

## **Ongoing Archaeological Investigations on Carriacou, West Indies: 2<sup>nd</sup> July – 3<sup>rd</sup> August 2007**

Quetta Kaye  
UCL Institute of Archaeology

Scott Burnett  
Eckerd College, Florida, USA

Scott M. Fitzpatrick  
North Carolina State University, USA

Michiel Kappers  
In-Terris Site Technics, The Netherlands

### **Introduction**

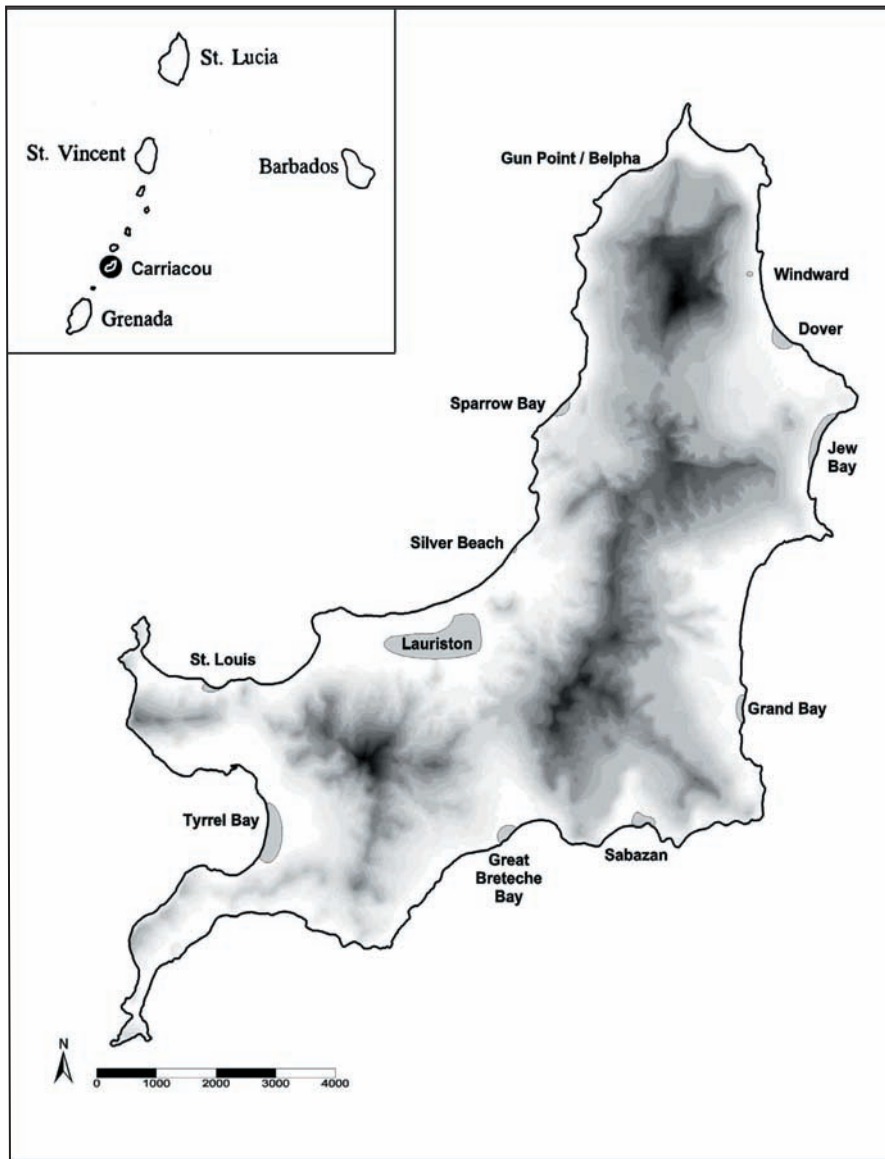
Under the direction of Kaye, Fitzpatrick and Kappers, the 2007 Carriacou Archaeological Field Project continued working at the Grand Bay site, one of the largest yet discovered in the southern West Indies (Kaye 2003; Kaye et al. 2004; Kaye et al. 2005). As in previous years, our team consisted of students from North Carolina State University's Study Abroad programme and the UCL Institute of Archaeology. Twenty seven undergraduate students participated in the project (16 US and 11 British) along with several staff members, including Mary Hill Harris (ceramic analyst from the University of Cambridge Museum of Archaeology and Anthropology), and two zooarchaeology PhD students, Michelle LeFebvre (Department of Anthropology, University of Florida) and Christina Giovas (Department of Anthropology, University of Washington). New additions to our team this year were Scott Burnett (bioarchaeologist, Eckerd College), and illustrator John Swogger (Çatalhöyük Project, UCL Institute of Archaeology).

