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Chapter 6

The Leake Site

Connecting the Southeast with the Hopewell Heartland

Scot Keith

Recent investigations of the Leake site in northwestern Georgia have yielded significant data pertaining to Middle Woodland period Hopewellian activity and interaction, particularly at regional and interregional scales. Occupied from approximately 300 BC until AD 650, the site came to serve as a ceremonial and interaction center within the regional Swift Creek interaction network and the interregional Hopewell Interaction Sphere. Situated at the interface of the Tennessee River Valley with several primary Gulf Coast and Atlantic river basins, Leake also acted as a gateway community that geographically and culturally linked the Southeast and the Midwest. Two pottery sherds made in or around the Mann site in southwestern Indiana found at Leake reveal a direct connection between these two sites, and in conjunction with other evidence, suggest these two sites served as gateways between their respective regions.

In this chapter, I describe the archaeology of the Leake site complex and selected Hopewellian contexts therein and examine Swift Creek site distribution and contexts in the Eastern Woodlands. I then draw upon these data to construct a hypothetical model of Hopewellian interaction at the regional and interregional levels.

ARCHAEOLOGY OF THE LEAKE SITE

The Leake site was first recorded as Rowland Mounds by researchers with the Smithsonian Institution's Division of Mound Exploration of the Bureau of American Ethnology survey in the late 1800s (Middleton 1883; Rogan 1883; Thomas 1891:45, 1894:313). Situated two miles downstream from the better-known Mississippian period Etowah Mounds in a large bend of the Etowah River, Rogan and Middleton documented three earthen mounds and a cemetery at the site (Figure 1A (top)). Mound A was described by Middleton (1883) as being approximately 45 m² (150 ft²), 2.1 m (7 ft) in height, and having a flat top, while Rogan (1883) described it as a "loaf shaped" mound with a length of 91.4 m (300 ft) and width of 70 m (200 ft). Mound B was described by Middleton (1883) as conical, 22.9 m (75 ft) in diameter, and 1.5 m (5 ft) in height, while Middleton (1883) recorded it as a rounded mound 54.8 x 45.7 m (180 x 150 ft) in length and width and 4.6 m (15 ft) in height. Rogan (1883) reported excavating a trench in the northern half of this mound; he encountered no artifacts or human remains, but documented numerous mound strata, including a pure white sand layer and several strata containing abundant ash. Mound C, located 400 m west of both Mounds A and B, was reportedly flat-topped and eight feet in height according to Middleton (1883), and 27.4 x 21.3 m (90 x 70 ft) in length and width according to Rogan (1883). No known excavations within or around Mound C have been conducted, and there are no other physical descriptions of this earthwork.

Since the Smithsonian investigation of Leake, the mounds have been negatively impacted by historic/modern land-use practices (Figure 1B (bottom)). In the late 1930s, Robert Wauchope (1966:238) visited the site and recorded three mounds, but upon his return in 1957, he found that one or more of the mounds had been leveled. The mounds were razed in 1940 for use as road fill when the road extending through the site was rerouted to run directly across Mound B. Local amateur archaeologist Pat Wofford Jr., who "observed the destruction of the mounds and salvaged as much material as possible," appears to have alerted archaeologists Charles Fairbanks, Gordon Willey, and Arthur Kelly of the destruction of these mounds, resulting in a coauthored short description of the site (Fairbanks et al. 1946:126). They reported that the basal parts of the "largest, and only flat-topped, mound still remain," having been razed to the level of the surrounding knoll, and also noted black humus at least a foot thick in the ditch of the road and that the "village area" was still present (Fairbanks et al. 1946:126–127). They were the first investigators to note the probable Adena-Hopewell connection to the Leake site.

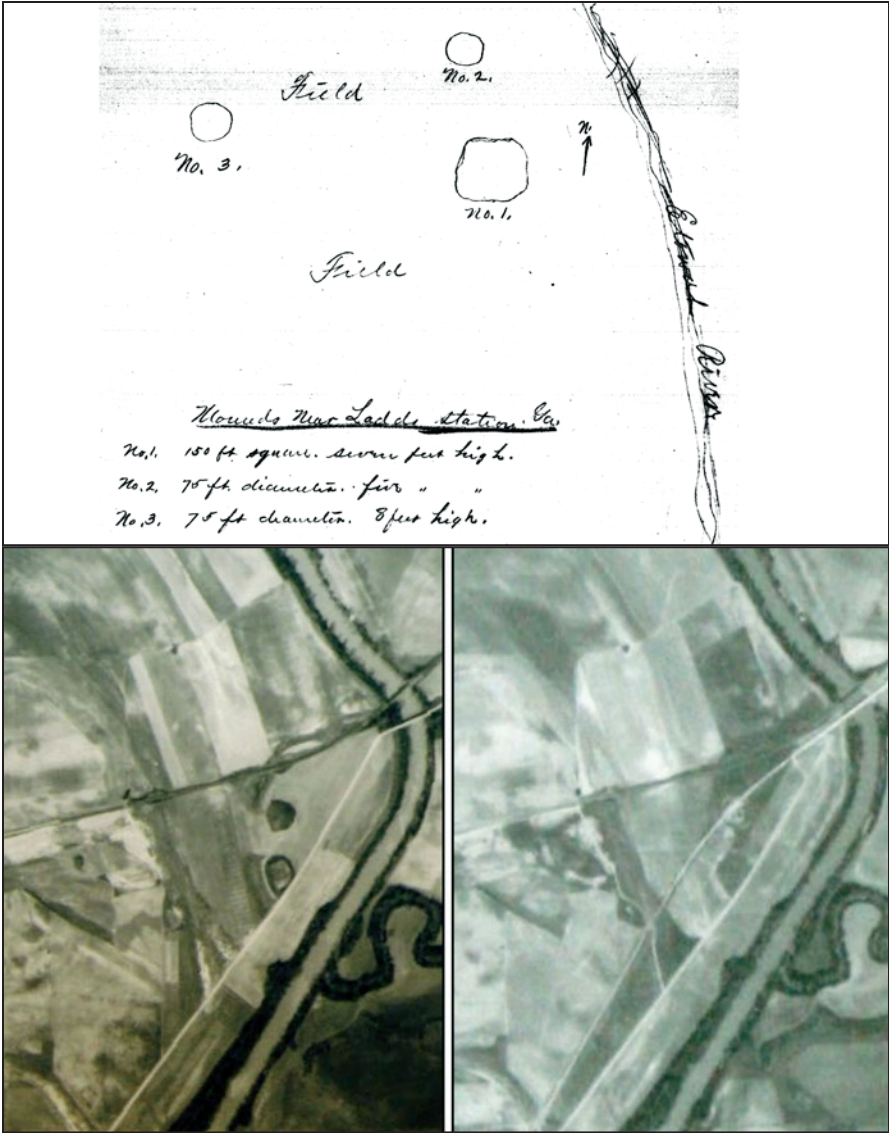


Figure 1. Historic documentation of the Leake site. **A.** (Top) James Middleton map of the Leake site, 1883. **B.** 1938 (left) and 1943 (right) aerial photographs showing the Leake site.

Since then, several investigations have been conducted at the Leake site, including a series of University of Georgia archaeological field schools, which examined some of the remaining subsurface portions of Mounds A and B (Hally 1989, 1990a, 1990b; Rudolph 1989, 1990; Williams 1989); salvage recordation of portions of a large midden (Southerlin 2002); excavation for a water line through the site (Southerlin et al. 2003); and Phase I survey (Price 1994), Phase II testing excavations (Pluckhahn 1998), and data recovery excavations (Keith 2010) in advance of the widening of the road and replacement of the bridge over the Etowah River. These investigations have uncovered nearly two acres, or 7,800 m², of the archaeological record of this site, which minimally covers 115 acres, and have provided a dataset relating to the remains of three earthen mounds, a semicircular ditch enclosure, extensive midden deposits, thousands of features, and material remains from an occupation dating between 300 BC and AD 650.

Excavations in the southwest portion of Mound B indicate it was constructed sometime during the first or second century BC (Keith 2010:Figure 2). During the data recovery excavation (Keith 2010), a trench extended through the southwest portion of the mound. This trench revealed what appears to be the initial mound stage, consisting of strong brown silty clay loam devoid of artifacts. This mound stage was placed atop a midden, possibly truncated and containing artifacts dating circa 300–100 BC, after the removal of a large post approximately 80 cm in diameter which had extended through the midden. A charcoal sample from a small burned post feature (UGAMS-02184) on the margin of the large removed post yielded a conventional age of 2190 ± 40 BP and a 2-sigma calibrated date range of 383–122 BC (Keith 2010:61). Another sample of charcoal (UGAMS-02183) from the top of the midden three meters away returned a conventional age of 2100 ± 40 BP and a 2-sigma calibrated date range of 347–2 BC (Keith 2010:61). Based on excavation data and the mound's signature on the 1938 aerial photograph of the location, it can be determined that Mound B was roughly circular in plan with a diameter of approximately 70 meters, a size closer to Middleton's (1883) description than Rogan's (1883).

