

North Carolina
Archaeological Society

Newsletter

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Society Website: <http://www.ncarchsociety.org>

IN THE EYE OF THE STORM: HURRICANES, ENVIRONMENTAL IMPACTS, AND COASTAL ARCHAEOLOGICAL SITES

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Coastal North Carolina stretches over 30 coastal counties across the Inner and Outer Coastal Plain. Their environment is low-lying and borders many waterways, which makes the area susceptible to impacts from major storms, like hurricanes, and daily natural processes. Collectively, these acute and chronic impacts destabilize infrastructure and archaeological sites alike.

In 2018, North Carolina was struck by two major hurricanes, Florence and Michael. Their combined impact through high winds, heavy rains, and storm surge damaged infrastructure, halted economic activities, and transformed archaeological sites. The level of impacts led the National Park Service to award approximately \$9 million to the NC State Historic Preservation Office (HPO) to provide recovery assistance to historic resources, damaged by Hurricanes Florence and/or Michael, that are listed in or eligible for listing in the National Register of Historic Places. The HPO divided this funding amongst external communities in 61 FEMA declared counties and internal groups, like the NC Office of State Archaeology (OSA). OSA received approximately \$1 million split over two projects – the Historic Cemetery Survey and the Shorescape Survey. These projects aimed to characterize and assess the impacts of hurricanes on cultural resources within 12 coastal counties (Beaufort, Bertie, Brunswick, Carteret, Craven, Dare, Hyde, New Hanover, Onslow, Pamlico, Pender, and Tyrrell) within the context of larger environmental change.

The Historic Cemetery Survey aimed to assess hurricane impacts on known cemeteries in 9 of the 12 project counties (Beaufort, Brunswick, Carteret, Dare, Hyde, New Hanover, Onslow, Pamlico, and Pender). While there are hundreds of cemeteries across these counties, cemeteries in state-owned and -managed lands were prioritized based on their proximity to surrounding waterways and level of impact and inundation from modeling Hurricanes Florence and Michael. OSA archaeologists visited seventeen cemeteries across these counties, photographing and spatially recording the footprint of each one. Any damages were documented and assessed in relation to known hurricane damage to cemeteries, including damaged trees and erosion (**Figure 1**). Additionally, the project also developed and tested a predictive model for locating unknown marked burials. This portion of the project was contracted to New South Associates and tested on an easement in Brunswick County. While the pedestrian survey



Fig. 1: Historic Cemetery Survey – A) Damage to a cemetery in Carteret County post-2018 hurricane season; B) Documenting the remains of a possible cemetery in Pamlico Sound.



Fig. 2: Shorescape Pedestrian Survey in Hammocks Beach State Park, Onslow County – A) Eroding shoreline of barrier island; B) Shell midden eroding along the shoreline; C) AECOM archaeologists excavating shovel tests in the shoreline area.