Our main objective, as in previous years, was to continue the excavation of dense midden deposits at Grand Bay. However, this year our team expanded the study to include the nearby site of Sabazan (Fig. 1). Our project also continues to monitor and map coastal erosion at Grand Bay and attempts to raise public awareness of the richness of the archaeology on the island through a series of site visits, public open days, television and radio broadcasts, and newspaper interviews.

### **Background**

Carriacou, an island roughly 32km<sup>2</sup> in area, lies in the Eastern Caribbean approximately 250km north of Venezuela. It is one of three islands that are politically part of Grenada. The other two, Petite Martinique and Grenada, and numerous islets and islands in the Grenadines, are easily visible from Carriacou in clear weather conditions.

*Papers from the Institute of Archaeology 18 (2007): 167-176*



**Figure 1.** Map of Carriacou with site locations.

As discussed in *PIA* 14 (Kaye et al. 2005), little archaeological research had been carried out on Carriacou prior to our 2003 survey, especially compared to other islands in the Lesser Antilles. During the survey, we identified six major areas of prehistoric settlement and five to six lesser areas by locating surface concentrations of archaeological material (Kaye 2003). Brief visits to Carriacou by Fewkes (1970 : 189-190; 1914: 667-8), Bullen and Bullen (1972: 4, 11, 18), and Suttly (1990) had indicated that there were a number of sites along the coast, but no systematic survey had been carried out. As a result, little was known about when Carriacou's first inhabitants arrived, their connection to other population groups in the region, and locally developed technological and subsistence adaptations.

#### **Archaeological Investigation**

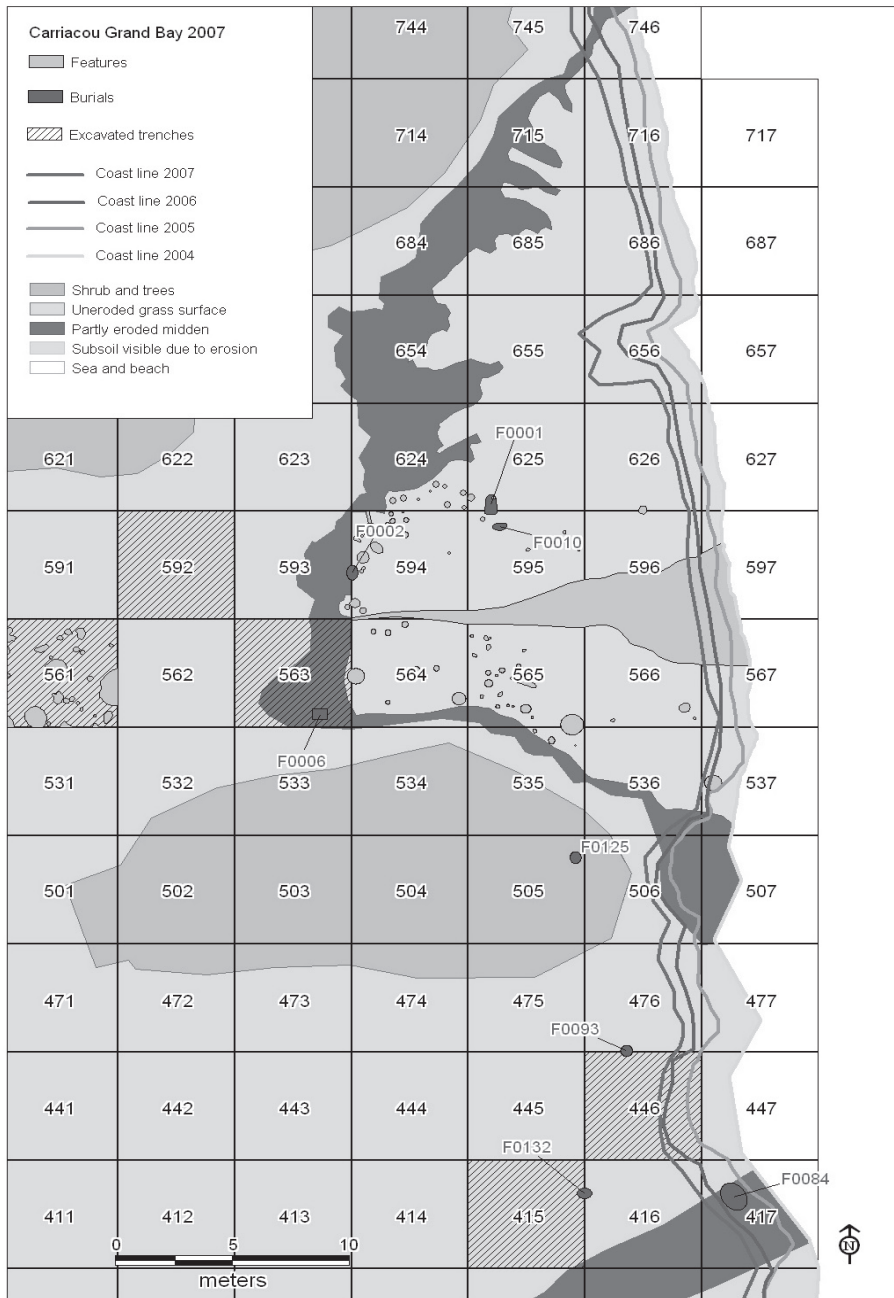
Continued excavation at Grand Bay has revealed a rich prehistoric midden covering an area of approximately 6000m<sup>2</sup>. The eroding coastal profile has exposed clearly stratified layers of mixed compacted archaeological deposits, including human burials, above a sterile layer of mixed pebbles, limestone and clay. A suite of nine radiocarbon dates from the site indicates that settlement probably began around AD 390 and continued until c. AD 1250 (Fitzpatrick et al. 2006). These dates are contemporaneous with those from the Sabazan site (Fitzpatrick et al. 2004).