Approximately 60 meters southwest of the two post features under Mound B described above, a portion of a very large ditch feature was encountered during excavation. The ditch enclosure was not noted by the Smithsonian researchers, nor by any other early researcher who documented the site, as the feature is not visible to the eye on the ground surface. A small portion of the feature was encountered during Phase II testing of the site and interpreted as a likely buried natural intermittent drainage (Pluckhahn 1998:66, 106). During the data recovery, much

more of this feature was exposed, and, in combination with analysis of early aerial photographs, the data indicated this feature represents a human-constructed ditch enclosure extending in an arcuate form over 700 meters from end to end to enclose Mounds A and B in conjunction with the river (Keith 2010). It is currently unknown if either or both ends were open to the river. There is stratigraphic evidence that the ditch held water at some point, as indicated by a stratum of swirling and laminated water-lain sediments exposed in a profile along an outside edge of the ditch southwest of Mound B. Ground-penetrating radar investigation since the data recovery has confirmed the presence of the ditch along the projected location in several areas lacking excavation data, providing additional support for the hypothesis that it represents a human-made semicircular ditch enclosure (Baughman and Keith 2014). In the area where it was most exposed during excavation (see Keith 2010), ditch fill extended to at least 1.7 m below its upper surface, though the base of the ditch was not reached in this excavation trench due to safety issues. In this location, the ditch slants inward and is approximately 20 m in width at its upper surface. During the excavation of the area located to the southwest side of Mound B, a sloped ramp-like feature leading into and out of the ditch was recorded. Perhaps this feature is related to the construction of the ditch and/or to the acquisition of sediments for the construction of nearby Mound B (Keith 2010).

Located approximately 50 meters due south of Mound B, excavations conducted within the remaining basal portion(s) of Mound A during a series of University of Georgia field schools (Hally 1989, 1990a, 1990b; Rudolph 1989, 1990) indicate it was constructed during the Middle Woodland period. Three radiocarbon dates from feature samples returned dates of cal AD 180, 194, 225 ± 60 ; cal AD 394 ± 80 ; and cal AD 544 ± 60 (Rudolph 1990). Rudolph (1989) mapped a series of aligned posts within the mound which formed a nearly north-south line extending for 24 m. He attributed this configuration to roofed architecture or scaffolding. No burials were present, but a copper bead, copper disk, hematite plummets, graphite, and tubular slate beads were recovered, as was Cartersville Check Stamped, Cartersville Simple Stamped, and Swift Creek Complicated Stamped pottery (Rudolph 1989).

Outside of the ditch enclosure west of Mounds A and B is a large midden covering at least 1.2 acres and dating from approximately AD 100 until the abandonment of the site ca. AD 650 (Keith 2010:Figure 3). Referred to as the Swift Creek midden, due to the very high frequency of complicated stamped pottery of this name found within in it, this black earth stratum yielded abundant evidence of Hopewellian activity. Approximately 700 cultural features have been documented within and

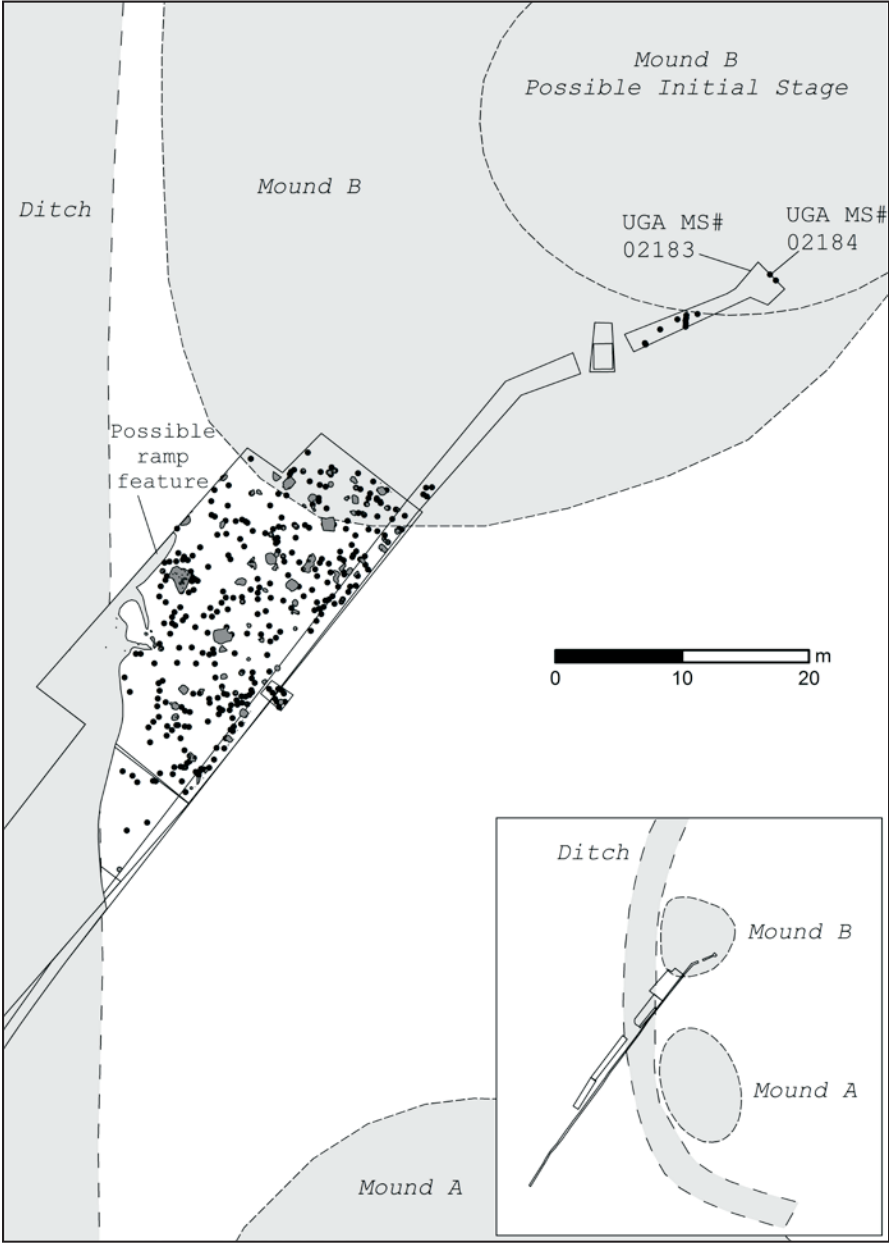


Figure 2. Mound B and ditch enclosure area.

below this midden, including post molds, small pits, hearths, rock concentrations, a small gully, a linear trench, and several unusual features of unknown origin and function. Communal feasting deposits are present, as are other contexts indicative of ritual and ceremonial events, including the potential remains of a world creation ritual featuring the spoonbill duck as the Earth Diver (Keith 2015). Materials and items recovered from the Swift Creek midden include cut mica, copper, galena, ceramic human and animal figurines, and prismatic blades of Ohio Flint Ridge chert, clear/crystal quartz, and local chert. Also found are modified quartz crystals, graphite, hematite plummets, greenstone celts, crinoid fossils, and various other minerals. Much of these materials occur as debris, while there is a high frequency of items that appear to have been discarded prior to finishing and a relatively low number of specialized items in finished form, suggesting that the production of specialized items took place in this area of the site. Clear/crystal quartz is abundant within the midden, occurring in crystal and nodular forms. Quartz crystals were broken, ground, incised, pecked, and split, perhaps with a specialized crystal splitting toolkit found within the midden; flakes and splinters from quartz crystals often exhibit use-wear. Also within the midden is a high density of projectile points, tools, and debitage of local chert, as well as fire-cracked rock and thousands of sherds.

