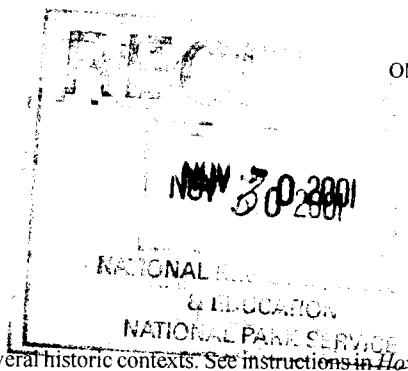


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National Register of Historic Places Multiple Property Documentation Form



This form is used for documenting multiple property groups relating to one or several historic contexts. See instructions in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or computer to complete all items.

New Submission Amended Submission

A. Name of Multiple Property Listing

Prehistoric Rock Art of Puerto Rico

B. Associated Historic Contexts

(Name each associated historic context, identifying theme, geographical area, and chronological period for each.)

"Prehistoric Ceramic Period Petroglyph and Pictograph Sites of Puerto Rico"

C. Form Prepared by

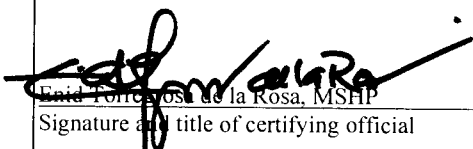
name/title Michele H. Hayward, Ph.D., Michael A. Cinquino, Ph.D., Mark A. Steinback, M.A.

street & number 2390 Clinton Street telephone 716 821-1650

city or town Buffalo state NY zip code 14227

D. Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation*. (See continuation sheet for additional comments.)


Eula Torres de la Rosa, MSHP

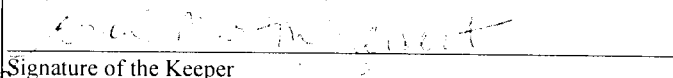
Signature and title of certifying official

November 28, 2001

Date

Puerto Rico State Historic Preservation Office
State or Federal agency and bureau

I hereby certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.


Signature of the Keeper

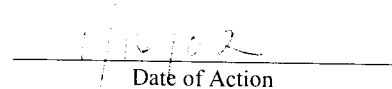

Date of Action

Table of Contents for Written Narrative

Provide the following information on continuation sheets. Cite the letter and the title before each section of the narrative. Assign page numbers according to the instructions for continuation sheets in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Fill in page numbers for each section in the space below.

	Page Numbers
E. Statement of Historic Contexts (If more than one historic context is documented, present them in sequential order.)	1 - 34
F. Associated Property Types (Provide description, significance, and registration requirements.)	35
G. Geographical Data	36
H. Summary of Identification and Evaluation Methods (Discuss the methods used in developing the multiple property listing.)	37 - 69
I. Major Bibliographical References (List major written works and primary location of additional documentation: State Historic Preservation Office, other State agency, Federal agency, local government, university, or other, specifying repository.)	70 - 98

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 120 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

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E. Statement of Historic Context

Introduction

The Puerto Rican prehistoric carved or painted images on rock surfaces present the researcher with a number of opportunities for investigation. Their high degree of execution and stylistic variability within the Caribbean invite interpretive exercises, cross-cultural comparative study, documentation, experimentation, and examination of relationships among cultural systems. Despite the richness and potential of the data set, systematic investigation and formal interest has remained minimal. The present effort aims to nominate to the National Register of Historic Places this unique class of cultural expression along with three examples (see accompanying forms), and by so doing to focus attention on the possibilities for their study.

A description of several island prehistoric rock art characteristics begins Section E, followed by the elaboration of one historic context in which to evaluate or place the images. The development of a series of research issues follows from this data base, as does the requirements for inclusion of future sites within the National Register (Section F). A listing of known rock art sites (Section H) for Puerto Rico and its dependencies (Section G) companioned by a comprehensive bibliography of sources (Section I) completes the Multiple Property Documentation Form.

Puerto Rican Rock Art Characteristics

Definition. Rock art can be divided into four subtypes: geoglyphs, rock sculptures, petroglyphs and pictographs (Dubelaar 1995:1). Geoglyphs represent a restructuring of the earth's surface, usually large-scale, to produce design elements. Examples include the animal-shaped earthen mounds of the Adena-Hopewell culture of North America. No such instances have been noted for Puerto Rico or the rest of the Caribbean. The island does possess rock sculptures in the form of carved zemis or three-pointed objects and free-standing statues. Our interest is restricted to the latter two subtypes found on immovable or relatively stationary rock structures (Rivera Meléndez 1996:2). Petroglyphs consist of images found on rock surfaces produced through pecking, grinding, abrading, scratching or other means (Dubelaar 1995:3; Rivera Meléndez 1996:2, 7). Pictographs consist of images painted on rock surfaces. The image makers commonly used hues of red, white, orange, and black, alone or in combination. The pigments were made from a variety of mineral, vegetable or even animal sources including carbon, kaolin, hematite, the juice of the jagua (*Genipa americana*) and bat guano (Rivera Meléndez 1996:2, 7-9). The images can be found on such rock types as granite, granitic porphyry, quartz diorite, dolomite and limestone (Frassetto 1960:384; Meighan and Trask 1994:15). Of the latter two subtypes, petroglyphs account for the majority of humanly-altered rock surfaces on the island.

Location. Fewkes (1903) organized his discussion of Puerto Rican rock inscriptions according to their physical location: along waterways, in caves or rock-lined enclosures and on stone slabs aligning ball courts or plazas. This scheme remains useful for discussing the

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positioning of carved or painted figures. Roe (1991) added a fourth category of location—beach rock.

Puerto Rico possesses over 1,300 waterways ranging from large, permanent rivers to numerous small, seasonal streams. The mountainous interior serves as the source of the rivers and streams, which, after draining the interior and coastal plains, empty into the Atlantic Ocean and Caribbean Sea (Toro-Sugrañes 1982:113-119). Alongside these water courses, both large and small, petroglyphs have been found. The images are frequently carved on large boulders actually in or bordering the waterway, or near other forms of water sources such as waterfalls (Fewkes 1903:443-444). The Ceiba 3 grouping of four petroglyphs is found on a vertical surface of a large boulder within a similar cluster at Puerto Rico's eastern ocean edge in the Municipio of Ceiba. The three anthropomorphic and one abstract images face south-southwest across the harbor of Ensenada Honda, occupying a commanding view of this body of water (Tronolone and Cinquino 1984). The two anthropomorphic petroglyphs of Camp García 3 have also been carved into a large boulder, this time at an inclined angle, along a much less extensive water source. This grouping lies adjacent to a small quebrada or stream in the Barrio of Puerto Ferro on the island of Vieques, a political dependency east of the main island of Puerto Rico (Tronolone et. al. 1984).

Puerto Rico also possesses hundreds of caves, rock shelters or rock-enclosed areas. According to José A. Martínez Oquendo (Inventory of Caves and Caverns, Department of Natural Resources, Puerto Rico), the island has some two thousand caves. Only a minor percentage have been explored and of these not all contain carved or painted figures. The number and location of figures within rock art cave sites is variable and access can be difficult. The Cueva del Indio site in the Municipio of Las Piedras consists of a number of large boulders accumulated around a deep depression. Open and enclosed spaces form an interconnecting network of cavities, crawl spaces, variously inclined rock faces, and different entrances. Some of these rock surfaces can be reached via an easy entryway at ground level. The 64 anthropomorphic faces and body figures have been carved into five rock surfaces which form the walls of the enclosure at the ground level entrance previously noted (Hayward et al. 1992: 23-24; 34). In contrast the Cueva Lucero located in the Municipio of Juana Díaz, possesses a rather inaccessible entrance. More than 24 petroglyphs of the Cueva San Miguel, Municipio of Utuado, are here carved on a large stalagmite formation within the cave. Most consist of various styles of human-like faces.

Ball courts and plazas in the Caribbean constitute level, prepared earthen surfaces. Rectangular, square or oval/ circular shapes are encountered. These courts and plazas can be unlined, partially or completely lined with a varying arrangement of stones, earthen embankments or both (Alegria 1983a; Oliver 1998:9-22, 34-39; Fewkes 1903:454-462, 1907:79-85). For Puerto Rico, Alegria (1983:115-116) lists at least 79 examples of prepared areas distributed among 72 sites. Seven of the sites have more than one, with Caguana in the central mountainous interior near Utuado possessing multiple structures—ten to twelve (Alegria 1983a:66-88, 115; Oliver 1998:6-27; Mason 1941; Barnes 1993). The structures date to the Late Ceramic period beginning around A.D. 600 or Period III, with their maximum period of growth occurring from A.D. 1200-1500 or Period IV (Alegria 1983a:117; Oliver 1998:29, 34; Rouse 1992: 52, 107, 116). The ball courts and plazas are considered to have served

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ceremonial and secular functions, such as the playing of a game of ball, public dances and mortuary rituals (Alegría 1983a; Oliver 1998; Rouse 1992; Fewkes 1903:455, 458-459, 461; 1907:80, 83-85).

Alegría (1983:117) reports that petroglyphs are commonly found on the stone slabs aligning ball courts or plazas, adding that stones in eighteen of the sites and in nearby rivers contain carvings. Twenty-two of the twenty-five extant and readily identifiable petroglyphs at the Caguana ball court site are found on large granite boulders aligning the western limit of Plaza A, or the central rectangular marked ground surface (Oliver 1998:9, 11, 121). Initial occupation of Caguana appears to begin around A.D. 700 with a subsequent increase in size and on-going structural modifications to the ball courts and plazas. The climax of site development is estimated to have been circa A.D. 1280, followed by a decline (Oliver 1998:22-27).

The earlier multiple court site of Tibes is located along the Portugués River near Ponce on the southern coast of Puerto Rico. As with Caguana, most of the petroglyphs are found on stone slabs marking the east and west sides of the large central square. Reconstructions of the court's arrangement place up to ten rectangular or squarish courts around the central plaza. Occupation at Tibes is evident from the Early Ceramic Period (A.D. 300), to the end of Period III of the Late Ceramic Era (A.D. 1200). Caguana and Tibes are both considered to have functioned as pre-eminent political and religious ceremonial centers on the island. Tibes is the first such center which is later eclipsed by Caguana (Alegría 1983a:111; Oliver 1998:38-44).

Petroglyphs carved into rock located at the island's ocean limits comprise the least numerous location for this form of rock art. Roe (1991) has reported on a grouping executed horizontally into beach rock in front of the Maisabel site. Similarly, Alemán et al. 1986 have noted one beach petroglyph associated with the site of Ensenada at Rincón on the northwestern coast. Maisabel represents a large, Early to Late Ceramic Period (250 B.C. to A.D. 1500) settlement on the central north coast of Puerto Rico near the town of Vega Baja. Roe's (1991) identification of the images includes: a simple face, a fish, a sun figure, a possible basketryfish trap, another fish, and a fish/human facial composite.

Classification Schemes. Classification schemes for the study of Puerto Rican petroglyphs and pictographs are varied. Frassetto (1960) developed an early framework which recognized four design types. Type I consisted of abstract and geometric forms, such as circles, volutes and series of pits in apparent association. Type II comprised a rather inclusive category of solar designs, zoomorphic representations and various human and animal head forms. Type III represented figures originally termed 'swaddled infant,' but now referred to as 'wrapped ancestor,' 'wrapped figure,' or 'enclosed figure.' The images possess enclosed bodies (i.e., no distinct arms or legs) with prominent-eared heads and readily defined facial features (e.g., eyes, mouth, forehead). Type IV can be defined as petroglyphs executed in the Capá style from four sites: Icacos, Caonillas, Salto Arriba and Capá or Caguana.

Bullen (1973) employed a five-fold division for petroglyphs, ranging from faces to more complicated full body forms, including Frassetto's wrapped figure and Capá types. The following year, Bullen (1974) expanded his classification into seven types intending the scheme to be applicable to Caribbean petroglyphs in general. Type I consisted of abstract geometric designs

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(e.g., concentric circles and diamonds, framed crosses). Type 2 represented the Colónarie or Capá style of images which lack any clear reference or meaning. Type 3 comprised simple to more complex faces without bodies. Type 4 referred to 'sun symbols' or circular heads with 'rays' or straight lines emanating from the figure. Type 5 included the wrapped figures with both a face and a largely rectangular-shaped body with internal crossing lines in some sort of pattern. Type 6 is made up of complicated full body images, found in Puerto Rico at Caguana, or what Bullen termed the Utuado-type figures. The last type accounted for stylized representations of uncertain symbolism.

Rivera Meléndez (1996:16-20) devised a scheme with six main classes and eighteen subtypes for his investigation of petroglyphs and pictographs located at various sites in the Municipio of Cayey. Five types with sixteen subtypes were devoted to categorizing human faces with or without bodies and animal figures. The sixth type with two subtypes was reserved for pictographic representations. Roe (1991), for his study of the petroglyphs at Maisabel, developed a formal framework of analysis involving the definition of individual design elements prior to interpretation. Head, eye, mouth, nose, body, arm, leg and other anthropomorphic body parts were all broken down into various subtypes or modes. For example, head shape included fifteen modes ranging from circular to ovoid to polygonal, to heart-shaped to absent.

The existing classificatory frameworks for Puerto Rican rock art reflect the talents and objectives of the individual researchers. Both general and specific schemes are present and needed. The general ones serve as common points of reference and discussion; the specific frameworks serve to define each site's potentially unique stylistic elements. Our objective in this section is to present an indication of the types of petroglyphic and pictographic images which are known for the island. For this purpose we have organized the presentation around a three-fold breakdown of anthropomorphic, zoomorphic, and abstract figures. Combinations of these three classes are also evident.

Anthropomorphic designs, under this classification, constitute the most frequently occurring type of figures. The images comprise simple to complex faces with or without body elements. Simple human faces range from two circles and a dash or three circles indicating a visage to the features being partially or wholly enclosed. A complex face with can consist of a circular-shaped head, pitted eyes, an enclosed dashed mouth, a semicircular decorated crown or headpiece, and a pointed hairline, among other features.

Attached body elements to faces are varied and can be minimal to elaborate. One of the petroglyphic groupings from the Cueva del Indio site of the municipality of Las Piedras barely outlines the upper body torso of an intricately executed crown attached to the head. Intertwined with the principal figure's headgear are a simple face and another elaborately crowned face. Both of these later facial images are without body elements. A more complete body form of two curved lines on opposing sides of a straight line, possibly indicating arms and legs, helps to complete the encircled pitted eyed, ovoid-eared and top-hatted full image. This petroglyph comes from the Piedra Escrita rock boulder group along the Río Coabey in the Municipio of Jayuya. A pictograph from the Cueva de Mora site illustrates the wrapped or enclosed body image. The figure possesses a squared- or tabular-eared face with two pitted eyes and an elongated nose and dashed mouth. The body forms a rectangle with multiple internal horizontal

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and vertical lines. No arms, legs, feet or hands are evident. In contrast, one of the petroglyphs from Plaza A of the Caguana ceremonial site represents a fully-formed figure. A crowned head with encircled eyes and mouth with a pointed hairline face connects to a torso with internal design elements (e.g., a circle, triangle). Arms and legs with hands and feet are detailed; the arms and hands are upraised.

Zoomorphic representations refer to animalistic or naturalistic forms. Frequently occurring images include bats, turtles, and birds. Turtle and fish examples can be found among the Maisabel grouping of beach rock petroglyphs. Another pictograph from the Cueva de Mora series models a less common zoomorphic design—that of a *Guabá* cave spider.

Verbal indications of the types of abstract designs executed by Caribbean precolumbian peoples have already been exemplified. For Puerto Rico an instance of a carved clockwise-spiral is present amid the Quebrada Maracuto river boulder petroglyphic grouping in the municipio of Carolina. The Piedra Escrita grouping near Jayuya contains similarly designed spirals, as well as an almost completely enclosed or framed simple cross.

Interpretation. Efforts at interpreting Puerto Rican petroglyphs and pictographs can be broken down into three approaches. Following Dubelaar (1995:18) these approaches involve deciphering the pictorial, symbolic and social significance of the rock art images. Pictorial interpretation refers to recognizing what the figure is, as in a face, a leg or a fish. Symbolic interpretation means arriving at what message or information the image was intended to convey. The anthropomorphic faces may represent actual people or perhaps a group's or individual's ancestors; the framed cross might refer to the four cardinal directions. Social interpretation means determining the role the carved and painted images or image-making-process played within the larger cultural context or system. Places of rock art might mark particularly sacred areas, or perhaps ethnic or political boundaries. Examples of the first type of interpretation have been given above. Here we are concerned with the latter two forms of interpretation.

Interpretations specific to Puerto Rican rock art consist primarily of untested statements ranging from low-level simple assertions to well-developed frameworks which relate the rock art to other cultural subsystems. Researchers rely on five data sets, or more frequently their combination, to postulate the function and context of the rock art images. The first data set consists of ethnohistorical accounts of the island natives at the time of Spanish contact. The second set comprises data on the culturally related lowland South American Indian culture, and especially religious systems. The third and fourth sets involve the use of ideas and information drawn from the fields of anthropology and rock art. The last set is a miscellany covering those cases where inspiration or information is drawn from sources other than the ones already mentioned. Interpretive examples cover single or a few images, the same class of figures found in multiple-locations, the entire grouping of images at a single location, and island rock art in general.

To illustrate the variability and nature of interpretive efforts, two case studies are outlined. Roe (1991) begins his analysis of the Maisabel beach petroglyphs with an acknowledgment of the difficulties in ascertaining the symbolic or iconographic meaning of rock art images.

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Interpretive problems include a lack of direct dating (see next section), an absence of direct ethnographic evidence (i.e., no living image makers; no ethnohistoric accounts of how or why the images were produced), variant reproductions of the same images by different researchers, lack of specified processes whereby the images are converted into reasonable explanations of them, and the uncritical use of the informational data bases that are available (Roe 1991; Meighan and Trask 1994). Roe attempts to at least partially overcome these problems by utilizing more rigorous rock art reproduction methods, developing a conversion process and specifying which types of information he will employ for explanatory parallelisms.

Generative-grammatical componential analysis is the term applied by Roe to his conversion process. The objective is to break down the images into individual design components, and then recombine the elements into motifs and design layouts which serve as the basic units of analysis. Definition of the design elements proceeds by isolating the shapes or variant forms of expression. For the Maisabel anthropomorphic figures Roe defined the dimensions of head shape, eye form, and eighteen additional body parts. The head shape range has already been referred to, while eye forms represent twenty-two varieties including the pitted and dashed eyes/pupils illustrated thus far. A componential analysis of the design elements for each dimension produces sets of modes (20 in this instance) from the most to least likely selected elements.

This type of analysis provides a statistically manipulable data base for comparative purposes and a means to define stylistic regions. The approach also provides an explicit basis or confirmation of the largely implicit assumption by researchers that rock art images are not randomly formed. Their production follows culturally prescribed rules. It is these rules for recombination, the generative grammar of rock art, that the researcher is attempting to elucidate. Roe's efforts at this exercise include the specifications for which type of material to select (i.e., calcite for cave and beach rock sites or harder granite rocks at river and ball court sites) and the standards of workmanship (i.e., sloppy, variant and careful, invariant). Patterning of the images should be more readily discernible, so that motifs and design layouts can be identified. Motifs such as a solar face or sun figure, simple face, an eared enclosed figure have already been discussed, with multiple-enclosed figure groupings comprising examples of design layouts.

Roe proceeds with his interpretation or decoding of the Maisabel petroglyphs by now being able to characterize individual as well as the entire grouping of images. An aquatic theme is clearly evident with various fish, turtle and crab representations. Anthropomorphic forms are also present from simple faces to enclosed figures. Of particular import to Roe's interpretation is his identification of three of the geometric images as woven basketry fish traps.

A review of relevant ethnohistorical and ethnographic sources yielded enough comparative data to suggest the overall significance of the images. For instance, the contact period Taíno natives are reported to have employed extensive fish weirs at various fresh water and near coastal locations. Native chiefs and later Spanish colonial authorities controlled access to these zones and equipment. Some evidence exists to suggest the use of fish weirs in Puerto Rico extends backwards into the pre-Taíno time period (A.D. 600-1200) when all but one of the petroglyphs at Maisabel are thought to have been engraved. Fish trap petroglyphs have also

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been produced by various South American Indian groups where they were employed as territorial markers to claim fishing areas among competing ethnic groups. In Venezuela petroglyphs represent communication devices, conveying information about territoriality among other messages. Roe summarizes his contextual data to suggest that the petroglyphs marked the site's or its ethnic group's "ownership of valuable fishing and marine hunting resources as well as the necessary nature fact aids (local landforms). Moreover, these lithographs [petroglyphs] were designed to communicate that differential access across competitive ethnic boundaries" (Roe 1991: 334).

Roe further hypothesizes that the anthropomorphic figures functioned as supernatural validation of the ownership claim. Whether the images are considered as representing the Sun Deity or as ancestors, their presence implies a continuity with the past population's occupation of the area and use of its resources. Ancestor worship as an important component of at least the immediate precontact (A.D. 1200-1500) Caribbean religious systems is well documented. He, along with others, postulates that the figures represent dead ancestors wrapped in a hammock. The internal lined bodies substitute for the hammock netting.

Roe (Roe et al. 1997) continues and amplifies these themes of ancestor worship and enclosed figures as wrapped dead ancestors in his examination of the Cueva de Mora images (our second case study). Caves constitute the only one of the four categories of location where petroglyphs and pictographs are currently found together. Roe observes that the Cueva de Mora set of carved and painted images exhibit discrete spatial and stylistic patterning. The 27 petroglyphs are positioned low on cave walls and stalagmite/stalactite formations near both entrances to the cavern complex. The 37 pictographs are situated within the two main and one of the auxiliary chambers of the eleven total chamber system. Virtually all of the painted figures have been executed from seven to thirteen meters above the chamber floors on natural ledges and near the ceiling. While the two sets of images share common stylistic elements and pictorial themes, the pictographs are rendered with greater complexity and on a larger scale than the petroglyphs. Roe suggests that the two sets of figures performed separate functions within a common ritual context. The petroglyphs acted as outer guardians and supplicants to the inner central pictographically rendered shaman intermediaries, ancestral spirits and animal heralds. Three-eared wrapped ancestors are figured along with a *Múcaro*-owl, their messenger, and their descendent(s), indicated by the presence of the human face at the lowest position of the subgrouping.