Sabazan was visited briefly by Ripley and Adelaide Bullen in 1969. They reported a single radiocarbon date, suggesting that occupation occurred "around 940 ± 100 years B.P. or about AD 1010" (Bullen and Bullen 1972: 17). Our 2003 survey identified a significant amount of archaeological material at the site that also warranted further investigation. To provide a complementary and much needed comparison with Grand Bay, Christina Giovas began excavating several 1×1m test units for her PhD project which will examine foraging variability between the two sites.

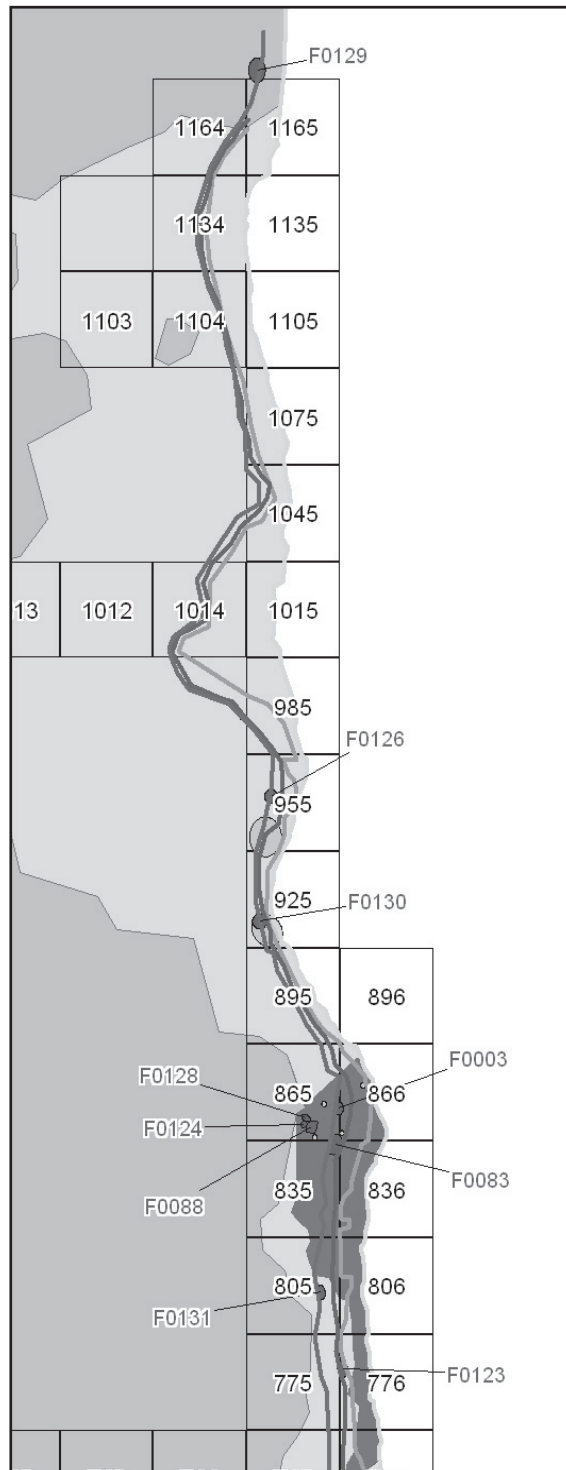
#### **Results**

This year's programme at Grand Bay concentrated on updating measurements along the coastal profile to record the extent of erosion, and continuing with excavation in two main 5×5m trenches (415 and 446). It was paramount to retrieve the maximum information possible from Trench 446. When we initially began excavating this trench in 2004, it was over a metre from the coast. Continued erosion of the coastline, accelerated by the continuation of sand-mining activities by locals (Fitzpatrick et al. 2006), has now destroyed over 1/3 of the trench (Fig. 2). Excavation of Trench 446 has now progressed to a depth of approximately 1m below surface (nine 10cm levels). Progress was also made in Trench 415 to a depth of approximately 0.7m below surface (seven 10cm levels).

During fieldwork this year, we identified eight human burials, adding to the nine that had been recorded previously. Below we summarise data collected from these newly discovered burials and provide a preliminary assessment on the demographic composition and general health of prehistoric inhabitants of Grand Bay.



**Figure 2.** Map of Carriacou showing burials and coastal erosion along the southern and northern (opposite page) sections of the profile.



### 2007 Burials

**F0130:** This individual was upright in a sitting position facing northeast with legs tightly flexed against the torso and the left arm flexed around the front of the lower left leg. The right arm was not recovered, presumably due to erosion. Gracile features of the skull suggest a female, while partial obliteration of the cranial sutures suggests a middle-aged adult (Fig. 3). The burial pit was situated inside the northern part of a large posthole (F0090).

**F0126:** Few remains were recovered below the level of the first ribs and proximal humerus. Feature size and the positioning of recovered elements suggest this individual was buried sitting in a tightly flexed position leaning forward, resulting in recovery of the upper body while the rest was lost to erosion. The cranium faced north and exhibited moderately robust brow ridges and mastoid processes, suggesting this was a male individual. The fused medial clavicle epiphysis suggests this individual was at least 25 years of age. The burial pit was situated just north of a large posthole (F0091).

