

Queen Anne's Revenge Field Operations – Fall 2007

Chris Southerly, Archaeological Supervisor/Field Director

I. Purposes/Goals

- a. Fully excavate, document, and recover artifacts from up to 3000 square feet in the offshore/stern/aft site area
- b. Recover cannon C16 from previously excavated and documented area and stage up to five (5) additional cannon for later recovery
- c. Map and photo document any newly exposed areas of the site
- d. Collect sand elevations from established locations
- e. Offer educational/experience opportunities to marine science and underwater archaeological students

II. Participants

- a. NC UAB-*QAR* (* approved diver)
 - i. *Chris Southerly – *QAR* Chief Archaeologist, Field Operations Director, Dive Safety Officer; UAB Archaeologist
 - ii. *Mark Wilde-Ramsing – *QAR* Project Director; UAB Archaeologist
 - iii. *Richard Lawrence – UAB Archaeologist Supervisor; NC Deputy State Archaeologist, Underwater
 - iv. *Nathan Henry – UAB Archaeologist, Conservator
 - v. *Julep Gillman-Bryan – UAB Dive Safety Officer, Vessel Captain
 - vi. *Wendy Welsh – *QAR* Conservator
 - vii. *Franklin Price – *QAR* Archaeologist/Conservator Technician
 - viii. *Anne Corscadden Knox – *QAR* Archaeologist Technician
 - ix. *Josh Daniel – *QAR* Archaeologist Technician
 - x. *Kelly Bumpass – *QAR* Archaeologist Technician
 - xi. *John Masters – *QAR* Archaeologist Technician
 - xii. Karen Browning – *QAR* Digital Technology Specialist
 - xiii. Sarah Watkins-Kenney – *QAR* Chief Conservator
 - xiv. Shanna Daniel – *QAR* Conservator
 - xv. *Rick Allen (Nautilus Productions) – Videographer (volunteer)
 - xvi. *Jim Dugan – Archaeologist Technician; EMT (volunteer)
 - xvii. *Lauren Hermley – Archaeologist; DiveDown Coordinator (volunteer)
 - xviii. Jim Craig – Geologist (volunteer)
 - xix. Lindley Butler – Historian (volunteer)
 - xx. Linda Carnes-McNaughton – Archaeologist (volunteer)
- b. NC Maritime Museum
 - i. *Dave Moore – Archaeologist, Historian
 - ii. David Nateman – Museum Director, Public Relations/Education
- c. North Carolina Marine Fisheries (R/V *Shell Point*)
 - i. Tom Piner – Captain, Vessel Operations, Surface Support
 - ii. Jason Hill – Mate, Vessel Operations, Surface Support
 - iii. Jerry Spencer – Mate, Vessel Operations, Surface Support
- d. USCG Sector North Carolina - Fort Macon
 - i. CAPT William “Dean” Lee – Commander Sector NC
 - ii. CDR John R. Helton – Primary *QAR* Expedition Liaison

- e. North Carolina Institute for Marine Science (R/V *Capricorn*)
 - i. Joe Purifoy – Captain, Vessel Operations, Surface Support
 - ii. Various Mates – Vessel Operations, Surface Support
 - 1. Stacy Davis
 - 2. Claude Lewis
 - 3. Wayne Fluellen
- f. Volunteers/Visiting Scientists/VIP Guests
 - i. Mike Daniel - MRI
 - ii. Local *QAR* Supporters – Coordinated and approved in advance with Project Director and Field Director
 - iii. Topside Observers – Coordinated and approved in advance with Project Director and Field Director

