REPORTS

# The Soldier Ghaut Petroglyphs on Montserrat, Lesser Antilles

John F. Cherry, Krysta Ryzewski, Susana Guimarães, Christian Stouvenot, and Sarita Francis

*Only five years ago, Montserrat was a blank spot on the distribution map of islands in the Lesser Antilles where petroglyphs were known. In January 2016, hikers in Soldier Ghaut, a deeply incised watercourse in the northwest of the island, came upon a panel of nine petroglyphs engraved on a nearly vertical wall of volcanoclastic tuff. Soon afterward the petroglyphs were documented by the Survey and Landscape Archaeology on Montserrat project (SLAM). Then in January 2018 an additional petroglyph was spotted on a large slab of rock, detached from the rock wall on the opposite side of the ghaut. At the invitation of the Montserrat National Trust (MNT) and with European Union funding, Susana Guimarães and Christian Stouvenot traveled to Montserrat in 2018 to assist in further studies at the site. They conducted photogrammetric documentation and photography under enhanced lighting conditions and inspected the petroglyphs and their context in detail in order to advise MNT about their conservation and provisions for public access. This report presents this new group of petroglyphs and their landscape setting and considers questions of dating and interpretation.*

**Keywords:** Caribbean, Montserrat, prehispanic, petroglyphs

*Hace tan solo cinco años, Montserrat era un vacío en el mapa de distribución de petroglifos en las islas de las Antillas Menores. En enero del 2016 unos senderistas se toparon con nueve petroglifos tallados en una pared de toba volcánica casi vertical y llana en Soldier Ghaut, una rivera angosta y profunda en el noroeste de la isla. Luego, el proyecto Survey and Landscape Archaeology on Montserrat (SLAM) los documentó. En enero del 2018, otro petroglifo más fue divisado en una roca que se había desprendido de la pared de toba en el lado opuesto del ghaut. Invitados por el Montserrat National Trust (MNT) y con fondos de la Unión Europea, Susana Guimarães y Christian Stouvenot viajaron de Guadalupe a Montserrat en junio del 2018 para realizar más estudios del sitio. Con la asistencia de SLAM, llevamos a cabo documentación fotogramétrica y tomamos fotografías con iluminación artificial; también inspeccionamos los petroglifos y su contexto en detalle con el fin de aconsejar al MNT sobre su conservación y sobre posible planes para ofrecer acceso al público. Aquí presentamos este nuevo grupo de petroglifos en su contexto y paisaje y consideramos cuestiones de datación e interpretación.*

**Palabras clave:** Caribe, Montserrat, prehispánico, petroglifos

In 2016, hikers in the northwest of Montserrat in the Lesser Antilles discovered the first known examples of petroglyphs on the island, in a narrow and deeply incised watercourse named Soldier Ghaut (*ghaut* is the local word for a seasonal streambed; Figure 1). At the invitation of the Montserrat National Trust (MNT), members of the Survey and Landscape Archaeology on Montserrat (SLAM) project documented the petroglyphs with photographs and measured drawings. The press release put out at the time excited considerable interest not

