Queen Anne's Revenge **2011 Fall Expedition Plan**
Schedule and Tasks
Mark Wilde-Ramsing and Chris Southerly

I. Primary Goals

- Assess the post-hurricane Irene condition of the Q*ueen Anne's Revenge* site and conduct mapping, recovery mitigation, and site stabilization should significant scour have occurred;
- Continue excavation, documentation, and recovery of artifacts from a previously known scour area, which involves the excavation of twenty-one 5 x 5 foot excavation units. This is the location of the foremast and galley area (map);
- Conduct in-situ corrosion monitoring on artifacts previously set-up, anchors A2 and A3 and three cannon C1, C9, and C12; install corrosion anodes on cannons C13, C20, C14, and C17;
- If time permits, excavate twelve units on the east side of the pile in the lower hold area at midships;
- Offer graduate internship and a directed study program in advanced excavation, recovery, and field conservation methods and procedures;
- Highlight this year's major project partnerships (NOAA's Marine Sanctuary Program and Foundation, ECU, NC Marine Fisheries, Intersal, The Town of Beaufort, and Friends of *Queen Anne's Revenge*) during the recovery cannon C23, one of the ship's largest guns.

II. Personnel

UAB

Mark Wilde-Ramsing - Expedition Director
Sarah Watkins-Kenney – QAR Conservation Laboratory Director
Chris Southerly - Equipment and logistics
Nathan Henry – Large artifact recovery
Wendy Welsh – Artifact recovery and processing; in-situ monitoring program
Shanna Daniel – Artifact receiving at QAR lab
Lauren Hermley – Media communications and on-site public outreach
Madeline Spencer – Administration
Karen Browning – Data management
Richard Lawrence – Former UAB Director

NCMM

Dave Moore – Site Mapping

Nautilus Productions

Rick Allen - Videography

Vessel Captains

Tom Piner, Captain (R/V *Shell Point*), NC Marine Fisheries
Eric Diadorrio, Captain (ECU Barge; R/V *Cutting Edge*)
Julep Gillman-Bryan, Captain and UAB Dive Safety Officer (*Snap Dragon*)
Kevin Meadows, Captain and Diver, Intersal Inc. (*Bonny Lass*)

Dive Safety Officers

Julep Gillman-Bryan – UAB Dive Safety
Kevin Flanagan – ECU Dive Safety

ECU Instructors

Lynn Harris –QAR Intern and Ind. Studies Instructor, ECU Maritime Studies
Mark Keusenkothen – Director, ECU Dive and Water Safety

ECU Student Volunteers

Matt Thompson
Kate Schnitzer
Rob Minford
Josh Marano
Dan Bera

ECU Student Intern

Laurel Seaborn

Winterthur Student Interns

Ellen Promise
Bartek Dajnowski

ECU Independent Study Students

Tom Horn
Charles Bowdoin
Lindsay Scott
Robin Croskery
Angus McKelter

II. Schedule, Objectives, Personnel, and Vessel/Equipment Needs

21 Sept

- Objectives – Deliver *Snap Dragon* and make logisital contacts and arrangements.
- Personnel – Gillman-Bryan, Welsh, Henry
- Vessel/Equipment – *Snapdragon*

27 – 28 Sept

- Objectives –
  - Relocate and establish primary moorings and lead lines and install baseline and replace missing stakes;
  - Assess condition of the site;
  - Record sand levels will be recorded;
  - Test dredge and sluice capabilities of ECU Barge.
- Personnel - Gillman-Bryan, Welsh, Henry, Wilde-Ramsing, Southerly, Thompson, Marano, Diadorrio.

- Vessel/Equipment – *Snapdragon* and ECU Barge; hand-held mag, dredge; moorings and line.

3 - 14 Oct

- Objectives –
    - Load equipment on R/V *Shell Point*,
    - Establish grid references for west excavation area;
    - 6" dredge area beginning at C13 and completely strip overburden off west excavation area;
    - Set up in-situ corrosion anode on C13 and take readings;
    - Commence with 3" dredge, sluice and artifact recovery in west excavation area;
    - Remove C23 from the excavation unit and stage it for recovery;
    - Relocate C1, C9, A2, and A3 with 6" dredge and take in-situ corrosion readings.
- Personnel –
    - Full time - Piner, Wilde-Ramsing, Gillman-Bryan, Welsh, Henry, Moore, Minford, Seaborn, Promise.
    - Part time – Southerly (3, 4, 10, 11); Thompson and Bera (3-7); Marano, Horn, Daniel, and Allen (10 – 14), Lawrence (12-14), Hermley (as needed).
- Vessel/Equipment – R/V *Shell Point*; dredge and sluice system, recovery equipment, in-situ monitoring equipment.

