Woodland Period Occupations Along the Savannah River: An Update of the Late Prehistoric Investigations at the Topper Site (38AL23), Allendale, SC
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(SLIDE 2). During the summers of 2015 and 2016 the University of Tennessee, Knoxville conducted excavations at the Topper Site (38AL23), Allendale, SC, (SLIDE 3) and were accompanied by volunteers from the Southeastern Paleoamerican Survey, and faculty and students from both Mississippi State University and the University of West Georgia. The focus of this ongoing project are the extensive Late Prehistoric occupations that have been noted at the site but that have until recently gone unexamined. To date, two blocks, Woodland Block West and Woodland Block East, and a dispersed 1x1 meter unit survey have been completed to better define these later occupations. All excavations were conducted in 1x1 meter unit intervals with all units being shovel skimmed to the base of the plowzone, approximately 20 cmbs. (SLIDE 4) Directly beneath the plowzone was uncovered a dense feature level. All features and potential features were identified, catalogued, mapped, photographed, and then excavated. The fill from each feature was fully excavated and then individually bagged for flotation processing. (SLIDE 5) A current total of 357 Late Prehistoric features have been recorded from the two field seasons, which includes post-holes, hearths, and storage pits, all indicators of past human activities. Beyond the Precontact features that were present, an additional 57 historic plowscars were also documented. In addition to the features, thousands of Late Prehistoric pottery sherds and lithics have been recovered from the units and the features. (SLIDE 6) All of these data are being recorded in a nested, relational, open access database, for more information on this database; please visit the current morning poster session that will be ongoing until noon today, to speak with our current project team about its creation and use.
As noted, the focus of this ongoing project are the extensive Late Prehistoric occupations at the Topper Site. From initial field and laboratory assessments of both the pottery and the lithics that have been recovered, we can relatively date these occupations to include both the Woodland Period and Mississippian Period. Every single 1x1 meter unit that has been excavated thus far has contained large amounts of Late Prehistoric pottery. A thorough ceramics identification and analysis are still in the early stages and are ongoing. However, from initial laboratory processing of the materials, it is clear that the vast majority of pottery that has been recovered from the site are parallel cord-marked and cross cord-marked pottery that are representative of similar sites in the area and of the Late Woodland Period.

Beyond the cord-marked pottery, initial pottery identifications include small amounts of Thom’s Creek and Refuge wares from the Early and Middle Woodland Period, and curvilinear complicated stamped pieces from the Mississippian Period as well as this unique piece that was incised prior to firing. In addition, some of the sherds that have been recovered are heavily sooted and basal fragments, both indicators of regular domestic activities occurring at the site.

In addition to pottery, lithic materials have also been found in quantity at the site. While the presence of lithics at the Topper Site, a well-known quarry, is not a surprise, this current analysis focuses exclusively on the Late Prehistoric lithics found in the upper levels. To date, 47 projectile points and point fragments have been identified. A majority of the projectile points that have been recovered are the small Woodland Triangular arrowhead points that are representative of the Middle and Late Woodland Period, with the remaining few points reflecting potential Madison-style point designs of the Mississippian Period. These lithics data again place the occupations firmly in Late Woodland Period with definite Mississippian activities also
occurring at the site. Our current lithic analysis also includes a debitage size grade analysis. Every unit that has been excavated has produced lithic debitage of all sizes grades, and while size grades alone can be potentially misleading within analyses of activities, this analysis, when combined with the large volume of pottery and the high density of domestic features, indicate that the Late Prehistoric occupations at the site were not task specific nor was this short-term occupation. Instead, these combined data highlight that the activities at this site are representative of the wide range of day-to-day village activities. From our current initial distributional analysis, we have seen that from this collection of lithic materials, many stages in the reduction sequence are present across the site, among this broad distribution there are, however, some potential areas of increased lithic activity, allowing us to begin to piece together local village activities during the Late Woodland Period. For further details regarding this initial lithics analysis, again please visit the current poster session to speak with our team.

While the lithic materials at the site indicate potential hunting activities and while hunting would have been a continual part of general subsistence strategies, even with the rise of horticulture, faunal remains within the Late Prehistoric deposits has been scarce. This is most likely due to the acidic nature of local soils and the lack of any alkalizing agents within the deposits. To date, the only identifiable faunal remains are three portions of deer long bones. All other currently recognizable faunal materials have all been less than 1/8in in size and were only captured due to the robust flotation practices of the project. (SLIDE 12) While having faunal remains would have provided valuable insight into the day-to-day activities at the site, and may have helped to answer questions of the use of projectile points, such as were they for hunting or conflict, we will have to rely on paleoethnobotanical remains to answer questions about foodways and subsistence at the site.
In addition to these material culture analyses, an initial paleoethnobotanical analysis has also been conducted by Sierra Roark, assisted by Kandace Hollenbach. A few of the hearth features were selected for analysis in order to begin to piece together an understanding of the botanicals remains from the site as well as to collect samples for AMS radiocarbon dating. This analysis has already resulted in the identification of maize (*Zea mays*), blackgum and maypop (*Nyssa sylvatica* and *Passiflora incarnata* respectively) fruit seeds, and hickory and acorn (*Carya sp.* and *Quercus sp.* respectively) nutshell. While limited, these botanical remains are still very much representative of what one would expect to find from a site that consisted of semi-sedentary or sedentary farmers who supplemented their diets with locally foraged wild plants (Scarry and Reitz 2005). For further details about this initial analysis, again, please visit the current poster session.