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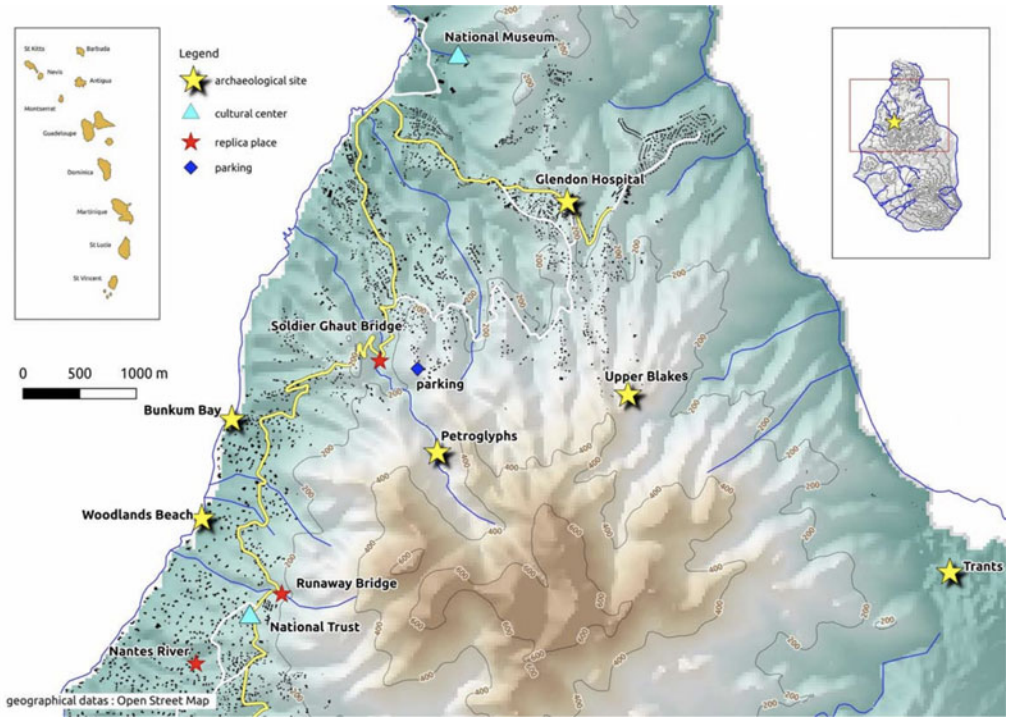


**Figure 1. Map of northern Montserrat showing the location of the Soldier Ghaut petroglyphs in relation to other nearby prehistoric sites. (Color online)**

only in Montserratian and other Caribbean news outlets but also internationally; for example, with a story that appeared in the *Guardian* newspaper (Schuessler 2016).

Although the site is difficult to reach, it quickly attracted increasing numbers of visitors, one of whom in 2018 reported an additional large petroglyph on a massive slab of stone that had become detached by heavy rains from the rock wall on the opposite side of the ghaut. Later that year, the MNT received a European Union (EU) grant to study the site, with a view to its protection and conservation, the development of an access trail, and public-facing education and outreach. Two Guadeloupe-based archaeologists with expertise in Caribbean rock art (Susana Guimarães and Christian Stouvenot) thus visited Montserrat in June 2018, collaborating with members of SLAM and the MNT (Stouvenot and Guimarães 2018).

This article presents the petroglyphs and their landscape setting, before turning to interpretive issues and the challenges posed by conservation, protection, and public access.

## Wider Context and Landscape Setting

The new petroglyphs on Montserrat are a valuable addition to the corpus of Caribbean rock art. Although the distribution of petroglyph sites in the Lesser Antilles remains patchy and imperfectly known (Table 1), studies by Dubelaar (1995), Jönsson Marquet (2002), and Hayward and colleagues (2009, 2015) allow some broad generalizations. Fourteen of the 25 main islands have known petroglyph sites, but many still do not; surprisingly, those without known sites include islands such as Antigua that have both an extensive history of archaeological exploration and a long record of human habitation. In general, larger islands are more likely to have petroglyphs than smaller ones, but the numbers vary greatly. On Guadeloupe, for example, 26 sites with a total of 1,200 individual petroglyph images have been recorded compared to Martinique with only 3 sites with 35 images.

By far the most common locations for petroglyph sites are near the coast or along watercourses, with inland rock formations and caves

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Table 1. Lesser Antillean Islands with and without Rock Art.

| Islands with Rock Art | Islands without Rock Art | Size (km$^2$) |
|---|---|---|
| Trinidad | | 4,828 |
| Guadeloupe | | 1,702 |
| Martinique | | 997 |
| Dominica | | 787 |
| St. Lucia | | 615 |
| Barbados | | 440 |
| Grenada | | 345 |
| St. Vincent | | 344 |
| | Tobago | 302 |
| | Antigua | 280 |
| St. Kitts | | 168 |
| Barbuda | | 160 |
| Marie Galante | | 152 |
| **Montserrat** | | **102** |
| | Nevis | 93 |
| St. Martin | | 87 |
| Anguilla | | 55 |
| Grenadines | | 45 |
| | Anegada | 34 |
| | Cariacou | 34 |
| | St. Barthélemy | 25 |
| | St. Eustatius | 21 |
| | Bequia | 18 |
| | Saba | 10 |
| | Union Island | 9 |

