A Preliminary Report on the Excavation at Grand Bay, Carriacou, West Indies, June 28th-July 31st 2004

Quetta Kaye
Institute of Archaeology, UCL
Scott Fitzpatrick
North Carolina State University, USA
Michiel Kappers
In-Terris Site Technics, The Netherlands

Introduction

The 2004 Carriacou Archaeological Project was undertaken by a multi-national group, directed by the authors. The team included 21 undergraduates drawn in part from the Institute of Archaeology (IoA), and students from various universities in the United States who participated through North Carolina State University's Study Abroad programme. They were joined by three graduate students: two Americans, both about to embark on island-related PhDs, and a Master's student from UCL who volunteered to be the finds-processing manager. The team's four staff members included two professional archaeologists from The Netherlands, a ceramics analyst from the Archaeological and Anthropological Museum of the University of Cambridge and an American postgraduate faunal analyst from the University of Florida. Also involved were a postgraduate specialist in human remains and a geologist experienced in the Caribbean region. This preliminary report reflects the collaborative work of the team. A full report will be presented to the 21st Congress of the International Association for Caribbean Archaeology in Trinidad in July 2005.

The objectives of the excavation at Grand Bay resulted directly from observations made during the 2003 survey of the island (Kaye 2003; Kaye *et al*. in press). In addition to identifying major concentrations of archaeological material on the island, the survey also assessed the threat of site destruction by erosion, development and indiscriminate looting. It also identified a lack of community awareness of the importance of the island's archaeology and suggested the inclusion of archaeology as a major tourist attraction.

Grand Bay

Grand Bay is located on the southeast coast of Carriacou (Fig. 1), protected to some extent from the ocean forces by a coral reef approximately 1.5km offshore. The site, which encompasses an archaeological midden, covers an area of *c*.9 000m^2 of partly eroded land and low grassland, which is grazed by donkeys, goats and cows. Sizeable portions of the area are overgrown with Manchineel (*Hippomane mancinella* L.) (Eshleman 1977), thorny scrub, cactus and other plants. The coastal profile is up to 4m high and displays clearly stratified layers of densely-packed archaeological material interspersed with compacted faunal remains and shells, lying above archaeologically sterile

