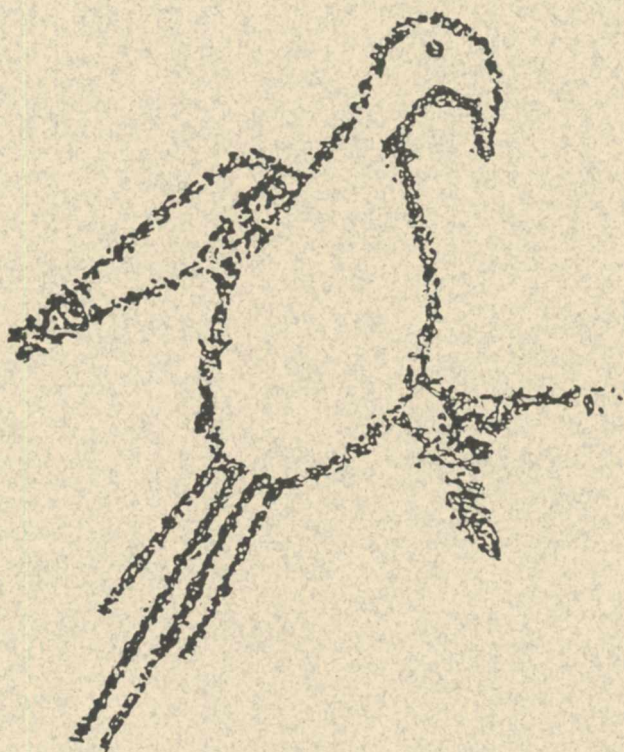


**PETROGLYPH NATIONAL
MONUMENT**



**BOCA NEGRA CANYON
TRAIL GUIDE**



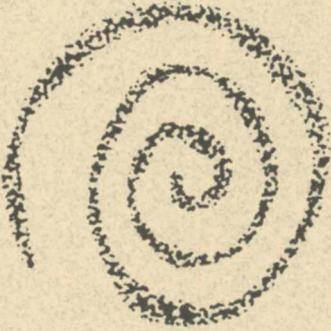
Petroglyph National Monument preserves one of the largest petroglyph sites in North America. The Monument was established in 1990 to protect and interpret petroglyphs and archaeological sites on Albuquerque's West Mesa and is managed by the City of Albuquerque Open Space Division and the National Park Service. Surveys suggest the presence of at least 20,000 petroglyphs along the volcanic escarpment. Petroglyphs

are a valuable record of cultural expression and have deep spiritual significance to modern Indian groups. Some images have direct meaning to modern tribes while the meaning of others has been lost over the centuries. Whatever their interpretation, petroglyphs preserve the beliefs of their makers and are part of our heritage and the heritage of the Indian peoples who still live in the area.

Please help others enjoy our heritage by preserving these petroglyphs for future generations:

1. Vandalism of the petroglyphs is strictly prohibited; damaging petroglyphs is a serious federal crime punishable by fine, imprisonment, or both.
2. Please don't touch the petroglyphs; they are fragile and easily damaged, even by body oils.
3. Please stay on the trails; walking off the official trails erodes the crumbly escarpment and can damage the petroglyphs.
4. Please use the trash cans. Don't litter.
5. Vehicles are allowed on roads and in parking lots only.
6. No pets are allowed.
7. No glass containers are allowed in the park.
8. Alcoholic beverages are prohibited in the park.
9. Firearms are prohibited.
10. Please don't remove rocks, plants, or anything else.

The Setting



The West Mesa escarpment is a 17-mile long ridge of basalt boulders created by volcanic eruptions that occurred about 130,000 years ago. The first two volcanic events were extensive flows of fairly liquid lava, which flowed down old arroyo courses that can now be seen as peninsulas on the escarpment. Similarly, lava flowed

around hills and higher ground to create the natural embayments on the escarpment (an effect called “reverse topography”). Subsequent eruptions of increasingly thicker lava covered smaller areas and the last events created the volcanic cones themselves. Looking west from the top of the Mesa Point Trail, visitors can see the now dormant volcanic cones.

