

ARCHAEOLOGICAL INVESTIGATIONS AT GREEN RIVER PRESERVE: 2012-2022

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There is an expansive, complex, and long-term Native American presence in Western North Carolina, and archaeological evidence within Green River Preserve, Dupont State Forest, and the surrounding area reveals this ancient history. Ongoing archaeological studies at Green River Preserve have uncovered many interesting discoveries including Native American rock quarries, lithic production sites, and a fire ring; bivouacs and caves used for shelter; petroglyphs etched into rock thousands of years ago; turtle drums used to create sound waves; pointer trees marking locations of caves; and surface collections of spearpoints and tools dating from the early Archaic to the late Woodland.

Since the summer of 2012, I have had the pleasure of being the Staff Archaeologist at Green River Preserve summer camp. Several weeks during the summer, I teach young campers about the methods of Archaeology and Native American history and culture in the Southeast by conducting archaeological investigations throughout the 3,500 acres of the camp. During my first summer, I noticed a very dense lithic scatter in the walking path of the girls' cabin area. I excavated three shovel tests on a flat rise next to a small stream that was dammed in the 1980s, creating a swimming and canoeing lake for the camp. Shovel Tests 1 and 2 had a few lithic flakes with 30 cm of intact stratigraphy above a sterile subsoil. Shovel Test 3 was excavated to 60 cm below surface, with fire cracked rock at the bottom.



Figure 1: Plan View of a Portion of Test Unit 1.

The following summer (2013), a test unit (TU 1) was excavated around Shovel Test 3, exposing a Native American fire ring at a depth of 60 cmbs. The profile shows three distinct soil layers, and charcoal flecks were observed within the ring of rocks at the base of the unit (**Figure 1**). Future research and testing may provide a specific date range for its use. In 2016, campers assisted me with a 10-meter interval shovel test survey surrounding TU 1, defining the limits of the site as roughly 35 meters N-S by 45 meters E-W. It was later recorded as Site 31HN323 with the NC Office of State Archaeology (OSA). Over 1,300 lithic flakes and debitage were collected from TU 1 and the shovel test survey, ranging in size from <1cm to <9cm squared. The density and variation in the size of the artifacts are indicative of a lithic production site, with over 90% of the artifacts presumably

coming from a metamorphic quartzite quarry near base camp (**Figure 2**). A rock quarry (Site 31HN327) used by Native Americans is located near Green River Road about 900 meters east of TU 1. There is a 30-meter rise on the north side of a gravel road at the point where Green River Road intersects with the Green River. This formation was identified by geologists in 2015 as a fault line that created a unique metamorphic quartzite rock. The material has its own specific makeup, can be identified as originating from that location, and is often referred to as “Green River Rock.”

The unique signature of Green River Rock allows comparisons to be made. In 2022, several flakes of Green River Rock were identified during an archaeological survey in Flat Rock, NC, about 11 miles east of the quarry site. The unique rock was also identified in a surface collection in a residential development about 3 miles east of the quarry. Future analysis of archaeological assemblages and personal collections in the region may be able to define a broader area of usage for this specific type of lithic resource in North Carolina and perhaps the SE United States.

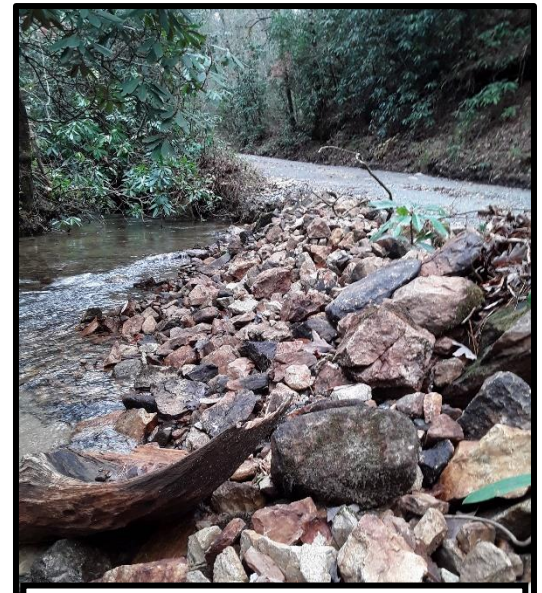


Figure 2: Debitage at the Green River Rock Quarry Site.

