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Case Study 3.1: Boca de Potrerillos, Mexico

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Presentation and analysis of the site

Geographical position: Municipality of Mina, State of Nuevo León, Mexico.

Location: Latitude 26°2′40″N, longitude 100°38′40″W. Elevation 700m above mean sea level.

General description: The Boca de Potrerillos site is one of the most important petroglyph sites in Mexico. It consists of more than 4000 rock boulders and rock panels containing numerous petroglyphs located on mountain slopes within an attractive landscape typical of the deserts of north-eastern Mexico.

Inventory of the remains: The site covers approximately 435 ha and the archaeological remains are distributed within three main topographical features:

- a. An extended alluvial fan located on the eastern part of the site with the remains of hundreds of prehispanic hearths called *fogones* and thousands of carved lithic and grinding artifacts, which are widely dispersed on the surface.
- b. Another alluvial fan located on the western part of the site with the same kinds of dispersed artefacts, but on a minor scale.
- c. The eastern flank of the El Anrisco and La Zorra mountains where there are thousands of rock boulders and loose rocks, all of them covered with petroglyphs on one or more sides.

History of the site: The site was first reported in 1963, by María Antonieta Espejo, an archaeologist from the Instituto Nacional de Antropología e Historia (INAH). In the 1980s it

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was studied by several rock-art specialists, most notably Jon Olson, Ma. Guadalupe DeWitt and William Breen Murray. Archaeological activities were initiated in 1991 when INAH and the University of Texas at Austin started a joint 'Boca de Potrerillos Project', directed by Moisés Valadez Moreno, Solveigh A. Turpin and Herbert H. Eling. Archaeological investigations were continued by Valadez later. The site was officially opened in November 1995.

Cultural and symbolic dimension: The site contains different astronomical motifs in rock-art depictions showing lunar calendar tallies and displaying alignments towards the solstitial and equinoctial positions of the sun on both horizons. Some rock tallies suggest, particularly, that the lunar count was connected to the cycles of deer reproduction. The site is extremely important for studies of the use of calendars and astronomy by hunter-gatherer peoples in the past.

Documentation and archives: Scientific conclusions have been made public and disseminated through diverse publications: a book, a dozen of scientific papers published in national and international academic journals, three Licenciatura Degree theses, a mini-guidebook to the site, a video, a movie and numerous papers and conferences presented at national and international meetings.

Present site management

Present use: The site is open to the public daily between 8 a.m. and 5 p.m.

Protection: The site is on the Public Register of Monuments and Archaeological Zones. Its extent is legally defined, and marked on the ground by 10 boundary markers in form of piles of stone. It is enclosed by a mesh fence, with two entrances on opposite sides. Two permanent jobs have been created by INAH for people from the adjacent rural communities who serve as site guardians and watchmen.

Meetings were held with the local population of Potrerillos to inform them about the judicial and legal measures that protect the archaeological heritage. At present, the total site area covers 6 km², which mainly comprises the buffer zone, since only an area of 600 × 400 m² (24 ha) is opened to visitors. The buffer zone both guarantees protection against damage and degradation and facilitates any future archaeological investigation.

Context and environment: The site is located between two mountains, El Antrisco and of La Zorraca, forming a 'mouth' (*boca*) or entrance to 'Potrerillos Canyon'. It is within one of the most beautiful desert landscapes of the Mexican north-east and contains the remains of the natural environment that was inhabited by various nomadic groups over a period of some 8000 years.

State of conservation: The environment has badly degraded recently owing to the overexploitation of the underground aquifer resources during the last 40 years to meet the water supply demands of the city of Monterrey. The degradation is exacerbated by natural desertification processes.

Archaeological/historical/heritage research: Archaeological work has revealed important material evidence attesting to the socio-economic development of local indigenous groups. The occurrence of hundreds of prehispanic hearths called fogones, together with a huge number of lithic artefacts and the thousands of images depicted in the rock petroglyphs, testify to the long-term socio-economic, cultural and ritual development of the communities who exploited natural resources and maintained ecological equilibrium in the region prior to European contact.

Management: The site is administered by INAH. A small pavilion has been built that contains a small museum room, an electric generator with an electric pump, and restrooms.

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Fig. 3.1.1. Top left: The ‘altar’. Top right: General view of the site. Bottom left: The ‘seat’, an observatory site. Bottom right: The Boca monolith. Photographs © Stanisław Iwaniszewski.