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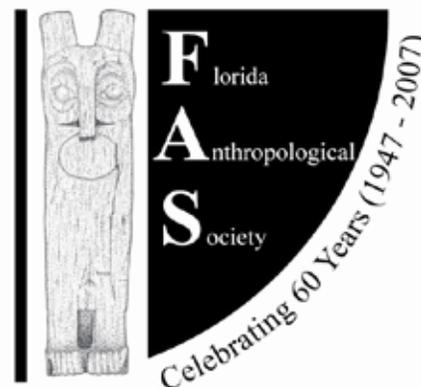


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Cover: (Left) The St. Marys region of northeast Florida, (Top Right) a topographic map of the Thornhill Lake Complex, (Bottom Right) glass trade beads from the Paynes Town site. See articles for more information.

REFINING THE CERAMIC CHRONOLOGY OF NORTHEASTERN FLORIDA

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Over the past decade and a half archaeologists have been working diligently to establish a ceramic chronology specific to northeastern Florida—an area I define narrowly as coastal northern St. Johns, Duval, and Nassau counties (Figure 1). In a way this has been an uphill climb because many archaeologists continue to subsume northeastern Florida within the broader boundaries of East and Central Florida, as defined by Milanich (1994:xix). As a result, pottery types and ceramic trends apparent in the St. Johns heartland are extended a priori to all reaches of East and Central Florida, obscuring intraregional ceramic differences (Milanich 1994:348). The situation, however, is beginning to change. Greater attention to ceramic paste characteristics, emphasis on pottery assemblages (not just types), and a growing number of radiometric dates are now affording us the opportunity to refine the ceramic chronology of northeastern Florida with more precision than ever before. But this is still an ongoing process. In this brief paper I build upon the work of earlier researchers (e.g., Bullen and Griffin 1952; Goggin 1952; Russo 1992; Sears 1957) and propose an updated chronology for northeastern Florida, with emphasis at this time placed squarely on the temporal aspect of pottery types and assemblages.

Background

In a 1992 article in *The Florida Anthropologist* Michael Russo openly questioned the applicability of the long-established St. Johns region ceramic chronology to northeastern Florida and southeastern Georgia, an archaeological region he coined St. Marys. The St. Marys region stretches from the south side of the St. Johns River, Florida north to the Satilla River, Georgia and includes northern St. Johns, Duval, and Nassau counties, Florida and Camden County, Georgia. Russo (1992:107) further stated that “[i]n terms of ceramic chronology, subsistence, and settlement, the region displays a unique culture history from those surrounding it.” Befittingly he eschewed the conventional “Orange (fiber-tempered) - St. Johns I (chalky plain dominated) - St. Johns II (chalky plain and check stamped)” ceramic sequence first alluded to by Wyman (1875:52-56), later formally defined by Goggin (1952), and refined by Milanich (1994; Milanich and Fairbanks 1980). As discussed below, even after synthesizing and assessing a variety of data by broad archaeological periods Russo was still unable to partition his chronology of northeastern Florida into distinct phases or subperiods based on ceramic, subsistence, and social information. In the end he suggested that the mixing of different pottery types might be reflective of local groups “involved with more than one pottery tradition” (Russo 1992:120).

Interestingly, Russo was not the first researcher to challenge the use of the St. Johns chronology in northeastern Florida. In fact, similar arguments were made four decades earlier, immediately following Goggin’s (1952) seminal publication on northern St. Johns archaeology. On the heels of their non-systematic site survey of areas of Amelia Island (Nassau County) in which they recorded 46 sites, Ripley Bullen and John Griffin (1952:50) asserted that “in no case is there an[y] suggestion of a plain chalky period (St. Johns I) before the advent of [St. Johns] check stamping.” They further bemoaned the fact that they were unable to “correlate the archaeological situation at Amelia Island” with the chronology proposed by Goggin (1952) for the St. Johns area to the south (Bullen and Griffin 1952:62). To Goggin’s credit, however, he too noted that “plain gritty wares” and “cord marked sherds” distinguished St. Johns II sites in extreme northeastern Florida from those to the south (Goggin 1952:56).

