The Atlantic coastline of northeastern Florida and southeastern Georgia has long been perceived as somewhat of an archaeological oddity from the standpoint of ceramic chronology. Often labeled a frontier or transitional area, its unique native history sometimes paralleled that of the St. Johns region to the south, at other times resembled that of the Georgia coast to the north, and at still other times had its own local developments (Russo, 1992). Although acknowledging the uniqueness of the frontier area, archaeologists in the past have attempted to impose chronologies and dates from adjacent areas and make them square with local archaeological data, which has proven to be quite frustrating. Over the past decade or so, a concerted effort has been made to establish a ceramic chronology pertinent to coastal northern Florida and southern Georgia by focusing on survey and excavation data from a variety of sites in both states.

The first step was the creation of the St. Marys region, which combines portions of northeastern Florida (Nassau, Duval, and northern St. Johns counties) and southeastern Georgia (Camden County). It encompasses the coastal mainland and adjacent barrier island zone from the Satilla River, Georgia, south to below the St. Johns River, Florida, and includes the lower reaches of the St. Johns, Nassau, St. Marys, and Satilla river basins (fig. 5.1). The southern boundary of the St. Marys region lies in northern St. Johns County where, prior to modern dredging and rechanneling, the intracoastal waterway naturally petered out and was less navigable. In fact, this general vicinity likely created a natural boundary separating cultural developments in northeastern Florida and the broader St. Marys region from coastal areas to the south at various times throughout native history.

Northeastern Florida traditionally has been subsumed geographically within the boundaries of the St. Johns or East and Central Florida region to the south. As such, pre-Columbian cultural developments were assumed to follow the same St. Johns I–II chronological sequence (Goggin, 1952: 15; Milanich and Fairbanks, 1980: 28–30). Recent research incorporating both new information and a reassessment of old data, however, has clearly demonstrated that this was not the case (Russo, 1992: Milanich, 1994: 248–254). Because of its lack of chronological fit, northeastern Florida was extracted from the St. Johns region and combined with coastal Camden County, Georgia, to form the St. Marys region in order “to promote research among areas of Florida and Georgia that are linked by a common cultural heritage” (Russo, 1992: 107).

Current research has taken advantage of the wealth of new data generated by CRM projects and drawn upon older investigations, although the latter in some cases have been reassessed in a new light. Moreover, a growing number of radiometric dates are factoring prominently into the new chronology. Of course, gaps in the chronology exist and the exact transitional dates remain tentative for certain periods, but a solid temporal framework is forming. The objective is not to force all areas of the St. Marys region into one master chronology, but to establish a baseline against which temporal and cultural variation can be measured. In fact, though the Atlantic coast of northern Florida and southern
Fig. 5.1. St. Marys region, including select site locations.
Georgia followed a broadly similar chronology, current archaeological evidence points to fluid social boundaries and intraregional differences in the sequencing and timing of ceramic changes not isomorphic with the boundaries of the St. Marys region. What sets northeastern Florida apart from the remainder of the St. Marys region is its geographic position, which provides direct and simultaneous links to both the Atlantic coast and St. Johns heartland to the south via the St. Johns River. Clearly, cultural identities and changes in the popularity of pottery styles were not precisely uniform throughout the boundaries of the St. Marys region over the millennia prior to European contact.

For the period under consideration here (A.D. 1400–1700), however, the area followed the same ceramic chronology, although beginning dates for the period appear to have been slightly earlier to the north in southeastern Georgia. In fact, linguistic and documentary data suggest that at the beginning of European contact, the St. Marys region contained a series of culturally similar and allied Timucua societies such as Saturiwa, Tacatacuru, Yufera, and Cascanguie–Icafui, who spoke the Mocama dialect of the Timucua language (Swanton, 1922: 320–332; Deagan, 1978a; Granberry, 1993: 7; Hann, 1996: 10–12; Milanich, 1996: 47–56). By the early 17th century, three Spanish missions (San Juan del Puerto, Santa Maria de Sena, San Pedro de Mocama) were established at preexisting villages in the St. Marys region (Worth, 1995b: 10–12; Hann, 1996: 10; Milanich, 1996: 98, 1999: 47; Saunders, 2000; 1995b). By the 17th century, the coastal mainland–barrier island province between the St. Johns River, Florida, and the Altamaha River, Georgia, was known to the Spaniards as Mocama (Worth, 1995b: 12; Hann, 1996: 18; Milanich, 1996: 98). The following draws upon this research to forward a refined ceramic chronology of the St. Marys region (A.D. 1400–1700) and in the process explores select aspects of the archaeological record.