The bulk of the pottery found in this midden belongs to the Swift Creek Complicated Stamped and Cartersville Simple Stamped types, with the former type comprising 71% and the latter 26% of the typed ceramics. Cartersville Check Stamped and Ladds Stamped each comprise nearly 10% of the typed assemblage from the midden. Ladds Stamped is a previously unrecognized ware, known from Leake nearly exclusively, with a single possible example found at a Swift Creek site in middle Georgia (Jerald Ledbetter, personal communication 2016). This previously unrecognized ware is characterized by a background of closely spaced parallel fine lines created by rolling a crinoid fossil across the vessel surface. The crinoid impressions were then overlain by raised lines in either a large diamond check pattern or blurred/smoothed amorphous patterns that occasionally appear similar to obscured complicated stamping (Keith 2010:338–354). The characteristics of this ware suggest it was made in the Swift Creek and Cartersville ceramic technological tradition, and crinoids were found within the midden suggesting it was made at or near the site. Numerous nonlocal ceramic types such as Marksville Incised, Alligator Bayou Punctated, Bayou la Batre, Weeden Island Incised, Cormorant Cord Impressed variety Cormorant, and a simple stamped and punctated sherd similar to Turner Simple Stamped B reveal the presence and/or influence of

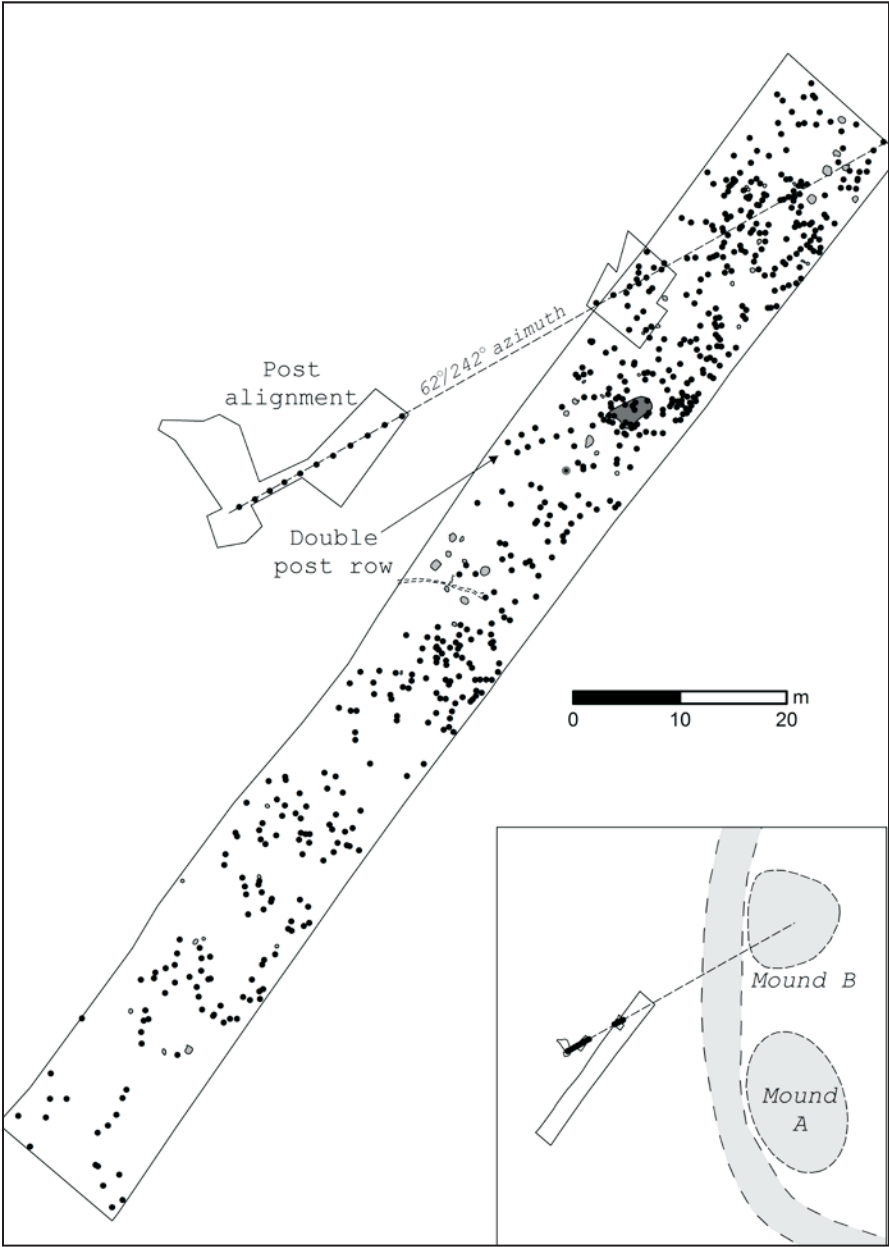


Figure 3. Swift Creek midden area.

peoples from the Lower Mississippi Valley, the Gulf and Atlantic coasts, the Mid-south, and the Midwest. In addition to these wares, a small number of sherds exhibiting an enigmatic diamond/dot decorative motif (see discussion of this type below) were also found at Leake (Keith 2010).

While there are numerous post holes within the area of the midden, no clearly defined complete structural patterns have been identified within the midden. However, there may be a portion of a keyhole entrance structure present adjacent to the aforementioned feasting deposits and the possible world creation ritual remains, consisting of two parallel rows of equally spaced posts (Keith 2010, 2013, 2015). Less than ten meters north of these posts, a single line of posts spaced at a regular interval of 1.7 m was recorded following a similar orientation to the double row of posts. Found within two discontinuous machine-stripped excavation blocks, these posts form a straight line spanning a distance of at least 45 m (Southerlin 2002). If this post line is extended to the east-northeast, beyond the excavation blocks and along its 62° orientation, it bisects Mound B. Rather than representing a possible palisade (Southerlin 2002), this post row may represent the remains of a solar observatory associated with Mound B, as the angle set (62°/242°) is very close to the alignment of the summer solstice sunrise (~61°) and the winter solstice sunset (~241°) for this location.

Outside of the Swift Creek midden and over 250 m southwest of Mounds A and B, a large structure (Structure 1) was identified within an excavation block. The remains of this structure consist of regularly spaced (average 1.2 m apart) posts arranged in a square plan lacking corner posts indicative of a right angle; the corners of the structure are aligned with the cardinal directions, and the northern and southern corners lack posts. A radiocarbon sample (UGAMS-02186) from a post mold in the eastern corner of Structure 1 yielded a conventional age of 1600 ± 40 BP and a two sigma calibrated date range of AD 382–560, with a mean date of AD 470 (Keith 2010:61). Adjoining the east side of this structure was an area of red clay that appears to represent a prepared clay surface. Measuring a minimum of 15 x 5 m in extent and extending outside of the excavation block, this soil lens is more compact and darker than the surrounding red clay subsoil. A thin lens of water-worn pebbles and cobbles was found within and underneath a portion of this possible clay platform. There are also arrangements of posts within this block that may be the remains of two other structures. Only a corner section of Structure 2 was exposed within the excavation block, but this possible structure was similar in size and shape to Structure 1. Structure 3 represents the remains of an oval structure

measuring 13 x 9 m in size, characterized by numerous paired posts. No midden was identified in this excavation block, and the artifact assemblage is relatively meager, as it is derived from feature fill, but diagnostic pottery consists of Cartersville Simple Stamped and Swift Creek Complicated Stamped types.

Despite the extensive excavations at Leake, no evidence of Middle Woodland burials has been found. While Rudolph (1989) states that Mound B was a burial mound, no Middle Woodland human remains have been documented in this mound despite the excavations within it (Hally 1989, 1990a, 1990b; Keith 2010; Pluckhahn 1998; Rogan 1883; Rudolph 1989, 1990). However, it should be remembered that much of the mound was used for road embankment fill and there are no known reports of what may have been uncovered due to its razing. Further, only a small percentage of the site has been excavated.

One burial that appears to be affiliated with the Leake site has been identified, although it is located across the river from the site in a stone mound at the base of a low ridge known as Ladds Mountain. During the data recovery investigation (Keith 2010), it became apparent that this burial structure and two other previously recorded sites on the mountain were likely related to the Leake site. In addition to the Shaw Mound (9BR24), the other sites include a large cavern, Ladds Cave (9BR194), at the eastern end of the mountain (Anonymous 1885, 1915; Sneed 2007) and Indian Fort, a stone wall (9BR17) that enclosed the summit (P. Smith 1962; R. Smith 1936a; Wauchope 1966; Whittlesey 1883). In conjunction with the Leake site proper, these sites form a ceremonial complex that covers a minimal area of 283 ha (Figure 4).

The stone mound at the base of Ladds Mountain was described by Whittlesey (1883) as being 5.5 m (18 ft) in height with a sunken center and small heaps of stone attached to its base. Similar to the stone wall, this site was also dismantled circa 1940 by the landowner to satisfy his curiosity as to what might be inside and to sell rock to the county for road building. Fortunately, local amateur archaeologist Pat Wofford was present to record this destruction, which was reported in an *American Antiquity* article (Waring 1945). A single individual was found within the mound, with large cut mica sheets placed over his/her face and chest, a copper breastplate on the chest, stone celts on either side of the head, and fragments of a geometric copper cutout in the pelvic area. A copper celt was also found when it got hung up going through the rock crusher. Waring (1945:120) also notes that he found simple stamped pottery "at the Shaw Mound" but does not describe precisely where he found it in relation to the mound. The burial items are clearly Hopewellian, and the sunken center of the mound may have been a result of the collapse of an inter-



Figure 4. Ladd's Mountain sites.

nal log tomb where this person was buried. It should be noted that at Leake there is an abundance of mica debris, numerous unfinished and broken greenstone celts of the form found with this person, and simple stamped pottery, particularly in the Swift Creek midden. The individual in the Shaw Mound was almost certainly associated with the activities across the river at Leake, perhaps acting as a type of liaison who facilitated events and interaction among the various peoples at Leake.