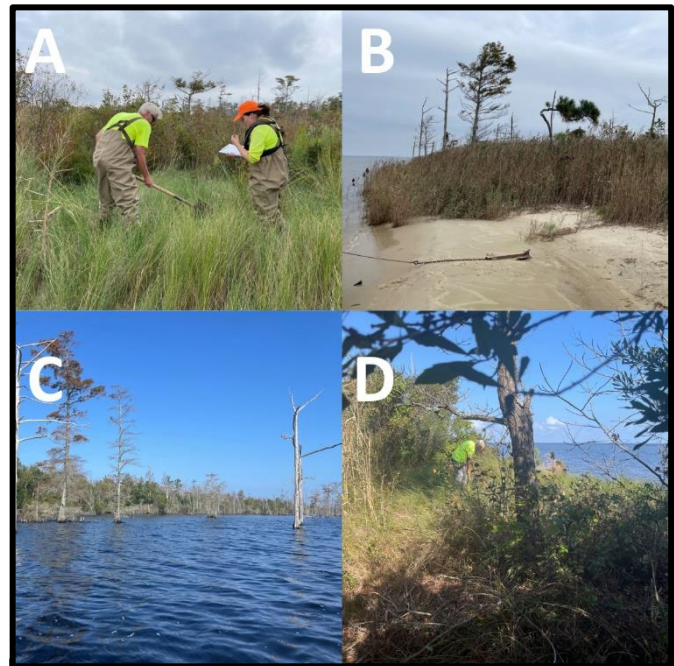


Fig. 3: Shorescape Pedestrian Survey in the Alligator River Game Lands (ARGL) and the Scuppernong River Section of Pettigrew State Park – A) AECOM archaeologists excavating a shovel test in the ARGL; B) Eroding shoreline along the Albemarle Sound in the ARGL; C) Scuppernong River during remote sensing survey. D) AECOM archaeologists excavating a shovel test in the ARGL.

did not identify unmarked burials, the model provided useful information for identifying a cemetery located just outside the easement boundaries. In all, the project offered a step forward in cemetery management in coastal counties. By expanding our knowledge of cemetery locations and storm impacts to these culturally rich locations, this project helps us develop management strategies and build partnerships with local communities seeking to protect their ancestral stories.

The Shorescape Survey aimed to cross the divide between terrestrial and underwater landscapes by surveying the littoral zone across the project coastal counties. The survey area stretched from 60 meters inland of the shoreline to 200 meters offshore. After assessing environmental and historical factors, three areas were chosen for work – Hammocks Beach State Park in Onslow County, the Alligator River Game Lands in Tyrrell County, and the Scuppernong River Section Dedicated Nature Preserve of Pettigrew State Park in Tyrrell County. The extensive pedestrian and remote sensing survey was contracted to AECOM who then surveyed over 3000 acres along the shorelines and over 1900 acres in adjacent waterways. Each area produced slightly different results. Hammocks Beach State Park had the greatest number of finds, indicating use across the park landscape from the Woodland period to modern day. The impacts of hurricanes and daily sediment movement was determined by location, as several sites on the barrier island are actively eroding while others on the mainland or interior islands are currently stable and protected by their environment (**Figure 2**). Within the Alligator River Game Lands, archaeological sites were sparse and spread along the shoreline and showed extensive erosion. Several underwater targets were identified, including two shipwrecks in the Little Alligator River. The location of these sites indicates that they do not face much impact from wave activity, but other processes are at play that contribute to their overall stability. The Scuppernong River project area revealed very little, because of the dense swampy nature of the shoreline. A single shipwreck was discovered, whose depth and location provide protection from the elements, but, like those in the Little Alligator River, other processes are at play in terms of site stability (**Figure 3**).

Following the completion of the pedestrian survey, OSA archaeologists returned to several of the sites to further record erosion information and site footprints and target dive newly identified shipwrecks. At Hammocks Beach, three sites were visited – one shell midden, one historic homestead with a cemetery, and a Confederate fort. Each face similar threats from hurricane storm surge and daily water movement; however, the level of impact is dictated by their proximity to open water, the underlying sediment, and type of site. At each site, the extent of erosion was mapped. In the Alligator River Game Lands, the team documented two shipwreck sites, both remnants of past maritime industries along the Little Alligator River, including fishing and lumbering (Figure 4).

These field projects are only part of the picture for characterizing, assessing, and managing archaeological site formation processes in the face of changing environments and hurricanes throughout our State's coastal landscape. These projects provide ground-truthed evidence of changes to archaeological sites in the different coastal ecosystems on land and underwater, evidence that can be coupled with large-scale assessments of archaeological sites in North Carolina assessing flooding, storm surge, and sea level rise. Using ground-truthed evidence, we now have examples of what might happen to at-risk sites in similar locations throughout Coastal North Carolina.

