Fall 2007 Daily Logs

Major Recovery Continues at QAR site

This fall's expedition will start Wednesday August 22nd by loading gear on vessels and reestablishing moorings and reference lines at the shipwreck site. From there our plans are to complete units along the edges of the site on the south end to make sure that we have gone out far enough to recover all artifacts. Last year we found that small amounts of lead shot and some gold flakes extended somewhat further than we anticipated.

Working in these peripheral areas will allow us to set up and test dredging and artifact screening systems before moving into the main portion of the site. We will be running two excavations at the same time to maximize our ability to record and recover artifacts. Our plan is to continue our full recovery efforts from last year and if all goes well, complete excavations in the stern and aft hold areas (see site plan below).

This area includes 4 cannons, at least one of which will be recovered later in the expedition when conditions for the lift are optimal. Based on past studies the stern and aft hold areas are rich in artifacts related to the captain's cabin and officers’ quarters. Pewter platters, ornamental brass items, shards of ceramics and glass, a bell, a small rail cannon, and considerable amounts of lead shot and gold dust are some of the items expected. We anticipate recovering 1,000 to 1,200 objects (concretions) this fall that will eventually produce tens of thousands of individual artifacts.

The fall expedition of 2007 is expected to cover 12 weeks in duration and is the longest and most ambitious investigation conducted at the site to date. Divers from the NC Maritime Museum, Intersal Inc., Nautilus Productions, Maritime Research Institute, East Carolina University and GoDiveNC will join staff from the NC Underwater Archaeology Branch and several archaeological field technicians. A crew of 8 - 10 divers will be on site at all times conducting diving operations off the NC Marine Fisheries research vessel Shell Point (Captain Tom Piner) and UAB R/V Snap Dragon (Julep Gillman-Bryan). Research vessels will be docked at the US Coast Guard Fort Macon; the project team will be housed at both the Coast Guard station and at Fort Macon State Park.
On Wednesday August 22nd, the expedition crew assembled late morning at Coast Guard Station Ft. Macon and met NC Marine Fisheries *R/V Shell Point* and Captain Tom Piner. The vessel was fresh from its annual maintenance check-up and when we got there Tom was directing a work detail that were finishing touch-up painting and equipment preparation. While a shore group loaded the vessel and picked up last minute supplies, a small sortie of staff divers aboard *R/V Snapdragon* went offshore to relocate the shipwreck and begin putting up moorings and stringing reference lines.

The following day set up continued and a general assessment of the site was conducted - measurements of the sand level across the site and a visual inspection confirmed that the shipwreck site has more sand covering than usual and that most scour holes have filled in. This is
in large part due to the absence of any hurricanes visiting our shores last season. Archaeological work continued throughout the day in which excavation unit locations were established and dredge and sluicing systems were tested.

On Friday the first excavation was placed at Unit 89 in the extreme southern portion of the site. Approximately two feet of sandy overburden was peeled away with the 6” dredge with its outflow being directed off the site. Once a level was reached just above the artifact bearing layer, work continued with the 3” dredge and all sediments were brought to the surface and run through a gravity sluice and screen setup to capture even the smallest of artifacts. This dredging sequence will be standard operating procedure at all units excavated during the expedition. At the end of the day excavation of Unit 89 was completed and no visible artifacts were found. To make sure, however, early next week staff will sift and pan the contents from the sluice to determine whether small lead shot and gold are present. Stay tuned for those results and much more as excavations move into the main part of the shipwreck remains.

Entry 02 Week 2 August 27 – 31
Mark Wilde-Ramsing

Such a week! Northerly breezes, warm water, and 20 feet of visibility!! All things are going well. Quite well!!

Excavations were conducted on two fronts: 1). Working units along the south and west of the site to finish collecting artifacts along those margins; and 2). Excavating units directly over the southernmost cannons (C16, C17, C12) to remove all small artifacts in preparation for cannon removal.

Front 1). It is not so easy to determine exactly where artifacts stop because there is not a clean break as was hoped but probably shouldn't have been expected due to ocean currents. Small lead shot and even some flecks of gold are still present in units beyond the area where larger concretions lie. Another complicating factor is a difficulty in determining exactly how deep to dig when there aren't any large artifacts to gauge where the cultural level
starts and ends. Without the presence of large artifacts, which protect the denser scour-resistant underlying layer and trap shell, the artifact zone is difficult to detect. To compensate, excavation began just west of the cannons and extended outward thus going from the known to the unknown. Archaeologists also used line levels to determine relative depths and often checked the contents of the gold sluice and screen system. In this way a reasonable delineation of the extent of the artifacts is being determined.