The stone wall on top of Ladds Mountain was first documented in the late 1800s (Whittlesey 1883), and again in the middle 1900s (Smith 1936a) as it was being dismantled by the landowner in order to sell the rock to the county. Whittlesey's (1883) map depicts an oval wall enclosing the summit, having six openings described as ranging from 3 to 18 m (10 to 60 ft) in width. Smith (1936) mentions only two openings, each approximately 9 m (30 ft) in width, and he also states that the wall was approximately 360 m (1,180 ft) in length, an average of 3 m (10 ft) in width, and approximately 0.9 m (3 ft) in height. One of the photographs of the wall taken by Smith (1936b) at the time of its deconstruction includes a caption stating that small depressions or pits were present near the wall openings, and he states that "on each side of the gaps and at a few other places are traces of former pits in the middle of the wall" (Smith 1936a).

Roughly between this stone enclosure and the stone burial mound, Rogan recorded a large cavern, the entrance to which was carefully walled-up when it was found (Thomas 1894). Now mined away with the exception of a few short passages, this cavern once comprised "a single cave with one natural entrance" that would have had the largest vertical extent (150 ft) of any cave in the county (Sneed 1998:226). Rogan submitted two collections from the cave to the USGS, one of which was reported to include fish bones, mastodon teeth, and human bones (Anonymous 1885; Keith 2010:43). In the 1970s, John Walthall and David DeJarnette (1974) documented Middle Woodland period Copena villages, mounds, and burial caves in the Tennessee River Valley west of Leake, and, like Arthur Kelly (1951, 1952) who investigated the prehistoric usage of caves in northwest Georgia (including the area surrounding the Leake site), characterized these sites as being part of a regional Hopewellian Copena/Cartersville mortuary tradition.

SWIFT CREEK IN REGIONAL CONTEXT

The name Swift Creek comes from the type site (9Bi3) located at the Fall Line in central Georgia. Arthur Kelly (1938) referred to the Middle Woodland complicated stamped wares he excavated at this mound site in the 1930s as Swift Creek, and it was shortly thereafter formally defined as a pottery type (Jennings and Fair-

banks 1939). Produced from as early as 100 BC until circa AD 800. (Anderson 1998:276; Stephenson et al. 2002), Swift Creek Complicated Stamped pottery is defined by distinctive iconographic designs, primarily curvilinear but also rectilinear in form, that were stamped into the outer surface of ceramic vessels. Swift Creek designs are characterized by combinations of elements such as circles, diamonds, bars, dots, and triangles arranged in various configurations and occurring in curvilinear or rectilinear forms, although both styles may be combined. Due to the seemingly infinite number of possible element combinations and configurations, there are a correspondingly infinite number of designs that could be created (see Kellar et al. 1962a:101). At the very least, many hundreds of unique designs have been documented (e.g., Snow 2007), and it is highly likely that there are at least as many more that have not yet been found and/or formally recorded.

Swift Creek pottery is often divided into early and late varieties based on variations in decorative designs, vessel shape, and rim form (see Caldwell 1978; Snow 1980; Willey 1998). Generally, there is a developmental sequence over time from notched and scalloped rim forms to folded rims, with the width of the rim folds increasing through time. Early Swift Creek forms are characterized by notched and scalloped rims, small tetrapods and conoidal bases, and somewhat simple design motifs of which concentric circles were prominent.

Swift Creek pottery often co-occurs with check stamped and simple stamped wares of the Cartersville and Deptford series in the Georgia, Florida, and Alabama area. Generally referred to as Cartersville in the Piedmont and Deptford in the Coastal Plain, but often used interchangeably, both series include sand/grit tempered check stamped and simple stamped decorative types. In northern Georgia, such as at Leake, Cartersville Check Stamped pottery was common circa 300 BC–AD 100. As check stamped wares declined in frequency, Cartersville Simple Stamped became the predominant ware in northern Georgia Middle Woodland assemblages by AD 200. Tempered with sand/grit, both the lands and the grooves on Cartersville Simple Stamped pottery may be very narrow to wide, while the application of the stamp ranges from very light (to the degree that it may be typed as brushed) to very heavy. Overstamping, in which the design is stamped atop a previously stamped area, is a common feature of Cartersville Simple Stamped pottery, forming a pattern of crisscrossed lines, often at an acute angle. At Leake, the most common simple stamping is fine-lined, and it is often overstamped. Occasionally, punctations are present, typically parallel to the rim. Cartersville Simple Stamped vessels usually have four podal supports (tetrapods) and a flat base; vessels often occur as large cylindrical jars with an outflaring neck/rim area,

although straight-sided neck/rim areas occur as well (Wauchope 1966). Rim forms include squared, rounded, notched, and scalloped, and the top of many straight rims appear to have been simple stamped at an oblique angle.

Pottery bearing Swift Creek iconography is most common in modern-day Georgia, particularly in the Coastal Plain and the central to western portion of the north half of the state; in the northern portion of Florida; and in the eastern portion of Alabama. In portions of Alabama and Tennessee, pottery bearing Swift Creek designs may occur on limestone tempered wares that are referred to as Pickwick Complicated Stamped (Haag 1939; Lewis et al. 1995; Webb and DeJarnette 1942), although this type is often used as a catchall for complicated stamped wares regardless of design, and thus assemblages in this area may contain wares that postdate the Middle Woodland period (Chapman 1973; Elliott 1998).

Swift Creek pottery has been found at a variety of sites, from small domestic occupations to large earthworks (Figure 5). According to the Georgia Archaeological Site Files, 835 of the 3,312 Middle Woodland sites recorded in Georgia have a Swift Creek component, and 34 mound sites recorded in Georgia have a Swift Creek component. While excavations, or lack thereof, have not documented Swift Creek constructional episodes at all of these earthwork sites, several of these are well-known Swift Creek sites, often with platform mounds, such as the type site, as well as Kolomoki, Mandeville, Hartford, Milamo, Cold Springs, and Leake. An examination of Swift Creek site distribution within Georgia reveals a network of sites situated primarily along the waterways (Keith 2014). Mound sites are often located on the floodplains of the major waterways, while non-earthwork sites are typically found along the tributaries. In a study of the distribution of Middle Woodland mound sites in the piedmont of Georgia and northwest South Carolina, Williams and Harris (1998) found that many were evenly distributed across the landscape, and argue that the lack of extensive middens at many of these sites suggests they represent nonresidential shrines where ritual activities were conducted—in essence, vacant ceremonial centers. However, substantial middens have been found at many of the Swift Creek mound sites (e.g., Hartford, Swift Creek, Leake), often including the remains of ceremonial feasts. In such contexts, Swift Creek pottery is typically found in association with the suite of materials and items often considered to be indicative of Middle Woodland ceremonial activities and contexts—clear/crystal quartz, mica, hematite, copper, galena, prismatic blades, and ceramic figurines. As a result of this association and its occurrence at Middle Woodland ceremonial centers across the Eastern Woodlands, the affiliation of Swift Creek ceramics with the larger Hopewell Interaction Sphere has long been recognized (Caldwell 1958, 1964; Kellar et al. 1962a, 1962b; Smith 1975, 1979; Willey 1998).