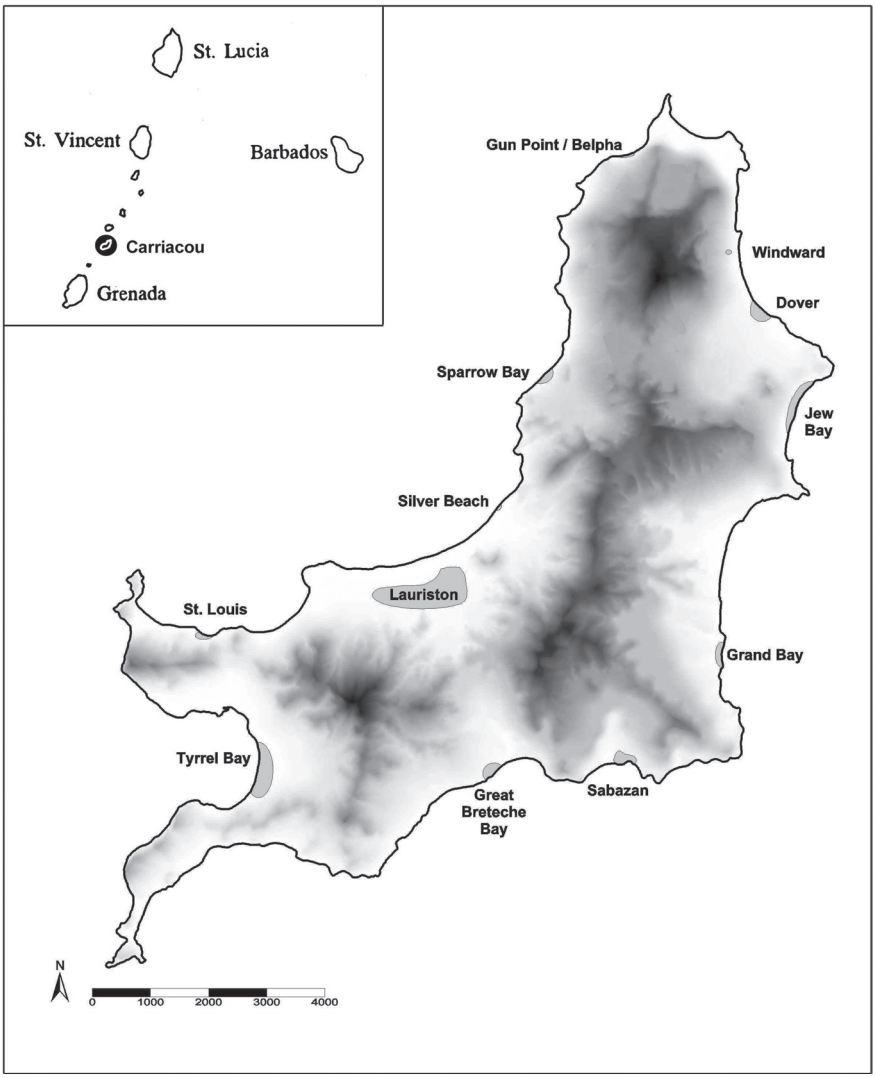

Figure 1. Map of Carriacou with site locations.

geological layers of mixed pebbles, limestone and clay. The archaeological midden area is inter-cut by a series of eroded gulleys that reveal the depth of the humic topsoil and expose an orange/yellow subsoil into which a number of features were cut.

Of the archaeological sites identified in 2003, Grand Bay was chosen as the first site to excavate because of the perceived immediacy of the threat to the archaeological assemblage from erosion. Aerial photographs were examined in the Land Office in Grenada this year in order to compare the coastal profile with photographs taken by Kappers in 1999 and the profile as photographed and

drawn in the 2003 survey. Precise measurements taken with the Total Station this year confirm that erosion is occurring at the startling rate of approximately 1m per year. It is also clear that erosion is accelerating due to almost continuous sand dredging at low tide within metres of the archaeology.

Methodology
Following initial auguring of the perimeter of the site, a grid system was created from which five trenches each measuring 5x5m were defined for excavation. Within each of these trenches, $1m^2$ units were delineated with pins and labelled with a unique computer-generated barcode number. A 5cm layer of topsoil was removed, and excavation proceeded in 10cm levels using hand trowels and, where appropriate, mattocks and shovels. The fill to a depth of 20cm from four $1m^2$ squares in each $5m^2$ trench was wet-sieved through 6mm mesh.

A total station was used to plot all squares, together with all geological and other features, to enable a computer generated three-dimensional reconstruction of the site.

Archaeology
Because of the threat to the coast and the collapse of parts of the under-cut profile of the site during the course of the excavation, the surviving profile was recorded in detail. Only in the most endangered area closest to the southern edge of the profile (Trench 446) did excavation progress to a depth of 30cm. In the other trenches, time and periods of very heavy rain restricted excavation to the upper 20cm levels.

Mixed material (Table 1) from each square or feature (with its unique label) was taken to the Carriacou Museum where it was washed, dried, categorised, weighed and entered into the data system devised by Kappers using *FieldLINK* from QLC. Seventy special small finds were separately catalogued and bagged to be photographed and drawn at a later time.

Material	Weight (grams)
Pottery (processed)	393 323.1
Pottery (awaiting processing)	139 500.0
Animal bone	11 669.8
Stone (27 pieces)	886.4
Shell	8 587.9

Table 1. Summary of material excavated at Grand Bay, 2004.

The ceramics excavated from the upper levels of the midden can be categorised stylistically as Troumassoid to Suazoid, *c*.AD 700-1500. From the lower level of the profile, several sizeable rims of white-on-red and red-painted ceramics were removed which can be dated to the Saladoid period (*c*.AD 350-700). These dates conform to those from a radiocarbon sequence for the nearby Sabazan site obtained following the 2003 survey (Fitzpatrick *et al.* 2004). An initial assessment of ceramic rims indicates styles

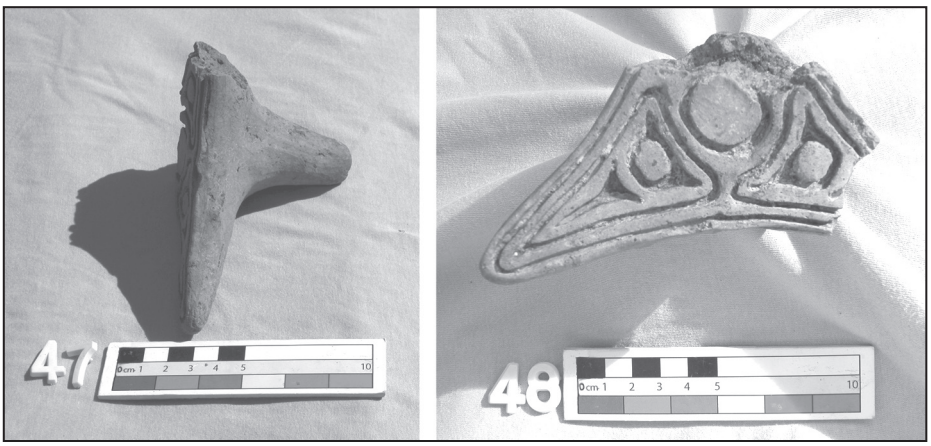

Figure 2. Incised ceramic stamp (12cm wide, 7cm deep) (No. 04CGB000448).