ST. MARYS II PERIOD (CA. A.D. 1100–1450)

By A.D. 1400, the St. Marys region was marked by the ubiquity of cord-marked pottery, which distinguished it ceramically from the contemporaneous northern Georgia coast where Lamar-derived Irene wares dominated (Caldwell and McCann, 1941; Larson, 1978, 1984; Crook, 1984a; DePratter, 1984; Braley, 1990: 94–95; Saunders, 2000a: 39–45) and to the south where St. Johns series ceramics prevailed (Deagan, chap. 6, this volume; Milanich, 1994: 262–263). In previous centuries, cord-marked pottery was made in abundance along the Atlantic coast from northeastern Florida into South Carolina and up, to varying extents, all of the major rivers between these points. But by the mid-13th century its production along the Atlantic coast—as the primary decorative ware—was restricted to the St. Marys region. While groups to the north at this time appear to have adopted maize farming to some degree, St. Marys societies continued their devotion to a foraging way of life and to the manufacture of cord-marked pottery.

Focusing on calibrated radiometric dates from secure contexts, it appears that the production of St. Marys Cord Marked pottery in southeastern Georgia began sometime prior to the 13th century A.D., but pinpointing its first appearance has been marred by conflicting radiometric dates from less than secure contexts (Espenshade, 1981; Adams, 1985; Saunders, 1989). I have suggested elsewhere that the appearance of St. Marys pottery on the Atlantic coast reflects the arrival of interior Ocmulgee III peoples from south-central Georgia via the Satilla River (Ashley, 2003: 361–368), but the following review does not depend on an Ocmulgee coastal migration scenario. In southeastern Georgia, the ca. A.D. 900–1100 represents a conspicuous gap in our understanding of the region’s pre-Columbian history. Although a brief St. Johns II occupation may have transpired during that time, as evidenced by St. Johns II ceramics and features at the Kings Bay (9CM171b) and Davis Farm (9CM188) sites (R. Smith, 1982: 179–363, 1985: 53–138), the area may have been largely unpopulated save for transient forays to the coast by hinterland groups.

In northeastern Florida, the St. Marys II period is better dated and it supplanted the St. Johns II period there by the mid-13th century. At that time, sandy cord-marked pottery replaced assemblages previously dominated by chalky St. Johns Plain and Check Stamped wares. The shift in ceramic technology was accompanied by distinct changes in household disposal patterns and mortuary treatment, intimating the immigration of people from outside the area (Saunders, 1989: Russo, 1992; Ashley, 1995; Ashley and Rolland, 2002). The clinal distribution of cord-marked–bearing...
sites across northeastern Florida, where more are situated north of the St. Johns River than on the river’s south side, points to a southward expansion of St. Marys groups from coastal southeastern Georgia, perhaps fueled by population increases and an out-migration of many St. Johns peoples in northeastern Florida (Saunders, 1989; Russo, 1992; Ashley and Rolland, 2002; Ashley, 2003).

**Pottery and Other Material Culture**

What is most striking about St. Marys II period sites is their rather mundane and remarkably similar composition of artifacts. Utilitarian pottery, consisting of few vessel forms, is the predominant artifact category found on all sites. Sand-tempered plain and cord-marked wares comprise the assemblage, with fabric-impressed and net-impressed types infrequently recovered (Ashley and Rolland, 2002). On most sites, plainwares tend to outnumber their cord-marked counterpart (Russo, 1992: 116–119). Burnishing and complicated stamping, distinguishing attributes of the north Georgia Savannah ceramic series, are rare to nonexistent in St. Marys II assemblages (R. Smith, 1984: 75; Ashley and Rolland, 2002: 30). St. Johns plain and check-stamped pottery occur on most St. Marys II period sites in varying amounts, but appear to have been more common on sites early in the St. Marys II period (Saunders, 1989; Russo, 1992: 116–119; Ashley, 2003: 96–98; 374–375). Sand-tempered check-stamped sherds occur infrequently on sites that contain St. Johns wares, and their paste and thickness generally differ from that of the cord-marked pottery.