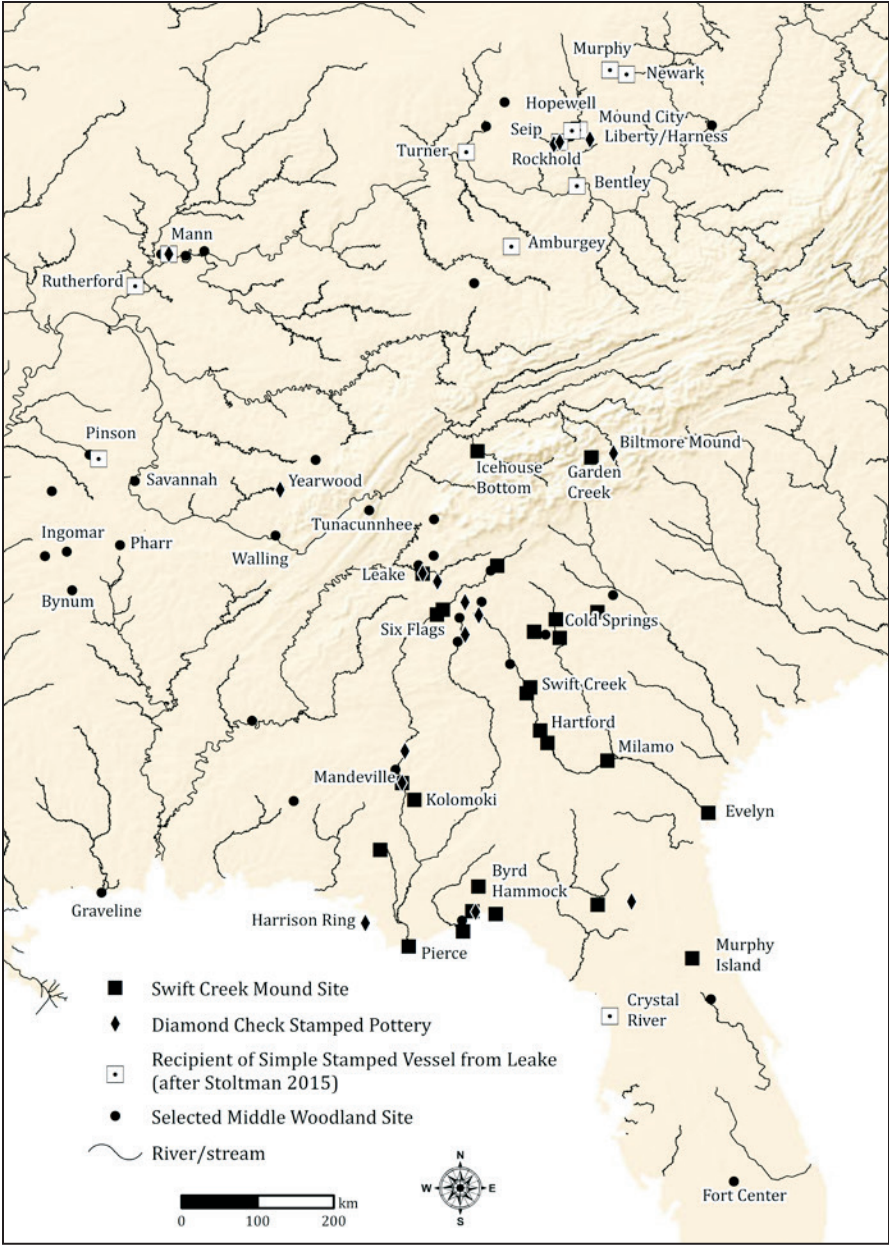


Figure 5. Swift Creek area and selected sites.

Despite being common in obviously ceremonial contexts, Swift Creek pottery may also be found in domestic contexts, usually in association with check and/or simple stamped wares, but occasionally only with plain wares. Unfortunately, our understanding of the range of social contexts in which Swift Creek pottery was used is hindered by the lack of a comprehensive regional comparative study of the range of archaeological contexts in which this pottery has been found, along with a much finer chronological resolution of these contexts. It must be stressed that the distribution of Swift Creek pottery is regional (and even interregional), cross-cutting several local Woodland cultural traditions from the Gulf and Atlantic coasts into the Appalachian Summit, and it also spans a wide temporal range.

Through the reconstruction of individual complicated stamped motifs, researchers have been building an ever-growing database of Swift Creek designs (Broyles 1968; Snow 1998, 2007), and, by identifying the occurrence of identical designs at different sites, a process known as design matching, researchers are continually constructing a map of the interaction among the people who were making and using these ceramics (Snow and Stephenson 1998; Stoltman and Snow 1998). A database of approximately 300 design contacts of Swift Creek designs have been identified within the area of Georgia. Seven different pottery designs from Leake have also been identified within the assemblages of twelve sites in Georgia and one in Florida. All twelve designs were not found at all of the sites, but rather each design from Leake occurred at one or more of the thirteen sites. The bulk of the design matches are with sites along the Ocmulgee River in central and southern Georgia (this area comprises the bulk of Snow's database), while there are matches with Kolomoki in the Chattahoochee River Valley, the Solomon site on the Atlantic Coast, and the Williams site on the Gulf Coast near the bend of Florida (Keith 2010:319–320). In a study designed to gain insight into whether it was “paddles or pots that were being circulated among Swift Creek communities,” Stoltman and Snow (1998:151) combined design matching with ceramic petrography analysis to analyze vessels from Swift Creek sites in the Coastal Plain of Georgia. They hypothesized that (1) if it were the stamping paddles that were being transported, then vessels with identical designs from different sites should exhibit different paste properties, and (2) if vessels were being circulated, then vessels with identical designs found at different sites will share similar pastes. Their data suggested that both paddles and pots were in circulation.

Several researchers have related the nature and spread of Swift Creek pottery to ceremonialism, interaction, and cultural identity, using analyses of Swift Creek

design iconography and its distribution across the landscape (Anderson 1985, 1998; Anderson and Joseph 1988; Broyles 1968; Espenshade 2008; Espenshade et al. 1998; Smith and Knight 2012, 2015; Snow 1975, 1977, 1998; Snow and Stephenson 1998; Stoltman and Snow 1998;). Examining Hopewellian exchange in the Southeast, Goad (1979:244–245) recognized Leake, the Shaw Mound, and Tunacunnhee in northern Georgia as affiliated with Cartersville series wares, and Mandeville in southern Georgia as associated with Swift Creek, but did not recognize the presence of many other Swift Creek mound sites across Georgia. Anderson (1985:40–41) briefly discusses the Swift Creek “problem,” wherein Swift Creek wares are occasionally but not always found at sites with Cartersville check and simple stamped wares of northern Georgia, suggesting that cultural differences of some kind may have accounted for the discrepancies in the uneven distribution of Swift Creek pottery. He states that the interaction between those producing Cartersville and Swift Creek wares was likely peaceful given the lack of evidence for warfare (Anderson 1985:41). Anderson and Joseph (1988:245–246) suggest that Swift Creek ceramics in northeastern Georgia may represent ceremonial wares traded into the area. On a more regional scale, Anderson (1998:291) argues that Swift Creek wares were not a “specialized elite or burial pottery but were widespread, so this rich symbolism was an integral part of the everyday life of the people.” He echoes Snow’s (1977, 1998) contention that some Swift Creek designs were animal motifs, some were cosmological in nature, some may have represented guardian spirits of lineage/community/kin groups, and designs may also have served as symbols of group or community identity. Williams and Elliott (1998:10–11) feel that Swift Creek iconography transcended local areas by “signaling social unity on the regional scale.” Recognizing Swift Creek pottery as a ware important within Hopewellian ceremony, Espenshade (2008:138–139) argues that the uneven occurrence of Swift Creek pottery among the widespread check and simple stamped assemblages in Georgia may reflect the level of acceptance of Hopewellian ideas and beliefs, such that some areas are devoid of Hopewellian Swift Creek influence, some show an admixture, and some appear to be *pure* sites suggestive of intrusive peoples.

Several sites in the Atlanta area south-southeast of Leake may provide a glimpse into Swift Creek interaction and movement (Figure 6). Shoal Creek 4 (9HY98) within the Flint River Basin (Espenshade et al. 1998); Miner’s Creek (9DA91) in the Ocmulgee River Basin (Chase 1994); and Butler Creek (9CO46) in the Coosa/Etowah River Basin (Cable and Raymer 1991), have each yielded sizable assemblages of Swift Creek pottery and other Hopewellian materials (e.g.,

human effigy fragments, quartz crystals, greenstone celts, mica). Each of these is found along the headwaters of their respective river watersheds very near the Chattahoochee River drainage divide. Within the Chattahoochee River watershed itself, centrally located and roughly equidistant (44–49 km) from each of these three sites, is a largely unreported Middle Woodland mound site, the Six Flags site (9FU14), excavated by A.R. Kelly (Kelly and Meier 1969). Unfortunately, we know very little about this mound site, and its nature of involvement within the Swift Creek network, but Swift Creek wares are present. This site was located on the floodplain of the Chattahoochee River, across the river from the mouth of Sweetwater Creek. Given that numerous Swift Creek sites are found within each of the watersheds in which the three non-mound sites are located, the distribution and the assemblages of these three sites suggests they may have served as way stations for Swift Creek participants who resided in areas south of Leake but who were traveling to and from Leake. While we unfortunately know little about the Swift Creek context at the Six Flags mound site, it may have functioned in a similar manner. Heading upstream along Sweetwater Creek and following its tributaries north from the Six Flags site, the Butler Creek site is located along an Etowah River tributary from which one can easily access Leake.

