butte (B Mountain).

For thousands of years this was a flourishing ecosystem, a broad savanna broken by clumps of cottonwoods, willows, and alders that mark the water courses. On the higher slopes are scattered stands of pines and oaks that extend upward to still snow-covered peaks of the southern Sierra. In this idyllic setting a small population of paleo-Indians live in an easy equilibrium with nature. Food is plentiful, the climate mild, and survival largely a matter of prudence: don't tease the saber-toothed cats and don't get in the way of the mammoths.

How do we know what it was like?

The ancient lakeshore is easily discernible where it hasn't been covered by drifting sand. Along its western margins professional and amateur archaeologists under the guidance of Dr. Emma Lou Davis of the San Diego Museum of Man patiently delineated the trails and villages of an aboriginal people who were almost certainly the first Coso petroglyph-makers. They left scattered on the ancient shoreline an astonishing quantity of stone tools, including a distinctive type of crescent-shaped scraper found in only a few other Great Basin sites. Embedded in the eroding surface of the ancient lakeshore are the fossilized remains of Pleistocene grazing animals - horses, camels, bison and mammoths - and the carnivores that hunted them - saber-toothed cats and jackal-like dogs. (It was not conclusively proven that man (in this area) co-existed with these creatures, although workers at the site were on the lookout for bones with butchering tool marks or embedded arrow-points.)

The evidence for early plant and tree forms has come from fossil pollen grains. The tough microscopic skeletal structure of many types of pollen appear when core samples from the valley floor are examined under the microscope. Recently, paleobotanists and palynologists, specialists in pollen identification, have turned up a wealth of information in the debris of ancient pack-rat nests; accumulations of plant material that have survived the drying climate for as much as 8,000 years. They show that the familiar pine-oak woodlands of the western slopes once extended well into this valley.

The gradual drying of this Basin-and-Range Territory commenced when the diminishing rainfall no longer maintained the level of the chain of inland lakes that stretched from Owens Valley to the Death Valley basin and beyond. Challenged by a more hostile climate, the earliest Indian bands became opportunistic hunter-gatherers, driven by the quest for food from their winter quarters on the valley floor to the game-rich uplands in spring, and finally into the meadows of the Sierra and the pinyon forests that provided their winter stores. The rigors of nomadic life in bands that rarely

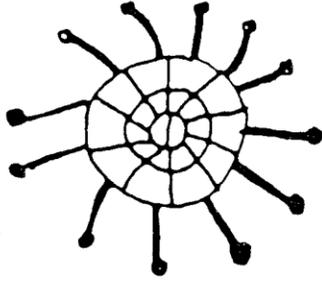
numbered more than four or five families were met by intimate knowledge of their environment, innovative crafts, and a belief in the supernatural. There is little doubt that their rock drawings represent efforts to communicate with the agents of the underworld upon whom they believed their survival depended. The petroglyph record - extending as it does over more than ten millennia - attests to the persistence of this shamanistic belief.

A View of Basin-and-Range Topography

Leaving the valley floor, we travel up through Mountain Springs Canyon, out of the creosote-burrobush desert and into one of the finest stands of Joshua trees in the the American west. At the top of the canyon we get our first view of Telescope Peak, 11,049 feet, which surmounts the great upturned geological layer-cake that forms the Panamint Mountains. Here is the essence of basin-and-range topography. From the eastern scarp of the Sierra Nevada, across the state of Nevada, and well into Utah, the geography is dominated by alternating desert basins and two-mile high ranges that would appear from an astronaut's vantage point "like an army of caterpillars on the march from Mexico to Canada," as one geologist put it. The Coso and Argus ranges form the western-most wrinkle in this corrugated physiography. They were shaped by two main types of volcanic activity, basalt flows and rhyolite domes. Basalt flows are quite fluid when still molten, and have filled many ancient canyons and river valleys. Rhyolite is lighter in both color and density than basalt, owing to a lower content of iron and magnesium and a higher content of silica. Rhyolite lavas tend to pile up, or dome, near their vents. Lumpy rhyolite domes are common in the Coso Range, and dominate the skyline. Throughout the Cosos a network of canyons provide drainage from the highlands to the desert below. It is on the chocolate-colored walls of the blocky defiles that the rock-artists left their mark.