III. Decision Making/Authority

- a. Project Operations – Chris Southerly will supervise and coordinate all project operations.
- b. Vessel Operations – The boat captain(s), in consultation with project and diving supervisors, will have final authority regarding cancellation or termination of field operations because of adverse sea or weather conditions.
- c. Diving Operations – All diving operations will adhere to the guidelines set forth in the NC UAB Diving Safety Manual (2004 revision). Julep Gillman-Bryan (UAB DSO) or Chris Southerly (*QAR* DSO) will have final authority regarding cancellation or termination of diving activity. The DSO with advisement from the Diving Control Board members will have final authority to determine individual diver competency (staff or visiting) to participate in diving operations.
- d. Artifact Recovery – The field director in conjunction with the field conservator will be responsible for determining recovery status and procedures of any artifact or object according to conservation/documentation protocols.
- e. Internal Communications – Mark Wilde-Ramsing or Chris Southerly will coordinate communication with State Archaeologist, Steve Claggett; NCMC Director, David Nateman; and DCR Public Affairs Office, Fay Mitchell-Henderson regarding the progress of field activities, significant discoveries, or any changes to the plan or scheduling.
- f. External Communication – Mark Wilde-Ramsing or Chris Southerly will be primary point of contact for media interviews and scheduling.

IV. Methodology

- a. Reconnaissance – All areas will be carefully examined for erosive scour and all newly exposed remains will be mapped. No excavation is anticipated in these areas. Only exposed artifacts that are deemed diagnostic or fragile/endangered will be considered for recovery.
- b. Elevations – Sand levels data will be collected at established locations. Sand levels will also be recorded at the beginning and end of each excavation unit (as deemed appropriate by the documenting archaeologist). The top elevations of all baseline stakes and SW unit stakes will be determined relative to the site datum for accurate contour mapping.
- c. Unit Excavation – 5'x5' units will be established on the site coordinate system according to the overall project recovery plan. All units will be referenced by the SW

“stake” trilaterated from the baseline or determined by rigid grid. A second reference stake will be placed in a second corner to support floating grids. Sand overburden will be removed with a 6-inch water-induction dredge and placed off site in designated areas. Once the cultural layer is reached, excavation will be done with a 3-inch water induction dredge. Excavated sand will be passed through a gravity sluice and screening system for small artifact recovery. Before declaring a unit complete, researchers will collect a core sample (10 cm diameter by minimum 10 cm deep) to be field processed by screening and panning to verify the culturally sterile layer has been reached.

- d. Mapping/Documentation – Major artifacts and concretions within the units will be tagged and labeled by the documentation diver. The object will then be sketch mapped and plotted showing general shape and orientation and location of the tag. A plan-view digital image will be taken of each tagged object *in situ* with a scale arrow, indicating north if visibility allows. Once tagged, sketched, and photographed, the object will be removed from the unit and set aside for recovery.
- e. Recovery – All artifacts to be recovered will follow the *Conservation and Artifacts Documentation Protocol* established by the *QAR* Conservation Lab.
- f. Ballast uncovered by excavation will not be individually tagged. General provenience will be noted on the unit sketch map and the ballast then placed in recovery buckets and brought to the surface at the completion of the individual unit excavation.
- g. Photography/Videography – Digital photos will be taken of all excavation units as indicated above to document *in situ* orientation of artifacts. Additional “working” photos will document the excavation and mapping process as visibility allows. Digital video may also be shot of all areas of the site to document conditions and change, and also for visual documentation of work being conducted.
- h. Detailed diving and time information will be maintained, on a task-by-task basis, for detailed work/time/cost figures

V. Logistics

- a. Platform
 - i. R/V *Shell Point* (NC Marine Fisheries) will be the primary platform for all field operations.
 - ii. R/V *Snapdragon* (NC Underwater Archaeology Branch) will serve as the support vessel as necessary.
 - iii. R/V *Capricorn* (UNC Chapel Hill) will be the primary lifting vessel for large artifact recovery.
- b. Operations
 - i. Site Setup
 1. Moorings will be placed on the West, North, East, and South and on the East screw eye.
 2. A new screw eye will be placed outside the southwest margin of the site area, to allow better vessel positioning for excavations.
 3. Baseline will be laid and reference lines from the moorings in to the baseline will be placed for convenience and low visibility navigation.
 4. 5x5 units will be trilaterated in from the baseline and marked in the SW corner and a second corner as appropriate.
 5. Once setup, a rigid floating grid will be used to define the excavation units.