A few years later William Sears (1957) sank excavation units into a series of shell middens on six sites (8DU58-62, 8DU66) along the south side of the lower St. Johns River. The results led him to virtually the same conclusion as Bullen and Griffin. He compared his site-specific seriations to the ceramic chronology outlined by Goggin for the broader St. Johns region, but failed to find a good fit. Sears (1957:2) thus concluded that “due to the fact that the mouth of the St. Johns River seems to have been on the boundary between the Georgia coast and Northern St. Johns culture areas, we have replacement of, additions to, or modifications of the ceramic complexes in all periods.”

With respect to the Woodland period, rather than finding a classic St. Johns I pottery assemblage, Sears’ (1957:33) excavations yielded a low incidence of St. Johns Plain sherds in midden contexts dominated by sand tempered plainwares. Dissatisfied with Goggin’s chronology, Sears formulated a region-specific ceramic sequence for the lower St. Johns region based on ceramic seriations in the absence of radiocarbon dates. His Woodland period ceramic chronology opened with the Deptford complex, followed by a lengthy sand tempered plain complex, and concluded with a sherd tempered complex known as Colorinda. Swift Creek Complicated Stamped was seen as a minor, yet persistent, part of the late sand tempered plain complex. The St. Johns II complex supplanted Colorinda and marked the beginning of the local Mississippi period, which according to Sears terminated in the mid-sixteenth century.

A reading of the many archaeological survey and excavation reports penned since Sears’s work leaves one somewhat perplexed with regard to the region’s ceramic chronology. The archaeological record reveals a lot of sand tempered plain pottery mixed with small amounts of check