Roe views the images and their location as recreating, microsmically, the Late Ceramic Age native (A.D. 600-1500) and Contact Period Taíno (1500-1525) cosmology. Archaeological evidence (e.g., presence of ritual items) and ethnohistorical sources (e.g., Taíno origins; association with ancestor cult) suggest that caves served as special ceremonial centers for the shamanistic-based religion during the aforementioned periods. By analogy with extant South American native cosmology, the prehistoric peoples of Puerto Rico would have divided the world into three sections: Sky World, Earth World and a sub-aquatic Underworld. These worlds were connected by some actual earthly feature, for the Taíno, by the Cauta mountain. Caves in mountains also served as connecting and thereby communication points, at least mythically via a shaman, among these worlds. The spatial layout of the Cueva de Mora can then be considered one whereby the entrances with the guardian petroglyphs equate with a lower Earth

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World; the inner, higher chambers with the ancestral/ shamanistic/animal familiar pictographs replicate an upper Earth World; the part of the cave above the images represents the Sky World, and the lower, subterranean chambers stand in for the Underworld.

A final note on interpretation. The two case studies should not be viewed as typical of efforts to decipher the iconographic meaning of Puerto Rican rock art. The two studies are among well-constructed examples which attempt to make sense out of the images beyond a mere pictorial identification. More common are lower-order or restricted-in-scope efforts which seek to interpret a few or selected images or those with less extensive use of comparative information and ethnohistoric/ethnographic data bases. An underlying premise that the images function in a religious or ritual context runs through all explanatory attempts.

Dating. The dating of Puerto Rican carved and painted images remains problematic. No direct method of dating the figures has been applied or developed (Meighan and Task 1994:15-16). The association of rock art with a nearby archaeological site and stylistic comparisons to other rock art assemblages comprise the two methods whereby the majority of island images have been dated. For instance, Roe (1991) employs both methods to date the Maisabel beach petroglyphs. Although occupation at the site begins in the Early Ceramic Period by 100 B.C. (ending A.D. 600), the petroglyphs are directly associated with the subsequent expansion of the first and second phase inhabitants of the Late Ceramic Period or A.D. 600-1200. Ceramics dating to these periods were embedded into the same beach rock that the petroglyphs were carved into. Stylistic similarities with other dated rock art assemblages also suggest an equivalent date range. One exception remains—that of a complex face from the third grouping of images at the site. Roe argues that this petroglyph was executed during the Taíno or last phase of the Late Ceramic Period (A.D. 1200-1500). Several factors suggest a later and separate engraving including the exclusive possession of goggled eyes which are also evident on the later and more complex Upper Icacos petroglyphs, and the production of the image with finer and shallower incisions than the other Maisabel petroglyphs.

These indirect methods present certain difficulties. Rock art sites with datable material, primarily ceramics for Puerto Rico, provide the most secure basis for inferring when the images were executed. Multi-component sites with rock art, as in the Maisabel example, confront the researcher with the issue of contemporaneity. The images may have been produced during one or more archaeological phases. Rock art sites without reliable datable material, not an uncommon occurrence, offer the least secure basis for establishing their use period. The occupational phases of nearby settlements are employed as proxies to the rock art sites on the assumption that the inhabitants lived in the settlements, but conducted at least some ceremonies and rituals in special non-habitational locations. Yet, how nearby should nearby be? Did more than one settlement conduct rituals at the same location? Has an associated settlement-to-ritual site been destroyed by historic or modern development? The reliability of stylistic comparisons to other datable image assemblages depends in turn on how secure the dating is for the compared grouping (see Meighan and Trask 1994:15-17 for a discussion of some of these and other dating problems).

Despite these difficulties, researchers early on considered the majority, if not all, of the rock art to have been produced during the Late Ceramic and Contact Periods (A.D. 600 to

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1524). (Meighan and Trask 1994:15; Fewkes 1903: 466; Rouse 1992; Frassetto 1960:381, 387-390; Roe 1991:326; Bullen 1974:106; Rivera Meléndez 1996:78-79, 89). Little evidence suggests continued post-contact engraving or painting of images or production before the Late Ceramic Period (see Martínez Torres 1987 for Puerto Rican and Morbán Laucer 1987 for Santo Dominican examples of rock art possibly dating to these periods).

Establishing relative chronologies for Puerto Rican or Caribbean rock art has met with limited success (see Frassetto 1960; Roe and Rivera 1995:446; Meighan and Trask 1994:16-17). A more promising approach to the relative ordering of Puerto Rican rock art has been offered by Roe (Roe and Rivera 1995; Roe et al. 1999). The seriation rests on two component underpinnings—the selection of three rock art assemblages with secure dating and the componential analysis of the assemblages' images. The Maisabel petroglyphs (circa A.D. 800-1000), the petroglyphs from the El Bronce site on the south coast of the island near Ponce (circa A.D. 1100-1200), and the carved rock boulders from the Caguana site near Utuado (circa A.D. 1300-1492) comprise the selected rock art assemblages. Once the relative positioning of the groupings has been established, a componential analysis of the assemblages yields the frequencies of individual design elements or modes and the motifs which can then be seriated in a similar manner as pottery modes and styles.

Diagnostic or common characteristics of Phase A, the earliest, include the predominance of simple round faces, a vertical nose element, the presence of faces with rays normally located below the face, depictions of enclosed simple-faced bodies, and faces with feather headdresses. In Phase B round faces continue, but with additions: concentric eyeballed eyes, horizontal hourglass-shaped eyes, goggled or connected encircled central pupil eyes, rays above and below the face, a nose, and more complex crowns or headgear. The detail, elaboration and size, both of the figure and the rock it is carved into, increase in this phase. The trend towards elaboration of facial and body parts reaches its maximum development by Phase C. The anthropomorphic figures of the Caguana ball court site best exemplify these full-formed and finely-executed images. One of the petroglyphs is considered to represent the Taíno Earth Goddess Atabeyra with her crown, ear plugs, internally complex face and body depiction and attached arms, legs, hands and feet. Such elements as nostrils, lip-lines, a V-shaped hair line and a heart-shaped face are unique to this latest phase.

Ceramic Period Puerto Rican Culture History Overview. The division of Puerto Rico's prehispanic and initial contact periods follows Rouse's 1992 scheme, as modified by Oliver in 1993, by Rouse and Faber Morse in 1995, and by Faber Morse in 1995. In Rouse's scheme, styles refer to a complex of ceramic or other material cultural (i.e., lithic, shell) traits that are characteristic of one or more sites. Series are sets of closely related cultural complexes or styles shared by peoples/cultures of common origin (Rouse 1992:175, 183-184). The scheme is ordered hierarchically, so that individual assemblages or styles can be placed into increasingly general categories (e.g., subseries, series). Vescelius (1980) points out that such schemes are inherently flexible, allowing for additional specific or more encompassing categories.

The areal distributions of Rouse's styles and series do not follow the current pattern of island-specific culture areas. Rouse observed (1982:48) that the Prehispanic ceramic traditions, and by extension the cultures producing the pottery, exhibited more similarity between adjacent

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islands than within a given island. Rouse attributed this to the difference in pre- and post-European communication networks. In prehispanic times, communication via the sea and coasts was more likely than over hilly, pedestrian land routes. With the arrival of the Europeans, the development of land-based communication systems (e.g., roads, bridges) was emphasized, thus favoring intra-island cultural relationships. Hence, the prehispanic local cultural areas of Rouse's charts are divided into island passage zones (top portion of the figures).

Puerto Rico's status is variable throughout the pre-Columbian past. During the Early Ceramic Period, the island shared more cultural traits with the Virgin Islands than with other island groupings. During the Late Ceramic Period, Puerto Rico experienced differentiation into two cultural traditions, while maintaining close contacts with the Virgin Islands and eventually establishing similar relationships with the remainder of the greater Antillian islands. This prehispanic areal pattern (Rouse 1986:129, 132) does not extend into the earlier preceramic Lithic age, which instead more closely resembles that of the Postonquest.

Rouse's divisions into series and styles are largely derived from a comparison of the similarities and differences among ceramic complexes. Other non-ceramic material items and cultural traits are also considered for both the ceramic and preceramic periods, with all such considerations organized into a chronological chart or model. Rouse recognizes three broad divisions: the Lithic and Archaic ages, the Ceramic age, and Initial Contact.

The first is represented by possibly the Casimiroid series (4000 B.C.-A.D. 500), but definitely by the Ortoiroid series (4000-200 B.C.) in Puerto Rico and the Virgin Islands. The Ceramic age is represented by two series—the Saladoid (200 B.C. - A.D. 600) and the Ostionoid (A.D. 600 - ca. 1500); Christopher Columbus encountered the Taíno Indians in the area at the end of the 1400s.

The terminology employed for the Ceramic Age discussion is outlined in Table 1 (see next page). When referring to the chronological period the terms *Early Ceramic* and *Late Ceramic* are used for the principal division, while those of the first, second and third phases are applied to the subdivisions.

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Table 1. Prehistoric Ceramic Age terminology for the chronological periods, ceramic series/styles and cultures of Puerto Rico

Chronological Period	Ceramic Series/Style	Culture/People
Early Ceramic		
First Phase	Initial/early Cedrosan Saladoid - Hacienda Grande/La Hueca	Early Saladoid
Second Phase	Late Cedrosan Saladoid - Cuevas	Late Saladoid
Late Ceramic		
First Phase	Initial/early Elenan/Ostionan Ostionoid - Monserrate/Early Ostiones	Early Ostionoid
Second Phase	Late Elenan/Ostionan Ostionoid - Santa Elena/Late Ostiones	Late Ostionoid
Third Phase	Chican Ostionoid - Espenanza/ Capa/Boca Chica	Later/latest Ostionoid

When referring to the ceramic series and styles that largely serve to define the periods, the various stylistic names are employed, for example, early Elenan Ostionoid rim sherds. When referring to the peoples or cultures of these periods and ceramic styles, the terms *early* or *late* Saladoid and Ostionoid are used.

The Lithic Age (4000-2000 B.C.). Lithic Age complexes have so far been identified in the Caribbean with the Casimiroid Series, specifically the Casimiran Casimiroid subseries of Cuba, Haiti and the Dominican Republic (4000-2000 B.C.). The subseries or other yet-to-be-defined Lithic Age complex may extend into Puerto Rico and Jamaica. The beginning of the series dates to 4000 B.C., where it is followed in Haiti and the Dominican Republic by the Courian Casimiroid subseries and in Cuba by the Redondan Casimiroid subseries. The appearance of both succeeding subseries around 2000 B.C. also marks the passage of the cultures associated with the subseries into the Archaic Age. The series continued until European contact in western Cuba as evidenced by the non-ceramic ethnohistorical and archaeological Guanahatabey peoples, and until A.D. 500-600 in eastern Cuba, Haiti, and portions of Hispaniola. Central America may be a point of origin for the series and the people associated with it, although the northern coastal area of South America is also a candidate.

The Casimiran subseries is characterized by the presence of flaked lithic tools, primarily simple microblades, struck from large cores of flint and chert, most of which appear to have been used for woodworking. Groundstone and shell tools are absent, although it is likely that tools were also made from perishable material (Oliver 1993:22-24; Rouse 1992:20-21, 51-57, 69).

The Cerrillo site from Puerto Rico might belong to the Casimiran Casimiroid subseries (4500-2000 B.C.) of the Casimiroid series. The site is classified as a lithic quarry, containing some two acres of naturally occurring low-quality chalcedony and chert nodules, prepared cores in a variety of sizes and shapes, plano-convex thumbnail and backed scrapers, micro- and large lamellar flake blades, punches, bifacially worked choppers, and hammerstones. Manufacturing

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techniques include direct percussion and anvil methods. Tools or artifacts made from other materials and ceramics are absent (Pike and Pantel 1974; Ortiz 1975). Although the flaked tools and manufacturing techniques suggest a Casimiran origin, specifically the Barrera-Mordán complex from Santo Domingo (pre-2000 B.C.), the site, as well as that of Barrera-Mordán, appears to have been exploited well into the Ceramic age. While Cerrillo's cultural and chronological positioning is unclear, a late Lithic or early Archaic age is indicated for the initial exploitation of the site (Lundberg 1980:134; Oliver 1993:24-25; Pantel 1975; Rouse 1992:54, 67-68; Veloz Maggiolo and Ortega 1976:148-150).

Information concerning other cultural traits for the Lithic age is limited. Kozlowski's excavations of rock shelters along the Seboruco and Levisa rivers in Central Cuba in the early 1970s yielded tool assemblages similar to those of the Hispaniolan and Cerrillo quarry sites. Mussel shells and bones of hutias, lizards, and snakes were recovered (as noted in Rouse 1992:54). Veloz Maggiolo and Ortega (1976:148-150) report faunal remains including shellfish (conch - *Strombus sp.*, chitons - *Chiton*, West Indian top shell - *Cittarium pica*), land mollusks, and fish being recovered from the Santo Dominican site of Mordán. By comparison with settlement and subsistence patterns of the succeeding Archaic period, one can suggest that the Lithic-age economy consisted of hunting and gathering land and marine animals (e.g., shellfish, fish, rodents), supplemented by wild fruits and plants. Settlements were likely to have been small, near the coasts, and short term or seasonally occupied by small groups. Rouse (1992:54) has also suggested that the Lithic Age peoples in the Greater Antilles were organized into small bands.

The Archaic Period (2000 B.C.-A.D. 200). The beginning of the Archaic Period in Puerto Rico and the Virgin Islands is unclear as Rouse's modified models demonstrate. Archaic Age cultures, as represented by the Ortoiroid series, become readily identifiable by 2000 to 1500 B.C. The series continues until ca. A.D. 200, marking the beginning of the Ceramic Age in these islands. The origin of the series is most likely from peoples migrating into the Antilles from Trinidad and the easternmost coast of Venezuela. Characterization of the series has been a slow process, due in part to a lack of sites and diagnostic traits. Rouse (1992:62), following the work of Lundberg (1980, 1991), incorporates a Corosan subseries containing the Coroso complex (1000 B.C.-A.D. 200) from Puerto Rico and the Krum Bay Complex (1500-200 B.C.) from the Virgin Islands (see Hackenberger 1991 for support of a South American origin of the series; Lundberg 1980:131; Oliver 1993:25; Rouse 1992:62, 69; see Veloz Maggiolo and Vega 1982 for an alternative classification of Caribbean preceramic cultures based on technological and ecological factors).

Groundstone, bone and shell artifacts, along with an absence of pottery, characterize Archaic Period assemblages. Diagnostic cultural material items of the Corosan subseries include choppers, hammerstones, shell picks and scrapers, flakes, and especially edge grinders and chipped or partially ground stone celts. Examples of the grinders, choppers, and hammerstones have been made from pebbles, while the flakes have been manufactured from igneous rock. These tools in turn would have been utilized to fashion items such as canoes or cloth from wood, fibers and additional perishable materials. Simple shell and stone beads and pendants have also been recovered (Rouse 1992:50,65-67; Rouse and Alegría 1990:26-27).

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The Archaic Period cultures of Puerto Rico and the Virgin Islands, and most likely those of the remaining Caribbean islands, exhibited considerable local variation while participating in a general shared subsistence/settlement pattern. A pattern emphasizing the primary exploitation of easily available marine resources and location of settlements nearby is implied. Subsistence appears to have been based on the hunting, fishing, and gathering of such resources as shellfish (e.g., conch, oyster, mussels, clams), reef fish, birds, turtles, rodents and plant foods (e.g., roots, palm tree products). As for plant foods in particular, Veloz Maggiolo and Ortega (1976) discuss the recovery of seeds and remnants of royal palm and *corozo* (*Acrocomia quisqueyana*) fruits from the site of Tavera in Santo Domingo. Further evidence for the utilization of plant foods was recovered in the form of coral and groundstone metates, groundstone manos, and anvils from several Archaic Period sites on the island. A diet rich in shellfish obtained from shallow marine environments (e.g., beaches, river mouths, mangrove swamps) supplemented by other locally obtainable land resources is thus suggested. The period's sites consist mainly of shell middens along with the use of caves, on or near the coasts. Occupation of the sites was probably by small groups of people for short or recurrent periods (Crock et al. 1995; Drewett 1995; Lundberg 1980:132-133; Oliver 1993:28; Rouse 1992:66-67; Rouse and Alegría 1990:26-27) (see Armstrong 1980 and Haviser 1989 for a presentation of formal models of Caribbean Archaic Period settlement and subsistence patterns).

For the Corosan subseries of Puerto Rico and the Virgin Islands, a number of sites have been recorded and investigated. Rouse and Alegría (1990:26) consider the complex of sites on the island of Puerto Rico to include the María de la Cruz cave on the north coast; Coroso, the type site on the west coast; Papayos, Cayo Cofresí, and Jobos on the south coast; and the Playa Blanca site on the eastern ocean edge of the island. The Krum Bay site complex on St. Thomas constitutes the most thoroughly examined Archaic settlement for the Virgin Islands. The multicomponent Lameshur Bay site on St. John's contains a preceramic and ceramic occupation phase (2720 ± 70 B.P. to 1180 ± 100 B.P.), with the possible Archaic period Betty's Hope site on St. Croix and the Arboretum complex at Magens Bay on St. Thomas completing the list for these islands (Righter 1992; Lundberg 1980:165). Additional preceramic sites are known or under investigation (Lundberg 1980:170;1991:74), including the deep shell and lithic deposits of the Angostura site near Barceloneta on the north coast of Puerto Rico (Ayes Suárez 1990). Occupation at the site may extend from the early Lithic through to the Archaic period (Oliver 1993:25).

The María de la Cruz site is found in one cave of a section of limestone hills on Puerto Rico's north coast, just east of the Río Grande de Loíza. The archaeological remains at this cave primarily date from the Archaic period with a minor component of Early Ceramic material. The area would have been attractive to both preceramic and ceramic age peoples with the nearby ocean, river, reefs and mangrove swamps providing a variety of birds, fish, and mollusks. Wild fruits and vegetables, along with the small game animals such as the hutia, would have been available upstream or in the surrounding forests. The recovered faunal remains reflect such a pattern of exploitation of diverse and easily gathered foodstuffs (principally aquatic). Bird, crab, fish, hutia, manatee, turtle, hard-shell clams, donax or wedge shells (Donacidae), top shells (Torchidae), conches, razor clams, and scallops, in addition to

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wild avocado seeds, and fragments of yellow sapote were among the identified remains. That some of this material was burned suggests it was prepared and eaten within the cave.

The Archaic period lithic material indicates a generalized-use tool kit. Eleven pebble grinders, three pebble choppers, five hammerstones, six sharp-edged flakes, and one shell scraper complete the list of artifacts showing some degree of use. The grinders usually consisted of large, irregular, hard stones with one or more of the edges having been worn flat by rubbing. The choppers showed minimal preparation: only one irregularly broken striking surface. While all five hammerstones were employed as tools, just two were intentionally reshaped. Little preparation could also be noted for the flakes, which were probably used as cutting and scraping implements. The *Cittarium pica* shell scraper was ground on both side edges (Rouse and Alegría 1990:1-23).

The Krum Bay complex or Archaeological District of St. Thomas consists of four separate areas or Archaic-period sites: Krum Bay, Cancel Hill, Grambokola Hill, and Sara Hill. All the sites have been tested at various times and by different researchers, and all have been impacted, the last two having been destroyed (Righter 1992:19-20).

The Krum Bay site, located along the southern shoreline, consists of shell and worked and unworked stone deposits (Bullen 1973c:110). Radiocarbon dates for the site range from as early as 1680 B.C. to 225 ± 160 B.C. (Righter 1992:20). The artifact assemblage includes an abundance of flaked igneous stone; numerous pebble tools with smooth facets used as hammerstones and grinders; crude bifacially worked tools resembling celts or wedges; shell beads and disks; *Strombus columella* or conch tip tools; coral files; polished pebbles; small stone beads; quartz; quantities of red ocher; and the presence of exotic cryptocrystalline stone. Discovery of the latter material supports the hypothesis of inter-island trade and communication during the Archaic period (Lundberg 1991:73-74).

Lundberg (1991:74) has characterized the Krum Bay subsistence pattern as a "narrow-spectrum, selective" one. The majority of the shell remains consist of the Atlantic pearl oyster (*Pinctada imbricata*), quite possibly exploited both for its pearls and nutritive content. *Arca zebra* or turkey wing shells are also present, in addition to vertebrate remains comprising primarily marine fauna (reef fishes and sea turtles). Of the archaeobotanical material recovered from flotation samples, the seeds of *Sterculia* (eaten or ground for a beverage today) and those from the edible fruit of the *Manikara* tree are particularly numerous. Although the site was occupied for a thousand years, the occupation appears to have been non-permanent or recurrent. Location factors likely include the presence of a small sheltered bay close to marine resources, red ocher deposits, or pearl oyster beds.

Gross (1976:233) reports on the history of the excavations at the other two sites of the Krum Bay district. At the Grambokola Hill site, besides shell remains, the recovered artifacts from the midden include "a discoidal hammerstone, half a ground conch shell disc, a prismatic blade of dark red translucent flint . . . and a triangular hammer-grinder" (Gross 1976:233). The Cancel Hill site's artifacts consist of "a number of basalt and quartz flakes, two hammerstones and several conch-tip 'picks'. . . a discoidal hammerstone and two groundstone celt fragments.

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The predominant shellfish remains from the excavated sample were those of the Turkey Wing (*Arca zebra*), West Indian Top Shell (*Cittarium pica*), pearl oysters (*Pteriidae*), and Leafy Jewel Box *Chama macerophylla* in nearly equal quantities" (Gross 1976:234). The calibrated radiocarbon dates for the two sites are 1243-788 B.C. and 1265-795 B.C. respectively (Oliver 1993:26).

Archaic-period sites are also known from the island of Vieques, between that of Puerto Rico and those of the Virgin Islands. They include Caño Hondo with a closely comparable artifact assemblage and settlement/subsistence pattern to the Krum Bay complex of sites. The radiocarbon dates indicate an occupation span from 1600 to 1550 B.C. (Figueredo 1976). A burial and "irregularly-shaped flake tools made of chalcedony, groundstone percussors and hammerstones, and shell artifacts similar in type and composition to those in [the] Krum Bay and Coroso complexes" (as noted in Oliver 1993:26), have been reported by Chanlatte Baik and Narganes Storde for the lower levels of the site at La Hueca-Sorcé. The radiocarbon dates vary considerably, but indicate an occupation as early as 2000 B.C. Verdiales 1 (12VPr2-33), known locally as "Puerto Ferro," is also on Vieques Island (Tronolone et al. 1984; Vescelius and Robinson 1980).