- ii. Mapping
 1. The site will be subject to visual reconnaissance and all areas previously unmapped (recently uncovered), will be drawn and measured in to the baseline for updates to the site map.
 2. All field drawings (including in progress drawings) will be scanned at the end of each field day.
 3. *In situ* digital photos will be downloaded from the camera and copies renamed with *QAR*/Field numbers for scaling and insertion in the CAD site map in unit folders.
 4. Photos will be scaled, drawn, and placed in AutoCAD based on sketch map coordinates for each object.
 5. No object will be removed from the units until fully documented by the mapping diver and tagged by the recovery diver.
- iii. Excavation
 1. Excavation of the test units will be done by a diver controlled water induction dredge system.
 2. The pump on R/V *Shell Point* will be used with a diverter manifold so multiple intakes may operate simultaneously.
 3. Sand overburden in the units will be placed in a designated area off the site, accessible for reburial.
 4. Excavation within the cultural layer will have all outflow pass through gravity/sedimentation sluice and a ¼ inch mesh screen for small artifact recovery.
 5. All test units will be backfilled at the completion of fieldwork.
 6. All field notes will be cleaned up and scanned at the end of each field day.
- iv. Digital Photography/Videography
 1. Photography will be done using a Nikon Coolpix 995 camera in an Ikelite housing. A second Coolpix 995 camera will be held in reserve, on site.
 2. Film/slide photography will also be available using a Nikonos V camera system.
 3. Video will be done using a Sony HD camera system.
 4. Camera downloads will take place immediately post dive to the UAB laptop for photo review and the photographer/diver will coordinate with the documentation technician to create a text reference file of the shots at that time.
 5. Digital imagery will be done of any exposures from recent erosive scour.
 6. Backups will be made of all digital imagery do a secondary recording device at the end of each day and prior to deletion from camera storage media.
- v. Field Conservation, Stabilization, Documentation
 1. All artifacts recovered will follow the *Conservation and Artifacts Documentation Protocol* established by the *QAR* Conservation Lab.
- vi. Diving

1. All diving operations will conform to the guidelines set forth by the NC UAB Diving Safety Manual and will be conducted on open-circuit SCUBA or a surface-supply hookah system.
 2. All working divers will be equipped with full-face mask and wireless communications.
- vii. Shore support
1. Monitoring of site operations will be done via the site security camera from the *QAR* office at IMS.
 2. Air fills for empty SCUBA tanks will be obtained from either Discovery Diving of Beaufort or Olympus Dive Center of Morehead City.
- c. Housing
- i. USCG Station Fort Macon
 - ii. Fort Macon State Park

VI. Public Relations

- a. A mutually agreeable public statement about the expedition will be discussed and decided upon prior to the initiation of fieldwork regarding:
 - i. Purpose
 - ii. Contributors
 - iii. Expected Results
 - iv. Continued Work
- b. Richard Lawrence, Mark Wilde-Ramsing, and Chris Southerly, will determine the content of the above statement.
- c. Chris Southerly and Mark Wilde-Ramsing will be the main points of contact for media interviews and scheduling. David Nateman will handle all museum oriented media inquiries.
- d. All participants likely to interact with the public or press will be briefed on the above expedition statement.
- e. Official press releases will be channeled through Fay Mitchell-Henderson at the DCR Office of Public Affairs using standard *QAR* “boilerplate” and additional information to be provided in the “message” mentioned above.
- f. Active media participation during the project is not encouraged. A public viewing will be scheduled following cannon recovery for media and interested persons to view the cannon prior to transport to the conservation facility.
- g. All media contacts will be reported promptly to the DCR Office of Public Affairs and the State Archaeologist.

VII. Planned Operation Time

- a. August 22, 2007 – November 9, 2007.
- b. Daily operations will commence by 0800 at the USCG Station Fort Macon dock, with vessels leaving the site by 1530 to return to dock, unless work and conditions dictate otherwise.
- c. Barring weather constraints, weekends are off time.
- d. Initial site reconnaissance and basic setup will be conducted from R/V *Snapdragon* August 22-23, 2007.
- e. Recovery of cannon C16 will take place during a period of calm sea conditions with as much advance notice to peripheral agencies and personnel as possible.