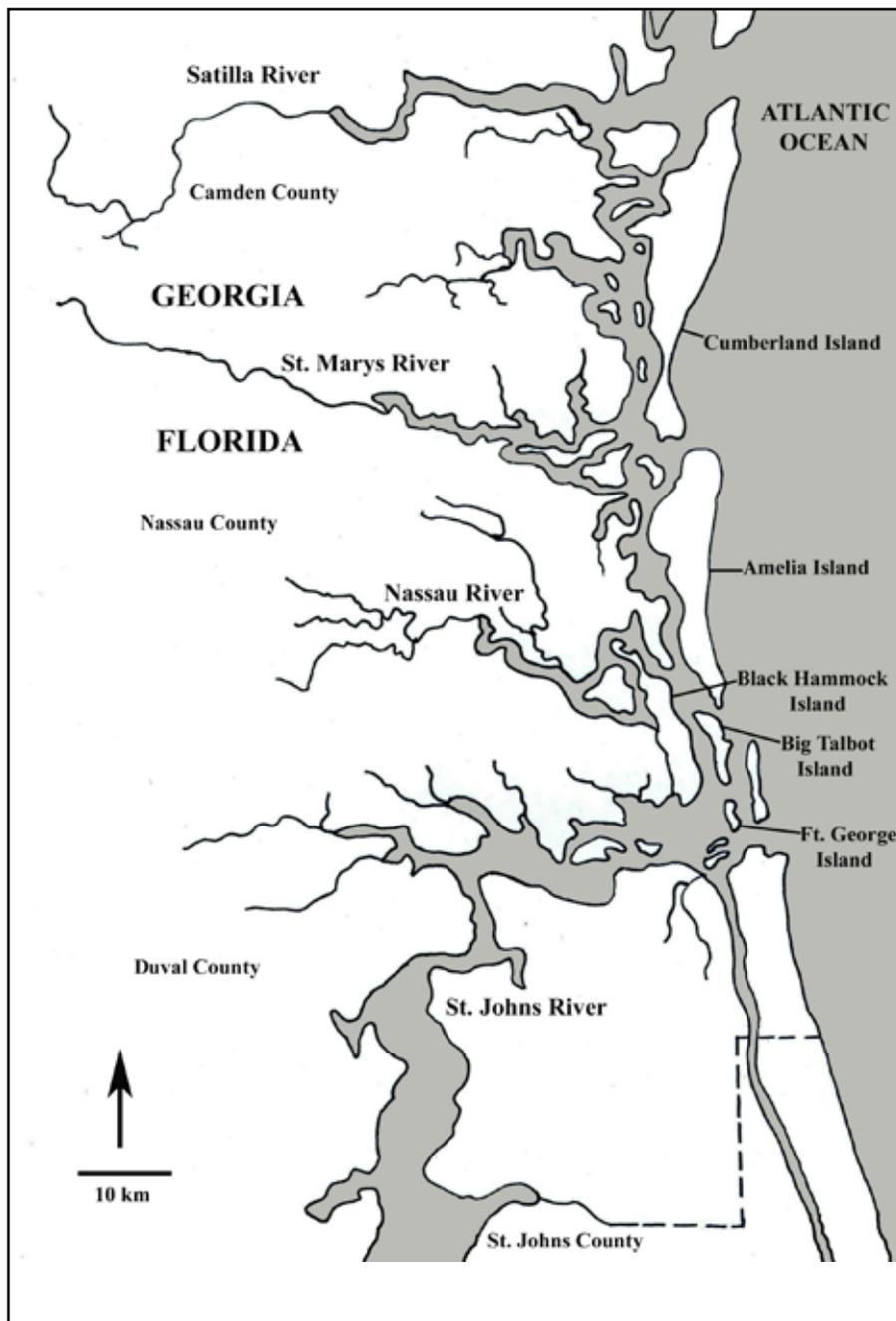


Figure 1. The St. Marys region.

stamped and complicated stamped wares along with some chalky plainwares. But the one thing that stands out is that there is only one reported secure context, with appreciable quantities of pottery, in which St. Johns plainwares dominate and it dates surprisingly to ca. 1000 B.C. (discussed below). Also the dominance of sand tempered plainwares on sites in northeastern Florida has typically been downplayed, since such generic-looking wares provide little temporal aid. As a result, sites have been assigned a cultural affiliation based on recovered minority wares (e.g., Deptford, Swift Creek, St. Johns), with St. Johns often given primacy. In fact, it is not uncommon to see a Florida Site Form in which a northeastern Florida site containing a single St. Johns Plain sherd is classified as having a St. Johns I component. Other than citing Sears's aforementioned

comments and possibly noting that the area might represent a frontier, transitional zone, or cultural ecotone, most authors until Russo (1992) continued to present a local culture history in which a classic St. Johns I period followed early Deptford.

Returning to the insightful—and often overlooked—observations made years earlier by Sears, Bullen, Griffin, and others, Russo (1992) took the next logical step and systematically addressed many of the discrepancies between existing chronologies and actual archaeological data. His study further spotlighted the need for radiometric dates from secure contexts for all cultural periods. In the 15 years since Russo's eye-opening article the ceramic chronology of northeastern Florida has been further honed and bolstered by more than 100 calibrated radiometric dates from sites throughout

Table 1. Aboriginal ceramic chronology of northeastern Florida.**ARCHAIC PERIOD**

Late (Orange)	2500 – 1000/500 B.C.
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WOODLAND PERIOD

Deptford	500 B.C. - A.D. 100
Sand tempered Plain ¹	A.D. 100 - 300
Early Swift Creek	A.D. 300 - 500
Late Swift Creek	A.D. 500 - 850
Colorinda	A.D. 850 - 900

MISSISSIPPI PERIOD

St. Johns II	A.D. 900 – 1250/1300
St. Marys II	A.D. 1250/1300-1450/1500*
San Pedro	A.D. 1450/1500 – 1625/1650*

CONTACT-SPANISH MISSION PERIOD

San Pedro	A.D. 1562 – 1625/1650*
San Marcos/Altamaha	A.D. 1625/1650 – 1702*

¹sand tempered plain dominates during this phase, although check stamped and complicated stamped sherds occur in minor amounts

* ending and beginning dates for these phases are tentative

Nassau, Duval, and northern St. Johns counties¹. Although transitional dates between ceramic phases are in need of further clarification, a solid sequence appears to be falling into place.