After reaching the head of Mountain Springs Canyon, our tour heads north into Etcherson Valley at the foot of Maturango Peak, at 8850 feet the highest point on the Naval Air Weapons Station. Leaving the paved road at mile 37.4 we head west to Little Petroglyph Canyon, following the route taken by early Nadeau stagecoaches from the mines at Darwin to the distant San Fernando Valley. Topping the rise above Wild Horse Mesa, we see the Sierra crest from beyond Owens Peak on the south to Olancho Peak, Mt. Langley, and Mt. Whitney on the north. The six-mile dirt road ends at our destination, a picnic area constructed by the China Lake Seabee detachment. Here we will assemble for the actual canyon tour, allowing 3 to 4 hours to view what we can of the Coso's thousands of examples of Native American rock art.

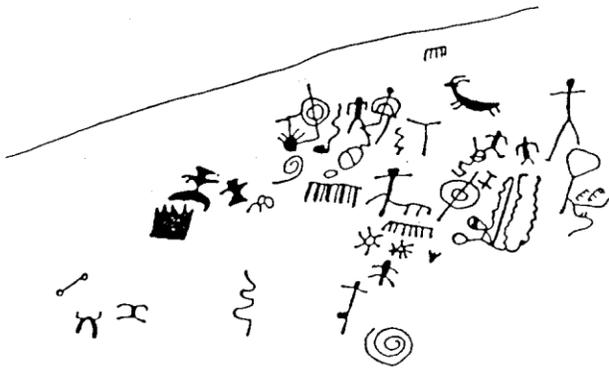
Many of the symbols which appear in this region are common throughout the Great Basin and the Southwest. A few examples follow:



The SUN symbol appears in many forms. It may be drawn as a circle with fringe of rays, as concentric circles or as a circle surrounded by dots. Variations of this common design are nearly endless.



The SNAKE is associated with water in the mythology of many Native American groups. Drawn realistically with head and tail, or merely as a simple wavy line, it may symbolize a river. Shown as a concentric spiral, turning either clockwise or counter-clockwise, the SNAKE may represent a pool of water or catchment.



In some tribes the spiral has special significance as the PLACE OF EMERGENCE symbolic of the center of the cosmos or the Mother Earth navel from which the earliest people emerged. It is also known as a whirlwind or twister symbolizing breath or life. It is a place for communication with spirits.

The RAKE or COMB is a rain motif used from California to West Texas. Lizards, frogs, toads and turtles are all bringers of rain. The Bighorn sheep was an important symbol used by COSO shamans to invoke rain.

Starting the Tour - The Dedication Monument

The bronze tablet that identifies Little Petroglyph Canyon as a National Historic Site is set in a boulder (see map, location 1) which provides many examples of "rock art style" and a range of ages typical of the local assemblage. Of particular interest here is one simple man-figure - a "patterned-body anthropomorph" in anthropologist's terms - which has been reworked by some later artist. The original figure, on the east face, may be several thousand years older.

The extent of repatination, the process by which the fresh rock surface exposed by the artist is gradually weathered back to the original dark color, has been found to be an inaccurate measure of age. Some of the pattern has been brightened by a second artist. The reworking, perhaps as part of a tribal ceremony hundreds of years later, looks relatively fresh today. (The boulder was repositioned by a Navy work crew. One can see that the side opposite the main petroglyph panel was once buried and escaped weathering. In another thousand or so years it, too, may have turned dark brown.)