While researchers generally consider that the sites from Puerto Rican islands and those of the Virgin Islands present enough cultural and chronological similarities to be grouped together into the same Corosan subseries, the extent of the two component complexes remains in debate. For example, Rouse (1992:65-66) classified the Archaic period remains of Vieques with those of the Krum Bay complex. Earlier (Rouse and Alegría 1990:77-80) he had included the sites within the Coroso complex of Puerto Rico, and Lundberg (1989:171-174; 1991), proposed three complexes—Krum Bay for St. Thomas only, Coroso for Vieques and eastern Puerto Rico, and Cayo Cofresí for part of the eastern and all of western Puerto Rico—within the Corosan subseries. Lundberg (1991:76) stresses that despite any differences, the subseries is marked by strong similarities in artifact assemblages and settlement and subsistence patterns.

The Early Ceramic Period (250 B.C.-A.D. 600). The Saladoid series marks the beginning of the Early Ceramic age in Puerto Rico and the Virgin Islands and the first appearance of settled village life and cultivated foodstuffs. Preceramic groups, as discussed above, may have begun experimenting with agricultural techniques (harvesting of certain roots and plants and encouragement of others) in the Archaic period. The origin of the peoples with this new cultural tradition, who perhaps rapidly displaced the Archaic populations, was again from South America (Oliver 1993:28-29; Righter 1992:24-25; Rouse 1992:71-74, 77-79; see Chanlatte Baik 1983; and Chanlatte Baik and Narganes Storde 1983, 1986 and 1991 for an alternative classification of the Ceramic age).

The Saladoid peoples, in their migration from the South American coast up the Lesser Antillean island chain, may have arrived in the Virgin Islands, Puerto Rico, and the far eastern portion of Santo Domingo as early as 500 B.C. More secure dating places their first appearance around 250 B.C. (Rouse 1992:36, Figure 10; 79-80). The Early Ceramic period in Puerto Rico and the Virgin Islands is represented by five styles. The first phase styles (250 B.C.-A.D. 350/400) are Hacienda Grande and La Hueca for Puerto Rico, and the Prosperity

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style for the Virgin Islands. The corresponding styles for the second phase period (350/400 B.C.-A.D. 600) are Cuevas for Puerto Rico and Coral Bay/Longford for the Virgin Islands (Rouse 1992).

A number of diagnostic or chronologically sensitive traits characterize these first phase styles, as well as the presence of inter- and intra-island variability within the Cedrosan Saladoid subseries. For Puerto Rico, Rouse and Alegría (1990:39-49) discuss in detail the ceramic traits from the type site of Hacienda Grande on the north coast of the island. Thin, fine, light tan-colored sherds from straight-sided and sharply angled vessels identify ceramics manufactured during this first phase. Vessel shapes exclusive to the Hacienda Grande style consist of incense burners, jars, and annular bases on bowls. Concave or outward flaring rims predominate over straight/deep and inward/restrictive types, as do squared over rounded rims. Secondary shape features commonly include pronounced carinas (changes in the vessel wall profile), D-shaped handles, flanges, partial flanges and points on rims, and pierced lugs or tabular handles. Among the distinctive decorative techniques is a usually red-colored slip applied to all or parts of the vessel; finely modeled zoo- and anthropomorphic forms on lugs; the presence of Zoned Incised Crosshatching (ZIC) ware or areas outlined with broad, deep lines and then filled in with lightly incised crosshatching normally found on rims, and finely executed white-on-red (WOR) painted designs.

In addition to the type site, Rouse and Alegría (1990:49) note the presence of Hacienda Grande style ceramics at six other sites for Puerto Rico: the El Convento site in Old San Juan, Tecla near Guayanilla on the South Coast, Sorcé on Vieques, Maisabel near Veja Baja on the north coast, Canas near Ponce on the south coast, and Monserrate on the northeast coast.

Outside Puerto Rico, this style is comparable in form, surface decoration, and technology to the Pearls style of Grenada, the Vivé style of Martinique and St. Lucia, the Morel I style of Guadeloupe, the Indian Creek I style of Antigua (Siegel 1992:1:71), and the Prosperity style of St. Croix (Faber Morse 1989:31). Faber Morse (1989:34) also notes similarities between the Prosperity style of St. Croix and that of La Hueca from Vieques (see discussion of La Hueca style below). This view is more strongly echoed by Chanlatte Baik (1981:56) and Rodríguez López and Rivera Calderon (1991:46), who consider the Prosperity site to exhibit a strong, if not dominant, Huecan material cultural presence. The authors present no specific data to support this conclusion beyond asserting that a significant relationship exists.

The Cedrosan Saladoid peoples of Puerto Rico and the Virgin Islands produced not only various kinds of vessels from clay and tempering agents, but other ceramic artifacts as well. Fragments of griddles, used for baking cassava bread made from manioc flour, are commonly recovered cultural material items from all Early Ceramic period sites, and are found in all succeeding Ceramic Age sites in the Caribbean. The griddles are large and circular, with flush or raised rims. They are relatively smooth on top, rough on the bottom, and are usually undecorated (Faber Morse 1989:32; Rouse and Alegría 1990:50). Topias, used to support the griddles, are also commonly distributed, and are cylindrical and squat in shape (Rouse and Alegría 1990:50). They are usually absent from the archaeological record by the end of the Early Ceramic period (Roe 1989:271-272, 299; Rouse 1992:84). The presence of these

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artifacts is usually interpreted as evidence for a reliance on cultivated rather than gathered plants.

Other ceramic items include amulets, tubular beads, figurines, and disks. Disks are small circular pieces of fired clay, smoothed on the edges, whose function has not been clearly demonstrated; they are nonetheless frequently termed "gaming pieces" in the literature (Rouse and Alegría 1990:50, 74; Rouse 1992:83). Examination of the wear patterns of three such sherds from the Puerto Rican site of PO-21 (Garrow & Associates 1987) suggests that at least some of these ceramic disks functioned as edge abraders to burnish the surface of vessels. The site dates to the first phase of the Early Ceramic period (A.D. 650 \pm 90 corrected).

Saladoid peoples throughout the Caribbean also employed stone, shell, coral, and bone to fashion a number of personal adornment objects and tools. Particularly noteworthy are the examples of finely wrought small groundstone beads, amulets, and pendants. The amulets and pendants are intricately carved and polished, with incised lines, perforations, or punctations used to emphasize the features of frogs or other exotic fauna. Raw materials consist of those locally available and a significant amount of foreign or off-island materials including jasper-chalcedony, crystal quartz, fossilized wood, and greenstones. The presence of such exotic items from distant South America suggests the existence of a Pan-Caribbean trading network in raw and manufactured items (Oliver 1993:32-33; Siegel 1992:100).

The sites of La Hueca-Sorcé on Vieques (Chanlatte Baik 1983; Chanlatte Baik and Narganes Storde 1983), Punta Candelero (Rodríguez López 1991) on the eastern coast of Puerto Rico, and a collection from the island of Monserrate (Harrington 1924) have yielded especially high frequencies of this type of micro-lapidary art. Additional examples of carved semi-precious or gem stones are reported for the sites of Hacienda Grande (Rouse and Alegría 1990:50-51), Morel in Guadeloupe (Durand and Petitjean Roget 1991), Pearls in Grenada (Cody 1991), and Prosperity on St. Croix (Faber Morse 1989:32). Oliver (1993:33) notes that a significant decline in the manufacture of micro-lapidary items by the end of the Early Ceramic period can be observed in the recovered material assemblages.

Bone and shell items made by Cedrosan Saladoid craftsmen occur regularly and are finely made (i.e., intricately carved, polished, incised), but at present appear to be less chronologically sensitive than ceramics. This contrasts with the succeeding Late Ceramic period, when such items are not as well-executed. First phase shell objects reported from Puerto Rico include needles, beads, three-pointers or deity icons, discs, amulets, spoons, gouges, celts, hoes, chisels, and figurines. The same phase and location bone items consist of: projectiles, amulets, awls, spatulas, beads, carved figures, and worked manatee ribs or even human bone (Siegel 1992:100, 106).

Groundstone artifacts continued to be made during the Ceramic age, with an increase in the variety and excellence of the product. Included are celts, adzes, beads, abraders, grinding stones, metates, and hammerstones. While the study of celts and certain other groundstone artifacts (e.g., metates, hammerstones) has yielded few temporally diagnostic attributes, the manufacture of adzes has been established as restricted to the Early Ceramic period. In plan

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view, celt and adze shapes are rectangular, teardrop, or petaloid, while plano-convex (adze), bi-convex (celt), or bi-planar shapes are observed in cross section. Use-wear ranges from heavy to apparently none, suggesting that the latter category of celts/adzes served a ceremonial function (Siegel 1992:106, 111).

By comparison, the chipped stone industry of the Ceramic age is less developed. Small cores can be found, with the majority of the material consisting of largely unretouched small flakes (Siegel 1992:111). Walker's (1980) replication experiments and study of the lithic assemblage from St. Kitts demonstrates that bipolar percussion was the primary manufacturing technique. This technique is suited to the production of small flakes, which appears to have been the objective of the Ceramic Age flint knappers. Possible uses for the flakes, as Walker discusses, are suggested by archaeological and ethnographic observations: use as teeth in grater boards for the processing of bitter manioc, and as tools for the production of other wood, shell, bone, and stone tools. Use-wear analysis would be helpful in suggesting and determining the function or functions of these lithics, but few such studies have been done. Chronologically distinctive attributes have not yet been identified for chipped stone artifacts (Siegel 1992:111).

Walker's (1983) continued examination of the St. Kitt's flaked stone artifacts constitutes one example of a use-wear analysis study. His sample consisted of 1,038 flakes, with 323 or 31 percent exhibiting wear patterns suggestive of tool use. The flake tools are from the Sugar Factory Pier site dating to the Ceramic Age, or A.D. 100 to 950. Comparison of experimentally produced use-wear patterns with those of the archaeological lithic assemblage, revealed that the flake tools were employed to cut, saw, plane, drill and grate a variety of materials. Relying on Tropical Forest ethnographic analogs, Walker notes that the tools used for cutting, the most common function within the assemblage, may well have included activities relating to manioc and fish preparation. The manufacture of wood items such as canoes, bows, arrows, and grater boards were likely accomplished with the sawing and planing tools. Lithics utilized as drills accounted for only a minor percentage of the functions. Analysis indicated flakes were also used in shell carving and as grater teeth for manioc boards. Although the flakes probably employed as grater teeth did not comprise a significant portion of the assemblage, Walker reports that they can easily pass through the standard ¼-inch screen frequently employed in archaeological excavations. This may help to explain in part the low frequencies of this artifact class in the sample.

The Saladoid peoples of Puerto Rico also manufactured sharpeners, anvils, netsinkers, and abraders from coral (Siegel 1992:111, 114).

Before reviewing the characteristics of the Cuevas style ceramics, mention should be made of the artifact assemblages from the sites of La Hueca-Sorcé on Vieques, Punta Candelero near Humacao on the east coast of Puerto Rico, and Hope Estate on St. Martin. While other sites with first phase (Hacienda Grande and Prosperity) and later (Cuevas) Saladoid style ceramics consist mainly of plain wares, with a significant to less significant percentage of painted sherds and a minor percentage of the Zoned Incised Crosshatched fragments, this combination is not observed at these two Puerto Rican sites. (See Rodríguez López 1989 for a discussion of 17 sites on Puerto Rico with stratigraphically distinct ZIC sherds or associated with

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Hacienda Grande/Cuevas style ceramics.) At both sites two sets of distinct semicircular mound groups are associated with two different and mutually exclusive ceramic assemblages. At the Vieques area, the southern grouping, termed La Hueca, contains only plain ware and ZIC sherds, while the northern grouping, called Sorcé, contains the expected combination of first phase Cedrosan Saladoid ceramic types (Chanlatte Baik and Narganes Storde 1983). At Punta Candelero, the mounds near the coast yielded only plain and ZIC wares, with the second, more inland mound grouping yielding Cuevas style ceramics (Rodríguez López 1991). Although the results are preliminary, at Hope Estate ZIC wares are also reported as being restricted to certain portions of the site (Haviser 1991).

The classification of these first phase Saladoid ceramic assemblages characterized by only plain and ZIC wares is unsettled. Chanlatte Baik first proposed in 1981 that the plain/ZIC ceramic components and associated high frequencies of micro-lapidary art be considered a separate series, the Huecoid. He, along with Narganes Storde (Chanlatte Baik 1983, 1991; Chanlatte Baik and Narganes Storde 1983, 1986), also proposed that the material cultural difference demonstrated that two separate but parallel and partially overlapping migrations of ceramic-producing peoples from South America occurred.

Rouse has vacillated. He (Rouse 1982:48-49) first considered that La Hueca material represented a variant of the Hacienda Grande style and not a separate series or migration of people, since at that time this combination of material cultural items had been described for only one site. With the discovery of the spatially distinct La Hueca components at the Punta Candelero site and, apparently, at Hope Estate, Rouse (1992:86-90, 1989) now considers that these assemblages should be classified as a separate ceramic style (Huecan), perhaps at the level of a subseries (Huecan Saladoid), but still within the Saladoid series. Rouse (1989:386) emphasizes that although the Hacienda Grande, La Hueca, and Prosperity styles reflect different cultural adaptations by peoples on different islands (with the question of their origins still in debate), the underlying similarities in material culture and settlement/subsistence strategies unite them into a single grouping.

The varying proportions in ceramic design elements and in the production of micro-lapidary art can also be viewed as one of emphasis. For example, Peter Roe's (1989) analysis of the vessel forms and surface decoration of examples of both plain and decorated Hacienda Grande and La Hueca style ceramics led him to conclude that the differences were minimal enough that the ceramics should be grouped into the Cedrosan Saladoid subseries. They could, however, be considered two separate styles. Roe argues the differences represent the material cultural manifestation of two culturally similar but competing ethnic groups or peoples.

Carini (1991) reached a comparable conclusion to that of Roe regarding the level of differences among the Hacienda Grande, La Hueca and Prosperity style ceramics. He based his assessment on the analysis of the material composition of 93 sherds, employing five methods which included infrared spectroscopy and petrographic microscopy. The sample consisted of Hacienda Grande style ceramics from the sites of Hacienda Grande, Canas, and Maisabel of Puerto Rico and Sorcé on Vieques; La Hueca style ceramics from Punta Candelero on Puerto Rico, Sorcé on Vieques and Hope Estate on St. Martin; Prosperity style ceramics

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from the sites of Salt River and Richmond on St. Croix and from the Indian Creek site on Antigua, and sherds from the sites of Cedros and Saladero in Trinidad. Carini's results indicated that all of the sherds' paste characteristics were similar enough to argue for inclusion with the Saladoid series. He did not consider that his results would or would not justify a claim to a separate Huecan subseries.

Lastly, Havisser (1991:655) reserves judgment, preferring to call them simply first phase Early Ceramic assemblages until more information is available.

The Cuevas (Puerto Rico/Eastern Santo Domingo) and Coral Bay/Longford (Virgin Islands) style ceramic assemblages have long been considered in the literature to represent a decline in the execution of design elements, manufacture (less emphasis on embellishments), and basic aesthetic appeal of the pottery compared to the preceding Hacienda Grande, Huecan and Prosperity styles. Indeed, this trend is considered to have continued into the Late Ceramic period. Curet (1995) cautions that such an assertion may not be completely correct or apply to all aspects of ceramic production. For instance, in his analysis of certain technological traits of utilitarian wares from Puerto Rican sites of the Early and Late Ceramic periods, Curet discovered that sherds from both periods were originally fired at similar temperatures. This finding thus contradicts a widely held assumption that Saladoid series pottery, because it is harder, was fired at higher temperatures than post-Saladoid series ceramics.

The manufacture of thin (less than 5 millimeters [mm]), hard and well-made ceramics continues to be found in Cuevas style ceramic assemblages, as does the presence of bowls in the shape of inverted bells. Vessel profiles, however, tend to be rounded, more graceful, and less sharply angled than those of the Hacienda Grande style. Such secondary features as carinas and internally thickened rims follow suit, with these features being less pronounced or more rounded than previously. A decrease in the proportion of decorated sherds, the elimination of ZIC wares, and the presence of less well-executed white-on-red motifs are among the design element changes observed from the first to the second phases of the Early Ceramic period (Rouse and Alegría 1990:39-49, 66-67; Rouse 1952:336-344; Siegel 1992:114). With regard to other artifacts of the second phase of the Early Ceramic period, Siegel (1992:117) noted that the trend in ceramic simplification carries over into the production of other material items, such as stone and shell beads and amulets. While still being produced, the degree of artistic refinement (e.g., engraving, incising) is less than that of the Hacienda Grande style assemblages.

Information on and analysis of Cedrosan Saladoid settlement patterns is limited. Few regional settlement surveys (Rodríguez López 1991 and Curet 1992 for Puerto Rico) or site distribution syntheses using known settlement locational data (Righter 1995 for the Virgin Islands) exist. Intersite patterns do, however, exhibit a change from the preceding Lithic and Archaic ages. Early Cedrosan sites are located on the northern and eastern (leeward) coastal plains, near river mouths and the shoreline, and at the edge of forests. Their locations most likely reflect selection factors involving proximity to available resources such as shellfish, fish, wood products, fruits, and agricultural land. On Puerto Rico, all known sites are found along the flat coastal plain and alluvial valleys. It is not until the later Cedrosan and most especially the

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Late Ceramic period that sites begin to appear in the interior mountainous regions. This shift may reflect an increase in population pressure on the more favorable coastal resources, with a concomitant move to areas of less favorable or accessible resources. Nevertheless, the sites remain about the same size, and it is not until this Late Ceramic period that increases in the size and number of settlements are observed throughout Puerto Rico (Oliver 1993:33).

Siegel's (1991) analysis of the physical setting of ten Early Ceramic period settlements from St. Croix and seventeen known first phase Early Ceramic sites on Puerto Rico suggests that a more subtle or eclectic interplay exists between settlement location and subsistence strategies. Sites from both St. Croix and Puerto Rico can be found near the shoreline, coastal plain and interior, implying that groups were exploiting a variety of habitats. Puerto Rican and Virgin Islands early Saladoid settlement patterns, as well as those of other islands, are best viewed as flexible and opportunistic. Positioning settlements with respect to the best or most easily obtainable resources and other sociopolitical factors is a strategy which, given the diversity of environmental zones in the Antillian island chain, is not likely to lead to one consistent pattern. The diversity in settlement patterns, Siegel reports, is mirrored in the diversity of subsistence strategies beginning to be documented for this period. These early Saladoid flexible adaptive strategies, Siegel believes, derive from those of similar South American lowland ones.

Determining intrasite settlement patterns has received little attention within Caribbean research projects. Nonetheless, Oliver (1993:33) considers that a typical pattern for Puerto Rico and adjacent islands might be "a semicircular or horseshoe-shaped series of mounded middens facing a central open space or plaza nearly devoid of refuse and frequently functioning as a cemetery." The sites of La Hueca-Sorcé on Vieques (Chanlatte Baik and Narganes Storde 1983), Punta Candellero on the east coast of Puerto Rico (Rodríguez López 1991), and that of Maisabel on the north coast (Siegel 1992; Siegel and Bernstein 1991), as we have already discussed, exhibit this patterning, as does that of Monserrate with roughly five circular mounds (Roe et al. 1990:339). Oliver (1993:34) adds the site of Ensenada/Rincón on the west coast of Puerto Rico to the list and Salt River on St. Croix can be added as well (de Booy 1919:43).

Both Versteeg (1989, 1990, 1991a) and Siegel (1989) provide further details concerning Early Ceramic period village organization. They also draw, based on this data, inferences regarding the period's sociopolitical organization. The site of Golden Rock on St. Eustatius (Versteeg 1989) in the Lesser Antilles consists of five midden areas arranged in a horseshoe pattern. The excavation by Versteeg of one of the mound groupings revealed the presence of a midden area, three circular houses, and associated burial and ceremonial areas. Two of the houses date from the first phase of the Early Ceramic period (fifth century A.D.), measure 7 and 7.5 meters in diameter, and were estimated to have housed between 14 and 20 people. The third house dates from a later phase, measures 19 m in diameter, and was estimated to have housed 45 to 50 individuals. Versteeg considers that the larger structure represents a sizable communal house based on northwest South American ethnographic analogs. These changes in house structures Versteeg interpreted as indicating an increase in sociopolitical organization during the second phase of the Late Ceramic period.

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At the Maisabel site, a large rectangular house, in addition to the cemetery area, was located in the center portion of the settlement surrounded by middens. Siegel also employed South American ethnographic analogs to reconstruct the size of the house and to estimate the number of individuals occupying it. His estimate is some 60 people. Siegel applied a similar method to obtain an estimate for the large circular Golden Rock site house, with a result of some 30 individuals, or somewhat less than Versteeg (1989) had thought. Although occupation at Maisabel spans the Early Ceramic through to the later Ceramic periods, the rectangular house structure dates to the Late Ceramic period. Assuming that: 1) the relative increase in house size from the second phase of the Early Ceramic to the first phase of the Late Ceramic period indicates an increase in sociopolitical organization; 2) early Saladoid peoples had clan- or lineage-based sociopolitical organization; 3) Saladoid peoples faced competition from the resident Archaic period populations when they moved into new areas, thus providing an external impetus for an increased sociopolitical organization; and that 4) the central portion, cemetery, and middens of Early Ceramic period settlements are also ceremonial centers for the worship of ancestors, a principal component of the religious systems of many lowland South American groups, Siegel argues that this period's sociopolitical organization can best be characterized as a *complex tribe* (derived from John Hoopes's concept of the term).

The complex tribe is a type of organization in which sophisticated community activities are conducted, where individuals have different statuses or ranking is observed, but where no centralized authority is present. Siegel observes that for Caribbean Saladoid societies, the postulated ceremonial centers would indicate communal activities on an order above a simple tribal organization. Ranking is observed in the burials at Maisabel, where some adults and children were either accompanied by grave goods or were afforded more careful post-mortem treatment than others. Lack of centralized authority is indicated by the apparent absence of such archaeologically observable traits as a hierarchically ordered set of settlements and ball courts/ball game paraphernalia. Ball courts are normally associated with paramount chiefs and chiefdom levels of organization in the Caribbean. This form of organization developed into simple and complex chiefdoms in the area under discussion during the Late Ceramic period.

