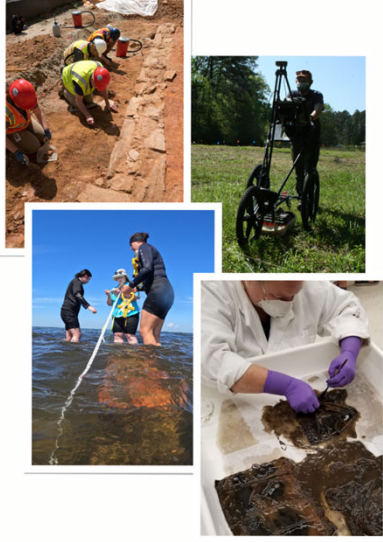


Session 2:
North Carolina
Office of State Archaeology



NC DEPARTMENT OF
NATURAL AND CULTURAL RESOURCES

Who We Are



- **North Carolina Office of State Archaeology (OSA)**

- Created by the North Carolina General Assembly in 1973
- Part of the State Historic Preservation Office (SHPO)

- **Our Mission**

- Protect the NC maritime and terrestrial archaeological legacy through the application of state and federal archaeology laws and regulations and by **maintaining inventories** of site data and artifact collections
- Enhance the appreciation of cultural heritage to strengthen the social, educational, cultural, and economic future of North Carolina



Where We Are located



OSA locations

- Main office. Where most of our staff is located. Main function is to perform Environmental Review but also home to our historic cemetery program, GIS program, and houses our statewide report and site form library. One of two offices where background research can be performed.
- OSARC: primary curation facility for the preservation and storage of North Carolina's archaeological collections.
- Western Office
- UAB
- QAR

What We Do at OSA

Coordinate a statewide archaeological preservation program by:

- Serving as a repository for archaeological data
- Implement state and federal cultural resource laws
- Provide professional archaeology services to state and local governments
- Public education and outreach



NC DEPARTMENT OF
NATURAL AND CULTURAL RESOURCES

Specialty Programs

- Historic Cemetery Program
- Underwater Archaeology
- Artifact Curation and Conservation
- ARPA Permits
- Underwater Permits
- Geophysical Unit
- Public Education and Outreach



Current Metrics

- Currently have 62,371 Recorded Archaeological Sites
 - 563 new sites registered in so far this year
 - 3,023 were added in 2023, many of which were from our cemetery program
- Digitizing
 - 8,313 out of 9,024 reports digitized
- Compliance Review FY 2023-2024
 - 2,511 projects reviewed
 - 224 reports added to our library
- Updates to data management
 - High density mobile storage system installed in Raleigh Library
 - Transitioning databases from Microsoft Access to Laserfiche

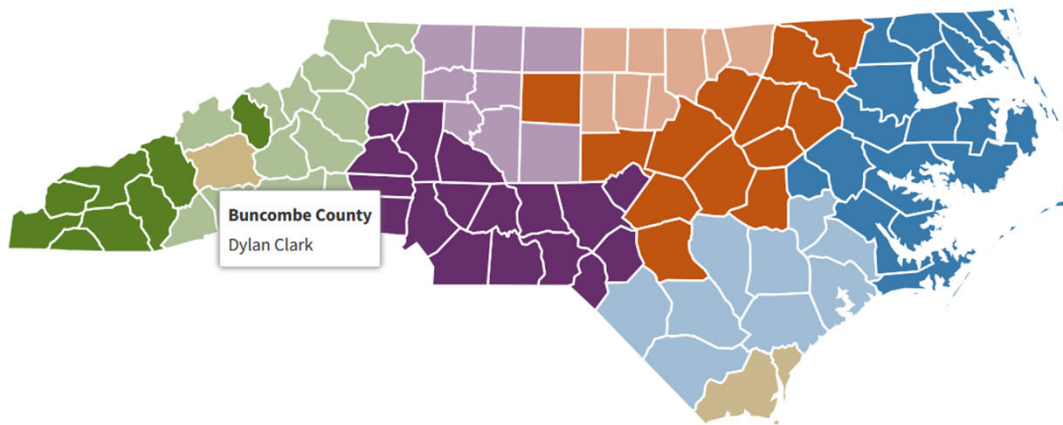


As I mentioned, a big part of what we do is serve as site file managers. There is a lot of data to manage, some going back to the 1950s and 1960s.

