Proposal for the Sayre School Historical Archaeology Project at Waterwild Farm

Historical Background

The house now known as Waterwild Hall was built sometime in the 1830s. It is a brick, Federal style I-house with an L-addition on the rear. There remains some evidence to suggest that this may have been the second house to occupy this site or perhaps that materials from an earlier structure located elsewhere were used for constructing Waterwild Hall. The house was remodeled in the 1850s, adding some Greek Revival features, including the Tuscan-columned front porch. At this time nothing is known about the earliest owners.

An 1861 map of Fayette County shows the property was owned by Mrs. Offutt. By 1877 the house had been sold to Dr. Joseph Bryan, a prominent Lexington physican. At that time the property was called Short Horn Farm, or the Bryan Place.

In the 1880s the house and 3,000 acres were acquired by Alexander Carrick of Georgetown (great-great grandfather of the current owner). He named the house Waterwild Hall. At the time, the farm was bounded by Russell Cave Pike to the east, Carrick Pike to the north, and Mr. Horeb Pike to the west. Upon Alexander Carrick's death, the farm was divided among his three sons Thomas, Oscar, and Dr. Robert Lee Carrick. Dr. R.L. Carrick inherited the smallest portion of the farm but retained the ownership of the house.

Waterwild Hall is currently owned by James K. Millard, father of Caroline Carrick Millard who attends Mrs. Janie Cowgill's Fourth Grade class at Sayre. Mr. Mallard and his wife, Madelyn, started renovations in 1992, beginning with the rear portion of the house, retaining or replicating as much of the original style and materials as possible.

Research Orientation

All archaeological investigations are focused on the attempt to answer questions about a site. These are termed "research questions" and guide the investigation strategy of the archaeologists. This archaeological investigation and the associated research questions are preliminary. The questions are designed for children of the 4th grade and are basic, yet important.

Research Question 1: What was the spatial layout of the farm? Where on the farmstead did the everyday activities, such as smoking meat, washing clothes, and dumping household trash occur? Are there old buildings, such as a detached kitchen, smokehouse, chicken coup and outhouse which may be located through archaeological investigation? The archaeological investigation will use methods that have been developed to answer these questions.

Methodology:

1. The use of small "shovel tests" to search for and recover artifacts indicative of structures and farm complex activities.
2. The use of computers to quantify and depict the patterning in recovered artifacts.

Research Question 2: What is the age of the farmstead and the associated structures, as determined through archaeology? Are the historical records correct?

Methodology:

1. Use artifacts recovered in shovel tests in the house yard area.
2. Date the artifacts to determine the "age of the occupation."

Answering these questions will provide the archaeologists with basic information about this historic site. This information is then used to determine what other important questions might be answered with additional research. For example, we might ask if the remains of a structure served as a slave quarter. If so, additional investigations may yield information on the lives of the slaves. Are structural remains associated with a detached kitchen? If so, archaeologists can ask questions about the diet, and the associated health, of the occupants of the main house. New research questions and methodologies are developed as new information becomes available.

Proposal

We propose that the project be divided into five parts: yard testing, artifact washing and identification, student analysis of artifacts, group discussion of findings, and possible future research. Students will be divided into task groups of no more than four students per group. Estimates are based on three classes of fifteen students per class, or a total of four task groups per class, twelve task groups total.

Part 1- Yard Testing

CRA personnel:
Dr. Hank McKelway
Trina Maples
Tressa Brown
Anne Furgason
Julie Lacy

Ideally, we would like to have six to twelve additional supervisory personnel provided by the school in the form of teachers and parents (optimum, one per task group; necessary, one for every two task groups)

CRA provided equipment:
Gas auger
Laser transit
Pin flags
50 meter tape
100 meter tape
roll of plastic
paper bags
sharpies
5 – 3 meter tapes (one per supervisor)
5 – notebooks & pencils (one per supervisor)

12 screens
3 shovels
2 cameras; 1 B&W, 1 color
film
first aid kit

Student provided equipment:
Gardening gloves – 1 set per child (these are necessary)
Wear old clothes and shoes (white stuff will get dirty)

Notes Concerning Yard Testing: Prior to the arrival of students, a datum will be established, and a grid laid out. Using an EM38 remote sensing devise, potential "hot spots" will be identified and flagged for auger borings. These are places where a structure may have been in the past, but is now only identifiable through archaeological testing. Systematic auger borings (approximately 50) will be placed at 10 m intervals across selected yard areas. Auger borings will also be placed in areas identified by remote sensing to be the possible locations of structures or activity areas (approximately 15-20). All auger borings will be completed before the arrival of the students. The grass will be removed first in the form of a divot, in order to replace it after the testing is completed. Plastic will be placed around the hole to catch the dirt and to facilitate returning the dirt to the hole after examination. Bags will be at each auger boring with all provenience information written on the bag.