Subsistence patterns, although strongly interrelated with those of settlement, have by contrast received greater attention in the literature. They even served as an initial criterion for differentiating the Early from the Late Ceramic periods. Rainey, in his 1940 publication, referred to the Early Ceramic peoples of Puerto Rico as the Crab culture, since they relied heavily on land resources, especially the land crab. He observed a shift in resource exploitation for the later ceramic age peoples, who now relied more heavily on marine than land resources. Subsequently, this land crab-marine shell dichotomy has been noted by a number of researchers throughout the Caribbean area, with its timing and reliance on particular species varying on a subregional or island level. DeFrance (1989:57) mentions that a number of models have been advanced to understand this shift in dietary patterns: Rainey (1940) proposed a second migration of peoples; Carbone (1980), a paleoenvironmental desiccation theory; Goodwin (1980), population pressure resulting in the need for intensification and diversification; Keegan (as cited in DeFrance 1989:57), diet breadth expansion from reduced cost-benefit ratios, and Jones (as cited in DeFrance 1989:57), increasing population versus reduced food yields.

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It should also be noted that most discussions of subsistence patterns have been about vertebrate and non-vertebrate faunal remains. Recovery of cultivated or wild plant foods, seeds, and fruits has not been abundant, unlike the faunal remains. Caribbean archaeologists have had to rely on the relative frequencies of such material cultural items as griddles and grinding stones for indirect indicators of cultivated or wild foodstuffs. It is assumed that from the Early Ceramic period on, peoples increasingly relied upon agricultural products (e.g., manioc, sweet potato), in addition to marine and land resources as major food sources. The proportions of these three categories in the diet remains to be demonstrated and undoubtedly varied by time period and island.

DeFrance's (1989) analysis of faunal remains from the Puerto Rican site of Maisabel illustrates these issues. Her sample consisted of some 25,000 specimens representing a minimum of 4,957 individuals. While invertebrates were more numerous, vertebrate remains accounted for the majority (77 percent) of the total estimated usable meat weight at the site. The terrestrial vertebrate remains that the first phase Saladoid peoples are assumed to have especially exploited are the hutia (*Isolobodon portoricensis*) and land crabs (*Cardisoma* sp. and *Gecarcinus* sp.).

Maisabel is located near soils suitable for agriculture, and close to a number of marine and terrestrial habitats. The results of DeFrance's analysis reveal that even during the first phase of the Early Ceramic period, people were relying on marine resources, in addition to those of the land. The recovered terrestrial remains included: the hutia, the most common mammal in the sample; dove species, along with much lower frequencies of herons, egrets and ducks; the reptiles iguana and pygmy boa, both present in low quantities; and the blue land crab (*Cardisoma guanhum*). The latter constituted the most important species in the diet, and would have been available in large quantities from nearby mangrove swamps. The crab species were present in the Early Ceramic period samples, but not those of the Late Ceramic period.

The recovered marine species are more varied than those of the land, and therefore demonstrate a wider range of habitats was being utilized. Those habitats consisted of a freshwater river, estuary areas at the mouth of the river, shoreline, and deeper offshore waters. While all were exploited, the relative frequencies of the faunal material suggest that the coast and estuary areas were especially exploited. The majority of the remains included reef or coastal fishes such as parrot fishes, grunts, triggerfishes, and groupers. A large number of smaller fishes, including sardines and herrings, were also present in both the Early and Late Ceramic periods. Tuna and shark remains from deeper waters; sea and freshwater turtle and manatee bones; and marine mollusks (e.g., nerites, top-shells, chitons, conch shells, sea scallops, pectens) from shallow to deeper coastal zones complete the listing.

DeFrance (1989) concludes by noting that a shift from heavy to less reliance on terrestrial resources (especially land crabs) can be observed from the first phase of the Early Ceramic to the Late Ceramic period at Maisabel. This shift is also accompanied by an increasing intensification of a maritime component of the diet that was already in place during the first phase of the Early Ceramic period. Oliver (1993:37) observes a similar pattern for the Ensenada site on the west coast of Puerto Rico. While Rainey's and Carbone's models are no longer

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considered valid, the other three also have problems in explaining subsistence strategy shifts on a pan-Caribbean basis, points out DeFrance, if the Maisabel and other site data is considered.

The Late Ceramic Period (A.D. 600 - 1500). The Late Ceramic period in the West Indies can be characterized by increased sociopolitical organization and economic diversity, as well as an increase in the regionalization of ceramic styles (Oliver 1993:36). From the first to the second phase of this period, seven ceramic styles are represented in Puerto Rico—Early Ostiones, Late Ostiones, Monserrate, Santa Elena, Esperanza, Capa and Boca Chica. The corresponding styles for the Virgin Islands are Magens Bay/Salt River 1, 2 and 3 (Rouse 1992; Rouse and Faber Morse 1995; Faber Morse 1995).

Rouse classified the Magens Bay/Salt River 1 and 2 styles of the Virgin Islands and the Santa Elena and Monserrate styles of eastern Puerto Rico into the Elenan Ostionoid subseries. Western Puerto Rican ceramic styles differentiate into the Ostionan Ostionoid subseries, which is grouped with other similar complexes from such areas as the Dominican Republic, Haiti and Jamaica. For the latest phase of the Ostionoid series (A.D. 1200-1500), Rouse has grouped the Boca Chica, Capa, Esperanza, and Magens Bay/Salt River 3 complexes into the Chican Ostionoid subseries, along with comparable ones from the Dominican Republic, Haiti, and eastern Cuba. According to Rouse (1992), the Ostionoid series ceramics, and by extension the other associated cultural traits, represent primarily a local developmental sequence from the preceding Saladoid series.

The Chican Ostionoid pattern developed directly out of the general Ostionoid complex of eastern Hispaniola, and then spread westward across the island with outposts established on the eastern end of Cuba, and eastward into Puerto Rico with similar outposts on St. Croix, in the Virgin Islands, and the northern Leeward Islands (Rouse 1992:107-108). The extent of this influence in the Virgin Islands, however, remains a subject for debate and further investigation (Righter 1992:27).

For the Puerto Rican Ostionoid ceramic style descriptions we rely primarily on Rouse (1952, 1982) and Rouse and Alegría (1990). The initial Elenan Ostionoid style for Puerto Rico is that of Monserrate (A.D. 600-900). Thicker, coarse and lower-fired vessels are produced, with bowls being the predominant form. Softening of the wall profiles continues, accompanied by a significant reduction in the number of secondary shape features, although modeled adorno heads in fanciful shapes and vestigial handles are present. Use of red slip and incising is rare, with red paint and black smudging employed to create simple designs (Rouse and Alegría 1990; Roe et al. 1990; Oliver 1993; Siegel 1992).

The Santa Elena style (A.D. 900-1200) also contains thick-walled vessels, with a tendency toward reddish brown-colored sherds. Simple hemispherical bowls constitute most of the shapes and flat bases on all vessels are common. Diagnostic elements include strongly convex, vertical-sided vessels and the presence of cylindrical rim coils. Modeled adorno effigies are common, as are vestigial ridges or strap handles. The effigies are also accompanied by incision and punctation used to emphasize shape, but they are not as well-executed as those of the Hacienda Grande style. The use of red paint with black smudging continues from the

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Monserrate style, but is employed in decreasing frequency. The use of incising is common, with thick and deep lines usually occurring as sets of horizontal and vertical parallel lines, often in combination with vestigial handles (Rouse 1952, 1982).

While the thickness and color characteristics of the preceding Elenan Ostionoid styles carry over to the Esperanza style (A.D. 1200-1500), vessels with rounded bases and incurving shoulders now predominate. Modeled and incised adornments and applied features on handles and vessels can be found, with incision again the most common form of decoration. Pairs of parallel lines, either semicircular or straight and inclined alternately in opposite directions are characteristic. They frequently can be found on the incurving vessel shoulders (Rouse 1952).

Many of the same ceramic and non-ceramic artifacts reported for Puerto Rican sites that were produced in the Early Ceramic period continue to be made in the Late Ceramic. In the preceding discussion and listing of these artifacts, they were considered to be less temporally sensitive than ceramic assemblages. This situation is further compounded by the lack of reporting in the literature of stratigraphic information, thus making correlations between the two sets of material cultural items difficult (see also Lundberg et al. 1992:6).

Nonetheless, certain trends or style-specific traits have been established. For example, the production of free-standing figurines and topias is eliminated by the second phase of the Early Ceramic to the first phase of the Late Ceramic period (Rouse and Alegria 1990; Rouse 1992:83-84; Roe 1989:271-272, 299), as is the rectangular adze by the beginning of the Late Ceramic period (Oliver 1993:37). Commonly occurring material cultural items in the Late Ceramic period include petaloid celts, and zemis made from stone, shell, and clay. The Esperanza style assemblages contain larger and more elaborately carved zemis than those of the preceding Early and Late Ceramic phases. Rock art in the form of petroglyphs and pictographs carved on cave walls, large boulders along rivers or on stone slabs aligning ball courts, is also believed to have become a common art form during the Late Ceramic period. Newly introduced items consist of: large, round "stone collars" associated with the playing of the Caribbean rubber ball game; carved stone, wood, and cotton representations of deities; spatulas of wood, bone or shell, which apparently were employed to induce vomiting during purification ceremonies; wooden small tables and platters presumably for ceremonial use; and wooden stools or *duho*, indicative of high status or chiefly individuals. All but the rock art items are characteristic or limited to the later phases of the Late Ceramic period (Rouse 1992:115-123; Oliver 1993:37).

Ostionoid settlement patterns exhibit both similarities and differences with those of the preceding Early Ceramic period. While the earlier pattern of mounded middens arranged in a rough circle around an open central area—with or without a cemetery—continued into the later ceramic age, the number and type of settlements increases. In Puerto Rico, this increase is especially associated with new interior locations (Rouse 1992:94, 109; Oliver 1993:39, 45). The rate of expansion may have slowed by the third phase of the Late Ceramic to Classic Taíno periods (Oliver 1993:45). Consistent factors in site location include proximity to rivers and defensible positions such as hilltops, ridges, or terraces (Oliver 1993:39), presumably for protection from natural elements or other populations. Lesser Antillean Carib incursions into the

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Virgin Islands and Puerto Rico are reported by the end of the Late Ceramic age in ethnohistorical sources (Rouse 1992).

Differentiation and the ranking of sites is also evident during the Late Ceramic period. Site types include large and small coastal and inland villages, probable individual homesteads, specialized resource exploitation sites (forests, mangroves), specialized small or local ritual areas represented by cave or riverine rock art sites, and specialized local and regional ceremonial sites as indicated by the presence of single (local) and multiple (regional) ball courts. The ball court in the Caribbean region can be defined as a wholly or partially stone-lined plaza. Villages may have had a single unmarked central plaza, as in the Early Ceramic period, a single marked plaza, or multiple marked plazas/ball courts. The ranking appears to have taken the form of smaller satellite villages, the possible individual homesteads, and the small specialized religious site being subordinate to larger village sites with marked plazas (Oliver 1993:37) (a probable individual house site type may be added to Oliver's typology; a probable local ceremonial center may also be added based on work by Garrow (1995) for the site of La Iglesia de Maragüez-PO 39, Puerto Rico).

Alegría (1983) has made a comprehensive study of the ball courts/plazas of the Caribbean and associated rubber ball game. For Puerto Rico, Alegría (1983:115-118) lists at least 79 such structures distributed among 72 sites. Seven of them have more than one plaza, with Caguana in the mountainous interior possessing eleven. Thirty-nine of the structures are rectangular in shape, and are likely to have been used for the ceremonial game, as opposed to or in addition to, other types of communal religious/social activities (e.g., dances, mortuary rituals, feasts). The ball courts/plazas date to the Late Ceramic period as a whole, with the earliest reported for Puerto Rico being around A.D. 700. The maximum period of growth, however, occurs between A.D. 1000 and 1500, or the period of the archaeological Taíno culture immediately preceding European contact (Alegría 1983a).

Information on village organization and house types for the Late Ceramic period is not abundant. Table 2 summarizes the data concerning various aspects of house types for Puerto Rico. As can be seen from the table, data on household structures are not only limited, but also contradictory. Siegel and Curet's estimates for household size vary for the Maisabel structure, in addition to Curet and Lundberg and Robinson's differing estimates for the dimensions of one of the houses at El Bronce.

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Table 2. Characteristics of prehistoric house types, Puerto Rico

Source	Site	Ceramic Style	Dimensions	Shape	Household Size
Siegel 1989	Maisabel	Monserate/ Santa Elena	52 x 14 m	oblong	60
Curet 1992	Maisabel	Primarily Monserate	52 x 14 m	oblong	98
Garrow 1995	PO-21	Early Ostionoid	8 x 6 m	oval	—
Curet 1992	El Bronze	Santa Elena	7.6 x 4 m	oblong	6
Curet 1992	El Bronze	Esperanza	5.2 x 5 m	circular	5-6
Lundberg and Robinson 1995	El Bronze	Santa Elena / Esperanza	6 m	circular	
Rivera and Rodríguez 1991	Playa Blanca-5	Esperanza	7.14 x 6.64 m	circular	8
Garrow 1995	PO-39	Santa Elena	10 m	circular	—

Note: The household size estimates were taken from Curet 1992:170, Table 2. Curet did not include the PO-21 and PO-39 sites in his analysis.

Curet's 1992 analysis of ethnohistorical and archaeological information relating to Prehispanic household structure is one of the most comprehensive to date. His reading of the ethnohistorical sources reveals that contact period or Taíno houses in general were circular and conical in shape; made of a frame of posts, reed walls, and straw roof; and appear to have had two doors and no windows. The size of the houses varied, with those of commoners smaller than those of chiefs. The number of occupants also varied, with extended families ranging from 10 to 75 individuals per household.

Inferences as to household structure in the Caribbean have been made on the basis of post mold patterns and the locations of hearths and burials. Curet's reading of the archaeological data, in addition to the above inferences, leads him to suggest that oblong structures preceded circular ones. Specifically, the second phase Early Ceramic/first phase Late Ceramic period houses may have tended to be oblong and large, indicating a communal arrangement of related families.

Oblong, but smaller, nuclear family-sized dwellings begin to be constructed sometime between the first and second phases of the Late Ceramic period. The smaller, nuclear family-sized orientation continues into the third phase. Houses now appear to be round and conform in general to the ethnographic descriptions. The discrepancy between the ethnohistoric and archaeological size estimates, Curet notes, may be due to regional, ethnic, or status

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differences. The ethno-historical sources primarily refer to chiefly and non-Puerto Rican households on Hispaniola, Cuba, and the Bahamas. Curet also argues that the changes in size and type of household in the Late Ceramic period are related to the other sociopolitical and subsistence trends of the period such as the development of complex chiefdoms, and agricultural and marine resource intensification.

Ostionoid subsistence patterns, as discussed in the previous subsection, include a shift in emphasis from primary reliance on land resources, especially land crabs, to primary reliance on marine resources. This shift has been abundantly documented for Puerto Rican, as well as Virgin Island sites, with the timing of change being variable (Lundberg et al. 1992:8). Another component of the pattern is the intensification of agricultural practices, such as planting in small mounds (equivalent to raised fields) and the possible use of simple irrigation systems (Moscoso 1986:280).

Intensification of the sociopolitical system, in especially the Greater Antilles, is another hallmark of the Late Ceramic period. We presented Siegel's (1989) model of a complex tribe for the Early Ceramic period system. While ranking and stratification appear to be absent (e.g., lack of a clear-cut settlement hierarchy, lack of artifacts/structures known to be associated with chiefly rank by the last phase of the Late Ceramic period), status differences were nonetheless indicated by burial goods and post-mortem treatment. Communal activities, such as mortuary and other religious practices, are signified archaeologically by the arrangement of mounded middens serving a ceremonial and domestic refuse function surrounding an open, central area, which often functions as a cemetery. Siegel (1991:235) next argues that this system in a Caribbean context, "provided an organizing framework for the following period of rapid centralization." The end result of the trend in political consolidation was the complex Classic Taíno chiefdoms of Puerto Rico and Hispaniola encountered by the Europeans. The chiefdoms likely consisted of a hierarchically-ordered system with primary, secondary, and possibly tertiary centers of authority.

Projecting certain aspects of the Classic Taíno religious system backward in time, Siegel (1991) sees the beginnings of this process of centralization in the manipulation of ritual and ceremony by higher-status individuals in the Early Ceramic period. During the Late Ceramic period, the increasing power of political leaders is presumed in part to be based on the continued participation in ancestor cult ceremonies, on the possession of ritual objects (e.g., large, carved zemis), on the organization of the ball game, and on the construction of the ball courts/plazas. The factors for political consolidation, Siegel considers, begin outside Saladoid/Ostionoid society with the presence of other perceived or actually hostile groups. These groups would have been Archaic age populations during the Early Ceramic period, and other local and off-island groups, such as the Caribs of the Lesser Antilles, during the Late Ceramic period. The factors continue with the Saladoid/ Ostionoid peoples' response to these threats consisting of incorporation into larger villages, and the concomitant need for increased social and political integrative mechanisms. Siegel asserts that the model remains hypothetical and needs to be tested.

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The Contact Period (A.D. 1500-1524). The Chican Ostionoid cultures of period IVa are the direct ancestors of the Taíno peoples of period IVb. Rouse (1992) divides the Taíno cultures into the Classic Taínos of Puerto Rico (including Vieques and St. Croix) and Hispaniola; the Western Taínos of Cuba, Jamaica and the Bahamas; and the Eastern Taínos of the remaining Virgin and northern Lesser Antillean islands. Rouse considers that the Taínos of Puerto Rico and Hispaniola represented the highest level of societal organization. The other two areas, although interacting with this central core, were less organized. Lundberg et al. (1992:10-11) counter that the Virgin Islands need not necessarily be considered a transitional or Sub-Taíno zone. Enough similarities in ceramic styles and settlement and subsistence systems may demonstrate the area's more complete integration into the Taíno interaction sphere, at least until the very late Island Carib intrusions from the Lesser Antilles.

The population of Puerto Rico at the time of contact has been estimated from 30,000 to 600,000, with modern scholars tending to accept lower population estimates for the island. They are also debating other aspects of Taíno culture, particularly the socio-political units into which these peoples were grouped (Anderson Córdova 1980; Sauer 1966).

The Classic Taíno sociopolitical system consisted of an elementary class structure organized into hierarchical chiefdoms (Rouse 1986:114-115). Chroniclers reported that the people were divided into two classes—nitáino and naboria—which they considered represented nobles and commoners. The expectation by the Spanish of additional class divisions, such as slaves, was not borne out. Their settlements were permanent, with "an average of one thousand to two thousand people and ranged in size from a single building to twenty to fifty houses" (Rouse 1992:9). Occupation of the structures or houses was by extended families.

The dwellings were made of wood and thatch, and had dirt floors with no internal partitions. Houses were commonly round and conical-roofed, although rectangular structures were noted by the Colonial period. Sleeping within the houses was normally done in a hammock, or for high status individuals on wooden platforms. Among the other material cultural items found within the dwellings were baskets, presumably personal adornments and tools. Houses were irregularly arranged around a central plaza or *batey*. The chief or *cacique* would occupy the largest and best-constructed house located on the plaza (Rouse 1992:9).

Chiefdom political organization took the form of a chief presiding over the affairs of a single village, then a district chief overseeing a grouping of the individual villages. These district chiefdoms were in turn interconnected to regional ones, each of which would be presided over by the most important district chiefs. Village chiefs, who could be either male or female, were responsible for a number of functions including organizing daily activities, regulating the distribution of surplus goods, handling political relations with other villages, and serving as religious functionaries. District and regional chiefs had the power, however qualified, to appropriate food and military service (Rouse 1992:9,16).

While full-time craft specialization appears not to have been practiced, the Taíno artisans nonetheless produced a wide range of finely-made objects such as small beaten gold plates

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which were used to inlay wooden objects and applied to clothing and ornaments, carved wooden stools, and stone ball court collars (Rouse 1992:9,11).

Subsistence was based primarily on agriculture. The gathering of wild fruits and vegetables and the hunting of fish, turtles, hutias, and other small game animals supplemented their source of vegetable nutrients. Horticultural practices included the clearing of presumably rotating forest plots, in addition to more intensive practices of maintaining mounded-earth fields. The fields, called *conuco*, contained mounds measuring three feet high and approximately nine feet in circumference in rows. This procedure lowered the hazard of erosion, and increased drainage thereby extending the storage period for the root crops grown in the mounds. While agriculture was mainly rainfall dependent, irrigation systems may have been in existence (reported for Hispaniola) (Rouse 1992:12).

Cassava, the primary food crop, grew well in a number of prehispanic environmental settings. Its growing season was virtually year round and could be stored in the ground for up to three years. Cassava was planted with a digging stick and made into flour for baking bread on a clay griddle. Another important cultigen was the sweet potato, supplemented by corn, squashes, beans, peppers, fruits and peanuts. Non-food cultigens included cotton and tobacco (Rouse 1992:12-13).

Zemism characterizes the Taíno religious system. Zemis represented the spirits of gods, people's ancestors and natural features such as trees and rocks. One of the two supreme gods, Yúcahu, presided over the growing of cassava and the products of the ocean, while the other, his mother Atabey, oversaw the fruits from fresh waters and human fertility. Zemis were commonly made of stone, shell and bone, with the term also applying to the actual artifact. Spiritual power was thought to reside in the zemis, with individuals owning a number of them. They were kept in special places within the houses, with chiefs even constructing separate structures or temples for their safe-keeping. People obtained zemis through inheritance, as gifts or in trade. Purification rituals were undertaken before communicating with the spirits, and food offerings were made to appease the zemis. These rituals could be performed by an individual or the entire village. Religious practitioners included the chiefs, priests and shamans (Rouse 1992:13-15).