*Source:* Dubelaar 1995:23, Table 1, with corrections and updates.

each accounting for only 14%. It is hard to know whether this siting reflects actual Indigenous preferences or is a consequence of patterns of archaeological exploration; few of the Lesser Antillean islands have been systematically examined, and many surveys have focused on coastal regions. These sites are frequently covered with very dense vegetation, which makes them inobtrusive and hard to detect. Montserrat provides a case in point. Beginning in 2010, SLAM conducted a thorough survey throughout the entire north of the island without encountering any petroglyphs (Cherry and Ryzewski 2020); the Soldier Ghaut petroglyphs were found entirely by chance.

The site's setting is unusual for rock art locations in the Lesser Antilles. It lies at an elevation of 270 m asl in a deep ravine, about 2 km from its mouth. At the site location, Soldier Ghaut is a canyon about 15 m high and 8–10 m wide formed by two almost vertical cliffs, covered with vegetation. The natural rock is made up of volcanoclastic deposits with occasional areas of fairly soft, consolidated ash with relatively smooth surfaces; it is on one of these surfaces that the petroglyphs have been engraved by either scraping or pecking with a hard object (Figure 2). Some of them are positioned fairly high up on the wall and today are out of reach, but this may be a function of erosion of the ground surface since Amerindian times.

## The Soldier Ghaut Petroglyphs

There are nine separate elements on the right bank, within an area measuring 220 cm horizontally and 324 cm vertically. Their size is somewhat larger than the norm in Caribbean rock art, with the tallest of the complex anthropomorphs reaching 93 cm. The only engraving found on the left bank of the ghaut is a very large face outlined by an incised square, 50 × 50 cm (Figure 3). Within it are two eye lines with lateral lobes and a straight mouth surmounted by a triangular shape that might suggest a nasal appendage rather than a nose proper. The face itself is common enough, but its square outline much less so: among the few parallels are Yambou 5 on St. Vincent and the tiny figure at the Morne Rita Cave, Marie-Galante, although both are much smaller (Dubelaar 1995; Kirby 1970:125).

The main body of petroglyphs, on the opposite right bank, is divided into two groups by a roughly horizontal incised line (I), 80 cm long. Three of the representations (A, B, and D) are simple faces of the kind that abound in Caribbean rock art: they comprise three cupules indicating the eyes and mouth, in one case with an enclosing circle to frame the face (Figure 4). A triangular depression (C) might be part of another such face and perhaps is unfinished.

The remaining figures are more elaborate. Element F (Figure 5, right), situated highest on the wall and almost 70 cm tall, may best be read as a representation of a figure in a batrachian squatting position, with body, arms, legs, and a round head with ears or other appendages; the style is filiform (i.e., lines symbolize the members). This type is relatively common in Caribbean rock art, the most famous example being the squatting frog-woman, often identified as