(SLIDE 13) One of the goals of this project as it moves forward is to examine the timing of the adoption of intensive maize agriculture in the southeastern United State and its role in the emergence of complex societies characterized by hereditary inequality, monumentality, and intensive warfare. Funding is currently being sought to precisely date carbonized plant remains, specifically maize, that has been found in the dense Late Prehistoric assemblage. Until this project, the Topper Site had been known almost exclusively for the extensive Paleoindian and Archaic occupations and while this previous research agenda at the site has generated fundamental information towards understanding the colonization and spread of humans into the Americas (e.g., Anderson et al. 2015; Goodyear et al. 2009), this new focus at the site will provide much needed data in regards to the Late Prehistoric period in the lower Southeast, a time when intensive maize agriculture and complex mound building societies characterized by hereditary inequality and extensive warfare emerged over the region. The timing and linkages
among these developments are not well established locally, something this project hopes to help remedy. As noted, both the completed fieldwork and the ongoing laboratory analyses that have been conducted have established that the site assemblage dates to the critical transition period when maize was being adopted within the region, and either just before or concurrent with the emergence of complex societies.

(SLIDE 14) Beyond addressing the adoption, spread, and use of maize within the region, the current research at Topper is unique in that it is focuses on a specific site type where much of the population of the region would have lived, yet that has been underrepresented in previous archaeological research: the small village community. While there has been extensive prior research regarding the Woodland and Mississippian periods in the Southeast, and in the South Atlantic region (e.g., Anderson et al. 1986; Anderson and Mainfort 2002; Anderson and Sassaman 2012; Pauketat 2004), (SLIDE 15) much of the focus has been on the mound and ceremonial centers and the accompanying spread and reach of culture groups defined from these centers, such as the Hopewell interaction sphere of the lower Midwest (Lynott 2015) or the Weeden Island (Milanich 1997) and Swift Creek (Wallis 2011) cultures of Florida and Georgia. (SLIDE 16) The goal for this project, however, is to move the focus away from the mound centers and these well-known culture groupings and to instead examine occupations in a region that represents an apparent alternative social, economic, and political structure, dispersed yet (given widespread occurrence of similar artifact styles), interconnected small semi-sedentary and sedentary villages.

(SLIDE 17) One of the closest neighboring and contemporary Middle and Late Woodland sites to the Topper Site is the G.S Lewis-West site. The G.S. Lewis-West site sits within the bounds of the Department of Energy’s (DOE) Savannah River Site (SRS) in Aiken,
Allendale, and Barnwell counties, South Carolina. Beginning in 1984 and then continuing through 1989 excavations were conducted at the site. The earlier excavations targeted a large 25cm thick midden deposit that was identified in a 1977 reconnaissance survey of the area (Sassaman et al. 2002). (SLIDE 18) Directly below the midden layer was a dense feature floor that is similar in density to that of the Topper Site. The Woodland deposits were excavated under the direction of David Anderson, Glen Hanson, Ken Sassaman, and Mark Brooks in 1989, within a large 154 meter square (m²) block that resulted in the identification and mapping of over 500 occupational features that included shell-filled pits and postmolds.

(SLIDE 19) The G.S. Lewis-West site is located directly on the edge of a riverine marsh system on the bank of the Savannah River. The surrounding area is relatively flat with no more than a 3 meters (~10 ft) difference in elevation across the entire immediate area (Sassaman et al. 2002:3). (SLIDE 20) The site itself rests 7 meters above the modern floodplain indicating that the site could have been relatively dry for most of the year (Sassaman et al. 2002:4). In all, more than 50,000 sherds were recovered from the block excavation, with the most common decoration styles being Deptford Linear Check Stamped of the Middle Woodland and Savannah Cord Marked of the Late Woodland. Also recovered were Woodland Triangular bifaces (Stephenson and Civitello 2001:8). Radiocarbon assays have been conducted at the G.S. Lewis-West site and from the 8 samples, it appears that the Woodland occupations at the G.S. Lewis-West site appear to be split into two main groupings of time, the first being between ca. 390 B.C. to A.D 130, during the Middle Woodland, and the next time of occupation falls with ca. A.D. 890 to 1200 during the Late Woodland (Stephenson and Civitello:9).

(SLIDE 21 – PLAY VIDEO) These two sites are only 35 kilometers apart and based upon the material culture assemblages they were occupied at similar periods in time. When one
compares the site maps of feature distributions, both sites appear to have a similar density of features. Additionally, both sites appear to have similar volumes and types of both pottery and projectile points. In addition, from early assessments at the Topper Site, both sites appear to share patterns of botanical uses. In short, these similarities combined with the nearness to each other both geographically and chronologically suggests that the occupants of the two sites practiced very similar socio-economic behaviors and shared a similar local history. However, there are two major differences between the two sites. The G.S. Lewis-West site, as noted, was situated in a level wetlands and was buried under a dense earthen midden. The Woodland Occupations at the Topper site are found atop the hillside overlooking the Savannah River and the local chert quarry, but only minimal dark midden staining has been identified at the site.