The tour will start at the upper end of the canyon and progress down canyon. In the upper end are found deeply-cut abstract patterns of pits and grooves, shield-like emblems and circular symbols. These petroglyphs were once considered to be the oldest in the canyon (partially because they appeared more 'primitive'). This perception is a hold-over from the concept of the "evaluation of art styles" which had its origin in nineteenth-century Darwinism, wherein Darwin had shown that biological species evolved from simple to complex.

Two notable features in this section of the canyon are long continuous lines low on the basalt wall (2). The one on the east side, which may be 30 feet long, has been partly worn away by erosion, but the one on the west side is in better shape. It cuts through a circle and has several pendant circles attached along its length (suggesting a genealogical record, perhaps?). Note how deeply it is cut, and how tough the rock is. The depth of the groove may have resulted from repeated abrasion of the pattern in the course of decades of ceremonial use.

On the ledges above the canyon floor are two kinds of kitchen equipment: metates, appearing as smoothly-worn depressions in the rock surface where a flat mano has been used to grind seeds into flour, and bedrock morteros, or mortars, hemispherical cavities in which larger nuts and acorns were pounded and ground with a stone pestle. A group of foot-deep mortars is on the rock surface above the east wall of the canyon (3), however, you will have to take our word for this as one is not allowed to climb up the walls or walk on the Canyon rim. This measure has become necessary to protect many petroglyphs that have been impacted by well-intentioned feet walking over them.

Importance of the Bighorn

A single large bighorn sheep is also found here, once thought to be the oldest example of representational art (4). Again, the great depth of the grooves may suggest repeated retracing of the pattern in ceremonial ritual. Throughout the Cosos the importance of the bighorn sheep is inescapable. This was once hypothesized, by anthropologists studying rock art, to depict a sheep hunting cult. Later studies, however, have not proven this to be the case. One anthropologist, Dr. David Whitley, has found a wealth of early ethnographies that should set the record straight - "...As is quite clear in the ethnographic record, the Coso petroglyphs were made by shamans; the sites themselves were shamans' vision quest locales; and the petroglyph motifs depicted the hallucinatory images seen by shamans when in the supernatural realm..." "...a series of shamanic specialities existed which were associated with particular animal species as helpers..." Isabel Kelly, writing in 1936, recorded the following comment: "It is said that rain falls when a mountain sheep is killed. Because of this some mountain sheep dreamers thought they were rain doctors." "...This interpretation of Coso petroglyphs, moreover, is confirmed both ethnographically and iconographically. ...numerous informants throughout the Numic realm recorded the fact that the Coso region and its inhabitants were renowned as rain shamans."

Dr. Whitley has written several monographs directed explicitly towards interpreting the art. In a chapter in the Maturango Museum's new book, ***COSO ROCK ART: A New Perspective***, Whitley states "The shaman, or Pohagunt (literally "[man] having power"), was the primary religious functionary in Numic Society. He was responsible for curing illnesses caused by disharmony in the band and imbalances in the supernatural world. He might also be able to predict the future, control rain, find lost objects, cure snake bites, and retrieve lost souls. Some shamans, further were believed impervious to gun or arrow wounds."

One small deer-figure is found at eye level on the east wall (5). It has weathered back to the original color of the native rock and appears only when the sun strikes it obliquely. The finely-pecked outline, the artist's animation of his subject and its delicate proportions all set it apart from the coarser work around it. It is one small mystery in a gallery of mysteries.

A bit farther down-canyon past dozens of examples of abstract patterns, someone will notice a pair of recently drilled inch-diameter holes in the basalt (6). Here geologists have taken core samples for dating the rock using the potassium-argon isotope ratio technique. The slow decay of one potassium isotope as it is converted to atoms of argon provides a geological clock that can be read in the laboratory. As rocks go this basalt is fairly young - a few 100,000 years at the most.

