Beyond *Time Team:*Archaeological Investigations at Coconut Walk, Nevis, West Indies, 1st July–4th August 2010

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Introduction

In July and August 2010 Kaye, Fitzpatrick and Kappers directed a team comprising four staff members from England, The Netherlands and the U.S. together with 22 students from various American universities to conduct archaeological investigations at the coastal site of Coconut Walk in Nevis, West Indies. Our goal this year was to expand on the 1998 excavations conducted by UK television's *Time Team* (in conjunction with Southampton University) and, if time allowed, begin exploratory work at the more southerly site of Indian Castle. As with our work in previous years in Carriacou (summaries in Fitzpatrick *et al.* 2009; Kaye *et al.* 2009), our objectives this season were to conduct a detailed investigation of a Pre-Columbian site, train students in fieldwork exercises, raise public awareness and appreciation of archaeology by encouraging site visits and, working closely with the Nevis Historical and Conservation Society (NHCS), to organise an exhibition of small finds for a public open day, and to conduct a series of television, radio, and newspaper interviews. Here we present the brief results of the 2010 project and outline future goals for our work on Nevis.

Research Background

Nevis is part of an arc of volcanic islands on the edge of the Atlantic and Caribbean tectonic plates. The island was known as *Oualie* ('land of beautiful water') to its original inhabitants but was later renamed by the Spanish as *Nuestra Señora de las Nieves*, meaning 'Our Lady of the Snows,' presumably in reference to the large white clouds which cover the dormant volcano Nevis Peak that rises to a height of 985 m. Nevis (area c. 93 km2) is the smaller partner of the two island St Kitts and Nevis Federation, which lies in the northern part of the Leeward Islands in the Eastern Caribbean (figure 1).

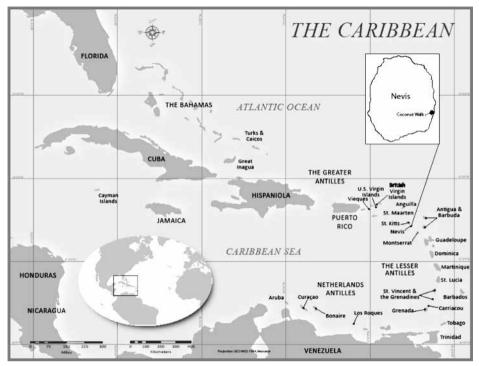


Figure 1. Map of the Caribbean with inset of Nevis showing location of the Coconut Walk site.

As little investigation into the Amerindian presence in Nevis had been carried out since the 1980s when 21 sites from three major periods were located as part of Wilson's (1989: 427-450; 2006: 62-63) comprehensive surveys, apart from work at Hichman's by the University of Southampton (Strutt 2003), it was an opportune time to begin a new campaign to document the later part of the island's prehistory c. post-AD 600. The *Time Team*'s 1998 examination of Coconut Walk had produced some interesting results for example (Bellamy, 2001; Nokkert 2001), but it was clear that this and other sites such as Indian Castle still had much more to offer.

Archaeological Investigations

Using an infrared theodolite, we created an arbitrary grid system across the site. Three 5×5 m trenches were opened, the two more northerly of which extended eastwards from the *Time Team* excavation of 1998 (figure 2). We have not yet been able to localise other, much smaller, trenches which the *Time Team* investigated.

Trenches 3073 and 2973 were opened using mattocks and trowels and revealed a shallow (c. 30 cm) humic layer overlying mostly sterile, sandy subsoil. After the removal of the topsoil by hand it was decided to employ a mechanical backhoe to remove the remnants of the humic layer to reveal the lighter coloured subsoil, in order to find possible features and the boundaries of the old 1998 *Time Team* trench.