possibly unique to Carriacou, notably special find No. 04CGB000448, of which the authors are not aware of similar examples from any other island (Fig. 2). This artefact is an almost complete triangular-shaped and deeply-incised ceramic stamp, with an intact handle. The stamp carries the inverted triangle/circle motif which is commonly found on ritual artefacts from the Greater Antilles, such as decorated vomit spatulas and *duhos* (high status carved seats used in rituals), and could have been used as a template for such decoration.

The excavated shell species were dominated by mature *Strombus gigas* L. (Queen Conch). A total of 599 *S. gigas* were recovered, the majority of which emanated from Trench 446. Preliminary examination of the shells indicates the presence of bivalves, gastropoda and chitons, representing a number of sublittoral and supralittoral species found on the nearby low rocky/coral foreshore. These molluscs represent an easily accessible subsistence resource for the prehistoric people. Shell artefacts recovered included eight *S. gigas* adzes, eight shell beads, two shell discs, one rectangular perforated shell plaque, two almost identical perforated Oliva pendants and a perforated curved spatula.

Seven adzes of polished dioritic greenstone and grey-stone were excavated, along with two greenstone beads. Another find, thought by the excavators to be unique so far south in the Lesser Antilles, is a grey stone three-pointer *cemi* (No. 04CGB000125) decorated at the apex with a band of chevron, or feathered, patterning (Fig. 3). Research revealed that an almost identical, but much smaller, fragment of a three-pointer *cemi* was recovered from Lokrum Bay, Anguilla in September 1984 (Anguilla Archaeological & Historical Soci-

Figure 3. Three-pointer stone *cemi* (23.05cm wide, 9cm high) (No. 04CGB000125).

ety 1986: 36) (Fig. 4). The concept of *cemi*-ism was an intrinsic part of the belief system of the Amerindians. A *cemi* is thought to have been representative of a spiritual 'essence' and could take numerous physical forms – one manifestation of which was a three-pointed stone.

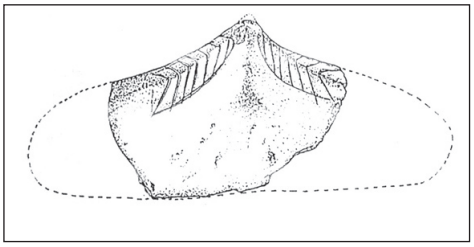

Figure 4. Fragment of three-pointer stone *cemi* (10cm wide, 7.5cm high) from Anguilla (Anguilla Archaeological & Historical Society 1986: 36).

Three sets of human remains in crouched or foetal position were uncovered: one adult female, one adolescent and one child. The cranium, proximal end of the left humerus and the left clavicle of the adult female (F1) were absent, possibly because of the insertion of a post since a circular feature – possibly a posthole – was cut into the area where these bones may have been expected. The other two burials were intact.

Turtle bone (Cheloniidae) was present in unexpectedly high numbers, including pieces shaped in a way which suggested their use as burnishing tools, as well as a finely shaped and pointed awl 4.02cm long. Considerable quantities of other faunal material (fish, shellfish and small mammal bones) were taken to the University of Florida for examination by the faunal specialist. This faunal material represents the remains of dietary and other subsistence materials and gives a good indication of environmental factors pertaining to the time of deposition.

The subsoil of the site in the area of the gulleys, referred to above, revealed a number of distinctly darker-coloured features. These features were generally circular in shape and were interpreted as postholes of various sizes. The layout of the posthole features (Fig. 5) could possibly indicate a long house, with large postholes flanked by various subsidiary ones. From their position, it can be assumed that the line continues under the unexcavated bank to the south. The excavated features were found to contain occasional stone, coral and/or ceramic material, possibly packing inserted to support a post.

Discussion

Archaeology

The 2004 excavation project was a success in so far as our proposed objectives were achieved. Specifically, we were able to determine the exact extent of the site at Grand Bay and obtain precise measurements to make detailed records of the coastal profile, which will almost certainly disappear during the coming months.