In association with Swift Creek materials, each of these three non-mound sites have yielded a distinctive decorated ceramic ware known only from a handful of Hopewellian sites in the Eastern Woodlands. This ware exhibits a stamped decoration characterized by a pattern of diamond-shaped parallelograms connected at their vertices, and the center of each diamond often contains a raised circular or square dot, although it may occur without this dot. This decorated type is known only from a handful of Middle Woodland sites in the Southeast and Midwest, including Seip, Harness, and Rockhold in Ohio (Prufer 1968); Mann in Indiana; Byrd Hammock (Penton 1970), Refuge Tower (Penton 1970), Horseshoe Bayou (Thomas and Campbell 2001), and Harrison's Ring in Florida (Craig Dengel, personal communication 2013); Miner's Creek (Chase 1994; Crawford 1977), Mandeville (Smith 1975), Shoal Creek 4 (Espenshade et al. 1998), Butler Creek (Cable and Raymer 1991), Shepard (Bland 2003), and 9SW71 (Knight and Mistovich 1984) in Georgia; Biltmore Mound in North Carolina (Kimball et al. 2010: Figure 6, 48); and Yearwood (Butler 1979) in Tennessee. Prufer (1968:77, Plate 23) describes a similar decorative ware found at Ohio Hopewell sites under the name Untyped Diamond Check Stamped, but he does not make it clear whether or not all of the examples contain a raised dot in the check stamped open-

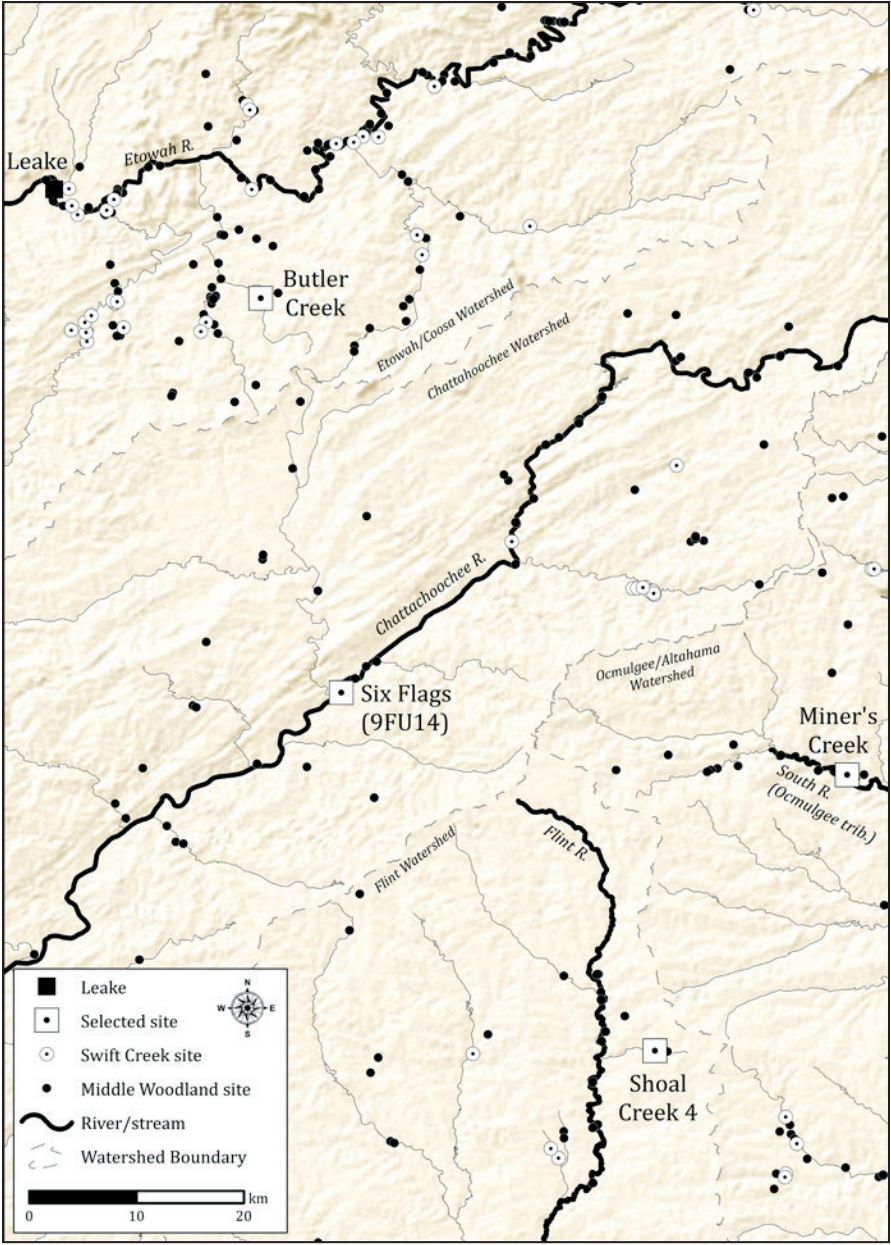


Figure 6. Leake Area Swift Creek Sites.

ings; the illustrated example of this type seems to lack the central dot (Prufer 1968:77, Plate 23). However, Prufer (1968:135, Plate 45a-137) depicts and describes a vessel from the Turner cemetery that he classifies as Untyped Complicated Stamped; the decoration on this vessel consists of large diamond checks, each containing a raised dot. From the same provenience, Prufer also lists an Untyped Check Stamped sherd with a stamped dot within the checks. Prufer does not make it clear why these two wares are typed differently. Butler (1979) referred to this ware at the Yearwood site as a diamond-dot decoration.

This decorative ware has been found most often at sites in Georgia. Chase (1994:31) reported 71 sherds of this type, and named it Panola Check Stamped. At Shoal Creek 4, approximately 30 sherds with this motif were recovered. Four sherds representing three vessels were found in the Swift Creek midden at Leake; two of the vessels did not contain the central dot.

The attributes of the Panola Check Stamped wares, specifically its strong technological similarities with Swift Creek and Cartersville wares, indicate that this type was produced within these pottery technology traditions (see Espenshade et al. 1998:37 for more discussion). Found at a Swift Creek site in the Florida panhandle and named Horseshoe Bayou Stamped type, Thomas and Campbell (2001:68–69) state that the vessel forms and ware characteristics of this pottery are “compatible” with Swift Creek Complicated Stamped. It may be that this decoration originated in the Swift Creek stylistic tradition, as a distinctive complicated stamped design.

Interestingly, of the 16 sites at which this ware has been recovered, all but two—Liberty/Harness and Rockhold—have also yielded Swift Creek pottery. Both of these sites are located in the Scioto River Valley of Ohio. Swift Creek pottery has been found at Seip, also in the Scioto River Valley, albeit at a very low frequency (Prufer 1968: 14, 75, Plate 22 d, e, f). Neither the diamond/dot pottery nor Swift Creek pottery has been reported from other sites in the Midwest Hopewell region, with the notable exception of the Mann site, where they are found together in association with simple stamped pottery.

LEAKE AND THE MANN SITE

Upon learning about the significant Swift Creek component at the Mann site during the data recovery investigation, the author and Co-Principal Investigator Dean Wood arranged to look at two collections of Mann site materials, one in the possession of Charles Lacer in Evansville, Indiana, and the other held by the Glenn Black Laboratory of Archaeology at Indiana University in Bloomington. We

wished to examine the Swift Creek wares from Mann for possible design matches with Leake, under the hypothesis that those responsible for the Swift Creek materials at Mann had likely visited and/or passed through Leake based on the evidence of it being a Swift Creek ceremonial center and its participation within the Hopewellian interaction sphere. The Mann site (12Po2) is a large Middle Woodland Hopewellian center located along the Ohio River in southwestern Indiana. Dating circa AD 100–500, the numerous mounds, geometric enclosures, and extensive habitation area and associated midden cover 175 ha, making it one of the largest Hopewellian sites presently known (Kellar 1979; Ruby 1997). Situated between the Illinois and Ohio Hopewell areas, the site was deemed a “regional transaction center” by Struever and Houart (1972:52, 54, 77), and Anderson (1998:280) stated Mann may have been a “gateway community or way station on one of the primary routes linking the lower Southeast with the Midwest.” The presence of complicated stamped ceramics similar to Swift Creek pottery and sand/grit tempered fine line simple stamped wares that resemble Southeastern ceramic types at Mann has long been recognized for its potential to provide information regarding Hopewellian interregional interaction between the Midwest and the Southeast (Adams 1949; Black 1940; Black and Adams 1947; Haag 1951; Kellar 1979; Kellar and McMichael 1960; Lacer 2017; Martin 1953; Muller 1986; Rein 1974; Ruby et al. 1993; Ruby and Shriner 2006; Smith 1979).

