Big Spring: A Ceremonial Petroglyph Site
In Anguilla, Lesser Antilles
Abstract
The island of Anguilla in the Lesser Antilles is the setting of several outstanding prehistoric Amerindian ceremonial rock-art sites, including Big Spring and Fountain Cavern. Both sites are attributable to the Late Ceramic Age after A.D. 600 and they include primarily anthropomorphic petroglyphs in association with freshwater springs, copious amounts of Amerindian ceramics, and other cultural remains. Recent archaeological testing at the Big Spring site is summarized in this paper and the results of this testing are compared with previous investigation of Fountain Cavern. Finally, these Anguillian sites are discussed within local and regional contexts, and their significance within the broad Caribbean is assessed.

Résumé
L’île d’Anguilla aux Petites Antilles est le cadre de plusieurs sites préhistoriques d’art amérindien cérémonial, y compris Big Spring (Grande source) et Fountain Cavern (Caverne à la fontaine). Les deux sites datent de la fin de l’Age de la Céramique après 600 de notre ère. Ils comprennent surtout des pétroglyphes anthropomorphiques associés aux sources d’eau douce, aux quantités importantes de céramiques amérindiennes, et à d’autres restes culturels. Dans notre communication nous faisons un résumé des examens archéologiques récents, et nous comparons ces résultats à ceux des examens de Fountain Cavern. Finalement, nous discutons ces sites anguilliens dans leurs contextes locaux et régionaux, tout en évaluant leur signification aux Antilles.

Introduction
The island of Anguilla is a low-lying, arid, carbonate island situated near the northern end of the Lesser Antilles directly adjacent to the Anegada Passage. Although relatively small, Anguilla preserves numerous prehistoric Amerindian archaeological sites, including over 40 identified so far. Of this total inventory, two Amerindian sites are especially notable, Big Spring and Fountain Cavern, because they preserve diverse petroglyphs pecked into bedrock directly adjacent to freshwater springs. Both are “closed” sites, that is, caves or rockshelters, and both were discovered as part of the ongoing study of Anguillian archaeology by the Anguilla Archaeological and Historical Society (AAHS) and several collaborating researchers from abroad.

Petroglyphs were recognized at the Big Spring site by the AAHS in 1988 and the site was archaeologically tested in 2001, as part of planning for its development as Anguilla's first National Park. In contrast, Fountain Cavern was recognized as a petroglyph site by the AAHS during the late 1970s and archaeologically tested in 1986 by David Watters of the Carnegie Museum of Natural History, with the help of the AAHS. Watters’ work was fully reported thereafter (Petersen and Watters 1991; Watters 1991). There are a few other known closed sites in Anguilla, but these do not contain water sources and we have yet to conclusively identify petroglyphs associated with them, nor are any petroglyphs associated with the much more numerous “open” habitation sites (Crock and Petersen 1999). Big Spring, Fountain Cavern and all the other sites contribute to our understanding of the long and diverse Amerindian occupation of Anguilla, especially for the period of most intensive and extensive occupation, the Late Ceramic Age, dated after A.D. 600 and before European explorers first arrived around A.D. 1500.

Both petroglyph sites help us understand the nature of late prehistoric occupation in Anguilla, when human populations seemingly grew rapidly and broad-scale trade and other connections linked Anguilla within local and broad regional contexts. During the Late Ceramic Age, Anguillian Amerindians certainly interacted with local islands in the Lesser Antilles and more distant ones in the Greater...
Antilles, based on ceramic, lithic, and shell artifacts. This inter-island and inter-regional linkage occurred within the framework of the enigmatic “Eastern Taino” people, following Rouse (1992:7, 17-19,123-127, Figure 3). This paper first briefly describes the Big Spring site and recent archaeological investigations there, and then compares it with Fountain Cavern, before finally comparing it with contemporaneous petroglyph sites elsewhere within the Caribbean.