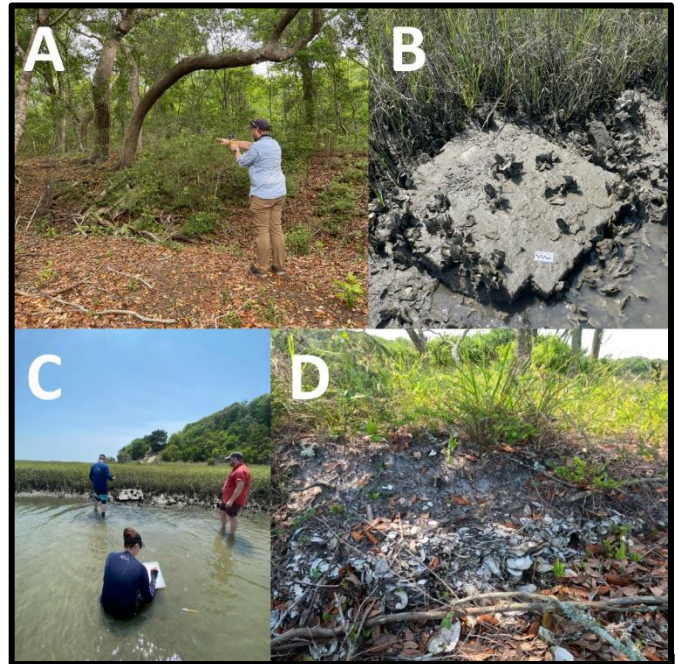


Fig. 4: OSA Ground-truthing and Follow-up Fieldwork at Hammocks Beach State Park – A) Exploring the remains of a Confederate fort; B) Portion of a fallen house structure; C) Documenting the remains of the fallen house structure; D) Eroding shell midden and shoreline.

NCAS Merchandise – New NCAS Hats!!!! A khaki mesh-back hat (a Richardson hat, with very soft mesh), a navy ball cap (for more dress occasions), and the return of the blaze orange (just in time for surveys during hunting season). Cost are \$25 each (sales tax included). Our ever-so-faithful merchandise extraordinaire will be at the NCAS Fall Meeting as well as SEAC, but if you want one in advance, message him directly at tbeamanjr@aol.com if you can't be patient! Take my money, Tom! Just take it!





Member Dig & Fall Meeting Berry Site and Catawba Meadows Park October 15th – 19th 2024



Saturday, October 19th Fall Meeting Schedule

Event	Time	Location
Welcome Reception	9 AM – 10:00 AM	Catawba Meadows Park, Picnic Shelter Pick up name tags, refreshments (?)
Board Meeting	9:30AM – 10:00 AM	Location of BOD meeting, TBD Catawba Meadows Park, Picnic Shelter, 701 Sanford Drive, Morganton, NC 28655
General Business Meeting	10:15 AM – 11:30 AM	
Lunch Break	On your own	Picnic Area or Food Truck (?)
3rd Annual Community Day Events	10 AM – 3 PM	Living History Village at Catawba Meadows Park, 701 Sanford Drive, Morganton, NC 28655
Berry Site Tour	3:30 PM – 4:30 PM	The Berry Site, 1701-1981, Henderson Mill Rd, Morganton, NC 28655

The North Carolina Archaeological Society will be partnering with the Exploring Joara Foundation (EJF) to host the Fall Dig for NCAS members. The fieldwork is planned for October 15th – October 18th, 2024 (Tuesday through Friday) at the Berry Site in Burke County, and we invite **current** NCAS members to participate (to join or renew, go to <https://www.ncarchsociety.org/membershiplanding>). Activities for which help is needed include: shoveling, troweling, dry screening, and washing artifacts. Archaeologists will be available to train participants in field methods so no previous experience is required. Come for the whole event or just a day! Registration for the event is free but will be limited to 20 volunteers per day. Participants will be required to sign a volunteer waiver. Excavations will be 10am-3pm, on Tuesday, Wednesday, and Thursday. Excavations on Friday will be 9am-1pm. In case of inclement weather, please bring appropriate rain gear. Please wear comfortable outdoor clothing and bring water. Food and lodging will NOT be provided. If you would like to participate or have questions about the area, please contact Sami Taylor (staylor@newsouthassoc.com).