Front 2). The other strategy concentrated on uncovering the southernmost cannons which lay about 12 inches under the seabed. The overburden was removed with the 6” dredge and once the associated artifacts were encountered, the smaller dredges brought sediment to the surface for sluicing. By the end of the week a number of units (6, 75, 76, 95, 101, 104, 105) had been completed thus clearly cannon C-12, C-16, and C-17 for removal. In doing so a number of exciting artifacts were found including a whole wine bottle, large pieces of ceramic and glass, a lead seal with "HART AM" written on it, a brass compass (dividers), a small weight, lots and lots of lead shot and cannonballs, and a whistle-like 'mystery' item.

Next week will be a challenging one as cannons are moved across the seabed to a staging area where they will await recovery. This stern area is extremely rich with artifacts, large and small, and should provide much excitement in the days to come.
Researchers had their work cut short on both ends this week. Monday was lost to the Labor Day holiday and Friday was lost because of preparations for the possible impact of Tropical Storm Gabrielle.

Tuesday was a bit of a slow start after the holiday as the crew had to release the moorings pulled down for the weekend and replace the one mooring left up for reference. Eventually one dive team completed unit 108 along the western periphery defining the site boundary in that area. A second dive team placed excavation grids on units 109, 110, and 111 and began removing overburden sand with the 6” induction dredge.

Excavation, documentation and recovery of units 109 and 110 were completed during the day on Wednesday. Cannon C12 was also rigged for lifting and moved out of the 3 previously excavated units it rested within. Once C12 was moved to a cleared area at the south edge of the site, we continued to excavated units 95, 104, and 105 recovering hundreds of lead shot, a few concretions and the 6th cannon apron from unit 95. C12 is the first of five cannon that will likely be moved as part of the excavation this fall. One or perhaps two of the cannon moved will be recovered this fall in mid-October with the assistance of R/V Dan Moore from the Marine Technology program at Cape Fear Community College, Wilmington.

Archaeologists completed units 111 and 112, start to finish, on Thursday. Overburden was removed from three additional peripheral units along the western boundary (113, 114, 115) in preparation for sluice/screen excavation. With the prospects of soon to be tropical storm Gabrielle making landfall near the wreck site, the crew spend Friday morning at the site recovering equipment and securing lines. The remainder of the day was spend offloading equipment from the research vessel, securing things on shore and moving R/V Shell Point to a more sheltered location to ride out the storm.

For the week, 111 QAR #s were assigned which include 89 concretions, 250 ballast stones, 9 ceramic sherds/glass shards, 1 gunflint, 1 yellow glass bead, a penny weight used for weighting gold and a rock of graphite. All artifacts were transferred to the conservation lab in Greenville.
The first half of the week was spent on-shore due to the residual weather from tropical storm Gabriel. Once R/V Shell Point was back at the dock we reloaded all the equipment in preparation for the next diving day. The time ashore actually gave the crew a chance to pick up a few items at the hardware store to improve our sluice systems and to construct an awning over the deck. Part of the crew spent their time processing sediment from 8 different units, recovering gold dust, lead shot, wood, copper alloy cufflinks and a copper alloy straight pin.

We were able to get out to the site Thursday and Friday, and managed to complete 4 interior units 117-120 recovering approximately 300 ballast stones, 70 concretions, and 5 glass shards/ceramic sherds. In our quest to find the western edge of the site we completed 3 units 113-115 and found no concreted objects but gold dust and lead shot were still present in the sediment.
For most of the week favorable north winds prevailed and the QAR team brought up the most artifacts of any week this season. On Monday, the divers started on the western perimeter and completed three units moving eastward, toward cannon C-18. The squares were empty of visible artifacts, but panning the sluice material revealed small lead shot and a scattering of gold dust in each square.