- There have been over 62k sites recorded across NC and we maintain a record of each site.
- For some of the sites we don't have much information, maybe just a 3-page form, but for other sites that may have been subject to numerous excavations, we may have numerous reports and a filing cabinet drawer full of information.
- We are currently in the process of a large digitization effort. Thanks to the Covid-19 pandemic and a partnership with NCDOT, we have scanned almost all of our over 9,000 reports and we plan to scan our site forms next followed by our environmental review paperwork which dates back to 1970.
- Along with digitizing our paperwork, we are updating our data management systems including, installing high density mobile shelving unit to replace our old aluminum bookshelves in our Raleigh library. The new system has allowed us to double our storage space in our Raleigh office.
- We also recently transitioned our Environmental Review Access database to a cloud based data manager called Laserfiche and are currently in the process of also transitioning our Site Form database to the same system. We plan to transfer our report database to the system in the future so that all of our data is stored in one easy to use digital platform.

- Our goal of our digitization efforts and Laserfiche system is to provide a more efficient Environmental Review process and a more efficient background research process for archaeologists doing compliance work across the state.

State Archaeologist of NC: Chris Southerly
8 Regions: 6 Assistant State Archaeologists and 2 Deputy State Archaeologists



ARPA Permits

- General Statute 70, Article 2: Archaeological Resources Protection Act
- Specific permits (may not exceed 3 years)
- General permits (may not exceed 5 years)
- Application & Background Check Process
 - Handy Permits tab on OSA website!
 - Build in sufficient time
- Schedule time for reporting (including 60 day review period + 30 days for revisions)
- Curation (including archival records!)

APPLICATION FOR SPECIFIC PERMIT
UNDER THE NORTH CAROLINA ARCHAEOLOGICAL RESOURCES PROTECTION ACT
(Pursuant to G.S. 70, Article 2)

Return form to: _____ Date of Application: _____
OSA ARPA Inbox OR Office of State Archaeology
osa_arpa@dot.nc.gov 4019 Mail Service Center Raleigh NC 27699-4619

- Principal Investigator**
Name: _____
Agency Affiliation: _____
Address (include zip code): _____
Telephone Number (_____) _____ Email Address: _____
- Project Director (if different from Principal Investigator)**
Name: _____
Agency Affiliation: _____
Address (include zip code): _____
Telephone Number (_____) _____ Email Address: _____
- Project Location Description**
Name of State Property: _____ County: _____
Land Managing Agency: _____
Name, address (physical & email), and telephone # of agency official: _____
Name, address (physical & email), and telephone # of agency local contact: _____
Estimated Acreage of Proposed Investigation Area: _____
- Type of Proposed Investigation**