St. Marys II vessels are typically thin walled and tempered with fine- to medium-sized quartz particles (Cordell, 1993; Ashley and Rolland, 2002). Coarse sand tempering is infrequent, and grit sized inclusions are rare. A consistently higher frequency of micaceous inclusions is noted in St. Marys Cord Marked paste. Observed under microscopic examination, sponge spicules also are sometimes present in low numbers, but their presence may be inadvertent. Spicules in low quantities also have been identified in Savannah Fine Cord Marked sherds from Chatham County, Georgia, and Prairie Cord Marked ware fragments from north Florida (Cordell, 1993: 49). Vessel exteriors were stamped, often overstamped at oblique angles, with fine-gauge cordage with predominately Z-twist (fig. 5.2). Medium to thick cord widths occur less frequently and typically on vessels with coarser sand tempering. No specimens have been reported with rim folds or added appliqué strips, a characteristic of interior Ocmulgee Cord Marked pottery. However, some poorly finished lips exhibit clay extrusion along the exterior that occasionally bears resemblance to a small, poorly formed fold. Vessels are typically dark in color, indicating reduced atmosphere firing. Burnished interior surfaces have yet to be recorded.

Shell and bone tools and ornaments, all made of locally available materials, are recovered on habitation sites. At present, there is no evidence for a complex bone or shell tool industry; although some formal types are found, many are expedient forms. Lithic artifacts are rare and consist of small triangular (Pinellas) points, crude bifacial tools, and debitage, all of which are nonlocal. Prestige goods seem to be completely lacking at all habitation sites as do other nonlocal raw materials or material by-products.

**Settlement and subsistence trends**

St. Marys II period habitation sites are conspicuously similar and often occur as groupings of discrete shell-midden heaps, 2 to 15 m in diameter, dotted over areas up to 9 ha. Individual middens vary from slightly discernible rises to distinct mounds as high as a meter. Sites containing these household middens (as they are frequently interpreted) are known from the mainland and all barrier islands in northeastern Florida (Ashley, 1997; Ashley and Rolland, 1997a; Ashley and Thunen, 2000; Bullen and Griffin, 1952; Dickinson and Wayne, 1985, 1999; Ellis and Ellis, 1992; Hemmings and Deagan, 1973; Hendryx and Smith, 2000; Johnson, 1998; Jones, 1967; Lee et al., 1984; Russo et al., 1993; Saunders, 1989; G. Smith et al., 2001), the mainland of southeastern Georgia and Cumberland Island (Adams, 1985; Crook, 1984b, 1986; Ehrenhard, 1976, 1981; Larson, 1958; R. Smith, 1982; R. Smith, et al. 1981), as well as along the central and northern Georgia coast for both Savannah and Irene groups (Crook, 1986; DePratter, 1984; Larson, 1978; Pearson, 1979, 1984). St. Marys II sites also have been recorded slightly inland from the coast along the lower reaches of the St. Johns and Nassau rivers in Florida and the Satilla River in Georgia. At present, little is known about the distribution of archaeological sites along the St. Marys River.
To date, no known mortuary mounds can be attributed unequivocally to the St. Marys II period (Russo, 1992: 118; Vernon, 1984: 117). While a few mounds excavated by C.B. Moore (1896) on Amelia Island are possible candidates, the lack of diagnostic artifacts renders their cultural affiliation problematic. At Greenfield Site #8/9 (8DU5544/45), a human burial, uncovered adjacent to a St. Marys II shell heap and assumed to be a St. Marys II interment, suggests nonmound burial practices (G. Smith et al., 2001: 132–136). If sand burial mounds were constructed during the St. Marys II period, they were apparently low and unassuming.

Zooarchaeology and seasonality data indicate that St. Marys II groups, like earlier St. Johns II peoples in the same area, lived along the coast throughout the year and procured small estuarine fish, shellfish, and other aquatic resources (Russo, 1992: 118–119; Russo et al., 1993: 172). The size of fish species represented in St. Marys middens points to extensive use of nets or other fine-mesh, mass-capture techniques. Terrestrial mammals such as deer, opossum, and raccoon were exploited to some degree, but in middens the remains of these animals always pale in comparison to those of fish, shellfish, and reptiles (mostly turtle). Variance in the specific mix of captured fish is due in part to seasonal differences in availability or numbers. Unlike the structured annual subsistence-settlement model proposed for the north Georgia coast (Crook, 1986), foraging movement and settlement shifting may have taken place on a more ad hoc basis and not necessarily during the same time each year (Ashley, 1997; Reitz, 1988: 139; Russo, 1992; Saunders, 1989).