Before the students arrive on the site, teachers should give a brief history of the property and prepare students to discuss with the archaeologists what they might expect to find. In this case we are examining a large farm that was built in the days before grocery stores and laundromats. Site inhabitants would have been fairly self sufficient. Teachers should discuss with their class what would be needed in those days to maintain and feed a large farm household, both immediate family and slaves. Structures or "outbuildings" for a large farmstead with slaves would include slave quarters, a detached kitchen, a smokehouse, a wash house, chicken coops, privies (outdoor toilets), etc. Students should come generally prepared to participate in a group discussion with archaeologists prior to testing. Information will be provided by CRA in the form of a Teacher's Packet.

Also prior to arrival on the site, teachers should divide their students into the task groups they will stay in for the entire project. Each task group should consist of no more than four students. This will cut down on confusion once the students arrive on site.

When the students arrive, there will be a general discussion with the archaeologists about 1) site etiquette and safety (remind students this is a REAL archaeological investigation and they are expected to act accordingly), 2) a discussion of the architectural house details and what they can tell us, 3) the general principle of yard testing on a grid pattern and artifact distribution (what are we trying to find and why), as well as, other possible research questions that archaeologists attempt to address, and 4) the mechanics of the actual testing (carefully going through the dirt for artifacts and the fact we are just sampling the artifacts, measuring the depth of the hole, noting any unusual features or stratigraphy in the supervisors notebook, and returning the dirt to the hole).

Each class will be assigned an area of the yard in which to work. That way we can keep each class together. One supervisor (professional archaeologist) will be assigned to each class, with two floating supervisors. Each supervisor will be in charge of an area of yard. Unless something really interesting shows up and everyone is

invited to come see, it is advisable for teachers and parents to keep their groups in their assigned area, cutting down on site confusion.

Prior to departure of each class, students will get together with the professional archaeologists and discuss what they have found and what they think it might mean.

Part 2 – Artifact Washing and Identification

CRA personnel:
Dr. Hank McKelway – afternoon
Trina Maples – all day

CRA provided equipment:
scales (ask school if they have 3 digital metric or metric balance beam scales)
digital calipers
laptop computer
flats
strainers

Student provided equipment:
1 old toothbrush per child (stress this brush is NEVER to be put into their mouth again)
1 plastic or metal large mixing bowl or small tub (for washing artifacts)
large strainer, if possible
plastic zip-lock baggies (they can be the generic kind)
permanent marker (sharpies)
wear old clothes (you will get wet and dirty)

Notes Concerning Washing and Artifact Identification. Students will form into the same task groups they were assigned for the on site phase. Ideally each class will wash and catalogue the bags of material they excavated. However, some holes may come up empty and it may be necessary to divide the bags between a class. This way students will still be working with the artifacts recovered from the yard area they investigated.

Before we start washing, there will be a brief lecture on lab etiquette, procedure and how to wash an artifact. Students will then break up into their task groups and start washing. It would be helpful if the students were asked to bring an old toothbrush from home, and parents were asked to provide a plastic wash tub or large mixing bowl. Past experience has proven, students who have to share too much tend to get testy. They do better when able to maintain some amount of personal space. After washing, each bag of artifacts will be placed in its own drying flat.

Teachers need to be aware that we need easy access to water and easy access to the outside of the building for dumping dirty water. Maintenance people would not appreciate us clogging up their drains. We can take several strainers, as well as, asking students to bring large strainers from home, and strain the water instead of having a strainer in each wash tub.

The next step is artifact identification. As this is can be complicated at best, we have decided to simplify the process by breaking the artifacts down into gross categories by functional artifact groups. Instead of trying to

teach ceramic identification, all ceramics will be lumped together, all bottle glass will be lumped, etc. Dates will be derived from nails and window glass. Although we will not teach the students ceramic identification we will take a type collection with us and explain it and other methods of dating a site.

Students will then be directed to divide their bag into these major artifact groups and then work on subdividing these groups into the different artifacts. For each provenience we will provide a data sheet that already has these groups and likely artifacts listed, along with room to write in miscellaneous artifacts, so that students only have to count what they have found and write in the number. A scale will be taken along, or perhaps the school can provide one, so that the coal, clinker and brick fragments can be counted, weighed and discarded, by the students. We will also take a pair of calipers to measure the window glass and the sheet we use to date the window glass.