The village plazas hosted social/religious ceremonies, including public dances, with singing and musical accompaniment; the annual homage to the chief's zemis; and rituals before and after battles. The Taíno ball game was also played in village plazas, in addition to specialized ball courts and ball court areas. A ball court, as opposed to the village plaza, was normally rectangular in shape and lined on one or more sides with earthen embankments, stone slabs or both. Spectators took their positions along the sides, with high status individuals sitting on stools. The actual game was played with male or female teams of from ten to thirty players, with the objective of keeping a rubber ball in play. This appears to have a frequent social activity, complete with betting, within and among villages. Religious and political aspects of the game are also likely. The most elaborate ball courts in Puerto Rico are found on the presumed chiefdom boundaries, indicating the game may have been played between different political units (Rouse 1992:15-16). Further, the center of the island contains the largest ball court

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complex in the Caribbean, with 14 ball courts, the largest measuring 198 m by 114 m (Alegría 1983a:66-88; Mason 1941). Later examination determined that only 10 of the 14 areas were actually ball courts (Barnes 1993). A second complex is located on the south coast, the Centro Ceremonial Indígena de Tibes in Ponce (Alegría 1983a).

Trade between islands was common. Daily visits across the Mona Passage between the western Puerto Rican and eastern Hispaniolan residents are reported. Trips were undertaken in canoes, hollowed out of logs, which could hold up to 150 people. Chiefs owned the largest canoes, which were carved, painted and stored in special boathouses. Travel on land was by foot, or, in the case of Chiefs, on litters (Rouse 1992:16-17).

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Research Issues

- 1 *Documentation Methodology.* The rock art that one sees needs to be duplicated as accurately as possible to form a reliable and comparative database. Reproduction methods include the use of color, black and white and infrared photography as well as photogrammetry; graphic artist representations; to scale drawings, verbal descriptions and digital imaging. More than one technique is normally needed to faithfully document the carved and painted images. Some methods are more appropriate for the particular physical characteristics of a site, or more likely to produce an exact copy than others. For instance, standard photographic methods can be employed for rock art located in caves or in the middle of rivers, but photogrammetry may not be feasible due to the camera or camera's location requirements. Tracings at a scale of 1:1 may produce the most accurate renderings of rock art, but can be destructive, especially of pictographs that are ill-bonded to the rock surface (see Leondorf 2001). Examination of documentation methods forms part of the on-going study of rock art, where Puerto Rican sites can serve:
 - to develop new techniques
 - to refine existing methodologies
 - to help eliminate non-effective or destructive procedures
 - to test the relative results of competing techniques.

- 2 *Chronology.* Direct dating methods for Puerto Rican rock art have either not been developed, or existing ones, such as cation-ratio dating and accelerated mass spectrometry (AMS) of pictograph pigments have not been applied (see Rowe 2001 and Dorn 2001). Indirect methods involving assigning dates to the images based on close physical proximity of dateable habitational sites or other rock art sites similar in design execution can be problematical. Even direct dating results must be accepted with caution and ideally evaluated with other sources of chronological data. Any site which would offer the particular set of environmental or chemical properties necessary for a chronological determination would be especially significant. Accurate, datable reproduced images form the twin supports for further manipulation and interpretation. Specifically, datable island rock art locations can:
 - determine the earliest to the latest island occurrences of the images
 - establish local, regional and island-wide sequences
 - provide a chronological framework for relating rock art to additional island patterns of settlement, socio-political organization and the religious/ideational system.
 - provide a chronological framework for cross-cultural comparisons

- 3 *Locational Representation.* The distribution of known sites in Section H, while imperfect, nonetheless suggests that images have been carved or painted on a large number of rock faces throughout the island. Som 536 locations can be found in caves, mountain regions, ball courts, plazas, along large and small waterways and at the edge of the surrounding sea. The majority of municipios possess at least one site, with their lack in the remainder most probably due to the absence of significant archaeological studies or modern development. An underlying assumption of archaeological investigation considers that the materials and their contexts which are extant represent products of human patterned

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-
- behavior. Rock art is unlikely to be an exception. The nature of that patterning in island rock art distribution is presently unclear. Examination of this issue could involve:
- conducting surveys in those areas for which rock art sites have not been reported
 - determining the relationship among images or design elements and locational factors. For instance, are certain figures or elements employed only in a cave setting or only along major rivers?
 - recognizing images produced by individuals or groups of individuals (e.g., artistic specialists, shamans)
 - identifying designs related to social or political boundary definition
 - identifying images produced by hierarchically related social or political groups
 - investigating the relationship between the physical location of a rock art site and celestial factors.
- 4 *Art.* Puerto Rican petroglyphs and pictographs might not necessarily reflect artistic expression as presently understood. Rock art may have been produced for primarily other reasons including social and political boundary definition and identification. Nonetheless, the images can be considered as another class of cultural item, like ceramics or lithics. When viewed in this context, a number of avenues of investigation are possible involving:
- establishing the physical methods of production
 - identifying the types of rocks and types of surfaces selected for rock art production
 - identifying the types and origins of pigments employed in executing pictographs
 - developing statistical techniques to quantify and to identify patterning in the rock art attributes
 - defining local, regional, and island-wide stylistic boundaries based on the rock art characteristics
 - developing internal critiques of the degree of execution based on the number, variability and other characteristics of the images
 - conducting cross-cultural studies
- 5 *Rock Art and Settlement Systems.* Rock art appears to be been produced during at least the Late Ceramic Period from A.D. 600 to 1500. Three archaeological subperiods have been defined, raising the issue of the relationship of rock art sites to the first, second and third phases of the Late Ceramic. Investigations into this issue might involve:
- determining the ratio of rock art sites to habitation sites through time; does one habitation site use one or more rock art sites?
 - determining if certain settlement types such as villages execute their images in one or more class of rock art site
 - examining if rock art sites are used continuously or discontinuously
- 6 *Rock Art and the Socio-Political Systems.* Researchers have recently been examining the relationship between such cultural material items as ball courts, stone collars and zemis, settlement patterns and island socio-political systems. Changes in the characteristics of these items are considered to mirror or be related to the increasing complexity of the social system and political organization. The role the production of petroglyphs and pictographs plays in this cultural milieu has received little attention. This research

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question can be investigated by:

- linking attribute changes in settlement types, their archaeological correlates and rock art attributes
- development of research strategies to test new hypotheses concerning the relationship of rock art and socio-political systems
- examining the role the individual or individuals play in the production of the rock art. Are they full-time specialists? Would they receive special treatment during life or in death?

7 *Rock Art and the Religious System.* Rock art is thought to be closely linked with the religious/ideational system. The majority of the designs represent human-like facial and body images, followed by zoomorphic and geometric/abstract designs. Interpretations of the carved and painted designs relate them to such aspects of the religious system as ancestor worship, cosmology beliefs and deity representations. The nature of these explanations remain largely low-level and untested. Avenues for further study involve:

- exploring appropriate ethnographic comparative sources
- generating interpretative frameworks based on explicitly stated methods of inference
- conducting inter-site comparative studies
- conducting cross-cultural studies
- establishing local versus supralocal religious expression
- relating changes in rock art to changes in the religious system

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F. Associated Property Types/Registration Requirements

This Multiple Property Documentation Form has been prepared to further the protection, and to stimulate the investigation of, Puerto Rican rock art. The developed Historic Context, *Prehistoric Ceramic Period Petroglyphs and Pictographs of Puerto Rico*, provides a working interpretive framework for individual sites to be nominated to the National Register of Historic Places. Three petroglyph locations are being submitted for eligibility determinations with this Multiple Property form—Quebrada Maracuto, Municipio of Carolina, La Piedra Escrita, Municipio of Jayuya, and Cueva del Indio, Municipio of Las Piedras. These sites meet, and future ones should meet, the following stipulations for Register inclusion under Criteria C (high artistic value) and D (advancement of prehistoric understanding).

- 1 The property must contain one or more petroglyphs or pictographs. A low number of images should not necessarily exclude the site from consideration, since unique design elements or a high degree of execution may be present.
- 2 The site must have the potential to address one or more of the research issues developed in this multiple property form.
- 3 The site must possess integrity. Since the petroglyphs and pictographs have been executed on largely immovable rock surfaces, the overwhelming majority likely occupies their original location. The condition of the images is therefore likely to be the primary concern in assessing integrity, which should be determined with a site visit.

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G. Geographical Data

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H. Summary of Identification and Evaluation Methods

Introduction

This listing of Puerto Rican Rock Art sites represents reordered information from Dubelaar et al. (1999), which contains the names and locations of some 500 sites with rock art on the island. Additional sources have been employed to supplement this data base.

The enumeration of the sites takes the form of a table with six columns: the municipio division arranged alphabetically, the name of the site., site type, class of rock art, comments and National Register of Historic Places status. The name column begins with an italicized name, or formal Puerto Rico State Historic Preservation Office code, as in PR AD 09 [Puerto Rico State Code (PR), the municipio designation (AD = Adjuntas), the xth site in the municipio listing (09), or a non-name/code description. The name, code or description is followed by the barrio or submunicipio division, the sector or subbarrio division and local road location (PR 10 kilometer marking) if known. Further location particulars may also be given to distinguish one site from another.

The site type refers to a four-part general geographical classification of cave/rock shelter/mountain, waterway, coastal/beach, and ball court/plaza while the class of rock art column distinguishes between sites with petroglyphs, pictographs or both forms of images. The *not verified* term is employed when it is unclear or unknown from the published sources consulted which of the forms is represented.

References to the number and form (e.g., anthropomorphic, zoomorphic) of the carved or painted designs at the sites can be found under the comment heading. The Dubelaar et al. 1999 citation is used to reference remarks from this publication regardless of the original source. The remaining citations represent information obtained posterior to, or data employed to supplement the Dubelaar et al. publication.

Four categories under the National Register Status category are provided: Listed or previously determined National Register eligible sites; Eligible or sites for which a National Register Nomination form has been completed; Initial Investigation or sites for which at least some background data has been collected and for which no National Register Nomination Form has been completed; and Investigation Required or sites for which very little or no background data has been collected and for which no National Register Nomination form has been completed.

Translations of Spanish words or phrases into English from Dubelaar et al 1999 have been provided by Dr. Michele H. Hayward.

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Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
Municipio Adjuntas				
Large boulder from a ball court; present location Plaza de Recreo, City of Adjuntas	ball court	petroglyphs	20 images (Dubelaar et al. 1999:62)	Investigation Required
Batey off of PR 518	batey	petroglyphs	one stone with images (Dubelaar et al. 1999:62)	Investigation Required
Ball court, Barrio Vegas Arriba PR 521 km 7	ball court	petroglyphs	one stone with images or with one anthropomorphic figure (Dubelaar et al. 1999:62)	Investigation Required for the ball court site (Barnes 1999)
<i>Pellejas I</i> Barrio Pellejas	ball court	petroglyphs	one stone with anthropomorphic image (Dubelaar et al. 1999:62)	Investigation Required for the ball court site (Barnes 1999)
PR AD 09 Barrio Capaéz PR 10	not verified	not verified		Investigation Required
PR AD 10 Barrio Capaéz PR 10	not verified	not verified		Investigation Required
Petroglifo Charco Azul Barrio Pellejas.	not verified	petroglyphs		Investigation Required
Barrio Juan González	rock on mountain side	petroglyphs	20 images (Dubelaar et al. 1999:63)	Investigation Required
Barrio Pueblo Carretera Adjuntas-Utuado	plaza	petroglyphs		Investigation Required
Barrio Guilarte/Limani PR 525 km 2.5	not verified	petroglyphs		Investigation Required
Barrio Guilarte PR 8 km 73.4	plaza	petroglyphs		Investigation Required
Municipio Aguada				
No information available				
Municipio Aguadilla				
<i>Cueva La Playuela</i> Barrio Boriquen	cave	petroglyphs	some images present (Dubelaar et al. 1999:31)	Investigation Required
<i>Cueva Las Golondrinas</i> Barrio Camaceyeyes PR 459 km 0.9	cave	not verified		Investigation Required
<i>Cueva Golondrina</i> Barrio Caimital Bajo Old Road #2 km 127.3	cave	not verified		Investigation Required
<i>Cueva Pablo Pietri/Cueva Felipe Lloret</i> Barrio Caimital Bajo PR 443 km 0.2	cave	not verified		Investigation Required
<i>Cueva del Caldero/Cueva del Camino</i> Barrio Caimital Bajo PR 443 km 1.4	cave	not verified		Investigation Required
<i>Cueva del Tubo</i> Barrio Boriquen PR 458	cave	not verified		Investigation Required
<i>Cueva San Carlos</i> Barrio Camaceyeyes PR 107 km 0.6	cave	not verified		Investigation Required

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<i>Cueva Chiquita</i> Barrio Camaceyes PR 107 km 1.2	cave	not verified		Investigation Required
Petroglifos <i>Boca de la Zanja</i> Barrio Guaniquilla	not verified	petroglyphs		Investigation Required
<i>Cueva Golondrina</i> Barrio Arenales PR 110, km 0.7	cave	not verified		Investigation Required
Municipio Aguas Buenas				
<i>Cueva la Clara</i> Cayey Mountains Barrio Caguitas near Río Caguitas	cave	petroglyphs		Investigation Required
Barrio Sumidero, near road from Aguas Buenas to Caguas	series of caves	petroglyphs		Investigation Required
Municipio Aibonito				
<i>Piedra Pintada</i> Road from Aibonito to Cayey	not verified	petroglyphs	Petroglyphs removed from site early 1900s (Dubelaar et al. 1999:78)	Location of petroglyphs unknown
<i>Las Abejas</i> Barrio Asomante Sector Las Abejas	rectangular ball court	petroglyphs	21 images, 49 anthropomorphic, 6 anthrozoomorphic, 1 zoomorphic (Ayes 1989:52)	Investigation Required
Barrio Llanos northeast of road PR 725.	isolated rock	petroglyphs	one image (Dubelaar et al. 1999:78)	Investigation Required
<i>Piedra Pintada</i> Barrio Plata PR 14 km 75	not verified	petroglyphs		Investigation Required
Barrio Cuyón Finca Sr. Solís	cave	petroglyphs		Investigation Required
Municipio Añasco				
Urayo Barrio Río Arriba	not verified	not verified		Investigation Required
Municipio Arecibo				
<i>Cueva del Indio</i> Punta Brava Barrio Islote Sector Punta las Tuna	cave	petroglyphs	numerous images (Dubelaar et al. 1999:34)	Investigation Required
Barrio Garrochales, Sr. Antonio Lopez Cordero's Dairy, two locations Garrochales 2 and 3, also called <i>Cueva de las Golondrinas</i>	rock shelter	petroglyphs	one petroglyph for each location (Dubelaar et al. 1999:34)	Investigation Required
Barrio Arenalejos	cave	petroglyphs and/or pictographs		Investigation Required
<i>Cueva de Miraflores</i> Barrio Arrozal Sector Biafara	cave	petroglyphs	numerous images reported (Dubelaar et al. 1999:35); 7 anthropomorphic images (Fewkes 1907:156)	Investigation Required
<i>Cueva Carreras</i> Barrio Arrozal Sector Carreras II	cave	petroglyphs		Investigation Required
Barrio Arrozal	cave	pictographs		Investigation Required
<i>Cueva Matos</i> Barrio Carreras	cave	petroglyphs and	may be same site as <i>Cueva de los Conejos</i> (Dubelaar et al.	Investigation Required

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		and pictographs	los Conejos (Dubelaar et al. 1999:35)	
<i>Cueva Grozzier</i> Barrio Río Arriba Sector Río Abajo PR 621	cave	petroglyphs		Investigation Required
<i>Cueva de los Conejos</i> near Arecibo, road to Utuado	cave	petroglyphs and pictographs	partly painted petroglyph; may be same site as Cueva Matos (Dubelaar et al. 1999:35)	Investigation Required
Barrio Dominguito	cave	petroglyphs		Investigation Required
Barrio Sabana Hoyos	not verified	not verified		Investigation Required
<i>Cueva el Convento</i> Barrio Sabana Hoyos	cave	petroglyphs		Investigation Required
Barrio Sabana Hoyos Sector Jobales	not verified	not verified		Investigation Required
<i>Cueva Abra</i> Barrio Carreras PR 626	cave	not verified		Investigation Required
Petroglifos J.P. Reyes Barrio Carreras PR 626	not verified	petroglyphs		Investigation Required
Petroglifos la Parel Barrio Carreras PR 656	not verified	petroglyphs		Investigation Required
<i>Cueva Biafara I and II</i> Barrio Arrozal PR 637 km 2.4	cave	not verified		Investigation Required
<i>Cueva Arenalejos</i> Barrio Arenalejos	cave	not verified		Investigation Required
<i>Yacimiento Potala</i> Barrio Islote Sector Rincon Grande PR 681	not verified	not verified		Investigation Required
Petroglifos la Planta Sector Charco Honda PR 10	not verified	petroglyphs		Investigation Required
<i>Cueva San Rafael</i> PR 625	cave	not verified		Investigation Required
<i>Cueva del Abra</i> Barrio Hato Viejo Sector Calichoza	cave	not verified		Investigation Required
<i>Cueva del Cerro</i> Barrio Hato Viejo Sector Calichoza	cave	not verified		Investigation Required
<i>Cueva los Chorros</i> Barrio Carreras PR 10 km 71.5	cave	not verified		Investigation Required
<i>Cara del Indio</i> Barrio Sabana Hoyos Sector Jobales PR 626	not verified	not verified		Investigation Required
<i>Cueva Clara</i> Barrio Hato Viejo off of PR 626	cave	not verified		Investigation Required
Municipio Arroyo				
No information available				
Municipio Barceloneta				
Isla de Roque Barrio Palmas Altas	rock shelter	petroglyphs	3 groups of images (Dubelaar et al. 1999:37)	Investigation Required
<i>Cueva Convento</i> Barrio Florida Afuera.	cave	not verified		Investigation Required
<i>Cueva de los Tamarindos</i> Barrio Palmas Altas	cave	petroglyphs		Investigation Required

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<i>Cueva de Vallecillo</i>	cave	not verified		Investigation Required
<i>Cueva Golondrinas</i> Barrio Garrochales Sector Betania	cave	not verified		Investigation Required
<i>Cueva Mary Evy Peck and Pay</i> between Sectors Maguelles and Sabana Pike	cave	not verified		Investigation Required
<i>Cueva del Abra</i> Barrio Hato Viejo Sector Calichoza	cave	not verified		Investigation Required
<i>Cueva de la Boquilla</i> near mouth of Río Manati	cave	not verified		Investigation Required
<i>Cueva Río Encantado</i> Barrio Florida Adentro PR 642 km 8.4	cave	not verified		Investigation Required
Municipio Barranquitas				
<i>La Toje</i> Barrio Cañabon	ball court	petroglyphs	at least one stone with a petroglyph; reportedly removed from the site (Dubelaar et al. 1999:76)	Investigation Required; ball court probably eligible (Barnes 1999)
<i>Palo Hincado</i> Barrio Palo Hincado alongside PR 15	ball court	petroglyphs	3 extant anthropomorphic carved images (Oliver 1998:36,44)	Listed on National Register 1999
<i>Quebrada Mala</i> Barrio Helechal	plaza	petroglyphs		Investigation Required
Barrio Barrancas off or near intersection of PR 571, 771 and 769	not verified	not verified		Investigation Required
Municipio Bayamón				
<i>Quebrada Bello Gallón</i> PR BA 01 Barrio Guaraguao Arriba near PR 174	rock wall	petroglyphs	rock wall or mural with 12 images (Dubelaar et al. 1999:45)	Investigation Required
Bank of Río Bayamon	not verified	petroglyphs	3 bearded images and 7 simple faces (Dubelaar et al. 1999:45)	Investigation Required
Municipio Cabo Rojo				
<i>Cueva de las Quebradas or Cueva Don Acacio or Cueva Monte Grande</i> Barrio Monte Grande	cave	not verified		Investigation Required
<i>Cueva Mingo Toro</i> Barrio Monte Grande Sector Monte Grande	cave	not verified		Investigation Required
Barrio Llanos Tuna Sector Monte Grande PR 312 km 4.0 or 4.4	cave mountainside	not verified		Investigation Required
Barrio Guaniquilla Sector Playa Buye	rock shelter	petroglyphs	location unclear; Barrio Guaniquilla is in Municipio of Aguada (Dubelaar et al. 1999:30)	Investigation Required
<i>Cueva Mallorquin</i> Llano Canas near	cave	petroglyphs		Investigation Required

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Prehistoric Rock Art of Puerto Rico

Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
Cabo Rojo				
<i>Cueva Cofresi</i> Barrio Pedernales PR 307 km 6.2	cave	not verified		Investigation Required
<i>Cueva Monte los Melones</i> Barrio Boquerón	cave	not verified		Investigation Required
Municipio Caguas				
<i>Piedra del Indio</i> Also: <i>Piedra de la Campana</i> Barrio Bairoa Confluence of Río Grande de Loiza and Río Caguitas	waterway	petroglyphs	on horizontal rock table (Dubelaar et al. 1999:80); may be same as PR CS 03 below	Investigation Required
Barrio Bairoa Additional images near <i>Piedra del Indio</i>	rock walls	petroglyphs		Investigation Required
<i>Cabeza de los Indios</i> Río Grande de Loiza between Caguas and Gurabo	waterway	petroglyphs	one rock situated on two upright rocks in river with several crudely incised images (Fewkes 1903:442)	Investigation Required
Río Grande de Loiza between confluence with Río Bairoa and Río Turabo Largely in Sector Mano Manca	waterway	petroglyphs	some five rock formations with images; one of the rocks is under Lake Carraizo (Dubelaar et al. 1999:81)	Investigation Required
Barrio Cañabon, east of confluence of Río Caguitas and Quebrada Algarrobo	near waterway	petroglyphs	large rock with one image (Dubelaar et al. 1999:81); may be same as site with similar description below	Investigation Required
Barrio Cañabon in middle of Quebrada Algarrobo	waterway	petroglyphs	images on two large rocks (Dubelaar et al. 1999:81); may be same site as PR CS 12 below	Investigation Required
<i>Charco de Melilla</i> Barrio Cañabon; in small creek ending in Quebrada Algarrobo	waterway	petroglyphs	at least 12 shallow images on rock face partly covered by tree roots (Dubelaar et al. 1999:81)	Investigation Required
<i>Las Canoas</i> Río Caguitas Barrio Cañabon	waterway beside a pool and near a waterfall	petroglyphs	images on vertical rock walls aligning both sides of the pool; enclosed figures and facial designs (Dubelaar et al. 1999:81)	Investigation Required
Río Turabo Barrio Borinquen Sector Piedra Blanca PR 763 km 5.1	waterway	petroglyphs	15 images (Dubelaar et al 1999:82)	Investigation Required
Barrio Borinquen foot bridge over Río Fajardos	waterway	petroglyphs		Investigation Required
Río Turabo, Barrio San Salvador, near public school Mercedes Palmas, under small bridge	waterway	petroglyphs		Investigation Required
PR CS 01 Barrio Navarro	not verified	petroglyphs	a group of images (Dubelaar et	Investigation Required