The excavated material confirmed the impression derived from the 2003 survey, that the extent and quality of the archaeological remains at Grand Bay are exceptional within the southern Lesser Antilles, and initial assessment reveals locally specialised technological and subsistence adaptations. All finds remain in the custody of the Carriacou Historical Society and are stored at the Carriacou Museum in the island's capital, Hillsborough, with the exception of some non-diagnostic ceramic, shell and bone samples

Figure 5. Plan of features uncovered in the sub-soil at Grand Bay (Michiel Kappers, In-Terris Site Technics).

taken to North Carolina State University and the University of Florida for further analysis and radiocarbon dating.

Heritage Management, Awareness and Education

A major focus of our work has been an attempt to increase the community awareness of Carriacou's rich archaeological heritage, focusing on the implementation of protective legislation: to stop the looting and export of artefacts, and to facilitate the physical protection of the site by minimising erosion.

To highlight both the problems and the attributes at Grand Bay, a VIP site tour was organised, followed by a visit to a special exhibition of newly discovered artefacts and to see students processing finds at the Carriacou Museum. These events received press and television coverage. We also created and distributed a poster advertising a public exhibition and illustrated lecture, and it was encouraging to note the stream of visitors attending the exhibition on a Saturday afternoon – a day when the museum is usually closed.

Kaye and Kappers spoke to one school group but, unfortunately, the students' planned site visit to participate in the archaeological process and poster competition (with a project t-shirt as a prize) did not materialise. Students from another secondary school did visit the site, but had no time to participate in excavation work. Lack of support from the educational institutions on the island was a cause for concern since, without their support, the significance and safety of the archaeology is jeopardised.

Tourism

Following our 2003 survey, a list of recommendations for raising tourist awareness was sent to the appropriate Ministries and tourist related offices in London, Grenada and Carriacou. These points have since been discussed with Ministry officials and local heritage managers, and several have now been completely or partially implemented. It was agreed that our logo will be used to denote all island archaeology on official publications, and a significant number of our project t-shirts will be sold for the benefit of the museum. Our design for two new directional street signs to the museum will be financed by a private donor, and it has been agreed that the Carriacou Historical Museum will become the Carriacou Historical and Archaeological Museum. These new street signs, together with the promise of new display cases for the museum, will increase the visual impact of archaeology for tourists. Meanwhile, newly excavated finds have been temporarily displayed with clear information labels. It has also been agreed that the project team will design an explanatory stratigraphic sequence for installation near the entrance of the museum next year.

We are in the process of creating a website for Carriacou archaeology which will be linked to that of the International Association for Caribbean Archaeology (http://museum-server.archanth.cam.ac.uk/IACA.WWW/iaca.htm). A video is also in preparation for use as an information and teaching aide.

Future Plans

The Carriacou Archaeological Project is planning to continue work on the Grand Bay site in 2005, and will extend the excavation period to two months, with an increased number of students participating. The first session will be from May 23rd to June 24th and the second session will commence on June 27th and end on July 22nd.

Acknowledgments

Thanks are due to the Grenada Ministry of Tourism for granting excavation permission and the Carriacou Tourist Office for assistance throughout the planning stages of the project. The directors are indebted to the land owners at Grand Bay for giving permission for the excavation to take place. Our sincere thanks go to the Executive Committee of the Carriacou Historical Society for the hard work and support which they provided. Special thanks also go to The Carriacou Development Corporation for the loan of specialised pumping equipment and for supplying storage boxes. We also acknowledge the assistance of the people of Carriacou for their co-operation with our work. Last, but not least, thanks to all the students who participated in the excavation, without whom it could not have taken place.

References

Anguilla Archaeological & Historical Society 1986. Precolumbian Artifacts Donated to the Society: A Checklist. *Anguilla Archaeological & Historical Society Review* 1(1), 36.

Eshleman, A. 1977. *Poisonous Plants*. Boston: Houghton Mifflin Co.

Fitzpatrick, S. M., Kaye, Q. P. and Kappers, M. 2004. A Radiocarbon Sequence for the Sabazan Site, Carriacou, West Indies. *Journal of Caribbean Archaeology* 5(1), 1-11.

International Association for Caribbean Archaeology [website, http://museum-server.archanth.cam.ac.uk/IACA.WWW/iaca.htm]. [Accessed on 30th November 2004].

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., Kappers, M. and Fitzpatrick, S. M. in press. Archaeological Survey of Carriacou, West Indies. *Proceedings of the 20th Congress of the International Association for Caribbean Archaeology, Santo Domingo, Dominican Republic 2003.*