**F0128:** Most remains from this individual were extensively fragmented and found in a diffuse surface scatter. An adult female is tentatively suggested by dental and skeletal maturity combined with small size.



F0131: Poorly preserved remains, including fragments of the left arm, vertebrae, and ribs, were found projecting high from the eroding bank. Skeletal immaturity suggests a young teen of indeterminate sex. The left humerus and a right rib fragment exhibit periostitis, an inflammation of the periosteum typically a result of some type of infection or trauma.

F0093: Midden excavation revealed a near complete burial in an upright sitting position with the legs flexed and hands near the ankles. The body was facing southwest, though facial orientation is difficult to reconstruct. Dental development suggests an age of 15 years +/- 30 months. Four rib fragments and a piece of the sternum exhibited periostitis (Fig. 4).



**Figure 3.** Reconstruction of burial F0130.  
Drawn by John Swogger.



**Figure 4.** Examining burial F0093. Photo by Scott Fitzpatrick.

F0129: Poorly preserved remains eroding from the bank were the focus of limited testing. The burial orientation and posture remain unknown.

F0125: Five sunbleached long bone fragments were recovered from the surface with no further excavation. The preponderance of fragments from the left side may suggest the individual was interred on the right side.

F0132: A burial was encountered during trench excavation, but few remains other than femoral and *os coxa* fragments have been uncovered to date. Pubic morphology indicates an adult female.

### **Summary of Human Remains from Grand Bay**

Preliminary analysis of the skeletal remains from Grand Bay has resulted in age estimates for 17 known individuals, with only three thought to be under 18 years of age. Six females and five males are represented among the 11 adult skeletons with estimates of sex. Burial and facial orientation is quite variable, as noted previously (Kraan n.d.). Burial postures all appear to include flexion of the legs at the hip and knee. Overall, six individuals were interred sitting upright with bent legs flexed up against the torso, while six individuals were buried with their legs flexed and the body lying on the back or side (Kraan n.d.). Two of the three largely unexcavated burials from this season will likely add to this latter category.