In the summer of 2017, campers participated in a 10-meter interval shovel test survey at the Green River Preserve Farm (**Figure 3**). We excavated 34 shovel tests, 31 of which contained lithic flakes. Several shovel tests even had signs of fire cracked rock and charcoal stains. In fact, lithic flakes are visible in the dirt of the walking trails around the farm, and the nearby stream is brimming with milky white quartzite rocks and lithics of all sizes. In 2019, a shovel test excavated near the stream resulted in 77 lithic flakes recovered, 75 of which were a milky quartzite ranging in size from <1cm to <5cm squared. This additional high concentration of artifacts in one shovel test, along with the documented quartzite scatters in the area, further corroborate our assumption that there may have been a significant Native American presence along the Green River. Future testing such as GPR, LiDAR, soil analyses, block excavations, and other archaeological studies may reveal a Native American village site at the Green River Preserve Farm.



Figure 3: Campers shovel testing at Green River Preserve Farm in 2017.

Several bivouacs and caves on Green River Preserve were also used as shelters by Native Americans. In the summer of 1999, a Guilford spearpoint was found by a camper in the Green River Preserve Cave. The spearpoint is currently on display in the Archaeology Corner in the Lodge at base camp. Last summer, a shovel test was excavated at what is called the Bivouac Motel (**Figure 4**; a rock shelter with 4 separate and adjoining rooms, with rock walls built up around the entrance of the room on the south end of the



Figure 4: South End of the Bivouac Motel.

enclosure). The shovel test contained a small pressure flake of basalt rock from approximately 30 cmbs. Surface collections throughout Green River Preserve have yielded many interesting artifacts including spearpoints and tools ranging from the early Archaic through the late Woodland. Materials brought to the Green River Valley from many miles away include not only basalt, chert, and rhyolite (in the form of various flakes) but also some kind of rock from the Ohio River Valley (in the form of a gorget fragment). In 2009, a concentric circle petroglyph on Long Rock was recorded as Site 31HN205 with OSA. A more intensive archaeological study was conducted in 2010, with a formal report written for the Friends of Dupont State Forest in 2011. Over 200 pecked designs were documented within three (3) areas of Dupont State Forest – Long Rock, Bridal Veil Falls, and Big Rock Trail. These pecked motifs range from circular, oval, concentric circles, incomplete circles, lines, and bell-shaped cupules. Further research may provide the meaning of the pecked designs and when they were created.

Around Green River Preserve, Dupont State Forest, and nearby Caesars Head, there is a phenomenon known as “Turtle Drums,” which are oval-shaped rocks approximately 4 feet by 6 feet in size, rounded at the top with incised lines creating the look of a turtle shell. The bottom of the rock is concave, and the four corners are lifted on pedestals resembling turtle legs. When the top of the drum is pounded with a stick or other tool, you can hear the sound and feel the vibrations. It is possible that these “Turtle Drums” were used as a type of seismic communication. And, finally, there are several large “Pointer” trees scattered throughout Green River Preserve. It is believed that these trees were intentionally altered to grow with a 90° angle near their base in order to point in the direction of a rock shelter or other significant environmental feature.

Archaeological investigations at Green River Preserve over the last 10 years have uncovered significant evidence of the lifeways of people living in the area in the distant past. Despite the generations of researchers that have invested their lives in uncovering important information about the earliest inhabitants of the western parts of North Carolina, questions remain about demographics, settlement patterns, the organizations of space, interactions with other regional inhabitants, and the ways in which they managed their own resources. It is expected that our continued research at Green River Preserve will continue to help with these important topics.



Can Digitizing Gravestones Save History?

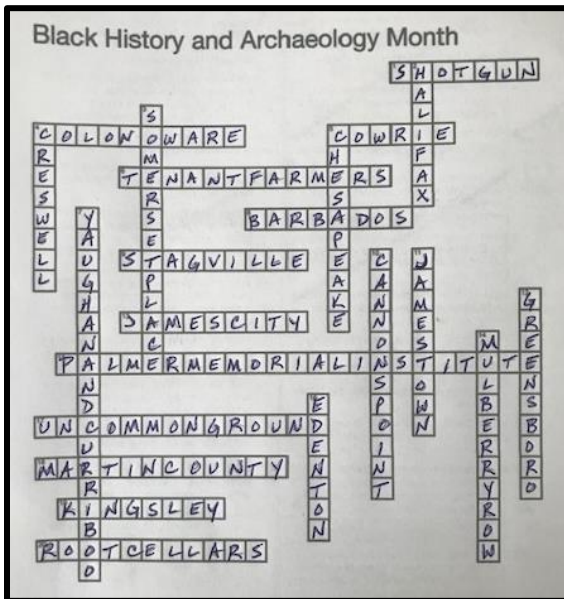
<https://www.sapiens.org/archaeology/can-digitizing-gravestones-save-history/>