Surface Survey with Artifact Collection

Surface Survey without Artifact Collection

Subsurface Testing: Type: _____

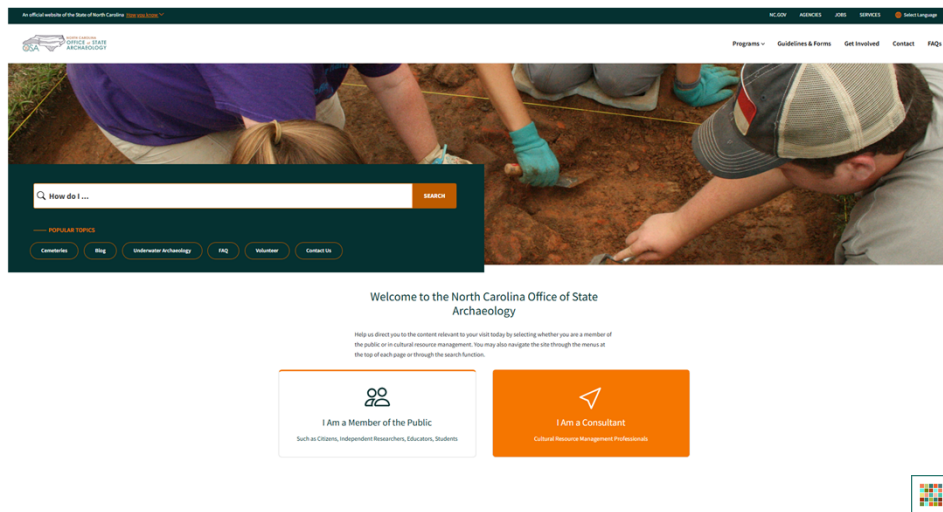
Other Excavation: _____
- Proposed Schedule (including beginning and completion dates. The schedule is to include 60 days to review and comment on the draft report and 30 days for response, revisions and resubmission of the final report.)**
Fieldwork (anticipated start date and duration): _____
Total Project: _____
- Approximate number of people to be involved with fieldwork:** _____
- Description of types and estimated amount of ground disturbance and the kinds of equipment or machinery to be used during the fieldwork.** _____



- Archaeological Resources Protection Act (State), NCGS 70, Article 2
- Permits required to conduct archaeological investigations on state owned or managed land and in state waters
- <https://archaeology.ncdcr.gov/programs/permits>

Find *almost* anything on our website

archaeology.ncdcr.gov



Find *almost* anything on our website

archaeology.ncdcr.gov

I Need To...



**Submit a Project for
Environmental Review**
Projects funded, licensed, or permitted
by the federal or state governments



**Access the OSA
Guidelines and Forms**
Site forms and guidelines for
archaeological investigation and
curation



**Make a Site File Research
Appointment**
Consultant background research for
compliance projects



**Request Site and
Accession Numbers**
Official NC site and accession numbers
for reports and curation



**Curate a Collection with
OSA**
State-owned, Federal, and CRM
collections excavated in North Carolina



Apply for a Permit
ARPA permits for state property and
underwater permits for exploration
and salvage



Archaeology.ncdcr.gov

NCOSA Historic Cemetery Program

- Purpose:
 - Contributing to the NC Site File, Research
 - Questions and Consultation
- For the ER process:
 - Consultation on practices, outreach, mitigation and avoidance strategies (including buffers)
 - However, most of the process defaults to the NC OSA review staff person



<https://archaeology.ncdcr.gov/programs/cemeteries>



Cemetery reminders

- Cemeteries containing interments greater than 50 years of age should receive a trinomial site number. Please submit a cemetery form to the Site Registrar.
- If the cemetery is associated with other historic site elements, or is located within a prehistoric site, it should be assigned a separate site number.
- Cemetery statutes:
 - Chapter 65- General cemeteries statutes, cemetery relocation (NC G.S. § 65-106)
 - Chapter 70- Archaeological burial ordinances, unmarked remains, inadvertent discoveries (NC G.S. § 70-29 through § 70-33)
 - Chapter 14- Criminal statutes for vandalism, desecration, etc. of remains, cemetery artifacts, and features



Maritime Archaeology Laws, Regulations, and Procedures



Who We Are

The oldest of its kind in the United States and predating the Office of State Archaeology itself, the **North Carolina Underwater Archaeology Branch** was established in 1962 in conjunction with the salvage and care of the Civil War blockage runner, *Modern Greece*. We are responsible for identifying, monitoring, and preserving underwater archaeological resources within rivers, coastal regions, and state waters.