Our examination of the Mann assemblages left us with no doubt that complicated stamped designs found on pottery from Mann are equivalent with the Southeastern decorative tradition known as Swift Creek Complicated Stamped. Readily apparent macroscopically and when handling sherds from each area, the most obvious difference between Southeastern and Mann Swift Creek pottery is the paste: wares from the Southeast are tempered with sand or sand/grit, while the vast majority of Mann Swift Creek wares are tempered with grog. Apart from the obviously sandy paste of the Southeastern and Leake site Swift Creek wares, it is not uncommon for macroscopically visible inclusions, including mica and amphibolite, to be components of the paste. Conversely, the texture of Mann Complicated Stamped sherds tends to be chalky, or at least noticeably smoother than their Southeastern counterparts. However, during my second examination of the Lacer Collection housed at the Indiana State Museum in 2010, I identified approximately one dozen sand/grit tempered Swift Creek Complicated Stamped sherds in the collection. While petrography or other physical compositional analyses would be required to determine if these particular sand/grit tempered complicated stamped

sherds are indeed of Southeastern origin, they are macroscopically similar to Southeastern Swift Creek wares. Lacer (2017:652) mentions that a small number of sand/grit tempered complicated stamped sherds are present in the assemblage generated during Indiana University's 1966–1967 excavations at Mann.

In terms of the complicated stamped designs on Mann and Southeastern Swift Creek pottery, there are obvious and strong similarities, with many shared design elements between Mann and Leake, such as diamonds, concentric circles, and eye shapes. Although we did not have the time necessary for an in-depth design match analysis and did not identify any exact design matches, three sherds from Mann were identified as very similar to designs from Leake. One is similar to Frankie Snow's design reconstruction #138 (Snow 2007) that matches Leake specimens 1394–1396; another is similar in theme to the designs on Leake specimens 1345–1348; and the third is a sand tempered sherd similar to Leake specimens 1338 and 1339, and its micaceous orange paste is extremely similar to many from Leake. One sherd bearing the diamond/dot motif discussed above was examined in the Mann materials; this sherd had a chalky grog-tempered paste similar to the Mann complicated stamped I have observed, indicating it was made at Mann. In terms of vessel form similarities, an early Swift Creek pottery rim trait—deep and closely spaced rounded notches—is very common at Mann (see Lacer 2017:652). This trait occurs at Leake as well as other Southeastern Swift Creek sites. Scalloped rims also occur on the Mann complicated stamped wares, another trait in common with Leake and Southeastern Swift Creek wares.

A few differences between the complicated stamped assemblages of Leake and Mann were noted. For instance, barred elements common at Leake are relatively uncommon at Mann. In addition, there are numerous examples of the Swift Creek Crooked River design (Willey 1949:383–386) at Mann (its presence was noted by Rein [1974]), a design common in Gulf and Atlantic Coastal Plains, but to date this motif has not been identified at Leake. Also, the intentional smoothing and obscuring of designs that may occur at Leake and other Southeastern sites is relatively uncommon at Mann; rather, designs are quite clearly and carefully stamped.

Upon our examination of the sand/grit tempered, fine line simple stamped Mann wares in 2006, Dean Wood remarked that one would not be able to distinguish these from the Cartersville Simple Stamped pottery from Leake if they were mixed together, and I concur. Macroscopically, many of these wares from Mann exhibit a very dark paste with noticeable mineral inclusions, particularly mica, which is a trait common to Cartersville Simple Stamped sherds found at Leake.

The obliquely notched or stamped rim forms on these Mann wares are identical to those found at Leake, as are the tetrapods.

In an attempt to determine their origin(s), Ruby and Shriner (2006) conducted petrographic analyses of complicated stamped and simple stamped sherds from Mann. The results indicated that the complicated stamped and bold simple stamped sherds were made with local clays, while the fine line simple stamped sherds were made from nonlocal materials indicative of Southeastern Blue Ridge and Piedmont metamorphic materials. Ruby and Shriner (2006) look to the Appalachian Summit area of eastern Tennessee and western North Carolina for the origin of the Mann fine line simple stamped wares, and equate the Mann examples with the type Connestee Simple Stamped. It should be noted that at the time of their study, the significant Swift Creek component at the Leake site was really only known to a handful of archaeologists in Georgia.

In interpreting the presence of locally made Swift Creek pottery at Mann, Ruby and Shriner (2006:570–571) discuss several models of interaction. One is based on Penney's (1989) suggestion that the widespread distribution of Hopewellian items may be evidence of long-distance travels for the purpose of learning and buying manufacturing rights of specific ceremonial items. Upon acquiring such rights, persons could manufacture items of distant styles using locally available materials. In this scenario, Mann area potters traveled to the Southeast to acquire the rights to make Swift Creek pottery. Production of such styles back at Mann would have bestowed some measure of prestige to the artisans, as well as been a symbol of their worldliness and openness to visitors (Ruby and Shriner 2006:571).

Another explanation that could account for this pottery is that Swift Creek paddles were transported to Mann, independent of the potters who used them, either through direct procurement or exchange (Ruby and Shriner 2006:571). Evidence against this scenario includes: the lack of exact design matches to Southeastern pottery, suggesting that the paddles were carved locally; Stoltman and Snow's (1998) petrographic study of Southeastern Swift Creek wares indicating that paddles and potters did not move independently; and the lack of data supporting exchange among leaders of regional peer polities (Ruby and Shriner 2006:571). Finally, one scenario that may account for the locally made Swift Creek vessels at Mann is that Southeastern Swift Creek potters produced them while visiting or living at the site (Ruby and Shriner 2006:571). Under this *ritual visitors* scenario, the Mann site was host to foreign visitors who were likely participants in ritual activities at the site. These interactions may also have led to long-term relation-

ships such as marriage and adoption. This model also posits that this pottery was produced by Swift Creek visitors rather than the local people, and that the high frequency of the pottery at Mann may be attributed to a high number of Swift Creek visitors in conjunction with the long-term relationships that developed (Ruby and Shriner 2006:571). At Pinson in Tennessee, Mainfort et al. (1997) argue that the presence of foreign artifacts made using local materials is due to a similar situation, with foreign visitors producing these items with local materials. While Ruby and Shriner (2006) favor the ritual visitors model, they also stress that multiple modes of interaction at variable scales and directions likely account for the Mann ceramic assemblage.

Shortly after our examination of the Mann assemblages, I was selecting Leake sherds for petrographic analysis to be conducted by Jim Stoltman when I came across a complicated stamped notched rim sherd. Upon handling, I felt strongly that it had likely originated at the Mann site, based primarily upon the paste but also upon the notched rim form. I included it in a sample of over 130 sherds for Stoltman to examine, without divulging to him which individual sherd it was. With the aid of Mann samples provided by Ruby and Shriner, he found the paste composition to be identical to Mann Complicated Stamped wares (Stoltman 2007). Additionally, he found that a small rocker stamped rim sherd from Leake had a similar petrographic signature, suggesting it too was produced in the Mann area. Stoltman also found that the paste and the decoration of Cartersville Simple Stamped wares from Leake are very similar to those from Mann, as well as to specimens from Tunacunnhee, leading him to state that both Mann and Tunacunnhee were probable recipients of Leake vessels (Stoltman 2007).

Stoltman subsequently went on to use the petrographic data from Leake, along with that from numerous other Hopewell sites, in a comparative study designed to investigate interregional interaction (Stoltman 2015). He found that at least 32 vessels made using paste believed to originate from the Leake site, or at least the area of Leake, have been recovered from several major Hopewell sites from Ohio to Florida, leading him to the conclusion that Leake, along with Mann, was a major regional center at which nonlocals gathered, particularly Southeastern peoples, many of whom continued north into the Midwestern Hopewell area (Stoltman 2015:192–194). The results of Stoltman's independent study provide additional support for the hypothetical model I have built to account for the findings at Leake and Swift Creek regional and interregional interaction within the larger Hopewellian context.

DISCUSSION

The hypothetical model presented here is an inductive model stemming from investigation of the Leake site and other Swift Creek and Middle Woodland sites. It should be remembered that there is a multi-century temporal span and a broad geographic extent to Swift Creek Complicated Stamped pottery, and there is a diversity of archaeological and cultural contexts in which this pottery and associated materials are found. Thus, one should expect differences in the usages and meanings of Swift Creek pottery across this vast time and space. Much of the data I have drawn upon are from sites primarily north of the Georgia Coastal Plain and chronological control is often lacking. The validity of this model needs to be tested through a comprehensive and detailed comparative examination, with chronological control, of the range of specific contexts in which Swift Creek pottery is found. With these constraints in mind, the model I have developed incorporates both cultural and environmental factors.

There is often either an implicit assumption (e.g., Elliott 2006) or explicit contention (e.g., Espenshade et al. 1998) that Swift Creek pottery represents the remains of an ethnic and/or cultural group separate from those peoples who were making and using the more common simple and check stamped wares found across the Southeast. Based on the similarities of ceramic technology of Swift Creek and Cartersville wares found at Shoal Creek (9HY98), Espenshade et al. (1998) suggest that this was a “creolization” of the wares of two groups who were closely interacting, with local groups accepting and absorbing the Swift Creek design tradition into their established ceramic tradition. Wallis (2011) has formulated perhaps the most explicit model of Swift Creek wares and how they related to the people who made them based on studies of Middle Woodland village middens and mortuary mounds along the lower St. Johns River and the Altamaha River in the Atlantic Coastal area. He argues that a Swift Creek pottery design embodied a social person, and served as a citation of the lineage or clan of which that person—living or ancestral—was a member. Stamped vessels were symbols that embodied the genealogical significance and history of a clan or lineage, helping to legitimize the descent group’s rank and identity. The exchange of Swift Creek vessels between the lower St. Johns and the Altamaha River Valleys occurred within the context of marriage alliances, so that a vessel with a particular design was essentially exchanged for the person to be married, helping to create and/or bolster a social alliance. Wallis (2009:199–200) argues that such citational vessels were interred in mortuary mounds since the primary concern of mortuary ritual was membership in and ranking of descent groups.