The trends that occur within the South Atlantic Slope during the Woodland Period is that of increasing population sizes, increases in social complexity, and aggregation of populations into more permanent centers of varying sizes. In some places, this trend is defined by the movement of people towards large ritual, spiritual, and/or social centers that resulted in the widespread spread of well-defined social and ritual culture identities. The Topper Site and the G.S. Lewis-West site appear to be aggregation centers but take the form of village sites that are near valuable resources. There is no doubt that these two sites existed within a larger network of interactions, encompassing each other and other sites and cultures in the area. Intact midden deposits may exist at the Topper Site, given that only a small area has been examined to date. Both G.S. Lewis-West and Topper appear to represent seasonal semi-sedentary locales for the same population. These two sites may represent distinct aggregation village sites, practicing similar, yet different socio-economic strategies, and existing within a network of villages within the
region with the G.S Lewis-West site sitting atop a stable, predictable, and cost-effective food source, and the Topper Site sitting on a well-known high quality quarry site.

(SLIDE 22) To conclude, a dense feature and artifact assemblage has been found at the Topper Site dating, based upon typological identifications, to the Late Woodland (A.D. 500 - 1000) and Early Mississippian (A.D. 1000-1200) periods. This assemblage is characterized by large quantities of cross-cord marked pottery and small triangular arrow points, which when combined with the numerous features, suggests a small village may have been present, one where inhabitants were concerned with both growing maize, local foraging, and either hunting or potentially local conflict or warfare. Additionally, there are traces of both Thom’s Creek and Refuge pottery that have been identified indicating both Early (1200 - 100 B.C.) and Middle (100 B.C. - A.D. 500) Woodland activity at the site, as well as a few sherds with complicated stamp designs indicating a Mississippian occupation, suggesting inhabitants of the chiefdom level societies known to have been present in the basin after ca. AD 1200, may have been emerging at the site, or were present later in time.

Perhaps most significantly, maize has been definitively identified at the site in appreciable quantity. Maize’s arrival in North America accompanies significant changes to the socio-political and economic landscape (Emerson et al. 2005). Maize becomes widespread in the Southeast by approximately A.D. 1000, but when it was intensively utilized locally remains unknown, although this project should answer that question in the near future. Whether the appearance of maize locally is tied to population growth and the emergence of complex societies is unclear. This project will examine this question and hopes to provide a better understanding, of the spread and use of maize in the Southeastern United States, and its relationship to the development of sociopolitical complexity.
References

Anderson, David G., David J. Hally, and James L. Rudolph

Anderson, David G., Ashley M. Smallwood, and D. Shane Miller

Anderson, David G. and Robert C. Mainfort Jr., editors

Anderson, David G. and Kenneth E. Sassaman

Emerson, Thomas E., Kristin M. Hedman, and Mary L. Simon

Goodyear, Albert C., Keith Derting, D. Shane Miller, and Ashley M. Smallwood

Lynott, Mark

Milanich, Jerald T.

Pauketat, Timothy R.

Sassaman, Kenneth E., I. Randolph Daniel, Jr., and Christopher R. Moore
2002 *G.S. Lewis-East: Early and Late Archaic Occupations along the Savannah River, Aiken County, South Carolina*. Savannah River Archaeological Research Papers 12, Occasional Papers of the Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina.
Scarry, C. Margaret and Elizabeth J. Reitz

Stephenson, Keith and Jamie Civitello

Wallis, Neill J.
2011 *The Swift Creek Gift: Vessel; Exchange on the Atlantic Coast*. The University of Alabama Press, Tuscaloosa.
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Woodland Block East

Feature 290 - N220 E30
Woodland Block East
Open Access Database
Pottery and lithics were also recovered from the flotation of the features.
Recovered from the Features

Maize (Zea mays)

Maypop (Passiflora incarnata)

Blackgum (Nyssa sylvatica)

Hickory (Carya sp.)

Acorn (Quercus sp.)
Location of the Topper Site

Weeden Island

Swift Creek

Images: top, Williams and Elliott 2009:6
bottom Milanich 1997:11.
Location of the Topper Site

Weeden Island

Potential network of dispersed villages

Swift Creek

Images: top, Williams and Elliott 2009:6
bottom Milanich 1997:11.
G.S. Lewis-West site

35 km upriver from the Topper Site
Feature Density

Woodland Block East
(38AL23)

Left Image: modified from Stephenson and Civitello 2001:8)
Elevation Profile along an North-South 650m transect

The G.S. Lewis-West site is on a relatively higher patch within a lower marsh environment.
Elevation Profile along an East-West 500m transect

The G.S. Lewis-West site is on a relatively higher patch within a lower marsh environment.
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Woodland Block East
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