Building upon Russo's (1992) work and that of other archaeologists currently working in the region, I attempt to outline the Late Archaic chronology as best as possible with available evidence and to divide the Woodland and Mississippi periods into ceramic phases². It must be kept in mind, however, that partitioning ceramic assemblages into neatly stacked vertical blocks can conceal short-term, stochastic events and mask episodes of cultural pluralism. Although slightly modified and better dated, the Woodland through Mississippi period ceramic chronology forwarded here is strikingly similar to that first suggested by Sears fifty years ago (1957:30). Vis-à-vis the accepted St. Johns region chronology (Milanich 1994:247), I believe the two most salient aspects of the proposed northeastern Florida sequence are the recognition that there is no St. Johns I phase and that the St. Johns II phase is temporally restricted to A.D. 900-1250/1300 (Table 1).

Late Archaic Orange (ca. 2500-1000 B.C.)

As is the case for the broader St. Johns River basin, the ceramic history of northeastern Florida began with the Late Archaic Orange phase. Around 2500 B.C., the inhabitants of the St. Johns River and adjacent Atlantic seaboard were among

the first natives of North America to make fired-clay pottery to cook, serve, and store the foods they hunted, fished, and gathered. The earliest pottery in northeastern Florida, called "Orange" by archaeologists, was made of clay tempered with vegetal fibers, either thin palmetto fibers or Spanish moss (Griffin 1945:219; Bullen 1972:9). Early ceramic pots were fashioned by hand and tended to be thick, flat-bottomed rectangular containers, although later vessels often showed more variety in shape and were produced by stacking coils of clay (Sassaman 2003). After being formed, some vessels were adorned with incisions, punctations, or combinations thereof, while others were merely smoothed and left undecorated. As pots were fired, vegetal fibers added to the clay burned away leaving worm-like grooves in the ceramic body, a defining characteristic of fiber-tempered pottery.

The production of Orange pottery was a pan-St. Johns River phenomenon, involving groups from its mouth south to its headwaters. Differences did exist, however. For example, in the heartland region the paste of some late Orange pottery appears to have included sponge spicules, while those near the river's mouth lack these inclusions³ (Cordell 2004; Rolland 2004; Rolland and Bond 2003; Russo and Heide 2002; Sassaman 2003). Perhaps this was a portent of things to come, with spicule tempered St. Johns replacing Orange pottery in the heartland and sand and grit tempered wares supplanting fiber tempered wares in northeastern Florida.

Transitional Late Archaic – Early Woodland (1000 – 500 B.C.)

This is not a formal temporal phase but represents a still nebulous half millennium or so in the chronology of northeastern Florida. Traditionally, archaeologists have set the cutoff date for the Late Archaic period at 1000 B.C. and the emergence of Early Woodland Deptford phase at ca. 500 B.C. (Milanich 1994:94, 114; Stephenson et al. 2002). This leaves an approximately five century gap (ca. 1000 - 500 B.C.) between Late Archaic Orange and Early Woodland Deptford phases. Russo (1992:113-114) suggests that sea levels might have retreated during this time, meaning sites would most likely be located in today's tidal marshes, as is the case for Refuge phase sites along the Georgia coast (DePratter and Howard 1980).