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			al. 1999:82)	
PR CS 02 PR 156 km 57.7	not verified	not verified		Investigation Required
PR CS 03 Barrio Bairoa	waterway	petroglyphs	may be same site as Piedra del Indio above	Investigation Required
PR CS 15 Barrio San Salvador next to Quebrada Morena	waterway	petroglyphs		Investigation Required
PR CS 12 Barrio Cañabón, Quebrada Algarrobo	waterway	petroglyphs	may be same as site noting images in middle of Quebrada Algarrobo above	Investigation Required
PR CS 16 Barrio San Salvador	not verified	not verified		Investigation Required
Barrio San Salvador Petroglifos la Monja	not verified	petroglyphs		Investigation Required
Cueva de Don Ocasio PR CS 09 Las Quebrada Monte Grande	cave	not verified		Investigation Required
Barrio Cañabón Confluence Río Caguitas and Quebrada Aguacate	waterway	petroglyphs	may be same as site with similar description above; one image (Dubelaar et al. 1999:83)	Investigation Required
Municipio Camuy				
Cueva de los Cabros Barrio Abra Honda Sector El Río PR 486 km 6	cave	not verified		Investigation Required
Río Camuy Cave Park Barrio Quebrada	cave	petroglyphs	bat face image on rock at bottom of Tres Pueblos sinkhole (Dubelaar et al. 1999:33)	Investigation Required
Cueva Piedras Gordas PR CY 02 Barrio Piedra Gorda Sector La Parcelas	cave	not verified		Investigation Required
Cueva Boca Inferno Barrio Santiago PR 488 km 4.2	cave	not verified		Investigation Required
Cueva Pared Hueca Barrio Santiago Sector Pendula at end of PR 486	cave	not verified		Investigation Required
Cueva Abra Honda PR CY 04 PR 486 km 4.7	cave	not verified		Investigation Required
Cueva Clara PR CY 03 and Cueva Oscura PR CY 06 Barrio Abra Honda PR 486 km 7.7	cave	not verified		Investigation Required
Municipio Canóvanas				
Barrio Lomas on terrace of Río Canovanillas	plaza	petroglyphs		Investigation Required
Río Canóvanas PR 185 km 7.5	waterway	petroglyphs	two rocks in river with 12 images (Dubelaar et al. 1999:48)	Investigation Required
Campo Rico Barrio Hato Puerco Sector Castillo PR 185 km 7.5	rock shelter	petroglyphs	13 images (Dubelaar et al. 1999:49)	Investigation Required

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Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
Sector Castillo PR 185 km 7.5			1999:49)	
Barrio Cubuy Sector Las Parcelas Benítez at or near Río Cubuy	waterway	petroglyphs		Investigation Required
PR CN 01 Barrio Canóvanas	plaza	petroglyphs		Investigation Required
Municipio Carolina				
Cueva del Caballo Barrio Hoyo Mulas	cave	petroglyphs	numerous or 15 images noted, anthropomorphic and abstract (Dubelaar et al. 1999:46-47)	Investigation Required
Hacienda Don Pedro Páez near the Río Piedras.	field stone	petroglyphs	one rock in a field with a series of threatening faces encircled (Dubelaar et al. 1999:47)	Investigation Required
Sabana Arriba Cuchillo de Hato Nuevo near intersection of Trujillo Alto, Gurabo and Carolina municipios	ball court	petroglyphs		Investigation Required
Cueva de los Cerros San José Barrio Hoyo Mulas	cave	not verified		Investigation Required
Quebrada Maracuto between Barrios Trujillo Bajo and Santa Cruz PR 853 then two local roads Ruiz and Febres	waterway	petroglyphs	31 images on 7 boulders within a 250-m (807-ft) section of the quebrada; anthropomorphic and abstract designs (Hayward et al. 1992a, b)	Eligible Nomination Form Completed September 2000
Municipio Cataño				
No information available				
Municipio Cayey				
Cuevas de Bina Barrio Pedro Avila	cave	petroglyphs	two caves 5 m (16 ft) apart; one definitely with rock art, 13 anthropomorphic images (Rivera Melendez 1996:157-173)	Initial Investigation
Las Planadas Site Barrio Pasto Viejo Sector Planadas.	plaza	petroglyphs	habitation site with plazas and nearby El Seto and La Iglesia caves with rock art; 1 plaza with at least 2 anthropomorphic images, 1 plaza with 2 anthropomorphic images (Rivera Melendez 1996:82-99; 1999:3)	Initial Investigation
Cueva Las Planadas or Cueva La Iglesia Barrio Pasto Viejo Sector Planadas	cave	petroglyphs	cave forms part of Las Planadas Site complex, with plazas and El Seto cave with rock art; 5 facial images, 1 snake design (Rivera Melendez 1996:193-217)	Initial Investigation

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Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
<i>Cueva El Seto</i> Barrio Pasto Viejo Sector Planadas	cave	pictographs	cave forms part of Las Planadas Site complex of habitation area with plazas and La Iglesia cave with rock art; 2 anthropomorphic images with facial and body elements (Rivera Melendez 1996:174-192)	Initial Investigation
<i>La Piedra or La Piedra Pintada</i> Barrio Matón Arriba	rock mural	petroglyphs	25 to 30 anthropomorphic, zoomorphic and abstract designs (Rivera Melendez 1996:110-121)	Initial Investigation
<i>Cueva Hueca</i> Barrio Cercadillo Finca Rahola Sector Lapa	cave	not verified		Investigation Required
<i>El Cedro</i> Barrio Cedro between Barrios Cedro and Farallon	waterway	petroglyphs	includes a grouping of facial images and one zoomorphic design Rivera Melendez 1996:122-131)	Initial Investigation
<i>Farallón</i> Barrio or Río Farallón	waterway	petroglyphs	Rivera Melendez 1996:122-131	Initial Investigation
<i>La Mina</i> Barrio Jajome Bajo	ballcourt	petroglyphs	village site with batey or ball court having at least 5 images (Rivera Melendez 1996:132-138)	Initial Investigation
Municipio Ceiba				
<i>Quebrada Aguas Claras</i> Barrio Chupacallos PR 978 km 1.6	not verified	petroglyphs		Investigation Required
<i>Roosevelt Roads 3</i> Roosevelt Roads Naval Station	coastal	petroglyphs	9 images on 6 separate rock panels at ocean edge; 5 facial images, 3 facial images with attached body elements, 1 indeterminate design (Meighan and Trask 1994)	Initial Investigation
<i>Roosevelt Roads 12</i> Roosevelt Roads Naval Station	coastal	petroglyphs	1 multiple line design and 1 simple arc on rock slab on ridge overlooking ocean (Meighan and Trask 1994)	Initial Investigation
<i>Ceiba 3</i> Ensenada Honda Roosevelt Roads Naval Station Barrio Guayacán	coastal	petroglyphs	10 images on a rock at ocean's edge; 5 facial images, 2 enclosed figures, 3 probable facial designs (Meighan and Trask 1994)	Eligible National Register Form completed 4 March 1985
<i>Ceiba 4</i> Ensenada Honda Roosevelt Roads Naval Station Barrio Guayacan	coastal	petroglyphs	2 images on 2 separate boulders at shoreline; 2 facial with attached body element	Eligible National Register Form completed 4 March

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Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
			designs (Meighan and Trask 1994)	1985
Municipio Ciales				
<i>Doña Caro</i> PR CL 06 Barrio Hato Viejo Sector Caliche PR 146 up to the bridge over the Rio Cialitos	cave/rock shelter	petroglyphs	3 rock shelters and 1 cave with images (Dubelaar et al. 1999:66)	Investigation Required
<i>Bateyes II</i> Barrio Hato Viejo Sector Caliche	ball court	petroglyphs	1 image (Dubelaar et al. 1999:66)	Investigation Required
<i>Bateyes IV</i> Barrio Hato Viejo Sector Caliche	cave	petroglyphs		Investigation Required
<i>Cueva del Sapo</i> PR CL 11 Barrio Hato Viejo Sector Paso Hondo PR 149 towards Manati	cave	petroglyphs		Investigation Required
<i>Cueva de Mataplátano</i> Barrio Hato Viejo Rio Grande de Manati PR 149	cave	petroglyphs	at least one cave with 13 images (Dubelaar et al. 1999:67)	Investigation Required
<i>Paso Hondo I + 2</i> Barrio Hato Viejo	rock shelter	petroglyphs		Investigation Required
<i>Cueva las Golondrinas</i> Barrio Cordillera	cave	petroglyphs		Investigation Required
<i>Cueva del Negro</i> Also: <i>Cueva del Indio</i> PR CL 14 Barrio Cordillera Sector Camarones	cave	petroglyphs		Investigation Required
<i>Yacimiento Del Torro</i> Barrio Cordilleras PR 146, km 24.4	not verified	not verified		Investigation Required
PR CL 02 Barrio Cordillera	not verified	not verified		Investigation Required
<i>Cuevas Arcillos and Planadas</i> PR CL 01 Barrio Jaguas Sector Ventana	cave	petroglyphs		Investigation Required
<i>Ciales 4</i> Bolas de Ventura PR CL 04 Barrio Pozas PR 149 until it crosses PR 615	plaza	petroglyphs	at least one image (Dubelaar et al. 1999:67)	Investigation Required
Barrio Pozas Sector Caseana Filiberte	plaza	petroglyphs		Investigation Required
<i>Cueva del Viento</i> Barrio Hato Viejo PR 631	cave	not verified		Investigation Required
<i>Cueva las Gonzalez I and II</i> El Convento Las Golondrinas Barrio Fronton PR 146	cave	not verified		Investigation Required
<i>Ciales Filiberto</i> PR CL 07 Barrio Pozas Cascana PR 149 from Ciales to Jayuya	not verified	not verified		Investigation Required
<i>Cueva Ciales 13</i> Barrio Jaguas Sector Ventana PR 149 towards Manati	cave	not verified		Investigation Required

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Batey 10 PR CL 18 Barrio Hato Viejo Sector Caliche	plaza	petroglyphs		Investigation Required
Ciales 18 Pueblo Calle de Diego, corner of Corchado, in front of an intermediate school	not verified	petroglyphs	one petroglyph on river boulder (Dubelaar et al. 1999:69)	Investigation Required
PR CL 28 Cave behind/beyond Bateyes III	cave	not verified		Investigation Required
Municipio Cidra				
No information available				
Municipio Coamo				
Baños de Coamo Barrio San Ildefonso Sector Las Flores PR 546, km 1.7 on the way to Parador Banos de Coamo; near Quebrada al Marquez	rock wall near waterway	petroglyphs	some petroglyphs (Dubelaar et al. 1999:97)	Investigation Required
Area of Coamo Rock face with petroglyphs from the Coamo area now in the Anthropology Museum, University of Puerto Rico	rock face; original location unknown	petroglyphs		Investigation Required
Villón Barrio Cuyón One of two ball court carved rock slabs in Peabody Museum, Yale University	ball court	petroglyphs	two ball court slabs with images (Dubelaar et al. 1999:97)	Investigation Required
Municipio Comerío				
Cueva La Mora Barrio La Vega Redondo near PR 172	cave	petroglyphs, pictographs	37 pictographs and 27 petroglyphs; primarily anthropomorphic with zoomorphic/abstract designs (Roet et al. 1997)	Listed National Register 1980
Cueva de la Momia Barrio La Vega Redondo near PR 172	cave	petroglyphs	6 anthropomorphic images on a stalactite (Roe et al. 1999)	Initial Investigation
Río Toa, now Río La Plata	not verified	petroglyphs		Investigation Required
Cueva Garaguao Barrio La Vega Redonda	cave	not verified		Investigation Required
Cueva los Santos Barrio La Vega Redonda	cave	not verified		Investigation Required
Municipio Corozal				
Barrio Cibuco	not verified	petroglyphs		Investigation Required
Cueva Hnos Quintero	cave	not verified		Investigation Required
Los Puertos PR 818, west of Corozal	not verified	petroglyphs	21 images (Dubelaar et al. 1999:76); may be same site as following one	Investigation Required
Road PR 818. After passing the church and water storage/bathing units made of concrete, images on a	waterway	petroglyphs	may be same site as preceding one	Investigation Required

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Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
rock along a small quebrada or creek				
<i>Cueva la Rodriguez</i> Barrio Padillas PR 568, km 2.65	cave	not verified		Investigation Required
Island of Culebra				
No information available				
Municipio Dorado				
Cerros de Higuillar Sector Marismilla?	not verified	petroglyphs		Investigation Required
<i>Cueva Abellarde</i> Barrio Espinosa	cave	petroglyphs		Investigation Required
Cerros de Higuillar Sector Marismilla?	not verified	petroglyphs		Investigation Required
Abrigo Rocosó Barrio Higuillar Sector Monte Lindo	cave	not verified		Investigation Required
<i>Cueva del Arsená</i> Barrio Higuillar Sector Arenales	cave	not verified		Investigation Required
<i>Cueva de San Antonio</i> Barrio Higuillar Sector San Antonio PR 696	cave	not verified		Investigation Required
Municipio Fajardo				
Confluence of the Caño del Indio and the Río de la Ceiba, near Fajardo. East bank.	waterway	petroglyphs	at least 3 images (Dubelaar et al. 1999:98)	Investigation Required
Río Arriba, a branch of the Río de la Ceiba. Barrio Río Arriba	waterway	petroglyph	at least 1 image (Dubelaar et al. 1999:98)	Investigation Required
Loma Muñoz near the Río Arriba Barrio Río Arriba	rock shelter	petroglyphs		Investigation Required
Confluence of the Río Ceiba and the Río Blanco	waterway	petroglyphs	many carved images (Dubelaar et al. 1999:98)	Investigation Required
Río Fajardo PR FO 01 Barrio Río Arriba east of PR 976, km 6.4	waterway	petroglyphs	9 images (Dubelaar et al. 1999:99)	Investigation Required
Cerro Muñoz PR 977, 3.25 aerial miles west of Demajagua Bay	rock shelter	petroglyphs	9 images (Dubelaar et al. 1999:99)	Investigation Required
Paraíso Río Fajardo Barrio Río Arriba	rock mural	petroglyphs		Investigation Required
Municipio Florida				
<i>Cueva de Chivino</i> Barrio Pajonal de Florida	cave	not verified		Investigation Required
Barrio El Aguacate	not verified	petroglyphs		Investigation Required
<i>Cueva Pajona</i> Barrio Pajonal	cave	not verified		Investigation Required
Municipio Guánica				
Punta Ballena Barrio Carenero Bahía de la Ballena	cave	petroglyphs, pictographs	site may be a series of caves (Dubelaar et al. 1999:91); the caves or site may encompass one or more individual	Investigation Required

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Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
			locations listed below	
Barrio/Sector Tamarindo PR 333 then local road	cave	not verified		Investigation Required
Cueva del Abra Barrio Abras	cave	not verified		Investigation Required
Barrio Caño	cave	not verified		Investigation Required
Barrio Carenero Punta Verraco. El Bosque Estatal.	cave	not verified	may be same site as following two	Investigation Required
Cueva Bosque Estatal de Guánica PR GU 14	cave	not verified	may be same site as preceding one	Investigation Required
Refugio Rocosó I-II-III. Bosque Estatal de Guánica	rock shelter	not verified	may be same site as preceding one	Investigation Required
Cueva del Acuífero Punta Ballena	cave	not verified	may be part of the series of caves at Punta Ballena	Investigation Required
Refugio Rocosó PR GU 14	rock shelter	not verified		Investigation Required
Cueva Submarina PR GA 10 PR 323, km 3.4	cave	not verified		Investigation Required
Cueva de la Hoya PR GN 09 Barrio Caños	cave	not verified		Investigation Required
Refugio Rocosó PR GU 13	rock shelter	not verified		Investigation Required
Municipio Guayama				
Sitio El Palo PR GM 02 Barrio Carmen Sector El Palo PR 7712, km 1.5	waterway	petroglyphs	site comprises two loci: a residential location and 2 boulders with carved images along a seasonally dry stream bed; one boulder with one facial images; main boulder with 21 primarily anthropomorphic followed by abstract images (Roe and Melendez 1995)	Initial Investigation
Municipio Guayanilla				
Barrio Boca 650 meters northeast of Punta Ventana; 1700 meters south-southeast of Central San Francisco	cave	not verified		Investigation Required
Los Sitios Barrio Quebradas Sector Poblado PR 127 until the point that crosses the Río de Guayanilla	cave	petroglyphs		Investigation Required
PR GU 05 Barrio Sierra Baja	rock shelter	not verified		Investigation Required
Municipio Guaynabo				
No information available				
Municipio Gurabo				
Cueva de Don Tino Barrio Jaguas Lomas	cave	not verified		Investigation Required

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Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
Barrio Quebrada Inferno	cave	petroglyphs		Investigation Required
Barrio Navarro Sector Mano Manco Downstream from the metal bridge across PR 189	not verified	not verified		Investigation Required
Cueva la Silla PR GU 02	cave	not verified		Investigation Required
Municipio Hatillo				
Cueva de la Catedral Barrio Bayaney Sector Enpalme Parque de Las Cavernas	cave	pictographs	Diaz Gonzalez 1990	Initial Investigation
Cueva la Cueva Barrio Carrizales PR 2, km 84.0	cave	not verified		Investigation Required
Cueva la Salsa Barrio Carrizales PR 130, km 2.7	cave	not verified		Investigation Required
Cueva la Luz Barrio Aibonito PR 489, km 4.5	cave	not verified		Investigation Required
Municipio Hormigueros				
No information available				
Municipio Humacao				
Petroglifo Coto Mabu Barrio Mabu PR 198 and 922	not verified	petroglyph		Investigation Required
Municipio Isabela				
Cuevas Barreros Barrio Arenales Bajo PR 2, km 11.3	cave	not verified		Investigation Required
Barrio Coto Sector Guanábana PR 2, km 106.9 in front of Castillo Nite Club	cave	petroglyphs		Investigation Required
Cueva de Colo Barrio Coto PR-2, km 97.4	cave	not verified		Investigation Required
Municipio Jayuya				
Piedra Escrita Barrio Coabey Sector Boqueron PR JY 15 PR 144, km 7.5	waterway	petroglyphs	63 individual or closely spaced groupings of anthropomorphic, zoomorphic, and geometric/abstract designs (Hayward et al. 1992 a, b); 86 individual images (Hayward and Cinquino 2001)	Eligible National Register Nomination Form completed September 2000
Barrio Cubey or Coabey	not verified	not verified		Investigation Required
Barrio Coabey Beside PR 144 and in terrain surrounding Escuela Memisio Canales	not verified	petroglyphs		Investigation Required
Barrio Coabey Sector Línea Matey PR 144 towards Finca de Alberto Atienzo	rock boulder	petroglyphs		Investigation Required
Barrio Coabey Sector El Salto PR	waterway	petroglyphs		Investigation Required

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144, km 5.3				
Barrio Coabey Sector Boquerón PR 144 near a swimming hole	waterway	petroglyphs		Investigation Required
Barrio Coabey PR 144 until the The Three L's business/shop	waterway	petroglyphs		Investigation Required
Barrio Coabey PR 144, km 3	waterway	petroglyphs		Investigation Required
Barrio Jayuya Abajo Sector Padua PR 144 km 19.4	waterway	petroglyphs	10 images on a large rock along Río Grande de Jayuya (Dubelaar et al. 1999:64)	Investigation Required
Barrio Jayuya Abajo Sector Santa Bárbara	plaza	not verified		Investigation Required
Barrio Veguitas Zamas PR 527 until km 12.6 behind the Gripinas School	not verified	not verified		Investigation Required
Barrio Veguitas Sector Cariaboa PR 7 km 1.1	rock wall	petroglyph		Investigation Required
Barrio Zamas PR 528	boulder	petroglyphs	may also be one of the following two sites	Investigation Required
Barrio Zamas Sector Mapurita PR 528	rock shelter	not verified	may be the same as the preceding site	Investigation Required
Río Zamas Barrio Zamas associated with the La Zama ball court	waterway	petroglyphs	may be the same as the preceding site	Investigation Required
Barrio Saliente PR 539 until the Rafago School images on rock along banks of the Río Saliente	waterway	petroglyphs		Investigation Required
Barrio Mameyes Arriba Road from Jayuya to Ciales km 27.1 along Río Yunes de Marce	waterway	petroglyphs		Investigation Required
PR JA 01 Barrio Jayuya Abajo PR 141	not verified	not verified		Investigation Required
PR JA 02 Barrio Jayuya Abajo PR 141	not verified	not verified		Investigation Required
Canals PR JA 07	not verified	not verified		Investigation Required
PR JA 14	not verified	petroglyphs		Investigation Required
Piedra Tibes PR JA 17	not verified	not verified		Investigation Required
Municipio Juana Díaz				
Cuevas Lucero PR JD 05 Barrio Guayaball Sector Cuevitas off of PR 552	caves	petroglyphs pictographs		Initial Investigation
A dolmen near the south coast	not verified	petroglyphs		Investigation Required
Lugo Site PR JD 09	not verified	not verified		Investigation Required
Cueva Guaynía	cave	pictographs		Investigation Required
Cueva Los Roche	cave	pictographs	26 painted images (Dubelaar	Investigation Required