In summary, the St. Marys II period is reflected archaeologically by a number of structurally and artifactually similar sites, with some simply being larger than others. At present, it is unclear whether the larger sites, most of which are on barrier islands, are residential hubs or villages or merely the scene of more repeated short-term occupations. While the specifics of the yearly cycle are still not fully understood at this time, groups appear to have moved across the coastal landscape as social and subsistence needs arose, with most sites serving the same general purposes. The large number and widespread distribution of sites reflect a degree of autonomy and flexibility in St. Marys II social organization. Such an interpretation squares with other material culture data, suggesting a shared coastal
fishing–hunting–gathering way of life in the St. Marys region. It further contrasts with the more nucleated St. Johns II village-mound settlement structure reported for northeastern Florida during the previous period (Ashley, 2003: 129–208). More intrasite settlement data are needed to determine if this is an accurate representation or merely the product of sampling bias.

From a sociopolitical perspective, the absence of any clearly discernible site hierarchy or material differences among sites or within middens on the same site suggests band-level relations. There is no archaeological evidence at present to support a claim of regional control under a single individual or settlement. A communal political economy leaning more toward the egalitarian end of the spectrum is indicated, but this does not mean that inequalities did not exist. Present data suggest these groups were more insular and not involved in long-distance trafficking of exotics, as were early St. Johns II societies in northeastern Florida, suggesting that social reproduction at this later time required relations and interactions on a small geographical scale, like those practiced in the St. Marys region (Ashley, 2002, 2003).

SAN PEDRO PERIOD (ca. A.D. 1450–1625)

While we are now gaining a handle on basic aspects of the late pre-Columbian (St. Marys II) and early mission period (San Pedro) chronology of the St. Marys region, the 16th century has proven more difficult to ascertain (Borremans, 1985: 286; Walker, 1985: 102–103; Ashley and Rolland, 1997b). In particular, the precise timing and circumstances of the ceramic transition from St. Marys to San Pedro remain debatable. Since its first recovery in the early 1970s along the southwestern shore of Cumberland Island (Georgia), San Pedro pottery (though unnamed at the time) has been equated with the mission-period Tacatacuru (Mocama-speaking Timucua) of the island (Deagan, 1978a; Milanich, 1971a, 1972a). Subsequent research has demonstrated that its distribution during the early mission period also appeared on sites to the south in and around St. Augustine (Ashley, 2001; Deagan, 1978b: 33, chap. 6, this volume; Merritt, 1983; Herron, 1986). While the overwhelming majority of vessels in assemblages are tempered with large pieces of crushed potsherds, recent analysis indicates that sand and sand/sparse grog tempering also occurs (Ashley, 2001; Ashley and Rolland, 1997b; Borremans, 1985: 295; G. Smith et al., 2001; Thunen, 1999).

In terms of surface treatments, the series consists mostly of plain, check-stamped, and cob-marked types (Ashley and Rolland, 1997b; Herron, 1986; Goggin, 1952: 112; McMurray, 1973; Milanich, 1971a, 1972a). At some sites cob-marked is the most common decorative application, while at other sites it is check stamped, but plainwares always dominate numerically. A unique and defining trait of the series is the intentional smoothing of the exterior surface of some vessels that had been stamped or impressed, resulting in partial or complete obliteration of the surface design (Ashley and Rolland, 1997b: 53, 57). Often this results in burnished patches or streaks on otherwise decorated exterior vessel surfaces.