In northeastern Florida, contexts with fiber tempered ceramics have been radiocarbon dated as recent as 1000-500 B.C. Saunders's (2004:253) excavations at the Rollins Shell Ring (8DU7410) have yielded two radiometric dates in this range. In addition charcoal from a deeply buried sand zone containing Orange ceramics at the Sandy Branch Bluff site (8DU13283) and shell from an Orange phase ceramic scatter at Buckhorn Bluff (8DU7473) also produced post-1000 B.C. dates⁴ (Vicki Rolland, personal communication 2007). Though limited, these four radiometric dates suggest the production of Late Archaic Orange pottery might have lingered on for several centuries after 1000 B.C.

Another site dated to the early part of this transitional period is the unique Wood-Hopkins Midden (8DU9185), which represents the only recorded site in northeastern Florida with a St. Johns I cultural affiliation (Johnson 1994, 2003). This small (15 x 25 m) freshwater shell midden is situated on the north side of the St. Johns River, approximately 14 km from the mouth. St. Johns Plain pottery dominated, and no Orange pottery was recovered during survey and secondary testing. Two calibrated radiometric assays on shell from the site fall between 1300 and 900 B.C. at the two-sigma level (Johnson 2003). Not only is the Wood-Hopkins Midden the only St. Johns I site in the region, but it is also the only recorded freshwater shell midden (banded mystery snail, *Viviparus georgianus*) along the lower St. Johns River.

The presence of a small St. Johns I site well outside its normal range of distribution combined with evidence of the procurement of a food source (mystery snail) for which St. Johns I groups were accustomed suggests the site might represent a one-time encampment by a nonlocal St. Johns I band from the south. Perhaps due to environmental conditions related to sea level fluctuations, occupations in northeastern Florida during ca. 1000-500 B.C. were intermittent and confined to small nomadic groups living in more backwater locations. Clearly, more radiometric dates are needed to securely determine when fiber tempered pottery ceased to be produced in northeastern Florida.

Woodland Period (500 B.C. – A.D. 900)

Deptford traditionally has been viewed as the first Woodland-period archaeological culture in northeastern

Florida. Pottery made at that time consisted mostly of plain, check stamped, and simple stamped types tempered with either coarse sand or grit-sized particles (Bullen and Griffin 1952; Cordell 1993; Russo 1992:115; Sears 1957). Simple stamping appears more prevalent on early sites than on later ones. St. Johns pottery is also known to occur on some northeastern Florida Deptford sites (Kirkland and Johnson 2000). Along the Atlantic coast of Georgia and South Carolina, Deptford has been dated to 600 B.C. - A.D. 400, although 10 radiometric assays from two sites (8DU59, 8DU5541) in northeastern Florida suggest a more restricted local timeframe of ca. 500 B.C. to A.D. 200 (Kirkland and Johnson 2000; Stephenson et al. 2002; John Whitehurst, personal communication 2005). A review of regional survey and excavation reports gives the impression that over time classic Deptford assemblages gave way to ones in which fine sand tempering became the norm and plainwares began to dominate. But short-lived experimentation with other tempering agents (e.g., charcoal, grog) occurred at various times as well.

What immediately followed the Deptford phase in northeastern Florida is uncertain. Available evidence suggests that, beginning around A.D. 100, the region witnessed a span of several centuries in which nondescript sand tempered pottery was the primary domestic ware (Ashley 1998:200; Hendryx and Wallis 2007; Russo 1992:115; Sears 1957:29; Thunen 2007; Thunen et al. 2006). Small quantities of similarly tempered check stamped and complicated stamped types also were manufactured (or imported) as was St. Johns Plain. This phase, tentatively labeled "Sand Tempered Plain," falls between Deptford and Early Swift Creek, and the three appear to represent a local continuum. Determining precisely when Deptford ends and Early Swift Creek begins within this sequence is difficult with the data at hand.

The production of Early Swift Creek Complicated Stamped pottery appears to have been underway in northeastern Florida by at least ca. A.D. 300 (Ashley and Wallis 2006). Swift Creek is a distinctive pottery with intricate curvilinear and rectilinear designs created by pressing a carved wooden paddle onto the damp, unfired body of a clay pot. This pottery style was widespread throughout northern Florida and Georgia, although specific designs varied by region (Williams and Elliot 1998). Two broad varieties of Swift Creek Complicated Stamped have been reported in northeastern Florida.