The Big Spring Site
The Big Spring site is situated in the village of Island Harbour near the northern coast of Anguilla. Technically, it represents a partially “closed” site located within an ancient collapsed sinkhole. The roughly circular sinkhole is about 40 m in diameter and about 5 meters deep, from the top of the level bedrock that rings it to the surface of a large pool of water along its eastern edge. A subterranean cavern was apparently first created underground long ago by erosion of the carbonate bedrock. Subsequently, the “roof” mostly collapsed, leaving the sinkhole largely open to the weather and only partially covered in one area by a large bedrock overhang along some of its eastern and southern edges. One or more freshwater springs occurs beneath the bedrock overhang along the eastern edge of the sinkhole and the water seems shallow, generally only 30-50 cm deep at most, with slight seasonal variation and supposed tidal variation as well. Large blocks of collapsed rock fill much of the sinkhole, especially toward the northern and western edges, providing easy access across and between the surfaces of variably sloping rock surfaces. Amerindian use of the site apparently was focused on water acquisition and ceremonial usage in correlation with the rare freshwater. After the Amerindians disappeared, local residents of Afro-Caribbean and Euro-Caribbean descent also used the spring for 300 or more years throughout nearly the entire historic period. Indigenous Amerindian occupation of Big Spring was represented only during the Late Ceramic Age (A.D. 600-1500) based on available evidence, lasting until the Amerindians were made locally extinct in Anguilla and most other nearby islands. The local Amerindians disappeared from Anguilla at some point, either during very late prehistory due to regional conflict with other Amerindians, or during the early historic Contact period (ca. A.D. 1500-1650) due to European pressures caused by disease, enslavement, and warfare. The Amerindians were gone for whatever reason before Anguilla was re-colonized by Africans, Europeans and others starting around A.D.1650.

Given the extreme rarity of freshwater in Anguilla, Big Spring reportedly was a very important source of water until the very recent arrival of electricity and desalinization for water production. Big Spring certainly provided drinking water to local villagers in Island Harbour until the 1970s when it was no longer necessary as a freshwater source, but it was also long used for bathing, washing clothes, and cleaning food, among other uses, based on local oral history. Once Big Spring was abandoned as a source of freshwater, people began to dispose of trash in the sinkhole and it was left to grow up with scrub and trees, etc. There is no evidence to suggest that historic-period Anguillians recognized Big Spring as an Amerindian site during their 300-year (+) period of usage (ca. A.D. 1650-1970), but some of them may well have recognized the petroglyphs.

A general upsurge of interest in archaeology in Anguilla occurred during the 1980s due to the efforts of the AAHS, especially after recognition of Fountain Cavern as an Amerindian site. Mr. John Lloyd, an Island Harbour resident, is the first recorded person to have recognized the significance of the Big Spring site based on its petroglyphs in 1988. John Lloyd then informed Mr. Nik Douglas and other members of the AAHS about the Big Spring site. Douglas and the AAHS briefly studied it soon thereafter (Douglas 1988) and also made it known to various visiting French, Dutch, and American rock art scholars and archaeologists (Crock and Petersen 1999:117-119; Dubelaar 1995:440-441; Gilbert 1992).

As many as 28 individual petroglyph images were initially recognized by Douglas and Lloyd at Big Spring in 1988 and a larger number, perhaps a total of 60 or more, were recognized
by Alain Gilbert in 1992. A small number of Amerindian ceramic sherds (n=15) were collected by the AAHS from Big Spring prior to discovery of the petroglyphs there. The Big Spring archaeological site was assigned the site designation of AL28-BS in an island-wide inventory of prehistoric Amerindian sites in Anguilla during the 1990s (Crock and Petersen 1999).

Relatively little was done with the Big Spring site during the late 1980s and early 1990s, but the Government of Anguilla could protect it since it is a small parcel of “Crown Land” only 0.4 acres in size. In conjunction with the AAHS, the Anguilla National Trust (ANT) began to pursue development of Big Spring as a National Park during the mid-1990s. Several episodes of trash clean up were done by local residents under the sponsorship of the ANT and the site was enclosed within a protective fence to help prevent further trash disposal. A local community action group, the “Big Spring Action Committee” (BSAC), also arose within the surrounding village of Island Harbour and the BSAC has worked tirelessly in recent years with the ANT to develop the site for public visitation, Anguillians and tourists alike. The BSAC soon proposed to clear brush from the site and construct an elevated walkway and viewing platform, along with interpretive signs, to make the archaeological site available to the public and to protect it, as they ultimately achieved in 2003.

