

Queen Anne's Revenge Field Operations – May 2005

Chris Southerly, Project Archaeologist/Field Director

I. Purposes/Goals

- a. Fully excavate, document, and recover artifacts from 400 square feet (16 5'x5' units) of previously undisturbed areas of the site to expand on the current research design
- b. Investigate *in situ* artifacts to add information to material cultural analysis dictated by work on the Interim Report
- c. Map and photo document any newly exposed areas of site
- d. Collect sand elevations from established locations, establish additional locations
- e. Offer educational/experience opportunities to marine technology and underwater archaeology students
- f. Excavate and recover up to 3 cannon from different zones of the site

II. Participants

- a. NC UAB-QAR
 - i. Chris Southerly – Archaeologist, Field Director
 - ii. Mark Wilde-Ramsing – Archaeologist, Project Director, Lead Public Relations
 - iii. Richard Lawrence – Senior Archaeologist, Public Relations, DCR Liaison
 - iv. Nathan Henry – Archaeologist, Lead Excavation
 - v. Julep Gillman-Bryan – Dive Safety Officer, Boat Captain, Underwater Photography
 - vi. Sarah Watkins-Kenney – Lead Conservator, Artifact Documentation, Recovery Monitoring
 - vii. Wendy Welsh – Field Conservator, Artifact Documentation, Recovery Monitoring
 - viii. Eric Nordgren – Field Conservator, Artifact Documentation, Recovery Monitoring
 - ix. Barbara Brooks – Project Administrator, Logistics, Supplies, Shore Support
 - x. Karen Browning – Digital Technician, Surface Photography, Shore Support
 - xi. Jim Dugan (Volunteer) – Diver, EMT
 - xii. Jim Craig (Volunteer) – Geologist, Surface Support
 - xiii. Rick Allen (Volunteer) – Videographer
 - xiv. Jim Martin (Volunteer) – Marine Biologist, Videographer
 - xv. Lindley Butler (Volunteer) – Historian
- b. NC Maritime Museum
 - i. Dave Moore – Archaeologist, Lead Documentation
 - ii. David Nateman – Museum Director, Public Relations, Public Education/Outreach
- c. Intersal/MRI
 - i. Phil Masters – Documentary Coordinator
 - ii. John Masters – Surface Support, Diving
 - iii. Mike Daniel – Documentary Productions
- d. Cape Fear Community College (R/V *Martech*)
 - i. Peter Simpson – Captain, Vessel Operations, Surface Support
 - ii. David Monaghan – Marine Technician, Vessel Operations

- iii. Various Persons – Mate, Vessel Operations, Surface Support
- e. Visiting Scientists/VIP Guests
 - i. Joel Bourne – National Geographic Senior Writer
 - ii. Linda Carnes-McNaughton – Visiting Archaeologist
 - iii. Local *QAR* Supporters – Coordinated and approved in advance with Project Director and Field Director
 - iv. 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, in consultation with senior staff and task supervisors.
- 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 due to 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) 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/senior archaeologist in conjunction with the field conservator/senior conservator will be responsible for determining recovery status and procedures of any artifact or object according to conservation/documentation protocols.
- e. Internal Communication – Richard Lawrence will be responsible for communicating with State Archaeologist, Steve Claggett; NCMM Director, David Nateman; DCR Public Affairs Office, Fay Mitchell-Henderson; Intersal, Phil Masters; and MRI, Mike Daniel regarding the progress of field activities, significant discoveries, or any changes to the plan or scheduling.
- f. External Communication – Mark Wilde-Ramsing will be primary point of contact for media interviews and scheduling in conjunction with David Nateman who will handle museum oriented media inquiries.

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 well as for prominent artifacts or concretions within the 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. Test Unit Excavation – Approximately 16 standard 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. A second reference stake will be placed in a second corner to support a rigid floating grid.