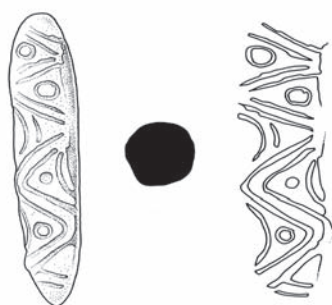
The preliminary diagnoses of pathology at Grand Bay are particularly interesting. Four individuals recovered during prior field seasons exhibit some form of skeletal trauma (Kraan n.d.; Reeves 2006). The elements fractured are concentrated in the appendicular skeleton (femur, fibula, humerus, ulna and radius), suggesting accidental injury may be responsible (Abel 2004). In addition, at least three out of ten individuals recovered over the past two years exhibit periostitis, with the ribs affected in two individuals, and the sternum, clavicle, and humerus each involved in one individual. Periostitis is a non-specific inflammatory response to either infection or trauma. The lesions of the internal surfaces of the ribs and sternum, in particular, probably result from infection and are unlikely to bolster the skeletal evidence of trauma. Though analysis is ongoing, the number of individuals exhibiting fractures or periostitis is relatively high considering that only 14 burials have been thoroughly excavated. This is particularly true considering the low percentage of elements actually recovered per individual and the high degree of fragmentation of bones (Reeves 2006). It is hoped that future research at Grand Bay will further elucidate any patterns in burial treatment and skeletal pathology.

### **Other Archaeological Materials Recovered**

In addition to the human remains, 751 kilos of ceramics, faunal, and other material were recovered (Table 1). All finds (after processing) were stored in boxes and are now housed at the Carriacou Historical Society (CHS) Museum in Hillsborough, with the exception of zooarchaeological samples being analysed by Michelle LeFebvre and Christina Giovas, charcoal and shell samples taken for radiocarbon dating, and human remains studied by Scott Burnett.

Category	Weight in Kilos
Animal bone	36.911
Human bone	6.642
Ceramics	618.170
Charcoal/Charred seeds	2.275
Coral	0.150
Shell (excluding <i>strombus gigas</i> )	59.194
Stone	4.053
Wood	0.057
Total	727.453

**Table 1.** Summary of material excavated at Grand Bay 2007.



**Figure 5.** Cylindrical ceramic body stamp. Drawn by John Swogger.

All small, or special, finds are photographed and uploaded to our site database. A number of artefacts or diagnostic ceramics were illustrated because of their unusual form or decoration. Examples include an unusual cylindrical ceramic body stamp (Fig. 5), worked turtle bone (Fig. 6), and a decorated ceramic lug that appeared to have Saladoid characteristics dating to c. AD 500 (Fig. 7). Ceramic adornos, spindle whorls, worked stone tools, and stone and shell beads were also recovered this year.

### Conclusions

The 2007 Carriacou Archaeological Project continued to reveal a plethora of special finds, ceramic sherds and faunal remains during excavation at Grand Bay and Sabazan. The discovery of eight more human burials at Grand Bay this year nearly doubles the number recorded in the previous four years, adding significantly to our understanding of site inhabitants. Our retrieval, recording, and display of archaeological material in the CHS Museum, and the continued participation of local residents in our fieldwork, particularly schoolchildren, will hopefully increase community awareness about Carriacou's past and promote future legislation to protect these important and quickly disappearing sites.

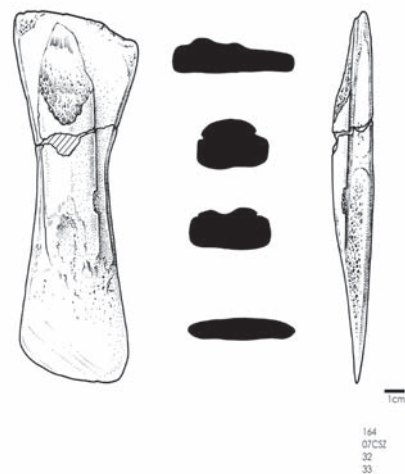
We are currently collaborating with the new Minister for Tourism in Grenada and the Grenada and Carriacou Tourist Boards to promote archaeology as a component of the tourist industry. A forthcoming feature on our research is to be included in the next issue