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			et al. 1999:96)	
A cave near Cueva Los Roche.	cave	pictographs		Investigation Required
<i>Cueva Jaguita</i> Barrio Collores PR 512	cave	not verified		Investigation Required
Petroglifo de Ollas Honda Barrio Jacaguas Sector Ollas Honda	not verified	petroglyphs		Investigation Required
<i>Cueva Guayo</i> Barrio Collores PR 517	cave	not verified		Investigation Required
Municipio Juncos				
Barrio LiRíos at the end of PR 9929	boulder mountain location	petroglyphs	14 carved images (Dubelaar et al. 1999:89)	Investigation Required
A short distance from Juncos, near the road from Humacao to Juncos.	waterway	petroglyphs	several carved images (Fewkes 1907:154)	Investigation Required
Municipio Lajas				
Caves at Barrio Lajas Arriba	cave	petroglyphs or pictographs	may be the same as one of the following two sites	Investigation Required
<i>Cueva de las Cuevas</i> Barrio Lajas Arriba Sector Cerro de las Cuevas PR 117 km 3.7	cave	not verified	may be the same as the preceding site	Investigation Required
<i>Cueva Minillas</i> Barrio Lajas Arriba PR 117	cave	not verified	may be the same as the preceding site	Investigation Required
<i>Cueva Pita</i> Barrio Sabana Yeguas PR 101 km 23.1	cave	not verified		Investigation Required
Cueva Barrio Lajas Arriba in route to Barrio Retiro de Municipio San German PR 118	cave	not verified		Investigation Required
Municipio Lares				
Barrio Callejones 6 kilometers north-northeast of the town of Lares	ball court	petroglyphs		Investigation Required
<i>Cueva Pajita</i> PR LA 01 Barrio Callejones PR 454 km 2.0/2.2	cave	petroglyphs	2 images (Dubelaar et al. 1999:53)	Investigation Required
<i>Cueva Machos or Cueva del Sol</i> (one or two caves/locations) Barrio Callejones PR 454 km 2.02.3	cave	not verified		Investigation Required
Barrio Mirasóll Sector Río Blanco	not verified	petroglyphs		Investigation Required
Municipio Las Marías				
Barrio Maravilla Sector Guacio	not verified	not verified		Investigation Required
PR LM 02 Barrio Bucarabones	possible plaza	petroglyph	1 petroglyph (Hayward et al. 1992c:1)	Investigation Required
<i>Cueva del Indio</i> PR LM 03 Barrio Palma Escrita Sector Rocho PR 106 km 120.2 and left of PR 408	cave	not verified		Investigation Required

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Prehistoric Rock Art of Puerto Rico

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Río Guacio Petroglyphs PR LM 04 Barrio Maravilla Este PR 119	waterway	petroglyphs	two boulders with images; 1 ill-defined image PR LM 04a; 40exclusively anthropomorphic images PR LM 04b (Hayward et al. 1992c)	Initial Investigation
Municipio Las Piedras				
Cueva del Indio Barrio Quebrada Arenas	rock enclosure	petroglyphs	64 primarily anthropomorphic individual or composite images distributed on 5 large boulders (Hayward et al. 1992a)	Eligible National Register Form completed September 2000
Cueva Piedra Marcada PR LA 05 Barrio El Río PR 949 or 948	cave	petroglyphs	at least 10 images (Dubelaar et al. 1999:89)	Investigation Required
Barrio El Río	rock shelter	petroglyphs		Investigation Required
PR LP 01 PR-198	not verified	not verified		Investigation Required
PR LP 02 La Familia, Barrio Quebrada Arenas	not verified	not verified		Investigation Required
Petroglifo aislado Barrio Montones	not verified	petroglyphs		Investigation Required
Confluence of Río Gurabo and Quebrada	waterway	petroglyphs		Investigation Required
Barrio Quebradas Arenas PR 198	not verified	petroglyphs	may be one of the preceding listed locations	Investigation Required
Municipio Loíza				
Cueva de los Indios or Cueva de Punta Maldonado PR LO 07 Barrio Torrecillas Baja Sector Punta Maldonado PR 187	cave	petroglyphs	14 petroglyphs, 4 possibly with a red pigment; primarily anthropomorphic, secondarily abstract designs (Coastal Resources and Wildlife Planning Division Area 1981)	Listed on National Register 1981
Barrio Torrecilla Baja Sector Arenas PR 187	plaza	petroglyphs		Investigation Required
Hacienda Grande	cave	petroglyphs		Investigation Required
PR LO 14 Vacía Talega Arenas area, Barrio Torrecillas Baja	not verified	not verified		Investigation Required
Municipio Luquillo				
El Peñon and Monte de Indios Barrio Mata de Platano	rock shelter	not verified		Investigation Required
Camandulas petroglyphs Near confluence of Río Sabon and Río Sabana	rock shelter	petroglyphs		Investigation Required
Cueva Mata de Plátano o Monte de los Indios Barrio Luquillo	cave	not verified		Investigation Required
Municipio Manatí				
Cueva de las Golondrinas Barrio Tierras Nuevas Saliente at end of PR	cave	petroglyphs	8 to 10 or more images; anthropomorphic designs	Investigation Required

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648			present (Dubelaar et al. 1999:39; Fewkes 1907:155-156)	
Four Plazas Ceremonial Center near the previous Cueva de las Golondrinas site	plaza	petroglyphs	two of the plazas have petroglyphs on the stones aligning the courts (Dubelaar et al. 1999:39)	Investigation Required
<i>Cueva de las Golondrinas</i> Barrio Coto Sur PR 668 km 0.7	cave	petroglyphs		Investigation Required
<i>Cueva de la Boquilla</i> Barrio Tierras Nuevas Poniente east of the Río Manati mouth	cave	not verified		Investigation Required
<i>Cueva del Viento</i> Barrio Río Arriba Poniente PR 642 km 6.3	cave	not verified		Investigation Required
<i>Cueva del Agua</i> Barrio Tierras Nuevas Saliente Sector Coto Norte Cantera Guayaney PR 686	cave	not verified		Investigation Required
<i>Cueva la Altagracia</i> Barrio Coto Norte PR 668 behind the cemetery	cave	not verified		Investigation Required
<i>Cueva la Gruta</i> PR MI 06 Barrio Tierras Nuevas Salientes Playa Mar Chiquita PR 648	cave	not verified		Investigation Required
<i>Cueva Jimenez</i> Barrio Tierras Nuevas Salientes Sector Boquilla PR 685	cave	not verified		Investigation Required
<i>Petroglifos los Tubos</i> PR MI 04	not verified	petroglyphs		Investigation Required
Municipio Maricao				
<i>Cueva del Bosque de Maricao</i> Río Prieto, Barrio Montos near PR 105 km 19 cave within the Maricao State Forest	cave	not verified		Investigation Required
Barrio Bucarabones de Maricao	waterway	petroglyphs	1 image on boulder (Dubelaar et al. 1999:52)	Investigation Required
Petroglifos Guava 3 PR MR 03 Barrio Bucarabones	not verified	not verified		Investigation Required
Municipio Maunabo				
<i>Matuyas</i> PR MU 01 Sector Matuyas Abajo	not verified	not verified		Investigation Required
PR MU 02 Barrio Lizas	rock shelter	not verified		Investigation Required
<i>Cueva Coroco</i> PR MU 10 Sector Matuyas Alto	cave	not verified		Investigation Required
Municipio Mayagüez				
El Batey del Delfín del Yagüez. Barrio Quemado	ball court	petroglyphs	various marine animal and anthropomorphic images	Investigation Required

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Prehistoric Rock Art of Puerto Rico

Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
			(Rivera and Pagan 1997)	
Island of Mona				
<i>Cueva Negra</i> 250 meters southeast-east of Playa Sardinera	cave	petroglyphs pictographs	39 images; vandalism present (Dubelaar et al. 1999:26); 1 anthrozoomorphic petroglyph and 3 pictographs in black, 1 anthropomorph and 2 zoomorphic images (Davila 1998)	Initial Investigation
<i>Cueva Espinar</i>	cave	petroglyphs pictographs	4 groupings of 26 polychrome pictographs, primarily zoomorphic designs (Davila 1998)	Initial Investigation
<i>Cueva de las Caritas</i> 800 meters south of Playa Sardinera	cave	petroglyphs	3 groupings of 13 primarily anthropomorphic images; (Davila 1998)	Initial Investigation
<i>Cueva de los Balcones</i>	cave	petroglyphs pictographs	4 petroglyphs (1 each zoomorph, anthropomorph, geometric and abstract design) and 18 pictographs, anthropomorphic and abstract designs present (Davila 1998).	Initial Investigation
<i>Cueva Mona 9</i>	cave	not verified	80 images (Dubelaar et al. 1999:27)	Investigation Required
Unknown location of a cave	cave	not verified		Investigation Required
Unnamed cave on west coast	cave	not verified		Investigation Required
<i>Cueva del Caballo</i> part of <i>cueva de los Pajaros</i>	cave	petroglyphs		Investigation Required
Municipio Moca				
<i>Cueva del Mapa</i> or <i>Cueva Nunez</i> Barrio Rocha Sector Pachanga PR 112 km 9.2	cave	petroglyphs pictographs		Investigation Required
<i>Cueva del Abono</i> Barrio Rocha PR 112 km 9.4	cave	not verified		Investigation Required
<i>Cueva Golondrina</i> Barrio Aceituna PR 110	cave	not verified		Investigation Required
<i>Cueva la California</i> Barrio Centro PR 110 km 19.8	cave	not verified		Investigation Required
Municipio Morovis				
<i>Cueva del Indio</i> Barrio Barahona near PR 633 km 3.6	cave	petroglyphs		Investigation Required
<i>Cueva de los Gemelos</i> Barrio Barahona Near <i>Cueva de Blackie</i>	cave	petroglyphs pictographs	1 to 5 petroglyphs and 6 to 30 or more pictographs (Dubelaar et al. 1999:69)	Investigation Required

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Cueva de los Lagartos or del Túnel Barrio Barahona Near Cueva de Blackie	cave	pictographs	zoomorphic images present (Dubelaar et al. 1999:69)	Investigation Required
Cueva del Marciano Barrio Barahona	cave	not verified		Investigation Required
El Mural de los Caballitos El Asomante, Barrio Barahona	cave	pictographs	possible historic period pictographs; horse and human images in black; at least 30 images (Dubelaar et al. 1999:70)	Investigation Required
El Refugio del Arco Barrio Barahona	rock shelter	petroglyphs		Investigation Required
Cueva de la Estancita Barrio Barahona	cave	pictographs		Investigation Required
Cueva de la Calavera Barrios Barahona and Torrecillas Near Cueva de las Palomas and Cueva de la Mata de Guineo	cave	petroglyphs	1 image present (Dubelaar et al. 1999:70)	Investigation Required
Cueva de las Palomas Barrio Torrecillas	cave	petroglyphs pictographs	some petroglyphs and more than 50 pictographs (Dubelaar et al. 1999:70)	Investigation Required
Cueva de la Mata de Guineo or Cueva Clara Barrio Torrecillas Near Cueva de las Palomas	cave	petroglyphs pictographs		Investigation Required
Cueva de las Golondrinas Barrio Torrecillas Near Cueva de las Palomas	cave	pictographs	polychrome pictographs (Dubelaar et al. 1999:71)	Investigation Required
Cueva de Blackie Barrio Torrecillas Near Cueva de la Calavera	cave	petroglyphs pictographs	polychrome pictographs (Dubelaar et al. 1999:71)	Investigation Required
Cueva de Dos Pisos, also Cueva del Negro, also Cueva de los Bejucos Barrio Torrecillas Near Cueva de las Palomas	cave	not verified		Investigation Required
Cueva Oscura, also Cueva de las Buruquenas Barrio Torrecillas Near Cueva de las Palomas	cave	pictographs		Investigation Required
Cueva de las Archillas Barrio Torrecillas	cave	petroglyphs pictographs	7 anthropomorphic petroglyphs and some pictographs (Dubelaar et al. 1999:71)	Investigation Required
Cueva del Machito Barrio Torrecillas	cave	pictographs		Investigation Required
Cueva de los Cabros Barrio Torrecillas	cave	not verified		Investigation Required
Cueva de la Ceiba Barrio Torrecillas	cave	pictographs	polychrome pictographs (Dubelaar et al. 1999:72)	Investigation Required
Cueva del Tabac Barrio Torrecillas	cave	pictographs	polychrome pictographs (Dubelaar et al. 1999:72)	Investigation Required

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<i>Cueva de Negro</i> Barrio Torrecillas near Barrio Barahona	cave	pictographs		Investigation Required
<i>Cueva de la Calavera</i> Barrios Barahona and Torrecillas Near Cueva de las Palomas and cueva de la Mata de Guineo	cave	petroglyphs	1 image (Dubelaar et al. 1999:72)	Investigation Required
<i>La Pared Escrita</i> Barrio Unibón PR 159 km 4.3 Near Cueva Maldita	not verified	petroglyphs		Investigation Required
<i>Piedra del Indio</i> Barrio San Lorenzo PR 567 km 4.0	possible ball count	petroglyphs		Investigation Required
<i>Sitio Las Casimbas</i> Barrio Río Grande	waterway	petroglyphs		Investigation Required
<i>Cueva del Machito</i> Barrio Torrecillas	cave	not verified		Investigation Required
<i>Cueva Archilla II</i> Barrio Unibón PR 159 km 4.1	cave	not verified		Investigation Required
<i>Cueva Lucero - Francisco Class</i> Barrio Torrecillas PR 159 km 4.3	cave	not verified		Investigation Required
<i>Cueva Autoridad de Tierras - del Frío - Class</i> Barrio Barahona PR 633 km 3.6	cave	not verified		Investigation Required
<i>Refugiode las Carita</i> Barrio Barahona	rock shelter	not verified		Investigation Required
<i>Cueva Paloma I and II - Clara</i> Barrio Barahona	caves	not verified		Investigation Required
<i>Cueva Mingo I, II and III - Paco - Del Cafe - Abono - Felipe I, II and III</i> Barrio Barahona PR 633 km 2.0	caves	not verified		Investigation Required
<i>Cueva de Franquez</i>	cave	not verified		
Municipio Naguabo				
Caribbean National Forest Near the confluence of the Icacos and Cubuy Rivers	waterway	petroglyphs	3 boulders with 12 images (Dubelaar et al. 1999:100)	Investigation Required
Upper Icacos Valley Rock shelter near the Icacos River	rock shelter	petroglyphs		Investigation Required
Río Cubuy near the Caribbean National Forest rock art location	waterway	petroglyphs	boulder with at least 1 anthropomorphic image (Dubelaar et al. 1999:100)	Investigation Required
<i>La Canoa</i> Río Blanco	waterway	petroglyphs	boulder with zoomorphic images (Dubelaar et al. 1999:100)	Investigation Required
<i>La Mina</i> near a creek which intersects the Río Blanco in the vicinity of the hydroelectric plant	waterway	petroglyphs	2 boulders with 11 images (Dubelaar et al. 1999:101)	Investigation Required
The Río Blanco 6 sites along or in the Río Blanco from the Icacos-Cubuy	waterway	petroglyphs	6 sites with a total of 45 images (Dubelaar et al.	Investigation Required

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the Río Blanco from the Icosos-Cubuy river junction to the hydroelectric plant			images (Dubelaar et al. 1999:101)	
<i>Punta Lima</i> Barrio Santiago and possibly Lima Sector Punta Lima PR NG 04	not verified	not verified		Investigation Required
<i>Petroglifos Daguao</i> Barrio Daguao	not verified	petroglyphs		Investigation Required
Municipio Naranjito				
PR NJ 01 Barrio Cedro Arriba Sector La Ceiba	not verified	petroglyphs	1 image present (Dubelaar et al. 1999:77)	Investigation Required
Municipio Orocovis				
Barrio Sabana, headwaters of Río Manatí. Road from Orocovis to Barranquitas km 25.0	ball court	petroglyphs	possible removal of ball court slabs with carved images (Dubelaar et al. 1999:74)	Investigation Required
<i>Cueva del Indio</i> PR OR 30 Barrio Bauta Abajo Sector La Francia PR 564	rock shelter	not verified		Investigation Required
<i>Cueva de la Espiral</i> PR OR 31 Barrio Bauta Abajo Sector Matrullas Near PR 564 km 1.9	cave	not verified		Investigation Required
<i>Refugio La Concha</i> Barrio Bauta Abajo Sector Matrullas	rock shelter	petroglyphs	a large number of designs (Dubelaar et al. 1999:74)	Investigation Required
Lago de Matrullas, East bank Barrio Bauta Abajo	not verified	not verified		Investigation Required
PR-143 km 35.9 Farm of Mr. Victor Colon Collazo adjacent to the Toro Negro State Forest	not verified	petroglyphs	30 anthropomorphic images (Dubelaar et al. 1999:75)	Investigation Required
Barrio Cacaos	not verified	not verified		Investigation Required
<i>Cueva el Gato</i> PR OR 29 Barrio Gato	cave	not verified		Investigation Required
Orocovis (plaza) Barrio Orocovis	not verified	not verified		Investigation Required
PR OR 25 Barrio Sabaña	not verified	petroglyphs		Investigation Required
Municipio Patillas				
Large boulder along east side of Río Patillas PR 184 km 5.8	waterway	petroglyphs		Investigation Required
Barrio La Mulas PR 754 km 0.8	not verified	petroglyph	at least one anthropomorphic figure (Dubelaar et al. 1999:88)	Investigation Required
Abrigo rocoso PR 184 km 13.2	rock shelter	not verified		Investigation Required
Barrio Higuero or Barrio Jacaboa Near PR 758 km 2.0	waterway	petroglyph	at least one image on a boulder (Dubelaar et al. 1999:88)	Investigation Required
Barrio Jagual 3 locations, may be sites Jagual I PR PT 01, Jagual II PR PT 02 and Jagual III PR PT 03	not verified	petroglyphs	(Terrestrial Archaeological Council 1992)	Investigation Required
Barrio Mulas 1 location, may be	not verified	petroglyphs		Investigation Required

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same site as Maternidad PR PT 04				
Barrio Muñoz Rivera 1 location, may be same site as Miraflores PR PT 05	not verified	petroglyphs	(Terrestrial Archaeological Council 1992)	Investigation Required
One location in Río Patillas; one location in Río Jacaboa and 3 rock shelters	waterway and rock shelter	not verified		Investigation Required
PR PT 07 Barrio Jacaboa Sector Espino or Higuero	not verified	petroglyphs	(Terrestrial Archaeological Council 1992)	Investigation Required
Municipio Peñuelas				
Barrio Santo Domingo Near municipio landfill	cave	not verified		Investigation Required
Cueva El Orégano Barrio Santo Domingo	cave	not verified		Investigation Required
Cueva Mapancho Barrio Coto	cave	not verified		Investigation Required
Municipio Ponce				
Tibes Ceremonial Center Barrio Tibes PR 503 km 5.3	plaza	petroglyphs	12 anthropomorphic images on stone slabs aligning the central rectangular plaza; other isolated boulders with images (Oliver 1998:38-43)	Listed on National Register April 14, 1978
Hacienda Barranca near the military road from Ponce to Juana Diaz	cave or rock enclosure	petroglyphs and pictographs	several petroglyphs, some outlined with a pigment or different colored earth; at least 2 caves with images; appears to be primarily anthropomorphic images (Fewkes 1907:157)	Investigation Required
Barrio Cerrillos PR 14 km 8.3	cave	not verified		Investigation Required
The island of Caja de Muertos.	cave	petroglyphs	multiple caves/rock shelters on the island with images; 2 petroglyphs in one cave (Dubelaar et al. 1999:95)	Investigation Required
La Iglesia de Maragüez Barrio Maraguez Sector Los Fondos PR PO 39 alongside PR 139 at insect ion of Quebrada Los Fondos and Río Cerrillos	batey	petroglyphs	4 anthropomorphic images on greenstone slabs associated with a ball court/plaza (Garrow et al. 1995:253-261)	Investigation Required
Petroglifos Maraguez PR 139 Río Cerrillos confluence of Río Blanco and Río Prieto	not verified	petroglyphs		Investigation Required
Cueva Rita Barrio Cerrillos PR 511 and 112 Lago #3	cave	not verified		Investigation Required
Mural de Petroglifos Confluence of Río Cerrillos and Río Jauca north of Río Cerrillos	not verified	petroglyphs		Investigation Required

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<i>Cueva Guachin</i> Barrio Cerrillos	cave	not verified		Investigation Required
<i>Refugio Rocos</i> o Fewkes Barrio Cerrillos	rock shelter	not verified		Investigation Required
Municipio Quebradillas				
<i>Cueva de las Golondrinas</i> Barrio Terranova	cave	not verified		Investigation Required
<i>Cueva las Golondrinas</i> Barrio Cocos PR 2 km 97.4	cave	not verified		Investigation Required
<i>Cueva Maleona</i> Barrio Terranova Sector La Estacion PR 2 km 103.3	cave	not verified		Investigation Required
<i>Cueva del Abono</i> Barrio Guajataca PR 119 km 0.9	cave	not verified		Investigation Required
Municipio Rincón				
Barrio Ensenada Sector Fussa PR 115 to Urbanization Vista Azul	not verified	petroglyphs	1 image on boulder in a house lot (Dubelaar et al 1999:28)	Investigation Required
<i>Ensenada</i> PR-RN-01 Barrio Ensenada	beach	petroglyph	1 zoomorphic design (Roe 1991:325)	Investigation Required
Municipio Río Grande				
<i>Cara del Indio</i> PR RG 01 Río Espíritu Santo Barrio Guzman Abajo Sector Jimenez	waterway	petroglyphs	variable number of images from 28 to 218; on at least 3 boulders; primarily anthropomorphic (Dubelaar et al 1999:49)	Investigation Required
Ball court 300 meters north of Cara del Indio and some 200 meters west of Río Espíritu Santo	ball court	petroglyphs		Investigation Required
Sitio Bartolo Río Espíritu Santo	waterway	petroglyphs		Investigation Required
Jiménez petroglyphs Boulder near Jimenez Creek, a tributary of Río Espíritu Santo; also near PR 966	waterway	petroglyphs		Investigation Required
La Coca petroglyphs Boulder near La Coca Creek, a tributary of Río La Mina; also near PR 191	waterway	petroglyphs		Investigation Required
Plaza Espíritu Santo PR RG 02 Barrio Guzman Abajo	plaza	not verified		Investigation Required
Municipio Sabana Grande				
<i>Cueva del Indio</i> Barrio Rayo Sector Parcelas Las Guaras PR 328 km 2.3 and 2.2	cave	not verified		Investigation Required
Municipio Salinas				
No information available				
Municipio San Germán				
<i>Cueva RosaRío</i> Barrio RosaRío Bajo. Sector Norman PR 348	cave	petroglyphs pictographs		Investigation Required