In 2000-2001, the ANT counseled the BSAC that Big Spring should be archaeologically tested in advance of ground disturbance that might result from development of the proposed visitor facilities. Two of the authors (Petersen and Crock) were contacted for help with this archaeological testing and assessment. This work was done in 2001 after it was agreed that time should be allocated to Big Spring as part of another biannual archaeology field school in Anguilla, each of which has been conducted by the Department of Anthropology at the University of Vermont.

In June 2001, 15 students under the direction of Petersen, Cox, and Lennox Proctor devoted about four-five days to fieldwork at Big Spring. The goals of this assessment of the Big Spring site included four aspects: 1) excavation of standard test pits, each 0.5 x 0.5 m, in selected areas where sediment might be expected and disturbance might result from the proposed facilities; 2) inventory and documentation of all petroglyphs to verify and update the past studies; 3) mapping of all salient features, including the numerous and dense rockfall, test pit locations, and all petroglyphs; and 4) examination of the area above and outside the sinkhole proper to determine if prehistoric artifacts were present beyond the sinkhole proper. Several days were spent during and after the field work water-screening all of the excavated sediments through 6.4 mm-mesh screen off site. After the fieldwork in 2001, Petersen and Cox spent several weeks of intermittent complete artifact inventory and preliminary analysis while in Anguilla.

**Test Pit Summary**

A total of ten 0.5 x 0.5 m test pits were excavated at Big Spring in 2001 in arbitrary 10-cm levels, demonstrating that the infilled sediments were relatively shallow in all cases. In fact, the test pits located away from the water often encountered sloping rockfall at very shallow depths, only 10-20 cm deep in most cases. These shallow test pits did not typically produce unequivocal prehistoric Amerindian remains, but they often yielded a wide range of historic items. In general, the deepest test pits were situated on a narrow, natural access path running between several large rock slabs close to the water in the center of the petroglyph zone. These test pits were excavated to a depth of 40-50 cm, or slightly deeper, and they produced historic artifacts of various sorts in the upper depths (glass, plastic, metal, ceramics, etc.) and a few prehistoric sherds. Copious broken up marine shell was found in some of the upper levels as well, while deeper, generally below 20 cm, a few test pits produced prehistoric pottery, mixed with broken shell and rare flaked stone and possible tools of coral. The stratigraphy demonstrated in these deeper test pits was not exceptional, but it quite clearly shows some temporal separation between prehistoric and historic remains, and some temporal sorting within the historic remains between early and later colonial times.
For example, early colonial-era ceramics were sometimes found deeper than the modern historic artifacts of various sorts. Over 4000 artifacts and possible artifacts were recovered in 2001, of which the majority of the unequivocal artifacts (n=2600) were historic and many of the possible artifacts (i.e. broken shell, n=1800) may have been historic or prehistoric. Many historic water-collecting artifacts, namely glass, ceramic, and metal container fragments, were represented, along with buttons and other evidence of washing clothes in the water. Fewer than 100 unequivocal prehistoric artifacts were recovered, among which Amerindian pottery clearly predominated, probably also for water collection. All of the Amerindian pottery is undecorated, but diagnostic thickened rim forms and other attributes suggest that all of it is attributable to the Late Ceramic Age, with minimal relationships to the Elsonian ceramic series and likely other Elsonian pottery as well (Rouse 1992:123-127). Notably, no Amerindian artifacts were found anywhere around the top of the sinkhole in 2001.

**Petroglyphs**

John Lloyd, Nik Douglas, and A lain Gilbert, among others, cumulatively identified over 60 petroglyphs at Big Spring. Yet, beyond the 28 or so first inventoried by Douglas, many petroglyphs are very subtle and difficult to isolate and interpret with any great degree of certainty (see Dubelaar 1995:440-446, Figures 629-639). Moreover, the petroglyphs had not been carefully mapped in the past and it was often unclear which of Gilbert's inventory was where. Our compilation of the petroglyph inventory in 2001 was thus quite difficult in that separation of human-made and naturally eroded forms was questionable (Figure 1). In the end, we produced an inventory of about 64-65 recognizable petroglyphs at Big Spring, with varying degrees of reliability.