In the millenia following the eruptions, the Rio Grande eroded the basalt caprock of the escarpment. The flows range from just 5 feet thick in places to over 50 feet thick in other places; the caprock can be seen across from the Canyon Trail. Huge pieces of the basalt caprock were undermined by the mighty river’s meandering and were left strewn all along the escarpment face. Millions of these boulders have been left exposed to the elements — sun, rain, heat, cold, and microbial action by tiny organisms. Exposure to the elements produces what is called “desert varnish,” a pronounced oxidation of metals such as manganese and iron within the basalt. The desert varnish, or patina, is extremely thin and chipping or pecking exposes the lighter color of the rock’s interior. The makers of the petroglyphs found that controlled pecking or chipping with a hand-held rock or chisel stone would produce high-contrast images on the rock. You will notice that many older petroglyphs have repatinated or have begun to darken again as a result of centuries of exposure; this substantiates their great age.

Many living things thrive on the escarpment. The absorbent sandy soils and the dark rocks provide a richer habitat than the surrounding desert. Four-wing saltbush, sagebrush, rabbitbrush, snakeweed, Indian rice-grass, other grasses, and wildflowers grow profusely. Visitors may see hawks, owls, turkey vultures, roadrunners, coyotes, foxes, rabbits, snakes, lizards, and millipedes among these plants.

The Petroglyphs



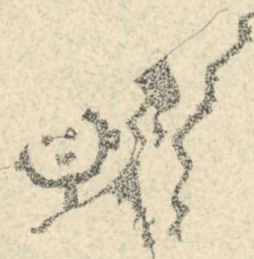
The petroglyphs along the escarpment were created from about 1000 B.C. until recent times. Some examples of what are thought to be the oldest petroglyphs can be found in the Canyon Trail area. Although

methods of determining the exact date of a petroglyph are now just being developed, age can be estimated in several ways. Relative darkness or repatination can be studied. Style, content, and execution can be compared to petroglyphs from surrounding areas. Designs from dated pottery types or painted murals can be related to similar petroglyphs. The superimposition of one petroglyph over another, as can be seen on the Cliff Base Trail, provides another means of relative dating.

The majority of the petroglyphs along the escarpment were done in what is called the "Rio Grande style," a style which developed rather suddenly around A.D. 1300 and continued until A.D. 1680. These dates coincide with a dramatic increase in local population and the construction of many pueblos along the Rio Grande. Common images of the Rio Grande style include human figures such as flute-players or dancers with upraised arms, masks and masked figures, and animals, including serpents, mountain lions, birds, reptiles, and insects. Hands, feet, animal tracks, spirals, four-pointed stars, and geometric designs are also common.

The People Who Made the Petroglyphs

Severe droughts struck the Southwest between A.D. 1275 and 1300. As a response, many people settled in areas such as the Rio Grande valley, which provided a permanent supply of water and good farmland.



They built multi-storied adobe pueblos on both sides of the river. Some pueblos were three or four stories tall and often contained more than 100 adjoining rooms built around an open plaza. More than 40 pueblos were built between A.D. 1300 and A.D. 1540 along the Rio Grande between Bernalillo and Belen (about 40 miles). Archaeologists estimate that more than 1,000 people lived at several of these pueblos. The pueblo of Kuaua at Coronado State Monument (near Bernalillo) provides an excellent opportunity to see the rooms used for living, ceremonies ("kivas"), as well as storage and colorful kiva murals that were painted by the same Pueblo peoples who created the petroglyphs along the escarpment.

The Pueblo Indians who settled here harvested corn, beans, and squash from fields along the Rio Grande. Agricultural terraces were also built along parts of the escarpment to build up soil and slow down runoff. Ingenious traps and snares were used for catching rabbits and birds and the people hunted deer, elk, and antelope. Domesticated dogs and turkeys would have been a common sight in the villages.

Like other Indian people, the Pueblos had well established trade networks with faraway cultures. Turquoise, from the mines of Cerrillos south of Santa Fe, was exchanged for bells cast of copper, shells from the Pacific used to make jewelry, and macaws (parrots native to Mexico). Remains of macaws have been found at Chaco Canyon and elsewhere, and macaws are depicted in kiva murals from

the Rio Grande area. Petroglyphs on the Macaw Trail show such a bird. The colorful feathers of macaws are still used on masks and head-dresses by modern Pueblo Indians.