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Area de cuevas Los Peñones Barrio RosaRío Penon Sector Los Penones	cave	petroglyphs		Investigation Required
La Tea Barrio Retiro Sector La Tea PR 118 km 3.5	not verified	petroglyphs		Investigation Required
Cueva Chiquita I and II - De la Perra - Clara - Oscura Barrio RoasRío Bajo PR 348 km 8.5	cave	not verified		Investigation Required
Cueva en la Cantera del Cerro Peñones Barrio RoasaRío Bajo PR 348 km 11.8	cave	not verified		Investigation Required
Cueva la Muerta Barrio RosaRío Peñón PR 348 km 12.8	cave	not verified		Investigation Required
PR SG 08 Barrio RosaRío Peñón	not verified	not verified	may be same site as Cueva la Muerta (Dubelaar et al. 1999:29)	Investigation Required
Cueva Malano Barrio Tuna PR 314 km 2.2	cave	not verified		Investigation Required
Cueva de Don Gerardo Barrio RosaRío Bajo	cave	not verified		Investigation Required
Cueva del Sumidero Barrio RosaRío Bajo	cave	not verified		Investigation Required
Cueva Maresúa Barrio Ancones PR 101	cave	not verified		Investigation Required
Municipio Santa Isabel				
No information available				
Municipio San Juan				
No information available				
Municipio San Lorenzo				
Río Grande de Loíza Barrio Cayaguas	waterway	petroglyphs	large boulder with several images; at least one anthropomorphic figure (Dubelaar et al. 1999:84)	Investigation Required
El Gato Río Grande de Loíza Barrio Quebrada Honda.	waterway	petroglyphs	several boulders with images (Dubelaar et al. 1999:84)	Investigation Required
Las Canoas Barrio Cayaguas	rock shelter	petroglyphs	many images present (Dubelaar et al. 1999:84)	Investigation Required
Cueva del Indio Barrio Jagual	rock shelter	petroglyphs	many images present (Dubelaar et al. 1999:84)	Investigation Required
Barrio Cayaguas Petroglyph complex in the Río Grande de Loíza	waterway	petroglyphs	multiple images present (Dubelaar et al. 1999:84)	Investigation Required
Quebrada Blanca Barrio Jagual	waterway	petroglyphs	zoomorphic images present on multiple boulders (Dubelaar et al. 1999:84)	Investigation Required
El Salto Río Grande de Loíza, Barrio	waterfall	petroglyphs	20 anthropomorphic images	Investigation Required

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Cayaguas Near intersection of PR 765 and 181			(Dubelaar et al. 1999:84-85)	
Barrio Cayaguas	waterway	petroglyphs	anthropomorphic and zoomorphic images on a boulder (Dubelaar et al. 1999:85)	Investigation Required
Piedra Sola Río Grande de Loíza, Barrio Cayaguas	waterway	petroglyphs	zoomorphic images present on one boulder (Dubelaar et al. 1999:85)	Investigation Required
Puente 912 Río Grande de Loíza, Barrio Cayaguas	waterway	petroglyphs	multiple locations, images or both (Dubelaar et al. 1999:85)	Investigation Required
Río Emajagua Barrio Espino PR 745, 0.3 miles from PR 181	waterway	petroglyphs	34 anthropomorphic and zoomorphic images (Dubelaar et al. 1999:85)	Investigation Required
La Caverna PR SL 12 Barrio Quebrada Arenas	rock shelter	petroglyphs		Investigation Required
Piedra Hueca Barrio Quebrada Arenas	waterway	petroglyphs pictographs	5 petroglyphs and 4 pictographs (Dubelaar et al. 1999:85)	Investigation Required
Pozo de la Negra Río Grande de Loíza, east bank, Barrio Quemados	waterway	petroglyphs		Investigation Required
Area S with 3 locations Near PR 788 and Mojica Laureano Family house at km 8.8	waterway	petroglyphs	16 images among 3 locations; may be of the preceding sites (Dubelaar et al. 1999:86)	
Area ST 400 meters upstream from Site 3 of Area S	waterway	petroglyphs	3 images present; may be one of the preceding sites (Dubelaar et al. 1999:86)	Investigation Required
Area T 3 locations: T1 near bridge spanning Río Grande de Loiza at PR 912; T2 0.1 miles upstream from T1 and T3 0.1 miles from T2 heading south	waterway	petroglyphs	25 images among 3 locations; may be one of the preceding sites (Dubelaar et al. 1999:86)	Investigation Required
Río Grande de Loiza Road PR-18 km 11.7.	waterway	petroglyphs	1 boulder with 6 images and 1 boulder with 2 images; may be one of the preceding sites (Dubelaar et al. 1999:86)	Investigation Required
Río Grande de Loiza PR 181 km 9.9	waterway	petroglyphs	1 boulder with 1 image and 1 boulder with 6 images; may be one of the preceding sites (Dubelaar et al. 1999:87)	Investigation Required
Río Grande de Loiza PR 181 km 9.65	waterway	petroglyphs	15 images; may be one of the preceding sites (Dubelaar et al. 1999:87)	Investigation Required
Río Grande de Loiza Sector Quebrada Honda PR 181 km 0.1	waterway	petroglyphs	4 images; may be one of the preceding sites (Dubelaar et al.	Investigation Required

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Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
			1999:87)	
Quebrada along PR 745 km 0.4	waterway	petroglyphs	34 images present; may be one of the preceding sites (Dubelaar et al 1999:87)	Investigation Required
Town of San Lorenzo, 3 locations: near Calle Tierra Nueva km 6 and km 10 and 500 yards downstream from the preceding site along PR 745	not verified	not verified		Investigation Required
Municipio San Sebastián				
Salto Collazo Río Guatemala Barrio Piedras Blancas PR 111 km 26.8	waterway	petroglyphs, pictographs or both		Investigation Required
Cueva La Catarata Río Guatemala Barrio Guatemala	cave	not verified		Investigation Required
Barrio Guajataca PR 3 km 26.8	near river	not verified		Investigation Required
Cueva Collazo or Cueva del Pozo Barrio Eneas PR 11 towards PR 448 km 26.7	cave	not verified		Investigation Required
Cueva la Bruja and Cueva del Negro Barrio Juncal Sector Seboruquillo PR 111 km 33.7	cave	not verified		Investigation Required
Municipio Toa Alta				
No information available				
Municipio Toa Baja				
Cueva Convento Barrio Hato Viejo Caliche PR 823 km 5.4	cave	not verified		Investigation Required
Municipio Trujillo Alto				
Cuevas II. Barrio Cuevas, East of Trujillo Alto town	ball courts	petroglyphs		Investigation Required
Río Grande de Loiza, east bank Barrio Carraizo one mile south of the intersection of PR 843 and 175	waterway	petroglyphs	2 images present (Dubelaar et al. 1999:46)	Investigation Required
Represa de Carraizo Along Río Loiza, east bank Barrio Carraizo	waterway	petroglyphs	2 anthropomorphic designs on boulder (Dubelaar et al. 1999:46)	Investigation Required
La Represa Barrio La Gloria Sector La Represa	waterway	petroglyphs		Investigation Required
La Sabana Barrio Quebrada Grande	near river	not verified		Investigation Required
Cuevas archaeological site Río Grande de Loíza, east bank, north of Trujillo Alto	cave	petroglyphs		Investigation Required
Boulder on a hill near intersection of PR 851 and 181	mountain	petroglyphs		Investigation Required

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Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
Municipio Utuado				
Note: due to limited information for some rock art locations of Utuado, duplicate listings may follow				
<i>Cueva de la Seiba</i> Hacienda Jobo lands Barrio Río Abajo some 5 kilometers north of Utuado	cave	petroglyphs	a number of anthropomorphic designs (Dubelaar et al. 1999:53)	Investigation Required
<i>Cueva La Soler</i> and <i>Cueva John Alden Mason</i> Barrio Angeles	caves	petroglyphs	a large number of designs (Dubelaar et al. 1999:54)	Investigation Required
<i>Piedra del Indio</i> Barrio Salto Arriba Roig Estate lands	waterway	petroglyphs	at least 8 or 9 images; primarily anthropomorphic, with abstract/geometric designs present (Fekes 1907: 150-152)	Investigation Required
Unnamed site upstream from <i>Piedra del Indio</i> Near a house site known as that of Senator Salvador Pons	waterway	petroglyphs	at least 3 images; 2 anthropomorphic, 1 abstract/geometric designs present (Fewkes 1907:153)	Investigation Required
<i>Salto de Meróvis</i> Río Grande de Arecibo A few hundred yards upstream from the previous unnamed location	waterway	petroglyphs	larger boulders with images; anthropomorphic and geometric/abstract designs present (Fewkes 1907:153-154)	Investigation Required
<i>Salto de los Morones</i> Barrio Arenas PR 10 km 44.5	waterway	petroglyphs	5 images (Dubelaar et al. 1999:54)	Investigation Required
<i>Vega del Hayo</i> PR UT 01 Barrio Vivi Arriba near PR 605 km 9.5	ball court	petroglyphs	moderate amount of images; at least 3 plazas present (Dubelaar et al. 1999:54-55)	Investigation Required
Unnamed site 100 meters north of <i>Vega del Hoyo</i>	not verified	petroglyphs	1 image (Dubelaar et al. 1999:55)	Investigation Required
<i>Paso Palma Complex</i> A grouping of petroglyphs located along the Jauca and Caonillas Rivers Includes site PR UT 49	waterway	petroglyphs	includes the <i>La Danza del Otoao</i> anthropomorphic image (Dubelaar et al. 1999:55)	Investigation Required
<i>Centro Ceremonial Indígena de Caguana</i> PR UT 10 Barrio Caguana	ball court/plaza	petroglyphs	a minimum of 26 images; at least 22 along central Plaza A; 1 with Plaza C; 1 each at 3 different plazas (Oliver 1998:11,121); Terrestrial Archaeological Council for site identification	Listed on National Register 1993
University of Puerto Rico, <i>Universidad de la Montaña</i> branch campus	reported from waterway	petroglyphs	a number of boulders with images in front of main building on the local campus (Dubelaar et al. 1999:56)	Investigation Required

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Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
Property of Perico Ancha Barrio Salto Abajo or Salto Arriba	ball court	petroglyphs		Investigation Required
Property of Mr. Cabrera former location of the Utuado Sugar Company	not verified	petroglyphs	2 boulders with images (Dubelaar et al. 1999:56)	Investigation Required
PR 10 km 45.3 near Río Abajo	not verified	petroglyphs	1 boulder with images (Dubelaar et al. 1999:56)	Investigation Required
Barrio Salto Arriba 200 meters downstream on Río Grande de Arecibo from a ball court on property of Salvador Vives	waterway	petroglyphs	20 images (Dubelaar et al. 1999:56)	Investigation Required
Small ball court possibly Barrio Caguana	ball court	petroglyphs		Investigation Required
Barrio Río Abajo near PR 621 in the Río Abajo Forest Reserve and Grozzier Encampment	cave	not verified		Investigation Required
Río Caonillas	waterway	petroglyphs	4 locations along the waterway (Dubelaar et al. 1999:57)	Investigation Required
Cuevas Antonio - El Arco (PR UT 50) - Arocho - Ortega - La Alta Barrio Caguana PR 111 km 9.7	cave	not verified	(Terrestrial Archaeological Council 1992)	Investigation Required
Cuevas el Misterio - Los Panes - Las Golondrinas Barrio Caguana Sector Cayuco PR 621 km 3.1	cave	not verified		Investigation Required
Cuevas Clara I - Clara II (one of both Cuevas Clara may be PR UT 40) - Colmena Barrio Angeles PR 129 km 19.4	cave	not verified	(Terrestrial Archaeological Council 1992)	Investigation Required
Petroglifos Hamaca I PR UT 02 Barrio Paso Palma Sector Hamaca	not verified	petroglyphs		Investigation Required
Petroglifos Hamaca II PR UT 03 Barrio Paso Palma Sector Hamaca PR 10 km 52.7	not verified	petroglyphs		Investigation Required
Petroglifos Hamaca III PR UT 04 Barrio Paso Palma Sector Hamaca PR 10 km 49.7	not verified	petroglyphs		Investigation Required
Petroglifos Hamaca IV PR UT 05 PR 10 km 49.5	not verified	petroglyphs	(Terrestrial Archaeological Council 1992)	Investigation Required
Petroglifos Paso Palma I PR UT 06 Barrio Paso Palma Sector Parcelas Pons PR 10 km 15.1	not verified	petroglyphs		Investigation Required
Petroglifos Paso Palma II PR UT 07 Barrio Palso Palma Sector Parcelas Pons PR 10 km 51 to 50.5	not verified	petroglyphs	(Terrestrial Archaeological Council 1992)	Investigation Required
Recurso Cultural los Morones PR	not verified	not verified		Investigation Required

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UT 08 Barrio Consejo Sector Guanico				
Cueva Collores PR UT 09 Barrio Salto Arriba	cave	not verified		Investigation Required
Cueva los Chinos PR UT 11 Barrio Paso Palma Sector Jauca	cave	not verified		Investigation Required
Petroglifos los Mercados PR UT 12 Barrio Paso Palma Sector Jauca	not verified	petroglyphs		Investigation Required
PR UT 18 PR 10 km 51.9	not verified	not verified		Investigation Required
Cueva Masco PR UT 30 Barrio Angeles	cave	not verified		Investigation Required
Cueva de los Muertos PR UT 31 Barrio Angeles PR 489 km 4.5	cave	not verified		Investigation Required
Cueva Pagán PR UT 32 Barrio Angeles	cave	not verified		Investigation Required
PR UT 35 Barrio Caguana	not verified	petroglyphs		Investigation Required
PR UT 37 Barrio Caguana	plaza	petroglyphs		Investigation Required
PR UT 39 Barrio Angeles	not verified	petroglyphs		Investigation Required
Cueva Oscura PR UT 41 Barrio Angeles	cave	not verified	(Terrestrial Archaeological Council 1992)	Investigation Required
PR UT 42 Barrio Angeles	not verified	petroglyphs		Investigation Required
Cueva Montalvo PR UT 43	cave	not verified		Investigation Required
Cueva Oscura PR UT 44 Barrio Santa Rosa PR 489 km 4.5	cave	not verified		Investigation Required
Cueva Camacho PR UT 47 Barrio Caguana	cave	not verified		Investigation Required
PR UT 51	not verified	not verified		Investigation Required
Barrio Angeles	not verified	petroglyphs		Investigation Required
Cueva Cacique Don Alonso Barrio Don Alonzo PR 140 km 34.2	cave	not verified		Investigation Required
PR UT 57 Barrio Salto Arriba PR 10 km 49.4	not verified	not verified		Investigation Required
PR UT 58 Barrio Salto Arriba PR 10 km 48.2	not verified	not verified		Investigation Required
PR UT 59 PR-10 km 48.5	not verified	not verified		Investigation Required
Plaza Utuado # 3 Barrio Salto Arriba	plaza	petroglyphs		Investigation Required
PR UT 60 Barrio Salto Arriba PR 10 km 46.7	not verified	petroglyphs	(Terrestrial Archaeological Council 1992)	Investigation Required
PR UT 74 PR 10 47.6	not verified	not verified		Investigation Required
PR UT 75 PR 10 km 48.6	not verified	not verified		Investigation Required
PR UT 76 PR 10 km 49.2	not verified	not verified		Investigation Required
Rouse 1938 Petroglifos Barrio Viví Arriba	not verified	petroglyphs		Investigation Required

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PR UT 77 PR 10 km 49.6	not verified	not verified		Investigation Required
PR UT 79 PR 10 km 51.4	not verified	not verified		Investigation Required
PR UT 80	not verified	not verified		Investigation Required
PR UT 81 PR 10 km 52.4	not verified	not verified		Investigation Required
PR UT 82 PR 10 km 55.8	not verified	not verified		Investigation Required
PR UT 83 PR 10 km 58.0 east side	not verified	not verified		Investigation Required
PR UT 84 PR 10 km 58.0 west side	not verified	not verified		Investigation Required
Municipio Vega Alta				
<i>Cueva de las Golondrinas or Cueva de los Espiritus or Cueva de los MisteRíos</i> Barrio Mariaco	cave	not verified		Investigation Required
<i>Cuevas Carmelitas</i> six caves: Camines, Burros, Don Tuno, Las Ortigas, Las Comas, Dona Marta Barrio Sabana	cave	petroglyphs pictographs		Investigation Required
Barrio Sabana	cave	petroglyphs	some images present (Dubelaar et al. 1999:43)	Investigation Required
Barrio Sabana	cave	petroglyphs	some images present (Dubelaar et al. 1999:43)	Investigation Required
<i>Cueva del Panapén</i> Barrio Sabana	cave	not verified		Investigation Required
<i>Abra de los Perros</i> Barrio Bajura	rock shelter	petroglyphs		Investigation Required
<i>Cuevas de Laguna Prieta</i> Barrio Sabana Sector Laguna Prieta Location also placed beside Laguna Prieta and between Barrios Marismilla of the Municipio of Dorado and Los Hoyos of the Municipio of Vega Alta	cave	petroglyphs		Investigation Required
Cave system <i>Santa Rosa - Monserrate</i> Barrio Sabana PR 2 and 869	cave	not verified	also listed under Vega Baja	Investigation Required
<i>Petroglifos la Pared</i> Barrio Espinosa PR 678	not verified	petroglyphs		Investigation Required
Refugio Rocoso <i>Petroglifos</i> Barrio Espinosa PR 678	rock shelter	petroglyphs		Investigation Required
<i>Cueva Carmelita</i> Barrio Bajura	cave	not verified		Investigation Required
PR VA 04 Barrio Bajura	not verified	not verified		Investigation Required
PR VA 03 Barrio Bajura	not verified	not verified		Investigation Required
Municipio Vega Baja				
<i>Cueva Maldita or Cueva de Juanito</i> Barrio Almirante Sur near PR 160 km 12.6 and Río Unibon	cave	petroglyphs and pictographs	petroglyphs; some of the images possess red and black paint (Dubelaar et al. 1999:40)	Investigation Required
<i>Cueva de Arenale</i> Barrio Río Abajo	cave	petroglyphs		Investigation Required
<i>Cueva de la Campana</i> Barrio Yeguada near Cueva de las	cave	petroglyphs	3 anthropomorphic images (Dubelaar et al. 1999:40)	Investigation Required

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Golondrinas				
Cerro Guarico Barrio Yeguada	cave	petroglyphs		Investigation Required
Barrio Almirante	cave	petroglyphs		Investigation Required
Cueva de las Golondrinas PR VB 15 Barrio Ceiba	cave	petroglyphs	1 image (Dubelaar et al. 1999:41)	Investigation Required
Cueva del Dérumbito near Cueva de las Golondrinas	cave	petroglyphs	many images present (Dubelaar et al. 1999:41)	Investigation Required
Maisabel Barrio Puerto Nuevo	beachrock/ coastal	petroglyphs	31 anthropomorphic, zoomorphic and abstract designs (Roe 1991)	Initial Investigation
PR VB 14	cave or mountain	petroglyphs		Investigation Required
Yacimiento los Nuñez PR VB 18 Barrio Ceiba	not verified	petroglyphs	1 isolated image (Dubelaar et al. 1999:41)	Investigation Required
PR VB 22 PR 674	rock shelter	petroglyphs		Investigation Required
PR VB 23 Barrio Río Arriba	rock shelter	petroglyphs		Investigation Required
PR VB 26 Barrio Pugnado Afuera PR 155	cave	petroglyphs		Investigation Required
PR VB 30 Barrio Yeguada PR 687	cave	petroglyphs		Investigation Required
Cueva Manahena I Barrio Almirante Sur PR 645 km 0.5	cave	not verified		Investigation Required
Cueva Manahena II Barrio Almirante Sur PR 645 km 6.8	cave	not verified		Investigation Required
Cueva del Acueducto Barrio Almirante Sur PR 160	cave	not verified		Investigation Required
Cueva el Pavo Barrio Almirante Norte PR 160 km 6.3	cave	not verified		Investigation Required
Cueva del Abono Barrio Río Arriba PR 646 km 3.8	cave	not verified		Investigation Required
Cave system Santa Rosa-Monserrate Barrio Ceiba PR 2 and 869 km 34.4	caves	not verified	also listed under Vega Alta	Investigation Required
Cueva los Muertos Barrio Almirante Norte PR 160 km 1.8	cave	not verified		Investigation Required
Cueva del Acueducto Barrio Almirante Sur PR 160	cave	not verified		Investigation Required
PR VB 19 Barrio Almirante Norte	not verified	not verified	may be one of the preceding listed locations	Investigation Required
Municipio Vieques				
Camp García 3 or 12 VPr2-164 Barrio Puerto Ferro Eastern Maneuver Area United States Naval Reservation	waterway	petroglyphs	2 designs (facial with attached body elements) on boulders in quebrada or small stream (Tronolone and Cinquino 1984); 1 possible additional anthropomorphic image	Eligible National Register Form completed 4 March 1985

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Municipio / Site	Site Type	Class of Rock Art	Comments	National Register Status
			(Meighan and Trask 1994)	
Municipio Villalba				
<i>Yacimiento Atabeira</i> Barrio Caonillas Abajo	cave	pictographs		Investigation Required
<i>Cueva de los Guabás</i> Barrio Caonillas Abajo	cave	pictographs		Investigation Required
<i>Yacimiento Caonillas</i> Barrio Caonillas Abajo Río Toa Vaca	waterway	petroglyphs		Investigation Required
<i>Cueva del Indio</i> Barrio Caonillas Arriba PR 553 km 3.5	cave	not verified		Investigation Required
Municipio Yabucoa				
<i>Corral de Indios</i> Barrio Calabazas Río Guayanés	not verified	petroglyphs		Investigation Required
<i>Piedra Blanca</i> Barrio Jácana near PR 902	not verified	petroglyph	boulder with 1 anthropomorphic image (Dubelaar et al. 1999:101)	Investigation Required
<i>Petroglifos Río Guayanes</i> Barrio Calabazas PR YO 07	waterway	petroglyphs		Investigation Required
Municipio Yauco				
<i>Las Escaleras</i> Pueblo Norte of the town of Yauco	not verified	petroglyphs		Investigation Required
<i>Cueva el Negro or Convento</i> Barrio Duey	cave	not verified		Investigation Required

Summary Statistics

Site Type	Cave/rock shelter/mountain	279
	Waterway	92
	Coastal/beach	2
	ball court/plaza	39
	undetermined	124
	Total	536
Class of Rock Art	petroglyphs	279
	pictographs	17
	petroglyphs/pictographs	22
	undetermined	218
	Total	536
National Register Status	listed	5

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eligible	6
initial investigation	20
investigation required	505
Total	536

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(Note: bibliographic entries conform to the *American Antiquity* Style Guide of 1992, 57(4):749-770.)

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