The Berry Site is the location of the 16th century Native American town of Joara that was visited by Spanish explorers Hernando de Soto in 1540 and Juan Pardo in 1567. The Berry Site is also the location of the Spanish Fort San Juan, which was established by Pardo in January of 1567. Relations between the Spanish occupants and the local Native Americans quickly deteriorated, culminating in the burning of Fort San Juan in June 1567.

The NCAS Annual Fall Meeting will be hosted at a picnic shelter at Catawba Meadows Park (701 Sanford Drive, Morganton, NC 28655) on October 19th, 2024, from 9am-12pm. In case of inclement weather, the fall meeting will be held at the Historic Burke County Courthouse Auditorium (102 E Union Street, Morganton, North Carolina 28655). The fall meeting will be held in conjunction with the 3rd Annual Community Day at the Living History Village at Catawba Meadows Park. Community Day will run 10am-3pm, include numerous activities and demonstrations, and is a short walk (~5 minutes) from the meeting location.

To reserve a room for the night of October 18th, 2024, at a discounted price, call the Comfort Inn and Suites in Morganton (828-430-4000) (<https://www.choicehotels.com/north-carolina/morganton/comfort-inn-hotels/nc342>) and request the NC Archaeological Society special rate, which covers a room with 2 queen beds (\$149.00+tax) OR a room with 1 king bed and a pull-out sofa (\$159.00+tax). **The special rate is only applicable for the night of October 18th and will only be available for bookings made before October 11th. The special rate is only applicable while rooms are still available so book as soon as possible.** Other local accommodations include: the Fairfield Downtown Morganton (828-608-0900) (<https://www.marriott.com/en-us/hotels/avlfm-fairfield-inn-and-suites-morganton-historic-downtown/overview/>) and the Hampton Inn Morganton (828-432-2000) (<https://www.hilton.com/en/hotels/mrnchx-hampton-morganton/>).



FOR MORE INFORMATION, VISIT...

<https://www.ncarchsociety.org/events/ncas-fall-membership-dig-2024>

<https://www.ncarchsociety.org/events/2024-ncas-fall-meeting>



Sweet tooth

- Fudge - Merrill Mischief
- Ice Cream – Toasted and Rolled

Food

- The Grind Café
- Moondog Pizza
- Root and Vine \$\$\$
- Little Guatemala (810 E Union St) – coffee and interesting food choices – probably would not walk there

Beer

- Brown Mountain Bottleworks
- Fonta Flora
- Hilman

Places of Interest in Morganton

Walking from Fairfield to Moondog Pizza/Hilman Brewing is 0.5 miles; 10 minutes. (From the Wall Center is 1 mile, 20 minutes)





WHAT AM I?

No, seriously... we have no idea what this is... it was recovered from a debris pile by NCDOT biologists paddling the Deep River near the Carabonton dam

If you have any idea what this might be, please contact Brian Overton (NCDOT Archaeologist) at bpoverton@ncdot.gov. He'll be forever grateful!



NCDOT PARTNERING WITH NC STATE TO MAP UNMARKED BURIAL SITES



The N.C. Department of Transportation announced a partnership with N.C. State University's Institute for Transportation Research and Education to conduct groundbreaking research aimed at mapping unmarked burial sites belonging to historically marginalized groups. "This partnership is important as it will help in preserving and honoring the heritage of these communities, ensuring that their stories are not forgotten," said Tunya Smith, director of NCDOT's Office of Civil Rights. "Additionally, this research will contribute to creating a more comprehensive understanding of our state's history and heritage."

The research project, led by NCDOT's Office of Civil Rights and N.C. State, is scheduled to start this summer and extend through the summer of 2026...The unmarked burial sites have long faced disproportionate risks and vulnerabilities as North Carolina's popularity leads to increased commercial and residential development and transportation projects. Experts are concerned that development coupled with more frequent storms could make it more difficult to identify and preserve these burial sites.