In addition to the many thousands of petroglyphs along the escarpment, the Pueblos expressed their creative skills in other ways. They developed a new pottery style, Rio Grande glazeware, that added to the rich tradition of pottery making in the Southwest. The colorful murals painted on the plaster of kiva walls were another form of cultural expression. Many of the images in these murals are not found before this period and suggest that new ideas were being incorporated into puebloan religion and social organization.



In 1540, Francisco Vasquez de Coronado became the first European to contact the pueblo villages along the Rio Grande. Coronado and his expedition wintered in a pueblo on the west side of the river, north of Albuquerque. The Spaniards destroyed several of the pueblos and some of the population fled until the explorers left in 1542. In 1598, Juan de Oñate brought colonists to New Mexico and prepared to stay. Between 1610 and 1680, Hispanic settlement of the middle Rio Grande valley increased and much of the former Indian land was divided into grants. Farmsteads or haciendas were founded along the river valley, and missions were established in many of the Indian communities. Indian populations were greatly reduced in the 1600s due to epidemics, crop failures, and Spanish repression. In 1680, Indians across the region united in the Pueblo Revolt and drove the Spaniards south to El Paso. This was the first time a major European power was defeated and exiled from a North American territory. The Indians remained independent until 1692, when the Spaniards reoccupied the area.

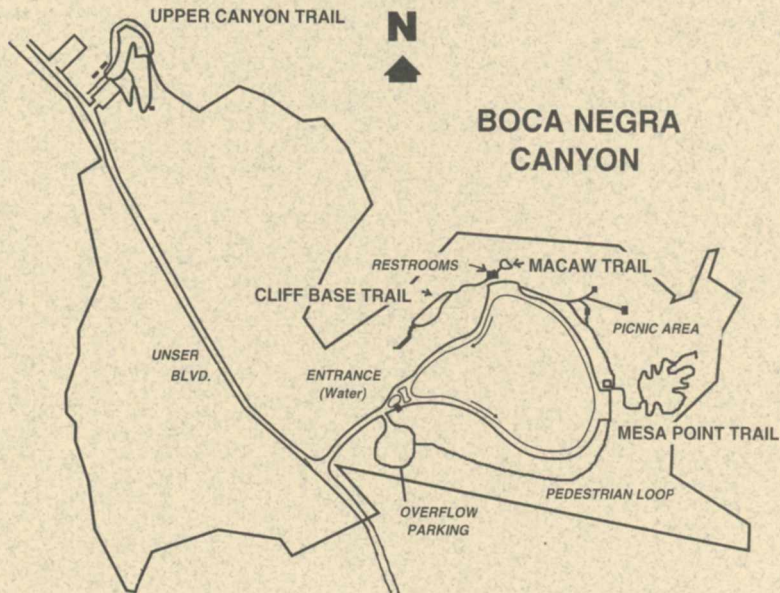
The Town of Atrisco Grant was first established in 1692 and confirmed several times in the 1700s. The Atrisco community still retains ties to lands that included the escarpment and mesa top in

Petroglyph National Monument. Atrisceño shepherds probably created many of the petroglyphs, including crosses, brands and names.

The Trails

Identification of some petroglyphs is based on contemporary ethnographic interpretations. We cannot say for certain what all of the images represent, nor is it appropriate to always reveal the “meaning” of an image. American Indians have different versions of the meanings and any one image may have complex or multiple meanings depending on the tribe and its context. This guide lends ideas to what some of the petroglyphs may represent to some Indian People.

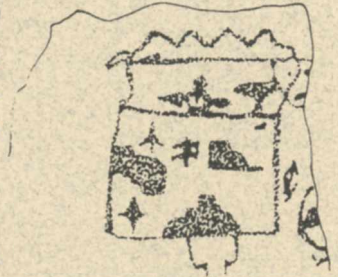
The trails in Petroglyph National Monument have been designed to



provide a good sample of petroglyphs and to reduce the impact on the escarpment. Boca Negra Canyon was originally built as Indian Petroglyph State Park in 1973 and contains just 4 percent of all the petroglyphs found on the escarpment.