Regardless of the exact number of petroglyphs, many of the known and suspected Big Spring petroglyphs are anthropomorphic representations of human heads, many of which resemble a few known from Fountain Cavern in Anguilla (Figure 2) (see Dubelaar 1995:Figures 617-619). The Big Spring unequivocal anthropomorphic petroglyphs, clearly in the large majority, demonstrate variable combinations of outline heads, eyes, mouths and noses, but noses were quite rare. These resemble what some have called "simple face" petroglyphs (e.g., Bullen 1974:97-99; Cinquino et al., this volume; Dubelaar 1995:28; Oliver 1998:126). This general form is widely distributed in northern South America, and the Lesser and Greater Antilles (e.g., Cinquino et al., this volume; Dubelaar 1995:Figures 200, 212-215, 517-524, 565-569, 596-598, etc.; Hatt 1941:191-192; Hayward et al., this volume; Morban Laucer 1994; W Illiams 1985:371-373, Figure 7.27).

Presumably a second form and perhaps anthropomorphic or zoomorphic, another distinctive set of petroglyphs at Big Spring (and Fountain Cavern) shows a set of outlined eyes, much like "owl eyes," or "spirit eyes," as they were labeled by Douglas, with or without a head-like outline. This second form at Big Spring has been elsewhere designated as one example of "elaborate face," or "complex facial design" petroglyphs. They are seemingly less common than the "simple face" examples regionally, at least within the Lesser Antilles (Cinquino et al., this volume; Dubelaar 1995:28, Figures 177-179, 216-217, 362-367, 566-569; Hatt 1941:Figures 2-4). Analogues to one or both of these two petroglyph categories have been sometimes labeled as "masks" or "dance mask" representations (W Illiams 1985:371, Figure 7.27).

In general, the different examples of "simple faces," including eyes, mouths, and head outlines, are about 10-30 cm in total diameter and virtually all of them are located on various protruding, vertically oriented sections of horizontally bedded bedrock at Big Spring, particularly toward the northern ("left") end. The possibly anthropomorphic "owl" or "spirit" eyes representations, in contrast, seem clustered farther back away from the outer edge of the bedrock and close to the water, especially toward the south ("right") end. Early all examples of both petroglyph categories "look straight" out at the viewer, generally from somewhere near the present distribution of the water. They are all more or less obvious and oriented to the pool of water in other words.
One large example, situated at about the northern end of the pool and the limit of the petroglyphs, is rather different; it is located on the top of a large fallen rock and thus looks “up,” or skyward at the viewer (Figure 4) (see Dubelaar 1995:Figures 629.2 and 638). Another smaller example found on a “loose” rock was apparently carried away by a local resident and thus its original orientation is unknown (Dubelaar 1995:Figures 629.1 and 639). Finally, a large, seemingly carved stalagmite-like example is situated beyond the southern end of the water and the other petroglyphs (Dubelaar 1995:Figure 629.28). It too is strangely placed in relative terms beneath a flat-lying slab rock and facing roughly toward the water, but it is not clearly discernable without getting into a cramped position under the overhanging bedrock to the southeast of it.

Local and Regional Correlations

The Big Spring site shares its petroglyph representations with Fountain Cavern in Anguilla. They also share single examples of carved stalagmites or boulders. However, the sculpted Fountain Cavern stalagmite is much larger, more “public,” and more dramatic, with a 3-D head representation in sculpture. In contrast, the Big Spring example is less fully sculpted and more like a conventional petroglyph that happens to have been emplaced on a naturally rounded, 3-D boulder in a decidedly non-public space. Perhaps the most notable correspondence between Big Spring and Fountain Cavern are the anthropomorphic “simple face” and encircled “owl” or “spirit” eyes that appear at both sites. Petroglyphs are obviously associated with important sources of freshwater at both of these Anguillian sites and broken prehistoric Amerindian pottery is related in both cases. In addition, both Big Spring and Fountain Cavern are situated near large Late Ceramic Age habitation sites, the Island Harbour and Shoal Bay East sites, respectively.

As interesting as the correspondences between Big Spring and Fountain Cavern may be, several significant differences can be recognized. First and foremost, the number of reliably identified petroglyphs at Big Spring far exceeds the number at Fountain Cavern by three or more times, making the Big Springs inventory quite outstanding locally and regionally. In fact, given the 64-65 petroglyphs now known at Big Spring, this inventory represents about 8% of the total known petroglyph inventory in the entire area of the Lesser Antilles (n=826) and only a few sites on a few islands have equivalent or larger known single-site inventories (Dubelaar 1995). Secondly, the uniformity of anthropomorphic and possibly anthropomorphic petroglyphs at Big Spring is rather different than the diversity of forms at Fountain Cavern, where more diverse sculptural and flat anthropomorphic, possible anthropomorphic and rectilinear forms co-occur in a much smaller overall inventory.