17 – 28 Oct

- Objectives
    - Load equipment on ECU Barge and support vessel(s);
    - Complete west excavation area with 3" dredge, sluice and artifact recovery
    - Relocate C12 with 6" dredge and take in-situ corrosion readings;
    - Relocate C14 and C20 with 6" dredge and set-up in-situ corrosion anodes and take readings;
    - Relocate conglomerate QAR 3240 with 6" dredge and recover the object;
    - Relocate C17, move it with other cannons in holding area, set up in-situ corrosion anode and take readings;
    - Relocate C1, C9, and A2 with 6" dredge and take in-situ corrosion readings;
    - Relocate two previously recorded conglomerates placed on pile and recover them;
    - Time permitting remove overburden from east excavation area;
    - Commence with 3" dredge, sluice and artifact recovery in east excavation area.
- Personnel
    - Full time - Diadorio, Wilde-Ramsing, Gillman-Bryan, Welsh
    - Part time – Southerly (17, 18, 24, 25); Henry (19, 20, 25, 26, 27); Dajnowski (17, 18, 19) Allen and Watkins-Kenney (25, 26); Seaborn, Marano, McKellar, Scott, and Flanagan (17-21); Schnitzer, Bowdoin, Croskery, and Kuesenkothen (24-28); Hermley (as needed).
- Vessel/Equipment – ECU Barge, MF Parker, and/or *Snap Dragon*; dredge and sluice system, recovery equipment, in-situ monitoring equipment.

26 Oct

- Objectives
  - Recover C23 (Back-up dates Oct 27 or 28);
  - Public viewing in Downtown Beaufort;
  - Transport C23 to Conservation Laboratory;
  - Archaeologists meet and greet with Beaufort citizens in the evening.
- Vessels –NOAA's SRVx (recovery vessel) with lifting crane; MF Parker (dive tender); *Snap Dragon* chase boat.

IV. Decision Making/Authority

- Project Operations – The field director has supervisory oversight and final authority over all project operations.
- Vessel Operations – The vessel captain(s), in consultation with the field director and dive safety officer(s), have final authority regarding cancellation or termination of field operations because of adverse sea or weather conditions.
- Diving Operations – All diving operations will adhere to the guidelines set forth in the NC UAB Diving Safety Manual (2004 revision). The UAB diving safety officer will have final authority regarding cancellation or termination of diving activity. The diving safety officer, with advisement from the Diving Control Board, will have final authority to determine individual diver competency (staff or visiting) to participate in diving operations.
- In-situ Corrosion Treatment – The in-situ program conservator will direct the setup and monitoring of large artifact corrosion treatment in conjunction with field, vessel, and diving supervisors.
- Artifact Recovery – The field director in conjunction with the field conservator will be responsible for determining recovery status and procedures for any artifact or object according to conservation/documentation protocols and within the operational parameters of the vessel captain.
- Internal Communication – The field director, in coordination with the QAR communications director, will coordinate any necessary communication with the Office of State Archaeology, NCMM, ECU, and DCR public affairs office, Jennifer Woodward and Fay Mitchell.
- External Communication – The QAR communication director in consultation with the project director, or designate, will be the primary point of contact for media interviews and scheduling.

V. Methodology

- Operations
  - Reconnaissance
    1. All areas will be carefully examined for erosive scour and any newly exposed remains will be mapped.
    2. No excavation is anticipated in these areas.
    3. Only exposed artifacts deemed diagnostic or fragile/endangered will be considered for recovery.
  - Site Setup

1. Moorings will be placed on appropriate attachment points: West, North, East, South, SW-RR, NE-RR, and/or East Screw-eye.
2. Baseline will be laid and reference lines from the moorings to the baseline will be connected.
3. Transect and offset lines will be trilaterated from the baseline as necessary for diving operations.

- Elevations
  1. Sand level data will be collected at established locations.
- Mapping
  1. The site will be subject to visual reconnaissance and all previously unmapped areas (recently uncovered), will be drawn and measured in to the baseline for updates to the site map.
  2. Artifacts considered for recovery will be tagged and labeled by a documentation diver.
  3. No artifact will be removed until fully recorded by a documentation/recovery diver.
- Excavation
  1. Excavation will be done by a diver-controlled water induction dredge system.
  2. An in-board diesel dredge or portable gas pump will be used to power both 6" and 3" dredge systems.
  3. Sand overburden will be placed in a designated area off the site, accessible for excavation backfilling.

- <u>Digital Photography/Videography</u>
  - Film/slide photography will not be used during this operation.
  - Photography will be done using a digital camera in an underwater housing.
  - Video will be done using a HD digital camera system.
  - Still 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.
  - Digital imagery will be done of any exposures from recent erosive scour.
  - Backups will be made of all digital imagery to a secondary recording device at the end of each day and prior to deletion from camera storage media.

- <u>Field Conservation, Stabilization, Documentation</u>
  - All artifacts recovered will follow the Conservation and Artifacts Documentation Protocol established by the QAR Conservation Lab.
- <u>Diving</u>
  - 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.
  - All working divers will be equipped with full-face mask and wireless communications.

- <u>Shore support</u>
  - Monitoring of site operations will be done via the site security camera from the QAR office at IMS.

    - Air fills for empty SCUBA cylinders will be obtained from Discovery Diving of Beaufort.
- Personnel Housing and Meals
    - UAB staff will have accommodations available at the Fort Macon State Park barracks.
    - Project personnel will have meals available at the Fort Macon Coast Guard Station galley at standard galley rates.
- Daily Operation Plan
    - Normal daily operations will commence by 0730 with individual vessels and crews rendezvousing at the USCG Station Fort Macon basin to load and receive a daily briefing in preparation for operations.
    - Vessels will leave the dock at 0800.
    - Monday, 03 October, R/V *Shell Point* departure will be delayed until 1100 to allow vessel loading and preparation.
    - Field operations will cease in time to allow vessels to leave the site by 1530 to return to dock, unless work and conditions dictate otherwise.
    - Friday, 28 Oct will be the breakdown/travel day and weather backup day for operations.