SAN PEDRO POTTERY AND ITS TEMPORAL PLACEMENT

San Pedro is a grog-tempered ware recovered on numerous coastal sites in Camden County, Georgia, and Nassau and Duval counties, Florida (Ashley and Rolland, 1997b). By early Spanish mission times, perhaps earlier, it also appeared on sites to the south in and around St. Augustine (Ashley, 2001; Deagan, 1978b: 33, chap. 6, this volume; Merritt, 1983; Herron, 1986). While the overwhelming majority of vessels in assemblages are tempered with large pieces of crushed potsherds, recent analysis indicates that sand and sand/sparse grog tempering also occurs (Ashley, 2001; Ashley and Rolland, 1997b; Borremans, 1985: 295; G. Smith et al., 2001; Thunen, 1999). In terms of surface treatments, the series consists mostly of plain, check-stamped, and cob-marked wares, and to a lesser extent, heavy cord-marked, textile-impressed, and complicated-stamped types (Ashley and Rolland, 1997b; Herron, 1986; Goggin, 1952: 112; McMurray, 1973; Milanich, 1971a, 1972a). At some sites cob-marked is the most common decorative application, while at other sites it is check stamped, but plainwares always dominate numerically. A unique and defining trait of the series is the intentional smoothing of the exterior surface of some vessels that had been stamped or impressed, resulting in partial or complete obliteration of the surface design (Ashley and Rolland, 1997b: 53, 57). Often this results in burnished patches or streaks on otherwise decorated exterior vessel surfaces. Examples of San Pedro pottery are depicted in
Two recurring themes garnered from the earliest European accounts may help shed light on the identity of the pottery series made at contact in the St. Marys region: (1) that the Mocama Timucua grew corn and (2) that the French and Spanish came well stocked with items either to give to or trade with the natives (Bennett, 1975: 20–21; Lawson, 1992: 18–19; Lyon, 1982: 12; Ribault, 1964: 67, 72). Thus, we should expect to find evidence of maize along with some historic artifacts in contact-era contexts. To date, St. Marys Cord Marked pottery has yet to be recovered in unequivocal association with European artifacts, although varying amounts of European goods (often only olive jars) have been discovered in contexts with San Pedro pottery at several nonmission sites (Borremans, 1985: Hendryx et al., 2004; G. Smith, 2001; Thunen, 1999; Walker, 1985). Admittedly, it is difficult to determine whether these San Pedro contexts date to the contact era (ca. 1560s) or the slightly later post-1587 early mission period. Of course, the quantity and diversity of European goods in association with San Pedro pottery are clearly most evident at Spanish mission sites, such as San Juan del Puerto (8DU53), Santa Maria de Sena (8NA41), and San Pedro de Mocama (9CM14).

The same association exists with respect to corn. Available evidence reveals that the first appearance of maize in the archaeological record of the St. Marys region is concurrent with the emergence of San Pedro ceramic technology. Excluding 17th-century mission sites, preserved corn in the form of charred cobs, kernels, or cupules has been recovered from six sites in northeastern Florida and all were associated with San Pedro pottery (Hendryx and Smith, 2002; Hendryx et al., 2004; Holland, 1987; Lee et al., 1984; Smith et al., 2001; Thunen, 1999: 6). Data from one of these sites (8DU634), however, has been used to argue for the presence of corn in the St. Marys region as early as A.D. 1200 (Lee et al., 1984; Milanich, 1994: 249). A reassessment of this site, in my opinion, lends credence to precontact production of San Pedro pottery.

In the early 1980s, two fragments of preserved maize were recovered from 8DU634 along the north side of the St. Johns River. A narrow kernel was retrieved from a “burned and crushed shell concentration” (Feature 4) amid a shell midden (8 × 7.5 m) designated Feature 1 (Lee et al., 1984: 88). An oyster shell from Feature 4 was radiocarbon dated to A.D. 1250–1310, although shells from Feature 1 were dated to A.D. 1405–1455 and A.D. 1490–1640 (all are 1-sigma calibrated dates). The latter dated contexts also contained a few cob-marked sherds. Analysis

Fig. 5.3. San Pedro Cob Marked sherds (impression on right sherd is partly obliterated).
identified a charred cob fragment from an undated context within a nearby shell midden that yielded cob-marked pottery. Shell middens at 8DU669, located less than 250 m to the north, were also tested and yielded 149 cob-marked sherds (2.9% of the pottery assemblage). Ten radiometric dates, each processed on shell from either general midden levels or inclusive deposits within larger shell middens, indicate two major periods of occupation: ca., A.D. 1200–1300 and A.D. 1450–1550.