The earliest Swift Creek ceramic variety is a locally produced charcoal tempered plain and complicated stamped ware with lip forms that include round, scalloped, and notched types (Ashley and Wallis 2006:6). Sand was also used to temper some wares, and the ratio of sand to charcoal tempered pottery tends to vary by site. This ceramic type was used in both domestic and mortuary capacities, and thus is found in middens and burial mounds. The quality of design execution, both in terms of paddle carving and vessel application, is often less proficient compared to that of the Late Swift Creek style of the Atlantic coast (Ashley and Wallis 2006:7). Weeden Island pottery is rarely found associated with charcoal tempered ceramics in domestic contexts (Hendryx and Wallis 2007:194). The charcoal tempered complex was short-lived, probably dating to ca. A.D. 300-500, and restricted mostly to sites along the lower St. Johns River.

From A.D. 500 to 850, mineral tempered plainwares continued to predominate, but Late Swift Creek Complicated Stamped assumed a more conspicuous role in pottery assemblages. With regard to paste, most Swift Creek pottery of this era from sites on the south side of the St. Johns River is sand tempered, but grit tempering occurs on sites to the north, where it was the favored tempering agent in southeastern Georgia (Ashley and Wallis 2006:9). Carabelle Punctated and other Weeden Island wares are recovered in small numbers in mounds and middens (Ashley 1998; Wallis 2004). Poor design workmanship and application, grog tempering, and the presence of stamped herringbone designs (cf. Crooked River Complicated Stamped) appear to represent a cluster of reliable attributes that mark ninth century waning Late Swift Creek along the Atlantic coast (Ashley and Wallis 2006; Ashley, Stephenson, and Snow 2007; Hendryx 2004); referred to as Kelvin by some in southeastern Georgia (Cook 1979). Ongoing research by Neill Wallis (2007, 2008) is opening new vistas into Swift Creek manifestations in northeastern Florida.

The Colorinda phase represents the terminal Late Woodland period (ca. A.D. 850-900) in northeastern Florida. It appears to have been a time of change for local natives as the production of elaborately decorated Swift Creek pottery gave way to more mundane types and participation in long distance trade networks diminished as a more insular lifestyle ensued (Ashley 2006). Hallmark Colorinda pottery is tempered with crushed St. Johns (spicule tempered) sherds (Sears 1957). Colorinda pottery assemblages also include sand tempered plain, St. Johns Plain, and small amounts of St. Johns Check Stamped (Ashley 2006). The presence of Swift Creek sherds in Colorinda contexts indicates that production of the two types overlapped during the ninth century. Colorinda pottery is sparsely scattered across extreme northeastern Florida from Amelia Island down to the river's mouth and upriver (west and south) as far as the Jacksonville University campus, although a few sites contain high-density concentrations (Ashley 2006; Hendryx and Wallis 2007; Russo et al. 1993; Sears 1957).

Mississippi Period (A.D. 900-1450)

The Early Mississippi period in northeastern Florida, known locally as the St. Johns II phase, is signaled by the dominance of St. Johns pottery and the introduction of the type St. Johns Check Stamped. St. Johns has a unique ceramic paste that contains disarticulated microscopic sponge spicules, needle-like rods that are part of a sponge's skeleton (Milanich 1994:246). Controversy currently surrounds how these biosilicate inclusions got into St. Johns pottery. Some researchers suggest they naturally occur in certain Florida clays (Borremans and Shaak 1986; Cordell and Koski 2003), while others argue that sponges were intentionally added as temper (Rolland and Bond 2003). The latter interpretation has gained strength and acceptance in recent years. Local St. Johns pottery assemblages consist mostly of St. Johns Plain and Check Stamped varieties, although various incised and punctated types also occur (Ashley 2003; Ashley, Rolland, and Marrinan 2007; Rolland 2004, 2005). The presence of Ocmulgee III Cordmarked is another defining characteristic of St. Johns II sites in northeastern Florida. Ocmulgee sherds