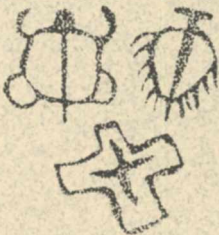
Mesa Point Trail

This trail climbs to the top of the lava flow and is a moderate strenuous trail (approximately 20 minutes). The elevation at the top is one mile (5,280 feet) above sea level. Sandia Crest is 10,678 feet above sea level, and downtown Albuquerque is at 4,950 feet above sea level.



At the beginning of the trail you may see a square enclosing a step-shaped cloud, four-pointed star with zigzag line, and other designs. Notice the numerous designs on several sides of this boulder, including handprints, animal figures, and a mask placed on the corner of the rock to “see both ways.”

Grinding spots are found throughout the escarpment. These areas can be identified by light grey, smooth patches on the basalt rock. The grinding areas may have been used to sharpen tools, grind corn or seeds, make pigments, or prepare medicines used in ceremonies.



Further along the trail are several petroglyphs, including two small animal figures and crosses. The outlined cross is a prehistoric symbol. Christian style crosses were made by Hispanic shepherders, but are not enclosed by an outline.

Notice the low, rock structure at the top of the trail. Conclusive identification of this cleared area surrounded by low walls cannot be made because no artifacts were found here. It could be an ancient ceremonial area or a corral. Several of these east-facing structures have been found on escarpment promontories and some still have importance to modern Pueblo peoples. Similar structures elsewhere were used by Hispanic shepherds as sheep pens. This point provides an excellent view of the Sandia Mountains to the east. To the west are the cinder cones of the Albuquerque volcanoes. They erupted about 130,000 years ago but are now extinct. Boulders that were part of the caprock have broken off and tumbled down as a result of erosion by the Rio Grande.

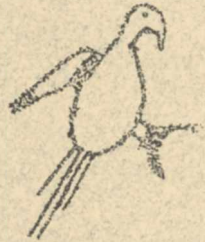


Historic Christian crosses may have been made by shepherds in the 1700s or 1800s and closely resemble Latin crosses of the patriarchal style (with two horizontals, both ending in crosslets). As you continue down the trail, notice a mask and a grinding spot.

Macaw Trail

The trail is located on the north side of the ramada (approximately 5 minutes).

This trail is named after the two parrot, or macaw, petroglyphs, identifiable by the long-plumed tails. The smaller macaw appears to be in a box or cage. Parrots are not native to the Southwest. Their natural habitat is in Mexico. Parrots and their feathers were important trade items from Mexico and are shown prominently in kiva mural paintings, made



during the same time period (circa A.D. 1300 to 1600). The feathers continue to be important today.

Two petroglyphs prominent along this trail are possible yucca seed pods. The root of the yucca was used for making soap, and the flowers, fruits and seeds were roasted in pits for food. The points of the leaves were used as needles and the leaves served as a source of fiber for basket-weaving.



Cliff Base Trail

Located on the west side of the ramada (approximately 15 minutes).

Note masks and figures and the differences in head ornamentation; the four-pointed star has a mask, a feathered headdress, and bird talons.

Direct methods for dating petroglyphs are only now being developed, but the presence of a petroglyph over an older one provides a means of relative dating. Here, the right-hand point of the star is superimposed over part of a human figure to the right. Also notice that one eye of the star image has been vandalized, which is a federal offense. The grayish color of the recent vandalism contrasts with the light brown that has developed over the centuries since the original petroglyph was created.

The figure with upraised arms behind a shield may be a warrior. Warriors were and still are important in Puebloan society. Upraised arms are thought to signify that the person is praying.



Upper Canyon Trail

This trail is located 1/4 mile north of the park entrance at the tip of the mesa. The trail goes down into the canyon and is a moderately strenuous trail.

For more information on
the Petroglyphs, contact:



Open Space Division
Parks and Recreation Department
City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico 87103
(505) 873-6620



or



National Park Service
Petroglyph National Monument
6001 Unser NW
Albuquerque, New Mexico 87120
(505) 899-0205



The National Park Service
Visitor Center is located at:

Las Imagines Visitor Center
4735 Unser NW (at jct of Western Trail)
Albuquerque, New Mexico 87120
(505) 899-0205

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