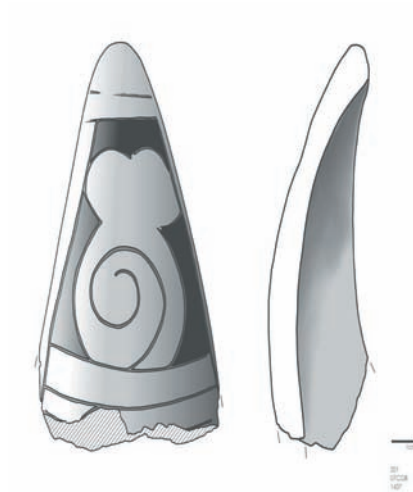
of the *Discover Grenada* tourist magazine. Images of archaeological artefacts we have recovered have also been reproduced on mugs and key-rings on sale in the Carriacou Historical Museum to enhance recognition of the island's rich cultural heritage and provide a much needed source of revenue.

#### Acknowledgements

We acknowledge the assistance of the Grenada Ministry of Tourism in granting permission for our excavations to take place and the Carriacou Historical Society and the Grenada and Carriacou Tourist Offices



**Figure 6.** Worked turtle bone. Drawn by John Swogger.



**Figure 7.** Decorated ceramic lug c. AD 500. Drawn by John Swogger.

for the assistance given to our project. We thank the landowners at Grand Bay and Sabazan for permission to conduct excavation and the people of Carriacou for their cooperation with our fieldwork. As always, we are indebted to the Carriacou Historical Society for their support and to Jerome McQuilkin (Maritime Management Services) for supplying all of our storage boxes. Special thanks go to the students without whom our project could not have happened.

#### References

- Abel, S.M. 2004. *Biocultural Variation of Skeletal Trauma in Contemporary Greeks*. Unpublished PhD Dissertation, University of Florida.
- Bullen, R. and Bullen, A.K. 1972. Archaeological Investigations on St Vincent and the Grenadines, West Indies. *The William L. Bryant Foundation American Studies*. Report No. 8. Orlando: William Bryant Foundation.

- Fewkes, J.W. 1970 [1907]. The Aborigines of Porto Rico and Neighbouring Islands. *Twenty-Fifth Annual Report of the U.S. Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1903-04*. New York and London: Johnson Reprint Corporation.
- Fewkes, J.W. 1914. Relations of Aboriginal Culture and Environment in the Lesser Antilles. *Bulletin of the American Geographical Society* 46, 667-8.
- Fitzpatrick, S. M., Kappers, M., Kaye, Q.P. 2006. Coastal Erosion and Site Destruction on Carriacou, West Indies. *Journal of Field Archaeology* 31, 251-262.
- Fitzpatrick, S. M., Kaye, Q.P., Kappers, M. 2004. A Radiocarbon Sequence for the Sabazan Site, Carriacou, West Indies. *Journal of Caribbean Archaeology* 5, 1-11.
- Kaye, Q.P. 2003. A Field Survey of the Island of Carriacou, West Indies, March 2003. *Papers from the Institute of Archaeology* 14, 129-135.
- Kaye, Q.P., Fitzpatrick, S.M., Kappers, M. 2004. A Preliminary Report on the Excavation at Grand Bay, Carriacou, West Indies, June 28<sup>th</sup> – July 31<sup>st</sup> 2004. *Papers from the Institute of Archaeology* 15, 82-89.
- Kaye, Q.P., Fitzpatrick, S.M., Kappers, M. 2005. Continued Archaeological Investigations at Grand Bay, Carriacou, West Indies (May 23<sup>rd</sup> – July 22<sup>nd</sup> 2005), and the Impact of Hurricanes and Other Erosive Processes. *Papers from the Institute of Archaeology* 16, 108-114.
- Kraan, C. n.d. *The Human Burials of the Grand Bay Site Carriacou, Grenada W.I.* Unpublished report, Carriacou Archaeological Project.
- Reeves, R.R. 2006. *Bioarchaeology at Grand Bay and Tyrell Bay, Two Contemporary Amerindian Sites on Carriacou Island, Grenada, West Indies*. Unpublished MA Thesis, University of Montana.
- Sutty, L. 1990. A Listing of Amerindian Settlements on the Island of Carriacou in the Southern Grenadines and a Report on the Most Important of These, Grand Bay, in Tekakis, A.G.P., Vargas Arenas, I. and Sanoja Obediante, M. (eds.) *Proceedings of the 11th Congress of the International Association for Caribbean Archaeology, Puerto Rico 1985*. Fort de France, Martinique: International Association for Caribbean Archaeology, 242-259.