are mostly grit tempered, although grog and sand inclusions can occur (Rolland 2004). A low percentage of rims exhibit classic Ocmulgee III folds, or more accurately, an added coil or appliqué strip (see Snow 1977 for a discussion of Ocmulgee Cordmarked pottery). Neutron activation analysis suggests that Ocmulgee Cordmarked vessels were both imported from southern-central Georgia and manufactured locally (Ashley 2003:104-128).

For the broader St. Johns River basin, the St. Johns II phase apparently began around A.D. 750 and continued into the early 1600s (Milanich 1994:247). In northeastern Florida, however, the St. Johns II phase is restricted to ca. A.D. 900-1250/1300⁵. The emergence of St. Johns II sites in northeastern Florida appears to reflect a settlement shift within the river basin, in which some St. Johns II people from the south moved closer to the river's mouth (Ashley 2003). It is unclear whether Colorinda populations abandoned the region or were absorbed into the emerging St. Johns II culture. Regardless, shortly after A.D. 900 autonomous settlements, dependent on the procurement of local resources, were scattered along the lower (northern) St. Johns River and up the coast to Amelia Island, and possibly into southeastern Georgia. The St. Johns II inhabitants of northeastern Florida soon became active participants in far-flung Mississippi-period exchange relations that resulted in the importation of a variety of nonlocal metal, stone, and minerals. It is important to note that this was the only time in native history when spicule tempered St. Johns pottery was produced throughout the broadly defined East and Central Florida region (see map in Milanich 1994:xix).

By the mid-thirteenth century, changes were underway in northeastern Florida. Pottery assemblages once marked by the dominance of St. Johns chalky wares were replaced by ones consisting mostly of thin, sand tempered plainwares and St. Marys Cordmarked (formerly known as Savannah Fine Cord Marked in northeastern Florida) (Ashley 2003:96-104; Ashley and Rolland 2002; Bullen and Griffin 1952; Cordell 1993; Russo 1992; Saunders 1989). Micaceous inclusions are often observed in the paste of these wares. Impressions in the wet clay pot were made either by stamping it with a cordage wrapped paddle or rolling it with a cordage-wrapped dowel. As Russo⁶ and others have noted, St. Johns pottery can occur in minor amounts on some sites. The shift in pottery technology and style coincided with distinct changes in refuse disposal patterns and mortuary treatment, which has led some researchers to infer a southward movement of St. Marys groups from coastal southeastern Georgia (Ashley 2003; Ashley and Rolland 2002; Russo 1992; Saunders 1989). This immigration may have been fueled to some extent by a southward out-migration of many St. Johns peoples in northeastern Florida, as local involvement in interregional trade faded. I use the temporal designation St. Marys II to refer to this phase of northeastern Florida history (A.D. 1250/1300 – 1450).

Protohistoric and Contact-Mission Periods (A.D. 1450-1700)

Some time during the fifteenth century, St. Marys II pottery assemblages underwent changes in which wares became thicker, tempering became coarser (sand or grog), and cordage

width became wider (Ashley 2009). Eventually grog tempering became the norm and cobmarking replaced cordmarking as the dominant surface decoration. The result is what archaeologists now refer to as San Pedro pottery. This was the signature ware of the Mocama-speaking Saturiwa and Tacatacuru Timucua of northeastern Florida and southeastern Georgia during the contact and early mission periods (Ashley and Rolland 1997; Milanich 1971, 1972). In addition to cobmarked, San Pedro pottery occurs in a variety of surface decorations including check stamped, cordmarked, textile impressed, complicated stamped, and roughened. Often decorated surfaces were intentionally obliterated in areas creating patches or streaks that lack decoration.