As shared by the SAPIENS Newsletter earlier this year, “Researchers are increasingly using digital tools to preserve historic sites and make them more accessible. Anthropologist Kerri Klein, for example, is creating 3D images of thousands of gravestones at Burial Hill in Plymouth, Massachusetts. Through these images, she invites the public to learn about and engage with an important historical site in the founding of the U.S.

This includes facing the more troubling aspects of Plymouth’s past. Most of those buried in the cemetery are White European colonists, including some famous Pilgrims from the late 1600s linked to the popularized story of Thanksgiving. However, the Wampanoag people and their ancestors had inhabited the region for millennia prior to colonization.

How can public archaeologists preserve treasured Euro-American histories and sites, while also acknowledging the Indigenous communities who were displaced and, in some cases, decimated by disease and violence?”

Click [here](#) to read more.



NCAS JOURNAL ANNOUNCEMENT
 Volume 71 of *North Carolina Archaeology* is now out and the Journal Editor is now taking submissions for Volume 72! 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 72 submissions is **September 1, 2023**.

WINTER ISSUE ANSWER KEY: In all the excitement thrust upon us by the New Year, our Crossword Guru Extraordinaire forgot to submit an answer key for our last issue's puzzle. No need to fret, mon frere, for your editor believes that he has proven himself worthy of solving such diabolical, yet educational, feats of the mind. In other words, "I got you, Tom."



Canoes in the News: Office of State Archaeology and Waccamaw Siouan Tribe work together to recover Lake Waccamaw Canoe



Kim Kenyon (QAR Senior Conservator – OSA) and David Cranford (Asst. State Archaeologist – OSA)

Recent local and national news coverage of the recovery of a nearly 1000-year-old canoe from Lake Waccamaw has garnered a lot of attention. While playing in Lake Waccamaw in the summer of 2021 near one of their family homes, three teenagers discovered a long wooden object buried in the silt. They were convinced they had found something significant and immediately reported it to their parents. Jess Hill, one of the boy's fathers, waded out to further investigate. Carefully removing the sediment, they realized the object continued under the sand, and they were certain they had found a long-submerged American Indian dugout canoe. Mr. Hill contacted the NC Office of State Archaeology and Chief Mike Jacobs of the Waccamaw Siouan Tribe about the find, and a plan started to take shape.

An initial visit by OSA staff verified that it was indeed an intact canoe, and a quick assessment showed that it was at risk of further damage or loss being in shallow water and with a preexisting propeller scar. On July 23, 2021, OSA staff, Waccamaw Siouan tribal members, Mr. Hill, representatives of the NC American Indian Heritage Commission, and other community members came together to relocate the canoe, now designated "WAL0009", under the Hill family's dock until it could be safely recovered. Other logistics such as building a tank that would hold the canoe during the multi-year conservation process, arranging transportation, and planning for conservation also had to be in place before the canoe could leave the lake. After nearly two years of cooperative planning, the team converged again at Lake Waccamaw on April 12, 2023, to bring the canoe once again to the surface and start it on its new journey.



Clockwise from Top Left: OSA Scientific Dive Team recovering the Lake Waccamaw canoe; Members of the Recovery Team (Local photographer, Mandy Posgai, Jess Hill, John Mintz, Quinn Godwin); Lake Waccamaw canoe starting the multi-year conservation process at the QAR Conservation Lab in Greenville; Recovery Team in front of the specially built conservation tank holding the canoe.

The OSA has documented over 70 log boats and dugout canoes in North Carolina rivers, lakes, and waterways and this canoe is just one of several canoes that have been documented from Lake Waccamaw over the years. Four of the ten canoes found from Lake Waccamaw have been carbon-14 dated, with ages ranging from 930 +/-30 BP to 140 +/-55 BP, or between AD 1025 and 1815. The most recently recovered is currently the oldest documented and also the longest intact canoe from Lake Waccamaw, measuring nearly 28 feet long. The species of wood has not yet been positively identified, but other canoes from Lake Waccamaw were made from either pine or cypress.