Signs of the Old People

Beyond this point the canyon widens briefly, then drops between high walls that give the rock-artist more room to work. On the right is an elongated symbol that might be taken for an emblem of one of the clans that claimed this space for their rituals (7). Or it might even represent a ceremonial opening into the underworld from whence the spirit of the rock could be summoned.

Here, too, are random patterns of pits which the ancients painstakingly ground into the tough volcanic rock. The pit-and-groove style has been identified as both a fertility symbol and an important part of rain-making magic in more recent California Indian cultures.

From Primitive Throwing Stick to Modern Bow

In this part of the canyon there are animals aplenty: sheep in a variety of poses, deer- crude, but with recognizable antlers instead of horns - dogs (or cats) harassing the sheep (8). Hunters with bows identify these figures as belonging to a later period when the spear-thrower or atlatl was supplanted by the more deadly bow and arrow. The atlatl appears frequently from this point on, usually as a vertical shaft carrying a central disk, representing the stone weight attached to the center of the throwing-stick, and with a hook at the top and finger-loops at the bottom. By extending the reach of the spear-thrower's arm it gave his missile greater speed and range, and it served his

people's hunting needs for millennia. The killing of the sheep depicted in Coso rock art served as a metaphor for the death of the shaman. It was believed that when the shaman entered an altered state of consciousness he died and emerged in the under or supernatural world. The depiction of the bighorn sheep was synonymous with the shaman in the supernatural realm.

The human population of the Eastern California desert was never large and probably did not exceed 500 in the region from Death Valley to the eastern slopes of the Sierra Nevada. Yet these people somehow accounted for the production of over 100,000 works of rock art. How did they do it? The answer, of course, is the great span of time in which they lived and left their mark. Allowing 8,000 years to create the present petroglyph record requires only a dozen new works each year, a task which has been easily accomplished in replication experiments by rock art researchers.

On the high west wall, facing the morning sun, stand four shaman-figures that represent the highest refinement of the Coso pictorial art (9). These patterned figures are clearly supernatural. They are also right-handed, if we take the object in the right hand to be an atlatl and those in the left, darts or arrows. It is likely that they represent the featured celebrants in tribal rituals that took place on the spot where we now stand.

Just Doodling? Not Likely.

But some distance southward there is an uneven scattering of rock drawings. The best display here is on one west-facing panel that has collected petroglyphs like graffiti on a subway wall (10), with a variety of motifs, real and abstract, drawn one atop another. To the uninitiated, such disorder is likely to suggest that this art is nothing more than doodling, an idle occupation to pass the time when food was plentiful and the living comparatively easy. But that is hardly the case. The time scale is anything but brief; even here one finds a succession of older motifs superimposed with newer ones in a continuum that spanned thousands of years.

The creation of a single new drawing was a singular event, and its creator an individual of some distinction. These were a people without written language or everyday acquaintance with graphic forms of expression. To them the image on stone must have been the embodiment of magic itself. The connection between the artist's rendering of a sheep and the objective (of invoking rain) was not trivial, and the meandering abstractions laboriously engraved on basalt must have conveyed an awesome significance to the aboriginal eye.

Shortly the canyon drops down a series of bedrock chutes (11), worn into the tough, unyielding granite by the abrasive action of thousands of flash floods. The canyon walls nearly converge overhead, and pools of greenish water in depressions dug by thirsty burros, horses and other wildlife may still remain from spring runoff. Here begin some of the finest and most varied examples of transitional forms of rock art, identifiable by the appearance of both atlatls and bowmen, and a variety of dot array patterns that suggest primitive counting games or tally systems, perhaps used in recording seasonal

events or calendrical observations (12). (A few recent additions in arabic numerals are also present.) At the canyon mouth (13), where a fence once stood to enclose herds of modern sheep, there is a fine procession of stick-figures - nearly a hundred in all - marching south on the western wall and up toward the mesa above. Some have packs, suggesting that the figures record a migration, the annual trek to the mountains that followed the springtime gathering here? Or perhaps they record a dance celebrating the successful entreaty of the shaman to bring rain.