Coupled with the emergence of San Pedro pottery is the first-time appearance of preserved maize in the archaeological record of northeastern Florida (Ashley 2009). It now appears that the natives of northeastern Florida did not add corn farming to their estuary-based economy until the late fifteenth or early sixteenth century. Following the establishment of Spanish missions along the Atlantic coast, the production of San Pedro wares in northeastern Florida eventually gave way to San Marcos (often classified as Altamaha in coastal Georgia) pottery during the first half of the seventeenth century. San Marcos is a grit tempered ware that became the primary pottery made by all Mocama-speaking Timucua, Guale, and Yamasee Indians living in Atlantic coastal missions north of St. Augustine (Hann 1996:86; Rolland and Ashley 2000:38, 41; Saunders 2000; Worth 1995, 1997:13-14).

Summary

I am emphatic in my belief that the ceramic chronology for northeastern Florida outlined in this paper is far from the final word on the topic. Clearly more radiometric dates are needed to refine transitional dates between ceramic phases and assess nuances and the potential for the contemporaneity among distinct pottery assemblages, particularly during the Woodland period. My primary objective has been to bring together information relevant to the development of an up-to-date chronology for northeastern Florida. Regardless of one's theoretical proclivity, archaeological research is contingent upon a solid chronological framework itself predicated on stratigraphic evidence, radiocarbon assays, and temporally diagnostic artifacts. We need such a framework to place the events and cultural dynamics of our respective study areas into proper perspective.

Notes

1. Not all of these radiometric dates have been generated in the past decade. Some are previously reported dates buried in CRM reports that have recently been calibrated by Beta Analytic, Inc. and made available. The following references can be consulted for lists of radiometric dates by phase: Orange (Saunders 2004), Deptford (Stephenson et al. 2002; Whitehurst n.d.), Sand Tempered Plain (Hendryx and Wallis 2007; Thunen 2007,

- Thunen et al. 2006), Swift Creek (Ashley and Wallis 2006; Hendryx and Wallis 2007), Colorinda (Ashley 2007), St. Johns II (Ashley 2005), St. Marys II (Ashley and Rolland 2002), and San Pedro (Ashley 2009).
2. Traditionally, blocks in time characterized by distinctive traits (including pottery) have been designated "periods" in Florida (e.g., Goggin 1952; Milanich 1994). I tend to use the designation period for broader spans of time recognized throughout the Southeast such as Paleoindian, Archaic, Woodland and Mississippi. For briefer intervals I use the term "phase." As defined by Willey and Phillips (1958:22), a phase is "an archaeological unit possessing traits sufficiently characteristic to distinguish it from all other units similarly conceived... [and] spatially limited to the order of magnitude of a locality or region and chronologically limited to a relatively brief interval of time" (see Thomas and Kelly 2006:223-227 for a discussion of period vs. phase)
3. An earlier claim that Orange fiber tempered pottery with spiculate paste was recovered from 8DU76 on Fort George Island in northeastern Florida (Johnson 2000:72) has been refuted by Vicki Rolland's (Rolland and Bond 2003:92, 95) reanalysis of the sherds.
4. The 2-sigma radiometric date from the Sandy Branch Bluff site (8DU13283) is 790 - 380 BC or 2740 -2330 BP (Beta 186560).
5. Presently 30 radiometric assays from St. Johns II contexts have been run indicating a date range of A.D. 900-1250/1300. Two recently acquired radiocarbon dates on shell suggest that the previously suggested terminal date of A.D. 1250 may need to be adjusted to A.D. 1300.
6. For the period A.D. 800-1500, Russo (1992:116-119) noted that St. Johns and Savannah Fine Cord Marked wares co-occurred on sites throughout the St. Marys region. Though he attempted to reconcile the perceived Savannah-St. Johns II dilemma, in the end he opted to treat the two contemporaneously over the 700-year span of time that he referred to as "Savannah/St. Johns II." Our ceramic chronology acknowledges mixing but differentiates an early St. Johns II phase and a later St. Marys II phase.

Acknowledgements

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