Dugout canoes were constructed by first lighting a fire at the base of a large tree, using mud or straw to prevent the fire from traveling up the tree. The charred areas were chipped away until the weight of the tree caused it to fall. The limbs, bark, and sometimes sapwood was then removed and the ends shaped. Carefully tended fire slowly burned out the interior of the log, gradually hollowing it, with an occasional need for tools to scrape away the charred wood. Gum or rosin controlled which areas were burned during this process, and a layer of grease may have been applied to help seal and protect the wood during its use.

The newly recovered canoe is now at OSA's Queen Anne's Revenge Conservation Lab in Greenville. Treatment will entail full documentation, analysis, cleaning, desalination, and impregnation with polyethylene glycol (PEG) before being safely dried for eventual display. More in-depth research on North Carolina's dugout canoes is underway so stay tuned.

BIG 90 BIRTHDAY BASH!!!

(fiddy loves alliteration)

WHEN: October 7th – 8th, 2023

WHERE: Canon Lounge, Gladfelter Building, Warren Wilson College
Campus (Saturday program and reception)
Biltmore Estates (Sunday morning site tour)

TIME: Saturday Program will start at **10am** (coffee and refreshments on site, name tags, etc.), with a short BOD meeting, followed by Membership meeting (and fall elections)
Sunday Program – Departure Time from Canon Lounge will be announced at the Membership meeting.

FOOD: Saturday lunch will be on site, delivered to Canon Lounge. Pizzas and refreshments from a local vendor will be sponsored by TRC Environmental Corp.



SATURDAY PRESENTATIONS:

- Dr. David Moore (Warren Wilson College/Joara Project) – “Joara and Fort San Juan: Sixteenth Century Native Americans and Spanish Colonizers in Western North Carolina” (with a static display)
- Dr. Jane Eastman and Dr. Brett Riggs (Western Carolina University) – “Astronomical Landscapes in Western North Carolina”
- Dr. Tom Whyte (Appalachian State University) – “Warm-Weather Tourism in Boone, a Trend that Began 12,000 Years Ago”
- Dr. Alice Wright (Appalachian State University) – “Old Data, New River: Revisiting and Revealing the Indigenous Landscapes of Northwestern North Carolina”
- Dr. Cameron Gokee (Appalachian State University) – “Oral and Archaeological Histories of Junaluska: A Black Appalachian Community”

SATURDAY AFTERNOON/EVENING:

- There will be several wonderful items set up in Canon Lounge for a Silent Auction, which will be held during the talks and conclude in the evening at the reception. We hope to have some musical entertainment as well as a special raffle drawing (prize TBD).
- The evening reception will be held in the Canon Lounge (time TBD). The reception is sponsored by the North Carolina Archaeological Council. Going to need help blowing out 90 candles! Linda says it'll be lit.

SUNDAY TOUR:

- Scott Shumate (Biltmore Estates Archaeologist) will guide a walking tour of sites Sunday morning. The tour of Biltmore grounds will be limited to our special group only, and they prefer we van-pool onto the property. At least three vans are being provided by WWC and WCU so we will announce at the meeting what time to meet outside Canon Lounge to board the vans. Vans will return to WWC following the tour. The program will conclude after the tour on Sunday by mid-day. It's a five-mile van ride to Biltmore.

HOTEL:

- Accommodations have been secured at the Comfort Inn (1435 Tunnel Road, Asheville, NC 28805 [828.298.4000 or 828.298.0197]). A special group rate has been offered for ONLY Saturday night, October 7, at \$114.75 plus tax (double-occupancy rooms). We have 20 rooms blocked. If you choose to stay Sunday night, the rate will be \$203.00 plus tax for that night. Fixed Cut-off Date for the special rate is September 6, 2023. Ask for the “NCAS BLOCK” to secure one of the double-occupancy rooms at the special rate for the night of the October 7 event. The hotel is easily accessible and only 3 miles from WWC. Other hotels are nearby but the rates are variable. Complimentary breakfast is offered at the hotel. Every room has a microwave, coffee maker, fridge, and flat screen tv. Laundry facilities are also on site as is a heated pool.