Reviewers:

Stephen Atkinson: Deputy State Archaeologist, Underwater (Tan Counties)

Jill Schuler: Assistant State Archaeologist, Underwater (Light Blue Counties)

Will Nassif: Assistant State Archaeologist, Underwater (Dark Blue Counties)

Madeline "Punk" Spencer: Office Manager



Maritime laws

- **Abandoned Shipwreck Act, Public Law 100-298**

- **General Statute 121, Article 3: Salvage of Abandoned Shipwrecks and Other Underwater Archaeological Sites**

- Establishes title for the State to all shipwrecks, vessels, cargoes, tackle and underwater archaeological artifacts abandoned for more than ten (10) years and lying on the bottoms of navigable waters and ocean waters from within one marine league, three nautical miles, seaward from the Atlantic seashore high tide watermark. (State owned bottomlands)
- It is the statutory responsibility of the Department of Natural and Cultural Resources to conduct and/or supervise the surveillance, protection, preservation, survey, and systematic underwater archaeological recovery of underwater cultural materials.
- <https://archaeology.ncdcr.gov/programs/environmentalreview/laws#underwater>



<https://archaeology.ncdcr.gov/programs/environmentalreview/laws#underwater>

Maritime Laws Cont'd.

- **Coastal Area Management Act (CAMA)**

- In 1974, the North Carolina General Assembly passed the Coastal Area Management Act (CAMA), and set the stage for guiding development in the fragile and productive areas that border the State's sounds and oceanfront. Along with requiring special care by those who build and develop, the General Assembly directed the Coastal Resources Commission (CRC) to implement clear regulations that minimize the burden on the applicant.
- 113A-101. Cooperative State-local program.
- This Article establishes a cooperative program of coastal area management between local and State governments. Local government shall have the initiative for planning. State government shall establish areas of environmental concern. With regard to planning, State government shall act primarily in a supportive standard-setting and review capacity, except where local governments do not elect to exercise their initiative. Enforcement shall be a concurrent State-local responsibility. Requires a permit.

- **Sunken Military Craft Act**

- Enacted as: the "Sunken Military Craft Act", on October 28, 2004, as Title XIV of the "Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005"
- Where Law Applies: Applies to sunken U.S. military ships and aircraft wherever located around the world. It also applies to sunken foreign craft in U.S. waters that are defined to include the internal waters, territorial sea, and contiguous zone (up to 24 nautical miles off the U.S. coast).



UAB Background research requests

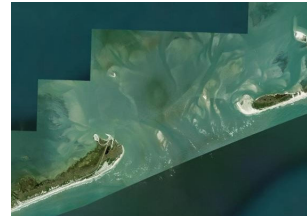
1. Request made to OSA
2. Disseminated to UAB
3. Compiled by UAB staff or those with drive access
4. OSA sitefiles email notified, files placed in sharefile
5. Sharefile link sent to requestee



- U/W GIS database not yet incorporated into OSA master sitefile database – pulling submerged special data must still be done by UAB staff
- Process is same as above for general background research request for UAB shipwreck sitefiles
- Do I need a U/W permit?
 - Currently gaining clarification on what undertakings would necessitate an U/W Permit
 - one permit for remote sensing
 - permit different/modified for recovery/mitigation

Scoping meeting/submission

- Define total APE, assess bottom conditions (depth, hazards, etc.), assess proper tools of survey for that environment
- Since our guidelines are not yet codified, this is an essential step for determining what tools are needed for maritime survey
- For now, we tend to reference BOEM guidelines for survey
 - “Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30CFR Part 585”
- Other:
 - mitigation parameters
 - Post work conservation/curation – if target(s) is not avoided



Tools of survey

Minimum requirements at this time:

1. Side scan Sonar

- Resolution should be 500 kHz or greater and resolve small targets measuring 0.5 m in length
- Tow depth and range should be sufficient to provide 100 percent coverage of the search area, with a minimum overlap of 20 percent between lines, and a resolution better than 0.25 to 0.40 meter for objects on the sea floor. Range should not exceed 100 meters. Typically, using present data state-of-the-art sidescan sonar on every fourth line if surveying with a magnetometer at 40-m line spacing or on every line at 50-m line spacing satisfies this criterion