Thus, one is tempted to differentiate between these two Anguillian sites in terms of their function and/or significance, but we caution against doing so until we have more analogues and more evidence to factor into the analysis. In any case, both places were not mere water getting locations, but instead they were ceremonial sites that linked a critical resource on a relatively dry island, freshwater, with underworld spirits of different sorts, both familiar and unfamiliar. The importance of such settings can be established through the Taino accounts of Ramon Pane and others in the Greater Antilles (Hatt 1941:170-172,187; Oliver 1998). Perhaps the underworld spirits needed to be propitiated, encouraged to continue supplying life-maintaining water, and petroglyphs were carved (and perhaps re-carved in some cases) in this quest.

Looking more broadly, comparable subterranean and semi-subterranean sites are quite rare regionally, especially in the Lesser Antilles. Obviously, there are many other petroglyph sites known in the Lesser Antilles and nearby areas generally, but most of these are located in open, not closed settings, often near freshwater, as in Guadeloupe, St. Kitts, St Vincent, and St. John, for example (Dubelaar 1995:27). Of a total of 51 recorded petroglyph sites in the Lesser Antilles, only eight are situated in closed cave or rockshelter settings, including the two sites in Anguilla, Big Spring and Fountain
Many other regional petroglyph sites are situated near water sources, but few, if any, reportedly show relatively dense Amerindian pottery associations, as seen at Big Spring and especially Fountain Cavern, nor other artifact associations. Thus, these two Anguillian sites are distinctive in several ways among petroglyph sites in the Lesser Antilles. Their presence further demonstrates the distinctive and probably outstanding position of Anguilla within the northern Lesser Antilles during the Late Ceramic Age, as seen in evidence of regional trade in “greenstone” celts, zemis, and ceramics, for example (Crock 2000, this volume; Crock and Petersen 2003; Petersen and Watters 1991).

In fact, one needs to look far afield to find generally similar analogues for Big Spring and Fountain Cavern, specifically to the Greater Antilles. Puerto Rico has subterranean and semi-subterranean sites somewhat analogous to Big Spring, and other notable Antillean sites similar to Big Spring and even Fountain Cavern occur on the large islands of Hispaniola and Cuba (e.g., Morban Laucer 1994; Oliver, personal communication 2001; Veloz Maggiolo 1972:153,163; Watters 1991:308-312). Space does not allow a full review of these correlates here, but suffice it to say that the available correlations in the Lesser Antilles and the Greater Antilles suggest that the Anguillian sites are not rare as petroglyph sites per se. However, semi-subterranean and subterranean petroglyph sites are rare in the Lesser Antilles and just a bit more common in the Greater Antilles. Eroded carbonate caves occur more commonly in the Greater Antilles and a diverse range of activities and ideologies were apparently represented among these different contexts during pre-Columbian times.

It might be tempting to say that this association of petroglyphs (along with painted images, or “pictographs” elsewhere) and subterranean settings was simply based on the availability of suitable caves and cave-like settings on islands with carbonate bedrock, giving them a reasonable likelihood of preservation. However, this seems very unlikely to completely account for petroglyphs (and pictographs) in subterranean settings in the Antilles, knowing how caves figured into Amerindian ceremonial lifeways during late prehistory across much of the region, especially among the Taino. Instead, we suggest that the Anguillian cave and rockshelter sites with petroglyphs represent one more linkage demonstrating the relationship of Anguilla and the northern Lesser Antilles in general to the Greater Antilles during the Late Ceramic Age. We also suggest that this linkage even included Taino affiliation of some sort for the prehistoric Anguillians, as we have tentatively suggested previously. This matter bears further investigation in the future, like so many other issues in regional prehistory.

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Figure 1. Examination of petroglyphs on bedrock at the Big Spring site in 2001, facing north.

Figure 2. “Simple face” petroglyphs (to left and right of scale) at the Big Spring site.
Figure 3. "Elaborate face" petroglyph (to left of scale) at the Big Spring site.

Figure 4. Anthropomorphic "simple face" petroglyph (toward right) on fallen rock at the Big Spring site.