On Tuesday and Wednesday the researchers concentrated on the three units surrounding cannon C-18. This area was rich in artifacts and the archaeologists recovered 4 whole pewter plates, half of a pewter charger, 150 concretions, 40 possible lead net weights, a unique decorative handle and a beautifully preserved brass trigger guard. Lindley Butler, the project historian, spent the day with us on Wednesday along with Susan Simone, a writer with the UNC-CH alumni magazine.
Thursday was a day to remember. Using lift bags, the divers were successful in moving cannon C-18 from its resting place to a location near the south end of the baseline. With all the divers back on deck, Captain Tom Piner shut down the pump and generator. With only the sound of a gentle rain and the lapping of the waves, the QAR team paused to remember Phil Masters and his years of hard work that led to the discovery of QAR—the reason we all are here. It was an emotional and fitting tribute to Phil.

Finally, while passing through the inlet on the return to Ft. Macon, the crew was caught by surprise when a 5-foot spotted eagle ray jumped from the water and landed on the deck of Shell Point. With some difficulty, Captain Piner and Videographer Rick Allen were able to get the ray back overboard along with several remora that were dislodged on the deck.

Although weather conditions were not terrible on Friday, a large swell and zero visibility made working on the bottom difficult. Content with completing 9 units, the decision was made to return to Ft. Macon and concentrate on preparing the artifacts for their trip to Greenville.

Entry 06 Week 6 September 24-28
Richard Lawrence - Wendy Welsh

This week marked the halfway point of the planned 12-week project, and the field crew continued to make steady progress. On Monday and Tuesday the archaeologists concentrated on excavating the three units (129, 130, and 131) that contained cannons C-20 and C-14. Once again, the area surrounding the cannons contained a wealth of artifacts. The researchers mapped, tagged and recovered 169 concretions, 15 glass and ceramic fragments, 1 wine bottle attached to a concretion, 4 pewter plate fragments, 2 pewter flasks (one in concretion), a set of brass nesting weights, and one cut stone slab that may have been part of the galley hearth.
With the surrounding artifacts removed and the guns fully exposed, divers prepared cannons C-20 and C-14 for moving. Using a system devised by Shell Point captain Tom Piner, the archaeologists were able limit the lift of the guns to only a few feet above the bottom to better control their short journey to the staging area at south end of the site. The system worked so well that the divers moved both cannons during a single dive. Once the guns were safely out of the way, researchers mapped and recovered artifacts hidden by the cannons and completed excavation of the three units.

On Thursday and Friday the team turned their attention to units 134-140 on the eastern side of the site. Although they didn't expect to find many artifacts in this area the researchers wanted to define the eastern boundary of the site. True to expectations, no concretions or visible artifact were found, but by sluicing and panning the sediment the archaeologists discovered small lead shot and a scattering of gold dust.
Days when you can't go out is like being told to go bed. You protest and find it hard to accept, but when you wake in the morning you are rested and refreshed. It is the same for us when we can catch up on repairs, errands, and backlog in processing artifacts. Since we have been working almost non-stop since August 22nd, Monday and Tuesday were put to good use on a whole variety of shore side chores.

One major activity during our weather days was building another wooden container, which was then transported to Parker Marine, Inc. for fiberglassing. This waterproofs the boxes that can then be filled with water and a cannon or lots and lots of small artifacts. Parker has donated this finish for a dozen boxes providing a major contribution and saving staff untold hours that used to be spent mopping up spills due to leaky containers.

As you've seen from earlier reports, panning of sediments has been constantly on-going aboard Shellpoint. During the two off days, a concentrated effort was made to get through much of the sediment that had already been collected. Sixteen units in all. As each unit is excavated, the dredge brings small diameter artifacts and sediment up to the deck of the boat and through gold sluices and hardware screen boxes. The only thing that escapes over the side is water and sand. Staff constantly monitor the screens by picking out any recognizable artifacts. Shell is also inspected for artifacts and then discarded. When the unit is complete, all the sediment in the sluice is placed in a separate bucket and saved for panning. In the panning process, smaller screens are used to separate shell, and then the shell and the leftover sediment are panned using an old fashioned gold pan. Carefully and skillfully even the smallest lead shot, glass beads and grains of gold are saved for analysis.
The moderate weather conditions allowed for 11 units to be completed primarily on the east side where eastern site boundary was being determined. Therefore, the overall week's recovery included only 30 concretions.