Both sites consisted of a series of shallow shell middens less than 10 m in size. Included within tested middens were large quantities of sand-tempered plain and cord-marked sherds along with minor amounts of sand-tempered cob-marked and grog-tempered plain, cob-marked, and burnished ware fragments. The authors noted that composition of the recovered ceramic assemblage did not match what would be expected of St. Johns, Savannah, or inland Alachua sites, but concluded that it most closely resembled Alachua with “Savannah influences” (Lee et al., 1984: 235–236). Although they acknowledged that the assemblages were “very similar to” those from the Devil’s Walkingstick site (9CM177) at Kings Bay, Georgia (Lee et al., 1984: 238), they opted to interpret the shell middens as byproducts of short-term estuarine resource procurement by inland horticulturists (Alachua culture of north-central Florida). This interpretation has found no support among regional archaeologists, and the cultural affiliation routinely has been considered St. Marys II.

Although 25 years ago the assemblage may have appeared unusual or out of place, based on our current knowledge of St. Marys II and San Pedro ceramic assemblages, it is what we should expect of a local late-15th/early-16th century assemblage. At 8DU634 and 8DU669, Savannah Burnished was described as representative of pots originally cord marked then smoothed over...
through the “act of burnishing” (Lee et al., 1984: 185), which is a classic San Pedro surface finishing characteristic. In addition, the grog tempering of cob-marked pottery was explained as “crushed sherds and [its presence] represents a deliberate cultural act” (Lee et al., 1984: 200), another San Pedro attribute. However, cob-marked pottery from both sites was overwhelmingly sand tempered (90%).

To verify the suspected presence of San Pedro wares in the collections, I recently conducted a cursory examination of the pottery from 8DU634 and 8DU669. Classic examples of both St. Marys Cord Marked and San Pedro series pottery were present, as well as assemblage characteristics that could be viewed as hybrid. As Lee and colleagues (1984: 96–97, 180–182) observed, cordage width was more variable and there appeared to be a correlation between fine cordage and fine sand tempering and coarser sand and grog tempering and wider cord thickness. A similar association was noted at the Devil’s Walkingstick site (Borremans, 1985), which yielded radiocarbon dates comparable to those from 8DU634 and 8DU669 (table 5.1).

The ceramic data from these sites suggest the presence of a transitional St. Marys II–San Pedro pottery assemblage. Working at the Devil’s Walkingstick site, Borremans (1985: 271) came to this same conclusion some 20 years ago, noting that:

Sometime in the 15th century A.D., cord marking began to decline and cob marking became more popular. Sandy plain pottery also appears to have decreased while grog tempered plain remained constant. These are most probably gradual changes and do not seem to indicate displacement of the indigenous population or intrusion by nonlocal people.

In fact, several researchers working on the Kings Bay Project thought that Savannah (St. Marys II) and grog-tempered (San Pedro) wares combined to form a late pre-Columbian pottery assemblage, although postdepositional mixing was always a concern (Borremans, 1985: 210, 271, 286; DesJean, 1985: 149; Espenshade, 1985: 307, 329; R. Smith, 1982: 354–355; Walker, 1985: 102–103). Viewing the two wares in their classic forms—San Pedro pottery with its thick body and heavy grog tempering and St. Marys with its thin walls and fine sand-tempered paste—had led some researchers, including myself, to entertain the possibility that the emergence of San Pedro was the result of a historic period phenomenon somehow linked to missionization (Ashley and Rolland, 1997b; Rolland and Ashley, 2000: 41; Saunders, 2000a: 248).

As to surface treatment/decoration, St. Marys pottery is almost exclusively cord marked, whereas San Pedro has a much wider range that includes cord marking, textile impressing, cob marking, and paddle stamping (mostly large checks but some complicated stamping). San Pedro, however, does parallel the St. Marys series in its limited range of vessel forms, although San Pedro pots can be much larger (Ashley, 2001). Interestingly, San Pedro does resemble inland late pre-Columbian and early mission-period Alachua series pottery (Potano region) in terms of some decorative techniques (Borremans, 1985: 255–256; DesJean, 1985: 149–15; Espenshade, 1985: 308; Walker, 1985: 104), but the Alachua series lacks paddle-stamped varieties (Milanich, 1971b). Though often downplayed, a small percentage of Alachua pottery contains “sherd tempering” (Milanich, 1971b: 31; 1972b: 54), but apparently not the large pieces typical of San Pedro wares.