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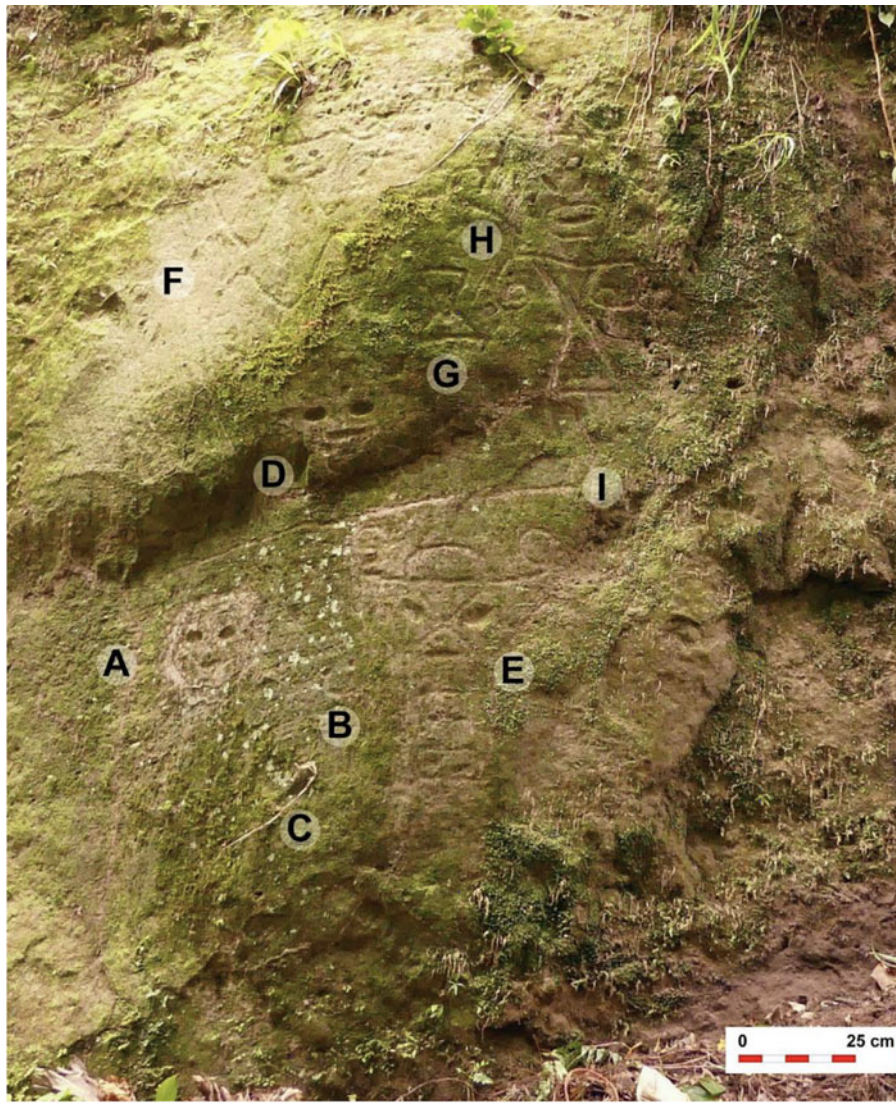


**Figure 2. The main panel of petroglyphs covering the rock face on the right bank of Soldier Ghaut. (Color online)**

Aterbey, the Taíno deity of fecundity, at the ceremonial center at Caguana in Puerto Rico (Oliver 1998); other filiform, squatting representations have been reported in the Dominican Republic, St. Kitts, and Guadeloupe, as well as in rock art in French Guyana and Suriname (Dubelaar 1995; Hayward et al. 2009:142; Mazière and Mazière 1994:340).

The anthropomorph of Figure H has two oblique eyes set in a V-shape, large ears, and a big mouth enclosed within an oval (Figure 5, left). The hourglass body is made up of two opposing triangles joined at their tips, with spiraliform appendages, possibly filiform arms. This "body," however, is not actually joined to the head, and it is also similar to the two smaller triangles (perhaps representing *cemi*, symbolic three-pointed sculptural objects that housed an ancestral spirit or deity) of petroglyph G, immediately to its left—so these triangles might be separate geometric elements of high symbolic significance. This hourglass motif seems comparable to so-called wrapped figures known from other islands.

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**Figure 3. Petroglyph J ("squarehead") on the left bank of Soldier Ghaut. (Color online)**

Roe (1991:335–336) interprets them as ancestors wrapped in their hammocks for burial, the hachure on their bodies representing the strings in the hammock's weave.

This interpretation may also apply to the final anthropomorph, Figure E (Figure 5, center), which has the characteristics of a wrapped body (several horizontal lines across the torso), plus a covered head from which extend two curly lines and laterally placed large eye lobes. This figuration has close parallels in examples at sites in the Parc Archéologique des Roches Gravées at Trois-Rivières in Guadeloupe, on St. Vincent, and elsewhere (Dubelaar 1995; Huckerby 1914; Jönsson Marquet 2002).