A few yards down the canyon (14), far enough for most tour groups to go, a pair of sheep are seen on the west wall, one appears in the normal upright attitude, the other has been speared and lies in death throes on its back.

The hike back to the parking lot will consume another hour, and the changed perspective will bring a host of new details to view. You may have observed, during your walk down the canyon, 3" metal discs with identifying numbers embossed on them. If not, see if you spot any on your way back up the canyon. These discs are survey markers installed by students from Fresno State University under the direction of Dr. Raphael Reichert. These markers will facilitate future research in the canyon by allowing exact location and mapping of specific petroglyphs and/or panels. The Museum has published a small guide book, written by Dr. David Whitley, to Little Petroglyph Canyon using these markers to guide the visitor to specific panels interpreted by Dr. Whitley.

At a short side-branch (15) we see a panel of "medicine bags", a peculiar Coso symbol that resembles the fringed deerskin bag used by a shaman to carry the sacred objects of his craft. By now the visitor, in an effort to grasp the sheer diversity of rock art themes that he has seen here, is probably starting to shape his own ideas on their origin and meaning. But - before going too far, try reading some of the books by anthropologists who have spent years researching the archaeological and anthropological record. Dr. David Whitley, in particular, has perused hundreds of ethnographical accounts by Native American informants about the meaning of rock art symbology in the Great Basin and, in particular, in the Coso Range. The Museum's publication *Rock Drawings of the Coso Range*, though out of date in theory, still has the best illustrations of the Coso rock art. The Museum also has two new books, both mentioned above, published in 1998 that specifically target the Coso Range Petroglyphs.

Suggested Reading:

Grant, Campbell; Baird, James; and Pringle, Kenneth
1968 *Rock Drawings of the Coso Range*, Maturango Museum Publication No. 4.

Schaafsma, Polly
1980 *Indian Rock Art of the Southwest*, University of New Mexico Press.

Von Werlhof, Jay

1987 *Spirits of the Earth: A study of Earthen Art in the North American Deserts*, Vol. 1 of *The North American Desert*, Imperial Valley College Museum Society.

Betancourt, Julio L.; Van Devender, Thomas R. and Martin, Paul S.

1990 *Pack rat Middens*, University of Arizona Press.

Dorn, R. I.

1994 Dating petroglyphs with a 3-tier rock varnish approach. In *New Light on Old Art: Advances in Hunter-Gatherer Rock Art Research*, edited by D. S. Whitley and L. Loendorf, pp.12-36, UCLA Institute for Archaeology Monograph 36.

Whitley, David S.

1987a Rock Art Chronology in Eastern California. *World Archaeology* 19:150-164

1993b New Perspectives on the Clovis vs Pre-Clovis Perspective. *American Antiquity* 58:626-647