For the Ohio Hopewell area and beyond, Byers (2004, 2011, 2015) developed a model of the social organization of Hopewellian communities that may provide a promising framework for interpreting the Swift Creek archaeological record. In contrast to models of community organization in which Hopewellian centers were primarily created by and under the dominion of local clan groups (e.g., Pluckhahn 2003; Ruby 2006; Ruby and Shriner 2006; Smith 1992), Byers argues that the Hopewellian phenomenon was essentially a widespread ceremonial sphere accounted for by the interactions of heterarchical ecclesiastical cult sodalities which operated independent of kinship-based clans that comprised local communities. Two primary social groups are believed to have been part of the social system: kinship-based clans and religion-based cult sodalities. These groups were autonomous, with clans concerned with domestic and family related matters, and cults with world renewal and sacred games. The cult sodalities, and alliances thereof, constructed earthworks and ceremonial centers. Byers argues that one aspect of this system involved licensing of rights to produce distinctive Hopewellian artifacts via a conveyancing and franchising process, a process which also functioned to form alliances among these groups.

Joseph Caldwell (1964) defined the Hopewell Interaction Sphere as a religious-mortuary expression, and Beck and Brown (2012:73) refer to Hopewell as a “religious movement.” Espenshade (2008) recognizes Swift Creek as a ceremonial ware associated with Hopewellian religious beliefs and ceremonial practices. Knight (1986) recognized the existence of multiple cult institutional groups that existed within individual Mississippian period societies, with each dedicated to specific rites and possessing discrete, yet complementary, iconographic materials and objects used to operationalize those rites. Interestingly, he identified three “iconic families” of materials and objects, consisting of representational imagery of mythological and cosmological beings and phenomena, platform mounds, and statuary, each of which are also important components of Hopewellian expression. As pointed out by Snow (1998:66) and Penney (1985:184–189), and hinted at by the occurrence of a spider web complicated stamped design associated with a possible world creation ritual context at Leake (Keith 2015), Swift Creek iconography appears to be symbolic representations of mythological and supernatural beings, religious concepts, and/or cosmological and natural phenomena, and at least some portion of this iconography is almost certainly ancestral to the corpus of imagery of Mississippian period cultures within the Eastern Woodlands. Pottery with Swift Creek style iconography is present at some Middle Woodland sites in the South-

east, yet not all. It cross-cuts local cultural traditions across a broad geographic area, and vessels decorated with this iconography are found at ceremonial centers both in its Southeastern heartland and in the Midwest. The possibility of the existence of autonomous religious groups operating independently from local clan-based communities in the Southeast should be considered given the distribution and context of Swift Creek ceramics and related materials.

Those who made and used Swift Creek pottery in the Southeast may have organized themselves within cult sodalities that subscribed to cosmological and ideological beliefs which extended across the Eastern Woodlands (and perhaps beyond), but that were interpreted and expressed somewhat differently by local groups. It may be that individual cult sodalities were responsible for specific ritual activities, these cults developed and “owned” specific iconographic designs to be used within specific rituals. Through networking and interaction of cult sodalities, the designs created by members of an individual cult group may have been transferred to other groups via conveyancing and/or franchising the rights to recreate these specialized designs, along with the necessary ritual knowledge. This iconography, which appears to have originated in the Southeast (Chase 1998), spread throughout much of that region via interactions among these cults, eventually making its way into Midwestern Hopewellian contexts.

The distribution of Swift Creek sites, the design matches among these sites, and ceramic composition studies of Swift Creek and other Middle Woodland wares reveal the extent and nature of movement and interaction among those making and using these materials. Some of the non-mound sites containing both quotidian and ritual items - such as Butler Creek, Shoal Creek, and Miner’s Creek in the Atlanta area south of Leake—may represent discontinuous but recurrent encampments of Swift Creek members who were traveling to/from ceremonial centers. These may have functioned as way stations where cults came together, items were fashioned and prepared for upcoming rituals at ceremonial centers, and also, as places where specific rituals were likely performed. As at earthwork locations, ceremonial items are typically found in context with utilitarian materials, as the cult members met their everyday needs.

Earthwork sites, rather than being the creations of local kinship-based groups, were created via the religious activities of cult sodalities as they congregated at these locations for seasonal and annual events. Typically located at strategic locations along major travel corridors, platform mounds are common at Swift Creek centers (Jefferies 1994; Pluckhahn 1996), while there is limited evidence for the construc-

tion of geometric earthworks like the semi-circular ditch enclosure present at Leake. These locations often yield assemblages consisting of a mixture of ceremonial and everyday items along with evidence suggesting that locals and nonlocals gathered to form fluid communities for the purposes of communal and cooperative religious expression and cultural interaction, which likely included bodily and worldly purification and renewal rites, ceremonial feasting, dancing and singing, and the active creation and maintenance of sacred space, including the construction of earthworks (see Anderson 1998; Snow and Stephenson 1998; Stoltman and Snow 1998). While the construction of these centers is attributed not to a residential population but to a fluid community of visiting local and nonlocal peoples, this does not rule out the possibility that people also established residential occupations at Leake or other southern Swift Creek centers. In light of this, Southeastern researchers should explore the nature of occupation at these places and the possibility that such places were vacant ceremonial centers (e.g., Williams and Harris 1998).

The natural and cultural setting of Leake was ideal for its function as a gateway between the Southeast and the Midwest regions, and for its development into a major interregional center. The geographic situation of Leake between the Southeast and the Midwest at the interface of the primary river valleys and travel corridors; Leake's location near the northern boundary of the Swift Creek heartland; and the availability of ideologically valuable minerals in the area of the site were the primary factors that fueled the development of Leake into an interregional interaction center. Located at the interface of the Piedmont, the Ridge and Valley, and the Blue Ridge Mountains provinces, the area of the Leake site is geologically diverse, with many of the minerals preferred by Hopewellian participants available locally (including within the geological formations that comprise Ladds Mountain). The linear topography of the Ridge and Valley provides a natural north-south overland travel corridor from the site area to the Tennessee River Valley just to the north, thereby providing access to the Midwest Hopewell area via waterway. While Leake provided access to the Midwest, it also is located just north of two other major river basins—the Chattahoochee/Apalachicola and Ocmulgee/Altamaha River Valleys—that provide access to both the Gulf Coast and the Atlantic Coast, respectively.

In the context of Middle Woodland interaction in the Eastern Woodlands, Leake came to serve as the location that bridged the Southeast and the Midwest. With the identification of a Swift Creek sherd at Leake that was made at the Mann site, and the evidence that simple stamped vessels made at Leake were transported

to major centers in the Midwest (Stoltman 2015), it appears that both Leake and Mann served in part as geographical and cultural gateway communities for their respective regions, with a back and forth of people, materials, and ideas between the two sites. Stoltman's (2015) study, along with the presence of the diamond/dot ware at several sites in Ohio, also indicates that peoples coming through Leake and Mann traveled beyond Mann to centers in Ohio. The burial of the individual with classic Hopewellian items in a stone-covered log tomb at the base of the mountain across the river from Leake suggests that this person was instrumental in facilitating the interaction between these two regions.

There are many specific details of the interaction between the Leake and Mann sites that are currently unknown, hinging in large part on the origin and identities of those who made up the Mann site-Swift Creek community. For instance, why is the simple stamped pottery at Mann, found in association with Swift Creek, made with sand/grit tempering when Swift Creek pottery is typically made using the local grog-tempered paste (Lacer 2017:687; Ruby and Shriner 2006)? Is the same group of people making all of these vessels, and if so, why use different tempers? Might the Southeastern simple stamped vessels at Mann be travel-support vessels? Might the group(s) who brought these have shown the locals at the site how to produce Swift Creek vessels, through franchising or providing the rights to production? Are the Swift Creek designs at Mann entirely unique from those found in the Southeast? Were locals necessarily involved at Mann or might these remains be solely from Southeastern Swift Creek participants? Were other materials available in the Southeast and in the Leake site area, such as quartz crystals, mica, hematite, and graphite, brought to Mann and associated with these remains? Continued investigation of Leake, Mann, and other sites yielding Swift Creek pottery and related materials should help to answer these questions, and provide a larger window into the nature of Hopewellian activities and interactions.

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