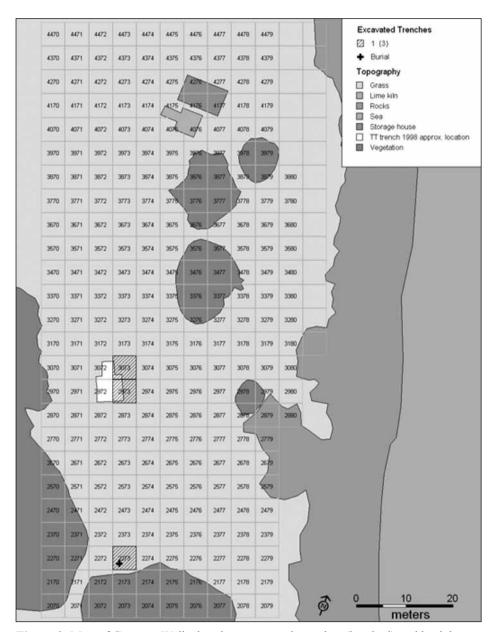


Figure 2. Map of Coconut Walk showing excavated trenches (hatched) and burial.

A series of dark, generally circular features interpreted as the post holes of Amerindian settlement structures were revealed in these two shallow and more northerly trenches. The *Time Team*'s measurements were revealed to be slightly incorrect, making it difficult initially to exactly locate their trenches. However some of their (partially) excavated posthole features were located within trench 2973 to allow detailed geospatial

referencing. There was also a clear and straight division visible between the top soil and the subsoil along the length of the *Time Team* trench excavated in 1998. Beyond these points the division between the two layers was much more natural and mottled.

Investigations in the southern 5×5 m trench (no. 2273) focused on an extensive midden deposit. Our methodology here was to delineate 1 m² units, each of which was labelled with a unique computer-generated barcode number. After clearing the surface by hand, an initial 5 cm layer of topsoil was removed and excavation proceeded in 10 cm levels using hand trowels. The fill from four 1 m² units (numbers 7, 9, 17 and 19) was carried in buckets down to the sea to be wet sieved through 6 mm mesh and to enable further zooarchaeological and palaeobotanical analysis. A 0.50×0.50 m column sample from each of these four 1 m² units was further sieved through 1.6 mm mesh to recover even smaller site constituents. Material from the excavation was then taken to the laboratory we had established in the grounds of the students' accommodation, where it was washed, dried, categorised, weighed and entered into the data system devised by Kappers using Archeo*LINK* from QLC (www.archeolink.eu). Small or 'special' finds were separately catalogued and bagged, to be drawn and photographed later.

We also conducted surveys of the site using gradiometry and ground penetrating radar (GPR). To date, there have been few geophysical surveys on Pre-Columbian Caribbean sites, with most investigations focused on the historic period (Gilmore 2008; Klingelhofer 2008). Given the rarity of published geophysical surveys in the region, our use of these techniques on Nevis was, in part, a pilot project to determine whether these could prove useful for identifying subsurface features, concentrations of archaeological material, and soil matrices which could then be compared with findings from Hichman's (Strutt 2003), located just south of Coconut Walk.

For the magnetic survey we used a Geoscan Research FM36 which measures the 'localized changes in the earth's magnetic field and is a near surface passive geophysical technique' (Kvamme 2006: 206). For the GPR survey, we used a GSSI Survey Systems Inc. SIR 3000 with a 400 MHz antenna. This active geophysical technique propagates radar pulses which then travel through the ground and are reflected back when they encounter physical changes in the earth's subsurface. Based on the travel time of the waves information is provided on both the vertical and horizontal distribution of near surface deposits (see Conyers 2004 and 2006). Given time constraints and vegetation, we surveyed an estimated 68% of Coconut Walk based on the current known distribution of Pre-Columbian materials, one 20×20 m block with the FM36 and an irregularly shaped survey area that encompassed c. 1716 m² with the GPR.

Unfortunately, lack of time and an extended period of inclement weather prevented us from carrying out test pit examination at the site of Indian Castle. However, we were able to collect GPR data for two 20×30 m survey blocks in the area, but due to operator error the data are not compatible in the GPR SLICE format. The survey transects were spaced 50 cm apart. We used ArcheoSurveyor to process the gradiometry survey data

and GPR SLICE for the GPR data. As it is often difficult to interpret magnetic results without covering large areas (Kvamme 2006: 205), we rely on GPR as our primary source of data at this point and therefore only present this data here. The GPR data is presented as a series of plan view slice maps showing how anomalies vary according to depth. Following convention the authors chose the GPR slice that best represents the phenomena under discussion (Thompson and Pluckhahn 2010: 39). While depth ranges are provided for each slice map, we caution that this may not reflect the exact depth as these values are based on the estimated dielectric of the soils at the site.