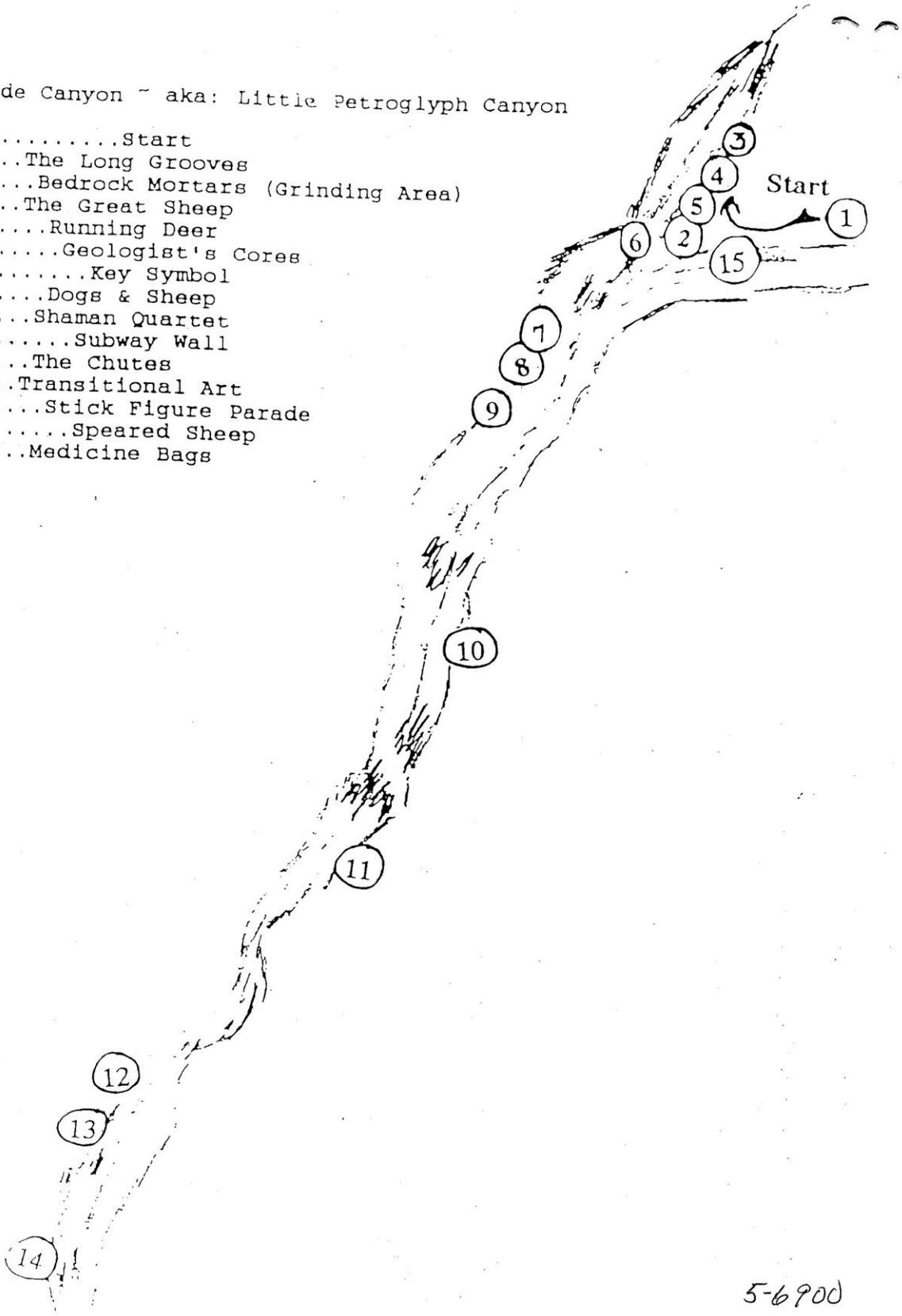
1994c Ethnography and Rock Art in Far Western North America: Some Archaeological Implications. In *New Light on Old Art: Recent Advances in Hunter-Gatherers Rock Art Research*, edited by David S. Whitley and Lawrence L. Loendorf, pp. 81-93. UCLA Institute of Archaeology Monograph 36.

1998 *Following the Shaman's Path - A walking Guide to Little Petroglyph Canyon Coso Range, California*

1998 *Coso Rock Art: A New Perspective*, edited by Elva Younkin. Maturango Museum Publication #12.

Renegade Canyon ~ aka: Little Petroglyph Canyon

- 1Start
- 2The Long Grooves
- 3Bedrock Mortars (Grinding Area)
- 4The Great Sheep
- 5Running Deer
- 6Geologist's Cores
- 7Key Symbol
- 8Dogs & Sheep
- 9Shaman Quartet
- 10Subway Wall
- 11The Chutes
- 12Transitional Art
- 13Stick Figure Parade
- 14Speared Sheep
- 15Medicine Bags



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