Next student data sheet information will be entered into the SURFER computer program, so that maps of the artifact distributions can be generated. That way each group can have their own set of maps in order to do their analysis. In addition, students can see one way archaeologists use computer technology in their work.

If we can be given the entire day, we should be able to wash, identify the artifacts, and enter the data into SURFER in one day

The artifacts need to be left to dry in their flats for a day or two, and should be stacked in some out of the way corner. Each drying tray should contain the data sheet with all the provenience information and the names of those in the task group, so the task group can relocate their artifacts later.

Before the end of the day the professional will explain to the students the next steps involved in the analysis. Teachers will, of course, have to go over this again, but it would probably be best if the archaeologist went over the next tasks, in case there are any questions and to prepare the students for the job ahead.

Part 3 – Student Analysis

This part of the process is to be accomplished by the students and teachers, without the aid of any of the professional archaeologists. We suggest a week be allotted for this, so the students have plenty of time to accomplish the required math, to think, and to write.

The first thing that needs to be done, is to rebag the clean artifacts in zip lock sandwich bags with the provenience information. Again each task group should be responsible for the artifacts they washed and identified. Remind students to print NEATLY. Teachers will be given instructions on what information is to be included and the order in which the information should be listed. This can be accomplished easily by using pre-printed note cards that ask for specific information. Once completed, the cards can be slipped into each of the bags containing artifacts. If each student brings a couple of zip-lock baggies from home, there should be plenty to do the job.

Students will use their SURFER maps to locate "hot spots" of architectural vs. domestic remains to attempt to locate structures and/or activity areas. Is there a structure ? Is it domestic ? Is the area associated with any specific activity ? Using the flat glass measurements and the dating chart, as well as nail dates, a general age for

the area investigated by each class can be determined. This is done by using the normal math formula for determining means.

The last thing the students need to do is write up their results, using the SURFER maps and mean dates. Analysis can be done either in task groups or as individuals. Students can also try to reach some conclusions about structure use based on the artifacts they found. This should be a fun exercise, stressing there is no right or wrong answer, only an opinion based on the facts (that is science).

Remember, professionals have a hard time with this too. These results can be included in our report to the landowner.

Part 4 – Group Discussion of Findings

CRA personnel:
Dr. Hank McKelway
Trina Maples

The last step of the process, will be for the professional archaeologists to go back to the school and discuss with the students their results. Students should be prepared to give a short oral presentation of their findings. Perhaps a spokesperson for each class (i.e. area of yard tested) would be best. This can be done with all three classes at one time and shouldn't take much more than an hour or so. After the presentations, the professional archaeologists will discuss the results, making suggestions and talking about site complexity and sampling strategies and how they affect our conclusions.

Part 5 – Future Research

Depending upon the results of fieldwork, future research could be designed for Middle and Upper School students. Because the archival information is quite weak at this time, selected students could pursue the written record by completing research into primary and secondary sources. Perhaps the Upper School history department might be interested in developing an historic context for the Bluegrass Region as a whole and for Waterwild specifically. Not only would it be useful to develop this overview but site specific knowledge of the site using agricultural, tax and census records would be helpful as well. What is the chain of title? When did the property change hands? How many slaves were owned by each landowner prior to the Civil War? What products were raised and sold, and in what quantities?

Other field work opportunities could also be explored. For example, if the patterning of artifacts or the remote sensing data suggests the location of slave quarters, this locality (and others) could be investigated further by the excavation of a limited number of 1 meter x 1 meter test units. Middle and Upper School student protocols could be developed to guide appropriate analyses and methodologies for drawing inferences and conclusions from the data available.

Part 6 – Reporting and Curation

Upon completion of field work and classroom sections of the Sayre School fourth grade archaeology project, a complete and formal report will be prepared by Cultural Resource Analysts, Inc. This report will include not only the analysis of the professional archaeologists, as well as their recommendations for further work, but also a copy

of the student analyses. Upon completion of the report, all artifacts and a copy of the report will be given to the property owner, Mr. And Mrs. Jamie Millard. Copies of the report will also be made available to Sayre School.

If the Millards are willing to loan specific artifacts to Sayre it might also be appropriate to create a display in Old Sayre. This could be accomplished quite easily and at minimal expense. This might include photographs of students involved in the excavation, processing of the data and artifacts, actual artifacts located during the project as well as historic and archeological information gained from the project. This exhibit may also serve as an educational tool for the school to supply other students not involved with the project an idea of the opportunities open to them as a possible career. This exhibit would also present to students and visitors to the school the accomplishments possible with joint ventures of businesses and educational institutions.