**MERCH:**

Tom Beaman will be on hand at the merchandise table. Not only could there be some new merch in stock, but we will be offering some special 90th Birthday swag for sale only on Saturday.

HELP:

If you are interested in helping with setup or break down of our special event, please contact Linda Carnes-McNaughton by email at lfcmdoc@gmail.com. She needs some helpers and facilitators. If you have any special items you'd like to include in the Silent Auction, please let her know soon.

THANK YOU!

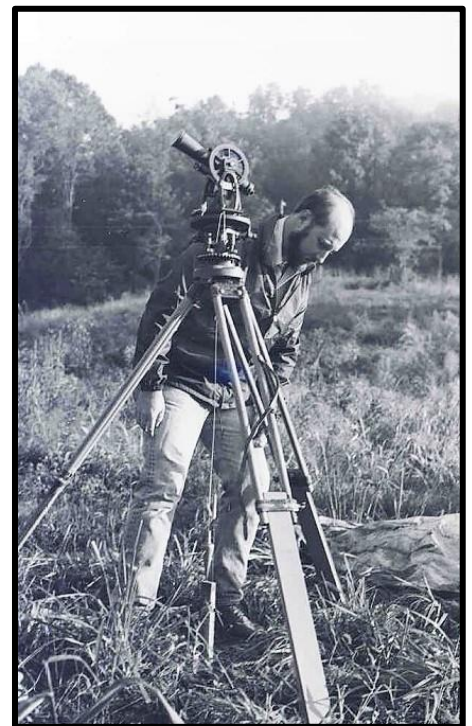
From the bottom of our collective hearts, thank you, **Scotti Norman** (Warren Wilson College) for helping us arrange such a wonderful program for such a momentous time for our society!

I know... horrible segue... my apologies, Tom P.

IN MEMORIAM...

On May 2nd, Tom Padgett, former head of the NCDOT Archaeology group and an NCAS member passed away at his home. Tom had a long career as an archaeologist in Florida and at the North Carolina Department of Transportation. I know a number of our members either worked for Tom or with him on projects like the Eden House site and the Contentnea Creek Site. I know lots of folks have some interesting stories about Tom; he was without question a pretty colorful character. Personally, I will always be grateful because he gave me a job 24 years ago, when I needed one. He gave me professional opportunities when they came up and he taught me to be humble in my approach to the work I was doing. Even more importantly, as a leader, while I worked for him, he always backed his staff whenever we needed his support. Over the past few decades, NCDOT has done a lot of significant archaeology in the state (it may sound self-aggrandizing coming from me, but the numbers bear the assertion out). Undoubtedly, much of that came through our current staff configuration. But, beyond some intriguing sites like those mentioned earlier, our subsequent accomplishments rest on the foundation Tom built. If anybody wishes to find out more information with regards to funeral arrangements or to send flowers/donations, feel free to send me a message and I'll either share what I know or put you in touch with folks that know more.

- *Shane C. Petersen, Brian Overton, Paul J. Mohler, Matt Wilkerson, Caleb Smith, Scott Halvorsen, & Damon Jones (NCDOT Archaeology Team)*



As the summer months approach and in preparation for the NCAS Fall Elections, the NCAS Membership Committee will be soliciting candidates for positions on the society's Board of Directors. The following positions will be up for election/re-election: President-Elect/Vice President, Treasurer, and two (2) At-Large Members. When it comes to elections, I am always reminded (thank you, Brian O.) of what Tom Padgett shared in our very own newsletter ([Volume 1 No. 1.pdf\(unc.edu\)](#)). Let's be more inclusive of the membership. Let's be open to new ideas. Let's be willing to put new talents to work.



Association for Gravestone Studies
 Denver, CO (June 20-25, 2023)
[2023 Conference \(gravestonestudies.org\)](http://gravestonestudies.org)

Southeastern Archaeological Conference
 Chattanooga, TN (October 25-28, 2023)
<https://www.southeasternarchaeology.org/annual-meeting/details/>

Society for Historical Archaeology
 Oakland, CA (January 3-6, 2024)
[Society for Historical Archaeology Conference Information \(sha.org\)](http://www.sha.org)

Society for American Archaeology
 New Orleans, LA (April 17-21, 2024)
[Final Program \(saa.org\)](http://www.saa.org)

NCAS Board

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scpetersen@ncdot.gov

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pjmohler@ncdot.gov

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 Watkins-Kenney

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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