Sokkia, a world leader in precision surveying provided a major equipment grant to Chicora. With the assistance of Duke Dutch, Sokkia Law Enforcement Application Division, Chicora now has a state of the art total station, plus real-time mapping software integration.

Plus our staff received two-days of intensive training to ensure we are proficient in its use. The package is being put to immediate use in our forensic, cemetery, and archaeology programs.

The equipment is Sokkia’s top of the line 530R3 Reflectorless total station with Bluetooth wireless technology. While most total stations require you to use a prism as the target, the Sokkia system operates in three different modes – with a prism, with a reflector, or taking direct shots on the object.

We can now shoot objects over 1,000 feet away (or as close as 1 foot) without a prism or reflector. This not only allows one-person operation, but it provides access to buildings, roofs, power lines, and other places that you just can’t reach easily.

The equipment is extremely accurate; at 1,000 feet or less instrument error for mapping purposes – or even bridge building – is essentially 0. It is even more accurate because of the basic mapping training that we received from Duke, one of the foremost forensic mapping trainers in the US.

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Known as “grave wax,” adipocere may form on cadavers as part of the postmortem changes in conditions of high relative humidity and high temperatures. It especially affects fatty tissues.

The chemical process that creates adipocere consists of hydration and dehydrogenation of body fats. There are two forms.

One form is bound with sodium and is hard and crumbly. The more often recognized is soft and paste-like and results from bounding with potassium.

Research has determined the unique constituents of human adipocere, helping forensics identify the remains of human burials.
FIELD SLAVES—HOUSE SLAVES

We have completed our analysis of the slave settlements at Tranquil Hill in Dorchester County, SC. Not only has the work provided a unique glimpse of a Colonial garden, but is also helping us better understand the complexity of slavery.

At Tranquil Hill we were able to examine not only a “typical” slave settlement dating to about 1773, but we also examined what appears to be a settlement for house slaves, dating about the same time. There were many differences.

For example, the house slaves possessed a greater range of material goods, including more European ceramics than did the field slaves. Colono ware—a slave made pottery comprised 70% of the kitchen artifacts in the slave row, but only 43% of kitchen artifacts among the house slaves.

We also found significant differences in the architecture. The house slaves lived Continued, page 4

WHAT MAKES CHICORA’S ARCHAEOLOGY “PUBLIC”?

You hear a lot about “public” archaeology, but what does that mean?

At Chicora it means a commitment to ensure that the public has access to our reports. Chicora’s larger monographs—data recovery projects, for example—are sent to libraries across South Carolina and the East Coast. You can find Chicora reports at libraries ranging from the New York Public Library to the university library at Mississippi State.

Even our smaller reports are always sent to the South Carolina State Library and the South Caroliniana Library. In fact, if you look up Chicora on the S.C. State Library website you’ll immediately see 408 entries.

So, if you’re interested in Chicora’s research, just ask your local reference librarian to request our reports through interlibrary loan—that’s public archaeology.

CHICORA RECEIVES ADDITIONAL FORENSIC TRAINING

Chicora staff members spent a busy summer receiving updated forensic training.

Debi Hacker attended the week long Post-Bomb Blast Recovery Short Course: Documentation and Recovery of Human and Physical Evidence at the Terrorism Crime Scene. Offered by Mercyhurst College, the workshop provides practical experience dealing with terrorist events such as car bombs or mass disasters.

Chicora’s Director Mike Trinkley attended the week long Outdoor Recovery in Forensic Anthropology class at the Forensic Anthropology Center (known to many as the “Body Farm”), University of Tennessee. The workshop included new research on determining time since death.

Nicole Southerland attended the three-day workshop at North Carolina State University on Bones, Bugs, and Botany that provides training in forensic botany and entomology.

Mike and Nicole also attended the three day class in WMD Crime Scene Management and Hazmat Evidence Collection taught by the Department of Homeland Security.

This car was blown-up in Mercyhurst class. Flags mark car debris and tissue.
MUSINGS FROM THE DIRECTOR

When I received my graduate training I was fortunate to be well trained — at least for the time — in using survey equipment. Of course, in the late 70s and early 80s that meant becoming proficient with a plane table, dumpy level, transit, and chains (or a tape).