The cemetery mapping initiative will involve a thorough literature and policy review, followed by a community outreach effort in Edgecombe County to document sites that may only be known through word of mouth and generational knowledge.

OPPORTUNITY – Seeking Leaders for NCAS Operation Alpha... Are you interested in helping introduce archaeology to today's youth, Generation Alpha? The NCAS Board is looking for volunteers to serve in a committee dedicated to brainstorming ways to engage kids in the latest archaeological ideas and discoveries! While previous work in the field of education would be beneficial, anyone with a passion for teaching archaeology is welcome to join the committee. Please contact Mike Carpenter (mikecarpenter1955@gmail.com) for more information.

Preserving Professional Meeting Materials

Professional conferences are a great venue for networking with people, brainstorming ideas new ideas and presenting your work. tDAR houses meeting abstracts for both the Society for American Archaeology and the Society for Historical Archaeology. If you presented your research or project at either meeting in the past five years, you can upload and share your conference materials for Free! Uploading your conference materials is a wonderful way to share your research with colleagues, the public and interested communities who may benefit from your work.

- Upload your [SAA materials](#)
- Upload your [SHA materials](#)



QUOTED – “Archaeology is the anthropology of the past, and science fiction is the anthropology of the future.”

- Joan D. Vinge, American science fiction writer

ANNOUNCEMENT – [GS-09 Archeologist | Southeast Archeological Center](#) - The primary duties of this job include serving as a Project Lead for archeological projects associated with compliance with Sections 106 and 110 of the National Historic Preservation Act in National Park units across the southeastern United States and the Caribbean.



NCAS JOURNAL & NEWSLETTER ANNOUNCEMENTS

REMINDER - Our Journal Editor is still taking submissions for Volume 73! If you have an article idea you would like to share with NCAS members, please contact David Cranford (david.cranford@ncdcr.gov) for more information. Deadline for Volume 73 submissions is **September 1, 2024**.

Your Newsletter Editor continues to scour the airwaves(?) in search of articles, news clips, and other intriguing tidbits of information to be shared with the membership. Please make my job easier and contact me with any interesting items, ideas, or requests you wish to share (pjmohler@ncdot.gov).

RECENT ANNOUNCEMENT FROM THE SEAC BOARD

“It has recently been announced that Taylor & Francis, the company that publishes Southeastern Archaeology for us, has sold its data to Microsoft for AI development. We are concerned about the implications of this sale for the intellectual property of our authors and the integrity of our journal. We are in the process of investigating what this means for already published research and for future publication, within the bounds of our contract. Our current agreement with Taylor & Francis runs through 2025. As renewal approaches, the Board will be reaching out to membership for public input on how best to continue publishing high quality research in the most equitable and ethical way possible.

Article Weblink: [Taylor & Francis strike AI deal with Microsoft](#)

mark  your **Calendar**

2024 SECHSA

Murrells Inlet, SC (September 6-7, 2024)
(www.SECHSA.org)

12th Biennial Fields of Conflict Conference
Savannah, GA (September 25-27, 2024)

[Conference Details – Fields of Conflict Savannah
2024 \(wordpress.com\)](https://www.conflictconf.com/2024)

Southeastern Archaeological Conference
Williamsburg, VA (November 13-16, 2024)
[https://www.southeasternarchaeology.org/annual-
meeting/details/](https://www.southeasternarchaeology.org/annual-meeting/details/)

SHA will be in New Orleans in January 2025!

NCAS Board

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NCAS Newsletter

Publication Schedule

All NCAS members should submit articles and news items to Paul J. Mohler (pjmohler@ncdot.gov) for inclusion in the Newsletter. Please use the following cut-off dates as guides for your submissions:

Winter Issue – January 31

Summer Issue – July 31

Spring Issue – April 30

Fall Issue – October 31

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