2. Magnetometer and gradiometer

- Altitude should be continuously recorded during data acquisition along survey transects, sensitivity should be 1.0 gamma or less, background noise should not exceed a total of 3.0 gammas peak to peak, data sampling rate should be greater than 4.0 hz to ensure sufficient data point density
- Tow the magnetometer sensor at a distance behind the vessel of at least two and one-half times the vessel length. To maximize detection, tow the sensor within 6 meters of the sea floor, as indicated by a depth meter on the sensor. Background noise level in the magnetic data should not exceed plus or minus 3 gammas. Recommended vessel speed is from 4 to 6 knots. The magnetometer should have a sensitivity of at least 1 gamma and be set to cycle at a rate of approximately 1.2 to 1.3 second intervals. This rate improves location accuracy with the one-second updates provided by the global positioning system and allows for increased magnetometer sensitivity

Survey Methods Cont'd.

3. Sub-bottom profiler – as needed (see scope of work)

- Survey should be capable of achieving a resolution of vertical bed separation of at least 0.5 m in the uppermost 10-15 m of sediments; multibeam echo sounder must provide full coverage with 1000/4 overlapping data

4. All tools must be routed through a DGPS system to collate remote sensing data with spatial data

5. Ground truthing – target diving

Should necessitate a permit if ground disturbance/excavation

Hydroprobing, visual inspection, imagery (photo, video, 3D)



Other:

Contact us/see scope of work for alternatives (Drone Mounted Magnetometer, Multibeam etc.)

Shoreline surveys/intertidal zone surveys

- Somewhat non-traditional 106 compliance
- Eroding middens, sunken cemeteries, intertidal wrecks, shipyards, sites of industry
- Scope of work
 - Methods – shovel test where able
 - pedestrian survey – waders, high boots
 - Wade as far out as safely can be done in a pedestrian survey
 - Probing
- Documenting sites as they erode – eligibility in jeopardy
- GPS minimum/RTK preferred to record surface scatter/finds
- Photo documentation - to reduce water surface glare – remove artifact from water to photograph once special data achieved, return to context if not collecting



Contact US!

Follow Us



<https://facebook.com/ncarchaeology>
<https://instagram.com/ncarchaeology/>

Raleigh Office

109 E. Jones Street
Raleigh, N.C. 27601
(919) 814-6550

archaeology@dnrc.nc.gov

Western Office

176 Riceville Road
Asheville, NC 28805
(828) 250-3109

dylan.clark@dnrc.nc.gov

Rach.denton@dnrc.nc.gov

www.ncdcr.gov/about/history/western-office

Underwater Archaeology Branch

1528 Ft. Fisher Boulevard
South Kure Beach, NC 28449
910.251.7320

uab@dnrc.nc.gov

archaeology.ncdcr.gov/programs/underwaterarchaeology

Research Center

215 W. Lane Street
Raleigh, N.C. 27601
(919) 715-5599

emily.mcdowell@dnrc.nc.gov

archaeology.ncdcr.gov/programs/curation

QAR Lab

West Research Campus
East Carolina University
1157 VOA Site C Road
Greenville, NC 27834

(252) 744-6721

qar@dnrc.nc.gov

www.qaronline.org



Session Questions and Recording Link

- 2025 Workshop Session 2 - https://youtu.be/05b9eVELsgM?si=mDZk5_U10FO8nLFF
- Questions:
 - Underwater site number assignment – [48:10](#)
 - Overlap for unmarked remains/NCGS and NAGPRA – [52:10](#)
 - Cemetery Form Submission – [56:16](#)
 - Cemetery site number assignment – [58:13](#)
 - Diving Hobby License – [1:00:20](#)
 - Large Acre Reconnaissance – [1:05:46](#)
 - Surveying in inundated areas – [1:10:10](#)
 - Climate Change effects on Coastal Sites – [1:14:14](#)
 - Ruinous/Surface Features Site assignment – [1:16:31](#)
 - Provide Site File Data Online – [1:21:09](#)