Entry 08 Week 8 Oct. 08-12
Chris Southerly

Work this week continued on the line of units between 55' and 60' on the baseline. Researchers completed five units (151-155) on Monday and Tuesday and moved a large cask hoop concretion to the south edge of the site area for later recovery. Poor weather conditions forced R/V Shell Point to stay in Wednesday and Thursday, but the shore days were well spent scanning field maps and beginning the digital mapping of excavation units and the artifacts in them. Friday was a busy day on site with excellent visibility and calm seas. Archaeologists completed unit 132, after rigging and moving another large cask hoop concretion to the south edge of the site. The unit containing cannons C16 and C17 (101) was re-excavated to prepare for the planned recovery of cannon C16 on Monday (See Special Report Cannon Recovery). Once exposed C16 was carefully examined and lifting straps placed for a balanced lift but also to protect the artifacts within the concretion and adhered to the surface.
The outstanding weather conditions in Beaufort Inlet enjoyed by all on Friday and over the weekend persisted this week as well. On Monday one team of researchers continued working excavation units along the 55' to 60' transect while the cannon recovery team made final preparations and equipment checks for raising cannon C16. Despite the excitement of the cannon recovery, archaeologists had a very nice discovery from unit 156, a brass pestle. The location is only a few feet from where archaeologists found and recovered a brass mortar exposed in a scour area after Hurricane Ophelia in September 2005.

R/V Dan Moore from the Marine Technology Program at Cape Fear Community College in Wilmington, NC (CAPT Steve Beuth) arrived on site around 1:30 PM after picking up project personnel, observers, and media at the US Coast Guard Station - Fort Macon. Once Dan Moore is moored on site the recovery divers from R/V Shell Point (Chris Southerly, Nathan Henry, Franklin Price) raise the cannon to the surface using two 1-ton lift bags. R/V Snap Dragon (Julep Gillman-Bryan, Tom Piner, Bill Carlson) tows the now floating cannon and recovery divers to the recovery vessel where divers attach the hook from the lifting crane and detach the lift bags once weight has been transferred to the crane. Divers returned to Snap Dragon to be ferried back to the site area for a brief reconnaissance of the recovery area before everyone heads in for the day.

The successful recovery of cannon C16 marked the beginning of a busy week. Good conditions allowed archaeologists to rig and move cannon C17 and yet another large concretion of cask hoops to the south edge of the site. This allowed units 101, 156 and 157 to have final cleaning completed. Researchers
completed six additional units (133, 158, 159, 160, 161, 162, and 16) on Wednesday and Thursday before being blown out for another shore day on Friday. Because of the number of artifacts recovered this week, over two hours was spent packing and preparing them for transport to the conservation lab. Two of the more interesting items were a little brass buckle and what appears to be a keg spigot valve in the form of a fleur-de-lis. The remainder of Friday was spent processing sediment from the excavated units, doing repairs to vessels and equipment, and catching up on paperwork before team members left for a much needed weekend break.

Entry 10 Week 10 Oct. 22-26

Chris Southerly

Underwater archaeologists from the Florida Bureau of Archaeological Research joined the crew this week. Unfortunately the weather did not cooperate. Only four new units 163 - 166 and one old unit 5 were completed on Monday and Friday. This work did include rigging and staging a very large triple cask hoop concretion to the south edge of the site for later recovery. The conservation tank for the stern post was built and taken to be fiberglassed. The wayward site buoy that found its way inside the inlet last fall was recently pulled from Bird Shoal by Jim Brown of Beaufort and towed to Taylor's Creek which was no easy feat and greatly appreciated. From there it was towed to the Coast Guard station at Fort Macon where it was pulled and loaded on the utility trailer for transport back to the Underwater Archaeology Branch facility at Fort Fisher.

Blown us out most of this week!
Entry 11 Week 11 Oct. 29 - Nov. 02
Chris Southerly
This week was the reverse of last week. The crew lost Monday and Friday to weather but were able to work Tuesday, Wednesday and Thursday. Shore work was extensive this week as well as fieldwork. The lifting frame for the sternpost was cut and welded while the now completed tank was transported to the conservation lab in Greenville. At the site, units 167 - 175 were completed along the BL60 - 65 line. With the completion of this line of recovery units, the overall goal for the fall project was achieved.

Entry 12 Week 12 Nov. 05 - 09
Chris Southerly
The team split on Monday with one crew working ashore to finish the planning and set-up for the stern post recovery and the second crew completing the final elements of field work and getting the site set for the stern post recovery. Archaeologists excavated edge reconnaissance units 176 - 179 extending east along the BL30 line. With the weather forecast to be rough on Tuesday and not calming down until late Wednesday the recovery was put off until Thursday, which affectedly ended our project.