Results

This season's project at Coconut Walk produced some interesting and unexpected results (table 1). Excavation proceeded to a depth of 40 cm from which large amounts of pottery, modelled clay *adornos* (small figures which would have been attached to the rims of vessels), four polishing stones (thought to be used in smoothing pots before firing), shell and stone tools (including three of polished greenstone), two polished stingray spines (possibly piercers or awls), 15 assorted shell and stone beads (figure 3) with three blank, unpierced forms, two spindle whorls, four body stamps, numerous chert flakes, and subsistence remains in the form of molluscs, fish, turtle and small mammal bones. Parts of a single human burial were also uncovered, including a section of the maxilla complete with three molars. Preliminary study of the teeth suggests the individual was in the mid-teens at death.

Category	Weight (g)
Animal Bone	6,499.20
Human Bone	606.60
Ceramics	431,259.80
Charcoal	155.43
Chert	1,237.60
Crustaceans	3.00
Glass	75.20
Plastic	8.00
Sample Animal Bone	26,554.00
Sample Ceramics	1,953.40
Shell	179,731.60
Stone	805.40
Tooth Human	13.00
Unknown	17.40
Total	648,919.63

Table 1. Summary of material excavated at Coconut Walk, 2010.

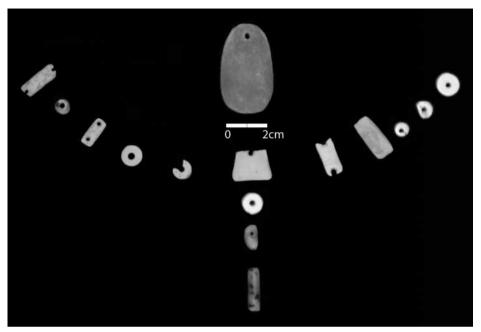


Figure 3. Shell beads as displayed in the Alexander Hamilton Museum. Photograph by Quetta Kaye.

Among the unusual decorative material was a small polished shell plate (no. 122), interpreted as being a decorative teeth plate or insert, formerly fixed into the mouth of a sculpted figurine. Two pieces of a near-triangular body stamp incised with triangles were recovered from different levels in two separate units within 2273 (figure 4). This triangular body stamp (combined nos. 154 and 221) very closely echoes a similar triangular body stamp also carrying a series of deeply incised triangles which was recovered at Grand Bay, Carriacou (Kaye *et al.* 2004: 85, f. 2; Kaye *et al.* 2005:111). The cross-media representation of triangles is found on pre-Columbian artefacts throughout the Antilles and is interpreted as being of ritual significance relating to the spiritual beliefs of the islanders. Incised triangles can also be seen on a shell bead (no. 128, see figure. 5).

Preliminary study of 11,633 sherds (approximately 25% of pottery excavated) by Mary Hill Harris of Cambridge University's Archaeology and Anthropology Museum, suggests that they show characteristic broad regional similarities and a post-AD 700 date for occupation at Coconut Walk, in accordance with Wilson's (2006) observations.

The presence of a significant number of chert flakes suggests trade and cultural contact with Antigua, some 68 km distant (Wilson 2006: 15), or possibly other nearby islands. Most of the faunal remains along with the chert, charcoal, and selected pottery samples were shipped to the US for analysis by students at North Carolina State University's archaeology laboratory, with results expected in 2012.

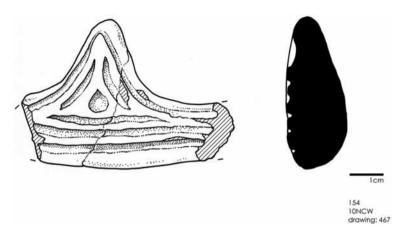


Figure 4. Incised ceramic stamp (combined Nos. 154 and 221). Drawn by John Swogger.

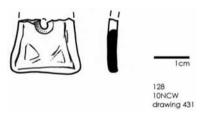


Figure 5. Incised shell bead (No. 128). Drawn by John Swogger.