## Interpretive Issues

Petroglyphs are difficult to date. Artifacts collected in the immediate vicinity may have nothing to do with the making of the engravings; no chronological or geographical serializations based on style have yet been shown to have any solid evidential basis; and if rock art locations were sites of repeated ritual performance, it is possible that different elements were added at different times. Although precise

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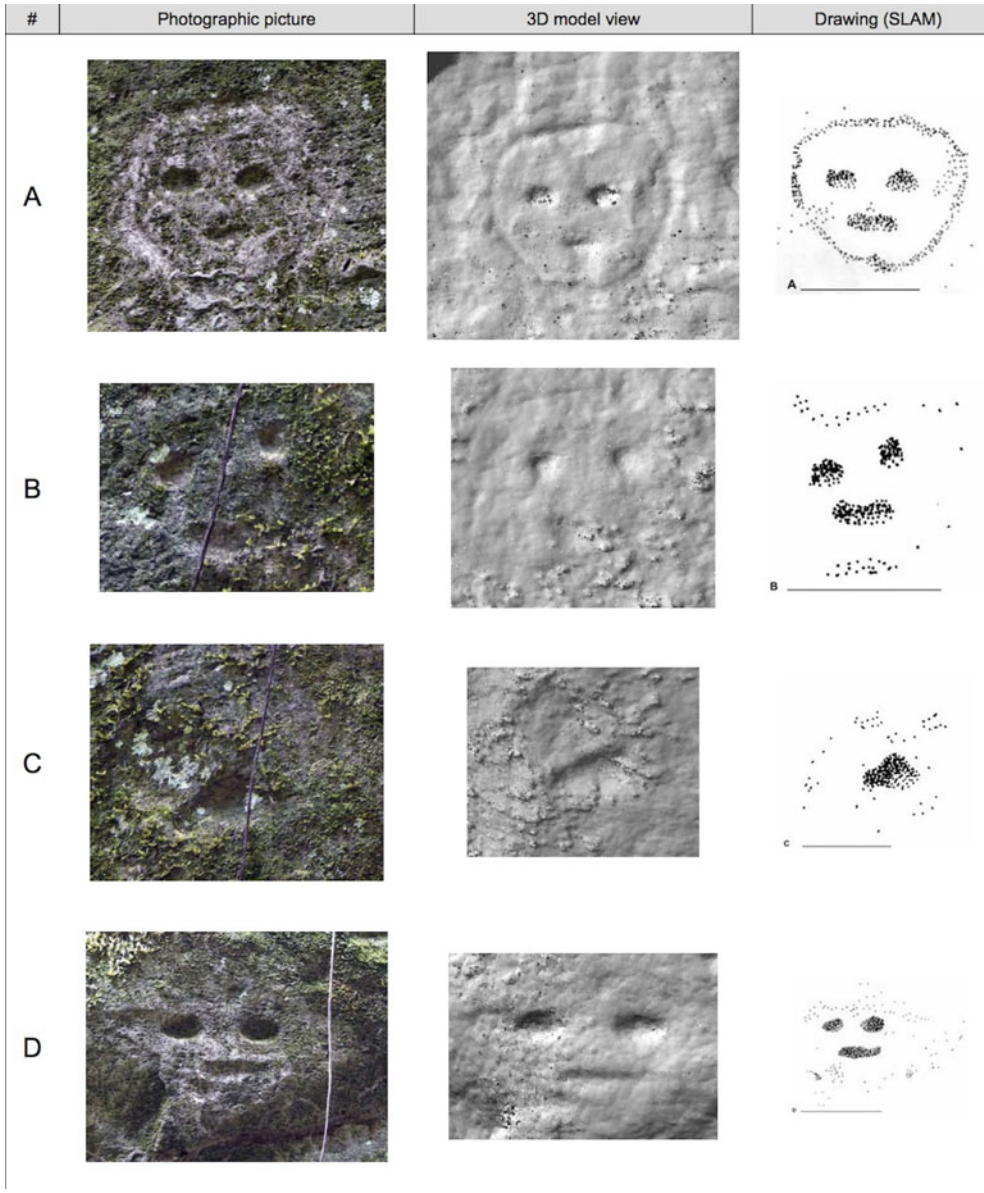