In both areas cord marking dominated early on (Hickory Pond period of the Alachua tradition and St. Marys II period), but eventually was superseded by cob marking (Alachua period of the Alachua tradition and San Pedro period). Another intriguing similarity is that Alachua series cord and cob-marked surfaces are often smoothed over to varying degrees like San Pedro pottery (Milanich, 1971a: 32–33; 1996: 32). In the St. Marys region this ceramic transition apparently occurred in the late-15th/early-16th century, while in the Alachua area the shift is loosely linked to the mid-13th century (Milanich, 1971b, 1994: 337–338). But as Milanich (1994: 338) admits, “the Alachua ceramic seriation is not yet firmly tied to radiocarbon dates.” This begs the question: could the introduction of cob marking on Alachua pottery have taken place roughly at the same time as that of San Pedro pottery on the coast, suggesting a broadscale late-15th/early-16th century phenomenon?

The reason for the technological change to thick grog-tempered pots is unclear at this time, but the coupling of San Pedro pottery and maize (both preserved remains and cob-marked pottery)
### TABLE 5.1
Calibrated Radiocarbon Assays for San Pedro Contexts in the St. Marys Region

<table>
<thead>
<tr>
<th>Site</th>
<th>Beta no.</th>
<th>Material</th>
<th>Measured $^{14}$C age (b.p.)</th>
<th>$^{13}$C/$^{12}$C ratio (‰)</th>
<th>Conventional $^{14}$C age (b.p.)</th>
<th>Calibrated 1 sigma (A.D.) with intercept</th>
<th>Calibrated 2 sigma (A.D.)</th>
<th>Reference</th>
</tr>
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<tr>
<td>9CM177</td>
<td>4001</td>
<td>charcoal</td>
<td>530 ± 80</td>
<td>0.0</td>
<td>940 ± 80</td>
<td>1335–1460</td>
<td>1295–1515</td>
<td>DesJean, 1985</td>
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<tr>
<td>8DU634a</td>
<td>6623</td>
<td>clam</td>
<td>540 ± 50</td>
<td>0.0</td>
<td>950 ± 50</td>
<td>1390–1445</td>
<td>1325–1475</td>
<td>Lee et al., 1984</td>
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<tr>
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<td>930 ± 50</td>
<td>1405–1455</td>
<td>1345–1485</td>
<td>Lee et al., 1984</td>
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<td>900 ± 70</td>
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<td>1450–1660</td>
<td>Smith et al., 2001</td>
</tr>
<tr>
<td>9CM177</td>
<td>3986</td>
<td>charcoal</td>
<td>360 ± 80</td>
<td>0.0</td>
<td>770 ± 80</td>
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<td>Walker, 1985</td>
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<td>6622</td>
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<td>350 ± 60</td>
<td>0.0</td>
<td>760 ± 60</td>
<td>1490–1640</td>
<td>1455–1675</td>
<td>Lee et al., 1984</td>
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<td>6624</td>
<td>oyster</td>
<td>340 ± 60</td>
<td>0.0</td>
<td>750 ± 60</td>
<td>1505–1640</td>
<td>1475–1670</td>
<td>Lee et al., 1984</td>
</tr>
<tr>
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<td>63071</td>
<td>oyster</td>
<td>340 ± 50</td>
<td>0.0</td>
<td>730 ± 50</td>
<td>1515–1655</td>
<td>1475–1680</td>
<td>Bond, 1993; Ashley, 2001</td>
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<td>126314</td>
<td>oyster</td>
<td>310 ± 50</td>
<td>0.0</td>
<td>720 ± 50</td>
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<td>0.0</td>
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<td>1490–1810</td>
<td>Walker, 1985</td>
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<td>63069</td>
<td>oyster</td>
<td>280 ± 50</td>
<td>0.0</td>
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<td>Bond, 1993; Ashley, 2001</td>
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<td>charcoal</td>
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<td>-25.0</td>
<td>220 ± 30</td>
<td>1650–1680</td>
<td>1530–1690</td>
<td>Hendryx and Smith, 2000</td>
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*Previously classified as St. Marys II (Ashley and Rolland 2002), now viewed as transitional St. Marys II/San Pedro.