The GPR system survey provided information on several anomalies which may indicate buried archaeological features at the site. In the amplitude slice map representing the upper levels of the deposits (figure 6), one of the excavation areas conducted by the research team can be clearly seen in the northern portion of the survey as a square anomaly. Within the survey block are several smaller anomalies which represent excavated features. In addition, several anomalies are present in the centre of the survey block, which appear to be archaeological features, most likely rock clusters. At a slightly deeper depth (24-28 cm below surface) a clear rectangular anomaly superimposed over another rectangular anomaly is visible in the north-eastern portion of the survey grid. This high amplitude anomaly potentially represents either an Amerindian or historic period structure associated with the storehouse and lime kiln located nearby. This, by far, is the most intriguing and readily interpretable feature detected by our survey.

The GPR system survey of Indian Castle provided equally interesting results, albeit slightly less clear than those of Coconut Walk. Anomalies were located throughout the survey grid (figure 7). However, as depth increases, they become increasingly concentrated in the northern section of the survey grid. In addition there is at least one circular to oval shaped anomaly located at around 12 to 16 cm below the surface that

appears to be approximately 10 m in diameter along its longest axis. There are several smaller but highly reflective anomalies located just along the interior of the circle that may represent additional features. It is possible that that the anomalies identified in this section of the survey could represent pits, posts, and portions of structures. We recommend future large-scale excavations geared toward identifying archaeological deposits of this type in this particular area of the site.

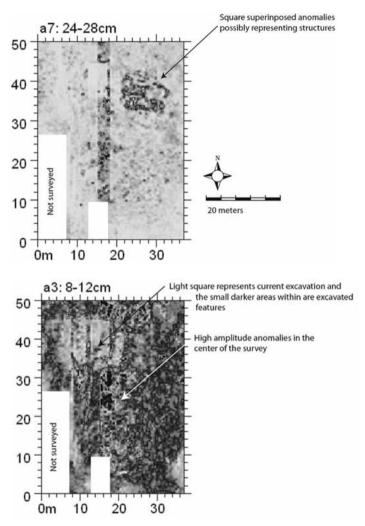


Figure 6. Selected amplitude slice maps of Coconut Walk showing anomalies described in the text.

In addition to our archaeological work, in an effort to widen access, a public 'Meet the People' day was arranged at the Alexander Hamilton Museum on Saturday 24th July, with the active cooperation of members of the Nevis Historical and Conservation Society Board. Students distributed posters throughout the capital, Charlestown, and radio, newspaper and television announcements were made. A series of illustrated explanatory notice boards were mounted alongside a display of 'special' finds from the excavation (figure 8) and a public slideshow presentation was given by Fitzpatrick at the museum.

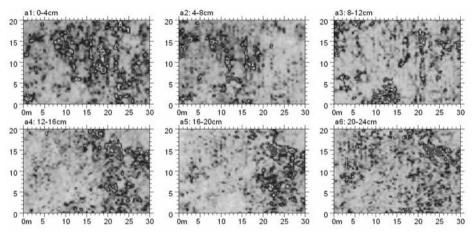


Figure 7. Selected amplitude slice maps showing anomalies at varying depths. The white circle in amplitude slice 12-16 cm denotes a possible structure.

Future plans

The newly appointed Executive Director of the NHCS Museum, Ms Evelyn Henville, and other staff were keen to increase appreciation of Nevis's Amerindian presence in public awareness of the cultural heritage of the island, as it had not been emphasised in past displays. To this end, our display will remain at the museum along with the bulk of the excavated material, in the hope that the illustrated notes and artefacts will encourage visitors, especially children, to visit and support the museum and also stimulate an interest in the original inhabitants of Nevis and archaeology generally. A brief report of this season's excavation project has been written for the NHCS's current newsletter, and accession notes, finds bags and blank pro forma with detailed instructions on how to curate future finds were left with the museum. Future work planned for Nevis in the summer of 2012 will allow us to better test ideas regarding Pre-Columbian settlement patterns on the island, potential human impacts, and interactions with other Antillean islands.



Figure 8. Public exhibition Amerindians on Nevis at the Alexander Hamilton Museum, Charlestown. Photograph by Quetta Kaye.

Acknowledgements

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