**Figure 4. Petroglyph elements: (A–D) faces on the right bank of Soldier Ghaut (photographs and photogrammetry by Christian Stouvenot, drawings by Samantha Ellens). (Color online)**

dating is not possible, we argue that the Soldier Ghaut petroglyphs belong to the Late Ceramic Age, perhaps even late in that period (Figure 6). Even though Montserrat has one of the earliest radiocarbon-dated sites in the Lesser Antilles at Upper Blakes (Cherry and Ryzewski 2019), there is no evidence of a resident Archaic population on the island that might have created the petroglyphs. There are now a number of radiocarbon-dated Ceramic Age sites spanning the period from the occupation of Trants in the mid-first millennium BC to the settlement at Indian Creek in the thirteenth to fourteenth centuries AD (Cherry and Ryzewski 2020:33–58). Yet as Roe and colleagues (2018:197–198) have shown, there is an apparent hiatus in rock art with the arrival of horticultural Saladoid groups into the Lesser

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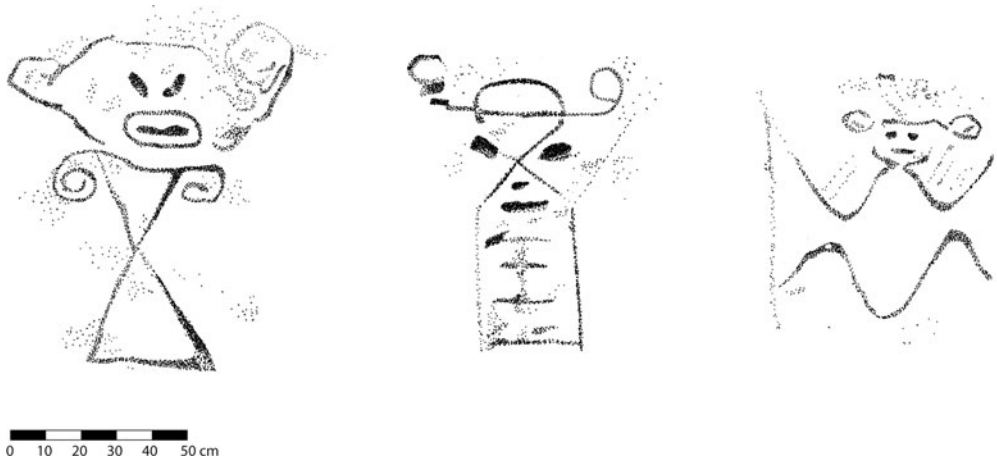


**Figure 5. Petroglyph elements H (left), E (center), and F (right) on the right bank of Soldier Ghaut (drawings by Samantha Ellens).**

Antilles during the Early Ceramic Age. On Montserrat, Late Ceramic sites are the most abundant (Figure 6) and their inhabitants therefore perhaps the most likely to have created the rock art. If the parallel between Soldier Ghaut petroglyph F and the squatting frog-woman of Caguana is valid, it would imply a late date, because construction at Caguana began only after AD 1200. Finally, the rock on which the petroglyphs are incised is very friable, and it does not seem likely that these representations would have survived intact for several millennia.

The images at Soldier Ghaut are undeniably part of the Indigenous iconographic repertoire of the Caribbean. Some of their elements, as noted, do have parallels at other sites in the Lesser Antilles—for example, faces with square surrounds, squatting figures, three-pointers, or wrapped ancestors—whereas others, such as plain dot-faces, are simply generic. It is difficult to provide a close reading of this small group of petroglyphs in symbolic, mythological, and functional terms by relying on analogies in narratives reported by the early chroniclers or on modern ethnographies of South American horticulturalists (see Dubelaar [1993] for the problems these pose). Nonetheless, given the role of these petrographic elements in the larger interpretive scheme elaborated by Roe and colleagues (2018), as well as their proximity to a watercourse, it seems possible that they relate to the desire for reliable rainfall and crop fertility.

## Conclusion

Currently, the main challenges regarding the petroglyphs are their conservation and protection. Rather surprisingly, considering the indifference to archaeological discoveries among much of Montserrat's local population, these petroglyphs at Soldier Ghaut have excited both the public imagination and the Montserrat Tourist Board and Montserrat National Trust. Viewing the petroglyphs has already become established as one of the must-do activities for visitors to the island, as advertised in tourist brochures.