Sand overburden will be removed with the large dredge and placed down current in designated areas. Once the cultural layer is reached, excavation will be done with the small dredge and all excavated sand will be passed through a 1/4" mesh screen for small artifact recovery or a sluice system.

- 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 on Mylar showing general shape and orientation and coordinates for the location of the tag. A plan-view digital image will be taken of each tagged object *in situ* with a scale arrow, indicating north. Once tagged, sketched, and photographed, the photo diver will remove the object from the unit and set it to the side for recovery.
- e. 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 for analysis and storage.
- f. 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.
- g. 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 *Martech* (CFCC Marine Technology Program) will be the primary platform for all field operations.
 - ii. R/V *Snapdragon* (NCUAB) will serve as the support vessel if necessary.
 - iii. R/V *Pelican* or R/V *Anomaly* (Intersal) may be present during the project for MRI's documentary filming
- b. Operations
 - i. Site Setup
 - 1. Moorings will be placed on the West, North, East, and South and on the East screw-eye.
 - 2. Baseline will be laid and reference lines from the moorings in to the baseline will be placed for convenience and low visibility navigation.
 - 3. 5x5 units will be trilaterated in from the baseline and marked in the SW corner and a second corner as appropriate.
 - 4. 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. For consistency and accuracy a single diver will conduct/supervise the mapping (Dave Moore).
 - 3. All field drawings will be cleaned up and scanned at the end of each field day.

4. *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.
 5. Photos will be scaled, drawn, and placed in AutoCAD based on sketch map coordinates for each object.
 6. No object will be removed from the units until the Mapping diver and the Photo Diver have it fully documented.
- iii. Dredging
1. Excavation of the test units will be done by a diver controlled water induction dredge system.
 2. The pump setup on R/V *Martech* will be used with a “Y” valve reducer so that two 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 1/4 inch mesh screen for small artifact recovery.
 5. For consistency a single diver will supervise excavation (Nathan Henry).
 6. All test units will be backfilled at the completion of fieldwork.
 7. 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. Video will be done using a Sony Mini-DV camera with housing.
 3. Camera downloads will take place immediately post dive to the *QAR* 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.
 4. Digital imagery will be done of any exposures from recent erosive scour.
 5. For consistency and accuracy a single diver will supervise and coordinate all digital imagery (Chris Southerly).
 6. Immediate backups will be made of all digital imagery do a secondary recording device (zip drive, flash drive, or second computer).
- 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.
 2. On-board SCUBA tank fills will be done using a high-pressure low CFM pump by a technician approved by the Diving Safety Officer.
- 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 Diver Down of Atlantic Beach

VI. Public Relations

- a. A mutually agreeable public “message” about the project 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 “message”.
- c. Mark Wilde-Ramsing will be the main point of contact for media interviews and scheduling. David Nateman will be apprised of any contacts and will directly handle all museum oriented media inquiries.
- d. All participants likely to interact with the public or press will be briefed on the above “message”
- 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. Key personnel, as necessary, will determine the appropriateness of end-of-week interviews, or weekly press releases.
- g. All media contacts will be reported promptly to the DCR Office of Public Affairs and State Archaeologist.

VII. Planned Operation Time

- a. May 02-27, 2005
- b. Daily operations will commence by 0800 at the Ft. Macon dock, with vessels leaving the site by 1600 to return to dock, unless work and conditions dictate otherwise.
- c. Barring weather constraints, weekends are off time.
- d. Out of town crew will arrive in Morehead City/Beaufort Sunday May 1, 2005.
- e. Initial site reconnaissance and basic setup will be conducted from R/V *Snapdragon* on Monday, May 2, 2005.
- f. R/V *Martech* will arrive from Wilmington Monday, May 2, 2005 and will begin as the operating platform Tuesday, May 3, 2005.
- g. Cannon recovery from the site, will take place during the last week of the project, May 23-27, 2005, with support from a larger recovery vessel, possibly R/V *Dan Moore*, from Cape Fear Community College, Marine Technology Program.