

# Jamaican Archaeology and High-Tech Human Stories

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ZACHARY J.M. BEIER

LIKE OTHER DISCIPLINES IN THE HUMANITIES, ARCHAEOLOGY is dedicated to uncovering human stories. Archaeologists study the things made and left behind by past peoples. We have come a long way from using simply a shovel and sieve to expose our human past. Today, the availability of innovative technologies for high-tech archaeological analyses produces high-resolution human stories that allows us to engage with a more dynamic and lifelike past. Examples of this technology include x-ray guns that identify an artefact's chemical composition, as well as ground penetrating radar that detects buried sites and ancient DNA from humans that says more about origin and biological makeup than ever before. The application of technology in Jamaican archaeology is particularly significant because of the potential to enhance our understandings about populations that have been “silenced” in popular histories through European colonialism. Archaeological research allows the silenced peoples of the island, such as indigenous Taíno and displaced and enslaved African groups, to “speak” to us today.

## Archaeology and Tech at the UWI Mona

The Department of History and Archaeology at The University of the West Indies (UWI) Mona is currently involved in two major research projects that bring together state-of-the-art methods in the investigation of these significant but “silenced” Jamaican people. Archaeology at the White Marl Taíno

settlement and at sites from former sugar plantations on the UWI Mona campus brings to light Jamaica's dynamic human past and provides university students with meaningful professional practice and experience in this tech-forward field. Both projects are on sites that are not only significant to global human history but also to the progress of Jamaican society through infrastructure development. As a result, these investigations have relied on local/international and public/private partnerships, which, along with technology, bring archaeology into HD-quality focus in the twenty-first century. These projects have involved key contributions from Mr. Dorrick Gray and the Jamaica National Heritage Trust (JNHT), Dr. Hayley Mickleburgh and Leiden University (Netherlands), Dr. Angus Mol and the VALUE Foundation, and Dr. Jillian Galle and the Digital Archaeological Archive of Comparative Slavery (DAACS) at Monticello (Virginia, USA).

## White Marl and Indigenous Jamaica

White Marl is one of the most important archaeological sites on the island of Jamaica. The size and rich archaeological record of this settlement is a testament to the lifeways and deathways of some of the first Jamaicans – going back over 1,000 years. Unfortunately, its present-day location along the busy and expanding Nelson Mandela highway threatens the existence of this significant cultural resource. Ongoing archaeological investigations by the Jamaica National Heritage Trust, the UWI Mona, and Leiden University seek to preserve and interpret this site for the benefit of Jamaica and world history. This study utilises advanced technologies, including site mapping of this extensive settlement with surveying equipment, satellite imagery, and Geographic Information Systems (GIS). We have paired these tech methods with scientific dating and 3D and geochemical analysis of the White Marl landscape, human burials, and artefacts.

Our work has already offered fresh insights. For instance, bone samples recovered from intact human burials identified during excavations have provided radiocarbon dates ranging between AD 1220 and AD 1654, which overlap with the Spanish occupation of Jamaica – when Amerindians were forced to work as labourers in Villa de la Vega (Spanish Town). This timeline

suggests Taíno continuity rather than immediate and total extinction. Additionally, specialists from Leiden University analysed teeth sampled from these burials. Different levels of carbon and nitrogen from these samples suggest the Taíno population of White Marl included “locals” to this area and “foreigners” from other parts of Jamaica or wider region based on the contribution of marine foods to individual diet. Furthermore, starches identified on teeth indicate that White Marl people were consuming maize (corn), wild beans, and cocoa – giving us added insight into their diets and daily life as well as potent links with other regions in the Americas. Continued archaeology at White Marl will provide even more detailed information on Jamaica’s first peoples, but these early results are very interesting indeed, as they are the first of their kind for Jamaica.

## The Mona Campus and Colonial Jamaica

Like White Marl, archaeology on the UWI Mona campus has relied on various types of technology to provide voices to those who, in the past, have often been silenced. Our investigations have focused on identifying and presenting to the public evidence associated with the everyday lives of individuals and communities impacted by the realities of African slavery. The UWI Mona campus includes above-ground and below-ground evidence associated with two eighteenth century sugar plantations: the Mona and Papine estates. In the past decade, historical and archaeological investigations carried out by the Department of History and Archaeology in collaboration with DAACS at better clarified the location of these campus resources and aided in their interpretation.

This work has used standard technologies in archaeology like, for example, site mapping methods along with systematic excavation. In the last two years, the UWI Mona Archaeological Field School has focused on the Mona works yards, which includes residences for the bookkeeper and overseer. The recovered artefacts suggest an area of high activity for both work and other types of social life including foodways, personal adornment, and recreation. In conjunction with DAACS, a growing catalogue of plantation-period material culture from the UWI Mona campus is being incorporated into an online database. This

digital archive features an abundance of information concerning sites impacted by African slavery in North America and the Caribbean (see [www.daacs.org](http://www.daacs.org)). This application of computer science to the humanities – Digital Humanities – encourages comparative archaeological research on slavery that is global in scale and uses innovative technologies to expand access and sharpen the images, resulting in a captivating means of presenting ‘big data’ to the public.

## High-tech Archaeology and Jamaican Stories

The human stories in Jamaica’s prehistory and history rely on the use of technology to bridge the temporal and cultural distance between the vastly different societies of today and those from over 1,000 years ago. Technology solutions make up for the absence of written records and revise misrepresentations resulting from unequal voices in the colonial past. Archaeology is particularly relevant in the twenty-first century as development practices in some areas of the globe threaten to further silence important segments of our human past. The Department of History and Archaeology at the UWI Mona is poised to carry out this work as well as train the future Jamaican archaeologists, heritage specialists, and historians in the craft of producing high-tech human stories.