This newfound interest is gratifying but poses its own problems. Stepped-up visitation may lead to damaging interventions such as "highlighting" (i.e., increasing the visibility of the engravings). Indeed, a visit to the petroglyphs in April 2019 revealed that they are becoming overgrown with moss, which some visitors have been scraping off with their fingertips or other tools. The site's remote location poses a dilemma about how to manage and preserve the petroglyphs for the public.

The EU-funded evaluation of the Soldier Ghaut petroglyphs proposed that replicas of the petroglyphs using photogrammetry or terrestrial lidar and 3D printing be made and installed

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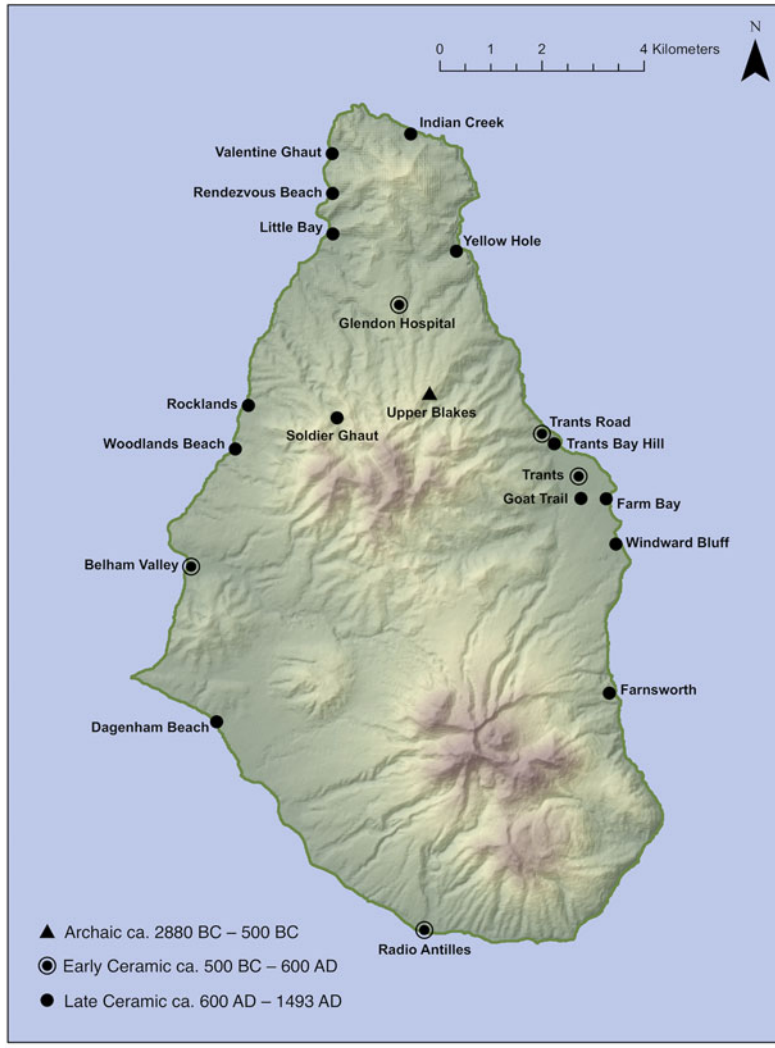


**Figure 6. Map of Montserrat showing sites dating from the Archaic, Early Ceramic, and Late Ceramic (map by Miriam Rothenberg). (Color online)**

both at the Montserrat National Museum and along a more accessible nature trail, to be accompanied by educational information boards (see Figure 1). Additional suggestions for raising awareness about the significance and fragility of the petroglyphs include cordoning off the cliff face in Soldier Ghaut and installing signage. These heritage management strategies are still at the proposal stage.

For now, it is to be welcomed that Montserrat can be added to the list of islands with rock art, that these representations—difficult though they are either to date or interpret—have captured the public's imagination, and that plans are underway for their longer-term preservation, access, and interpretation.

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*Data Availability Statement.* The Soldier Ghaut petroglyphs are currently accessible to visitors. Drawings, photographs, and the report by Stouvenot and Guimarães (2018) are available at the Montserrat National Trust.

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