While it provided a firm foundation and helps me understand the basics, things have changed dramatically in the past 20 years.

We are very fortunate to have received an extraordinary donation from Sokkia, a leading manufacturer of surveying equipment. Today we have state-of-the-art equipment that is far more accurate — and far easier to use — than anything I have ever dreamed of.

Our training was also a great example of teaching old dogs new tricks. I have been setting up tripods for 30 years; but our trainer, Duke Dutch with Sokkia, taught me the correct way, making it faster, easier, and less painful than ever before.

It was also a good reminder that the basics of precision, accuracy, and efficiency never go out of style. It’s too bad that they aren’t taught more frequently. Thanks Duke!

SOKKIA DONATION TO CHICORA . . . CONT. FROM PG. 1

.PC loaded with Evidence Recorder software. Connecting with the instrument using Bluetooth, the pocket PC controls all of the measurements and records the data, producing a map on the screen in real time. You know immediately what you are mapping and what it looks like.

Also provided was a CAD mapping program especially developed for forensic work, Crime Zone. The program, however, is so versatile that it can be easily adapted to cemetery recordation or routine archaeological mapping.

The value of the package provided by Sokkia’s Law Enforcement Application Division is over $9,000. Participating with Sokkia were The Cad Zone (Crime Zone Software), MapScenes (Evidence Recorder 4 Software), and Doug Devine with Pacific Survey Supply.

ANOTHER OF COLUMBIA’S FORGOTTEN CEMETERIES

For years — no one truly knows for how long — those who died at South Carolina notorious Central Correctional Institution (CCI) received a lonely burial in a small plot of forgotten land overlooking the Broad River.

Shown on many maps as the “State Cemetery,” the 13.5 acre parcel was acquired by the state in 1883. Providing mute testimony to the view that the burial of the dead was a matter of simple disposal, there seems to be no information in the Department of Corrections files about who is buried on the property. The state was also happy to dispose of the property in 2000 to the City of Columbia.

The earliest marked grave within a small fenced area is 1936, although there are many sunken graves surrounding the fence. Once kept locked, the gates are now open and many graves have been vandalized.

I do not feel obliged to believe that the same God who endowed us with sense, reason and intellect has intended us to forgo their use.

— Galileo Galilei

Above, a historic photo showing how South Carolina prisoners were buried as late as the 1960s. To the left is one of the concrete monuments.
Chicora Foundation is public, non-profit research foundation with 23 years of experience. We operate under a broad heritage preservation umbrella, conducting archaeological and historical research, providing a broad range of public education programs, and offering technical preservation for museums, libraries, and archives.

Our web site, at www.chicora.org, provides a great deal of additional information about our work and includes lists of all available publications.

If you have additional questions, please contact us and we’ll be happy to provide additional information.

Chicora archaeologists have investigated another house slave dwelling. Although later in the antebellum, this other settlement, at the Stoney-Baynard Plantation on Hilton Head Island, SC, suggested a similar disparity between the two types of slaves. Clearly additional research is needed.

Example of a wall trench structure in the Tranquil Hill slave settlement. Upright posts would have been placed in the trench to create walls.

FIELD SLAVES—HOUSE SLAVES... CONT. FROM PG. 2

in a frame structure set on brick piers with a brick chimney. The field slaves lived in wall-trench houses set directly on the ground and constructed of poles.

Even the diets of the two groups were significantly different. For example, wild animals, especially deer, were being eaten only by the owner and the house slaves. It appears that the house servants were engaged in hunting to supply the main table and received some of the less choice cuts.

In contrast, but not unexpectedly, the field slaves were not only receiving less meat, but were also being given the poorest cuts.

This is interesting to archaeologists since some histories suggest that owners made little distinction between the two “classes” of slaves, dispensing rewards or preferential treatment as a means of establishing and maintaining control.

At Tranquil Hill there appears to be a much more defined difference between slave groups, at least in the Colonial and very early antebellum periods.

Chicora archaeologists have...