

PETROGLYPH SURVEYS OF SOUTH MOUNTAINS:

1964/1991

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JJ Golio

Petroglyphs of South Mountain:

Two petroglyph surveys of South Mountain, Arizona have been undertaken. The first survey was completed 27 years ago and the second was completed August 1991. Comparison of the two surveys reveals information concerning the impact of urban growth, increasing use of South Mountain and other factors on the petroglyphs.

South Mountain is east of the confluence of the Salt and Gila Rivers in the southern extreme of Phoenix, Arizona. The range lies north of Snaketown and south and west of Pueblo Grande and in close proximity to the Hohokam irrigated area south of the Salt River. The long axis of the range runs ENE and WSW. It is about 12.5 miles long and, including an outlying ridge and foothills, varies in width from one to five miles. In 1924, a sizable portion of South Mountain became the largest municipal park in the United States. The park now covers a bit more than 16,000 acres. Phoenix park officials calculate that about 1.5 million people visit and use the park each year.

From 1962 to 1964, Ernest Snyder, with the aid of an Arizona State University faculty grant, undertook to locate and photograph the South Mountain petroglyphs. He recorded 109 sites comprised of 419 petroglyph panels and 2,031 design elements. the 419 panels were photographed in black and white. Each photograph included a two foot ruler and a slate on which the site designation was chalked. The site location were recorded on a USGS topographic map. In addition he took color photographs of many of the more interesting panels. The results were published in American Antiquity, Vol.31, No. 5, Part 1, July 1966.

In 1986, JJ Golio, with the assistance and her husband Mike, and many other friends, began a survey of the South Maintain petroglyphs. The 1989, she contacted Snyder with the idea of duplicating his work to see what changes, if any had taken place in the interim. After obtaining a set of the original 419 site panel prints, she took photographs from the same angels of all the panels in the earlier work. In addition to discovering a number of sites overlooked by Synder, she found 107 of the original 109 sites and 401 of the original 419 panels. The following statistics are from the comparisons of the two sets of 401 photographs:

77.81%	No apparent change
9.98%	Removed
4.49%	Vandalized
3.24%	Destroyed or removed by developers
2.74%	Exfoliated or broken
1.25%	Damaged by gunfire

0.49% Interim lichen growth
 The removed category can be subdivided by type of removal:
 75% Entire panel missing
 20% Petroglyph sections broken off
 5% Petroglyph element broken off

If removed, vandalized, exfoliated, broken or damaged by gunfire, the panels are classed as damaged. If the panels exhibited only lichen growth or had no other apparent change they were listed as undamaged. Thus 21.7% of the South Mountain petroglyphs have been damaged since the completion of the 1964 survey. To determine if there was a pattern to the petroglyph damage, the 107 sites were classed according to the routes by which the historic human population accesses each site.

Sites located on the periphery of park property in current development areas, or visible from a parking lot, road or trail were classified as "easily accessible". Sites that did not fall in this category were classed as "interior". The 107 sites were segregated into damage versus accessibility:

<u>Access</u>	<u>Damaged</u>	<u>Undamaged</u>
Parking lot	0	2
Road	4	4
Trail	16	16
Periphery	4	8
Development	7	6
Interior	6	34

These figures indicate that 46.3% of the easily accessible sites have been damaged while only 15% of the interior sites exhibit damage. Thus a site that is easily accessible to human traffic is about 3.1 times more likely to be damaged than is a less accessible site.

These statistics represent changes that were detected when the two sets of photographs were compared. Much of the graffiti contains dates from the 1920s. A significant number of panels had been altered prior to Snyder's work. For example, Frank Midvale gave him a 1929 photograph of a 4.5 foot long chalked petroglyph of a sort of insect. Snyder could not locate the panel but Golio was able to find it by matching the background rock formations shown in the picture. The original figure was almost completely obliterated by graffiti.

South Mountain has changed with time. Beginning with the Anglo settlement of the Salt River Valley in the neighborhood of Phoenix, mining became popular and roads and trails proliferated. Gold, silver and some copper were taken out of the range. Granite was quarried in the 1970s. More recently homebuilders and developers have been urbanizing all of the areas lying outside of the park boundaries and on Indian reservation lands to

the seat and southwest.

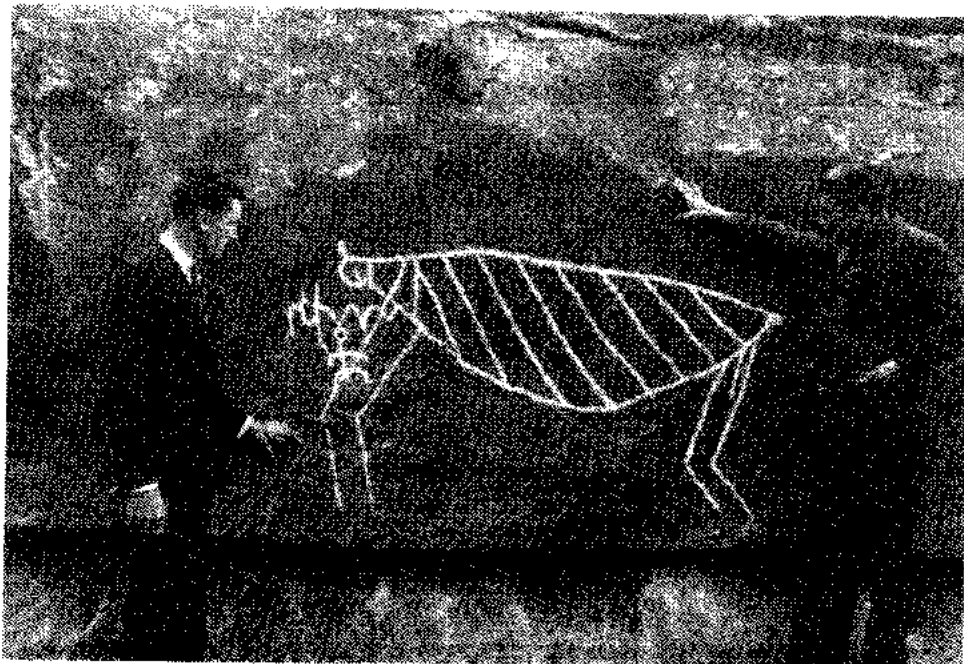
A proposed freeway, Loop 101, will traverse eleven of the 1964 recorded panels on the south side of the range. The area between the proposed highway and the south-side park boundary contains many petroglyphs, trails, quarries, clearing and some historic sites is rapidly being developed. In October of 1991, Golio revisited petroglyph sites documented in a 1984 predevelopment archeological survey. The development was not yet complete but 21.4% of the panels located in the 1984 survey were already done.

There are plans to put roads through and directly adjacent to South Mountain Park. These transverse road would connect the new development with the main part of Phoenix to the north of the mountain. On the north side a supplementary entrance into a large activity center was recently completed. This road provides easy access into a major petroglyph area. Additional hiking, equestrian and bicycle trails are planned or being built throughout the park.

In summary, more and more people will have easier access to the South Mountain petroglyph sites. We are documenting the changes that have taken place in these area over a 27 year period. We have also tried to determine patterns to the damage that had taken place. We hope that this information will aid others also interested in preserving threatened petroglyph sites in South Mountain.

Photographs:

1. Photograph of Frank Midvale and Bob Higgins at 4.5 foot petroglyph in 1929.





2. Golio photograph of 4.5 foot petroglyph in 1992.



3. Snyder photograph published in American Antiquity in 1966.



4. Golio photograph showing mission petroglyph boulders in 1992.