*bCorn in dated context.
suggests that the ceramic transformation might have technofunctional implications related to a variety of new cooking and storage practices that might have included corn preparation. San Pedro pots often display exterior surface soot indicating use over fire, and sometimes unsooted yet oxidized bases are recovered indicating direct placement in fire embers. Research among some early Mississippian societies in southeastern and midwestern North America has shown that abrupt technological changes in pottery assemblages coincided with increased maize agriculture. Specifically, vessels become thicker and large-particle tempering becomes more common (Kelly, 1990: 108). In general, large-particle grog tempering has the potential to enhance thermal shock resistance. Thus San Pedro pots may have been well suited for prolonged simmering at low temperatures, perhaps to cook stews, soups, or some form of corn gruel (Ashley, 2001).

**San Pedro Site Distributions and Mocama Social Geography**

San Pedro period sites, much like earlier St. Marys II period sites, are often manifested as small, mounded shell middens peppered over broad areas (Borremans, 1985: 272; Johnson, 1998; Milanich, 1971a, 1971b; Rock, 2006; G. Smith et al., 2001; Thunen, 1999). Based on shovel test and larger unit results at several large sites, some middens yield both San Pedro and St. Marys wares, whereas others contain more distinct assemblages. Such a scenario would be expected of an in situ displacement of St. Marys pottery by San Pedro pottery. The overall size of these large sites is probably due to intrasite shifting of household locations over time. This is exemplified at Greenfield Site #8/9 where groupings of San Pedro shell middens exist amid and adjacent to St. Marys II middens (Johnson, 1998; G. Smith et al., 2001).

Efforts to identify contact-period Timucua villages in the St. Marys region with certainty have come up empty, particularly because we have yet to uncover artifacts that can be assigned precisely to the decade of initial contact (1560s). Our best chance for identifying contact villages might be to focus efforts on early mission-related sites (post-1587), because these were established at preexisting villages in the St. Marys region. During the initial stage of frontier missionization, a standard strategy on the part of the Spanish was to establish missions or *doctrinas* at preexisting native communities (Worth, 1998a: 41–42). Extant native villages located near a *doctrina* served as *visitas*, and together these communities formed the friar’s evangelical jurisdiction. *Visititas* were visited periodically by the friar to perform Mass and administer sacraments.

By the end of the opening decade of the 17th century, three Spanish missions had been ensconced among the Mocama-speaking Timucua of the St. Marys region: San Juan del Puerto was among the Saturiwa on Fort George Island, Florida; San Pedro de Mocama was among the Tacatacuru on Cumberland Island, Georgia; and Santa Maria de Sena was situated between the two on Amelia Island, Florida (Hann, 1996: 10; Milanich, 1996: 98, 1999: 47; Worth, 1995b: 10–12). Focusing on San Juan del Puerto, I would like to present a brief overview of where we stand at present with regard to our knowledge of the early mission period landscape in northeastern Florida.

San Juan del Puerto has been identified on Fort George Island at 8DU53 and tested intermittently over the past half century (Dickinson and Wayne, 1985; Griffin, 1960; Hart and Fairbanks, 1982; Jones, 1967; Nidy, 1974; Russo et al., 1993). Census information taken in 1602 indicated that San Juan had nine *visitas* and a combined population of 500 Christian Indians (Pareja, 1602). Two additional villages on Amelia Island had a population of 292 (Lopez, 1602). These documents imply that all Indians living in northeastern Florida at the time had been Christianized. This information, at best a ballpark figure, suggests that there were around 800 mission-related natives living in northeastern Florida at the turn of the 17th century. Beyond census information, the 1602 document authored by Fray Francisco Pareja indicates how far each of the nine *visitas* was from San Juan (Milanich and Sturtevant, 1972). If these *visitas* were preexisting settlements, then their general locations might have been inhabited when Europeans arrived 40 years earlier.

Using Fray Pareja’s list of nine *visitas* as a rough guide, we can attempt to reconstruct the social geography of the late 16th-/early 17th-century Mocama of northeastern Florida. To date, 13 sites in northeastern Florida have yielded quantities of San Pedro pottery, but this does not necessarily mean that each was a *visita*, or contact village (fig. 5.5). Of the 13, one represents the location of San Juan del Puerto (8DU53) and
Fig. 5.5. Select mission period sites in northeastern Florida.
another is equated with Santa Maria de Sena at the Harrison Homestead site (8NA41). Five occur on or near Amelia Island, indicating that they were outside the jurisdiction of San Juan. They would have been affiliated either with Santa Maria at the Harrison Homestead site or with San Pedro on Cumberland Island. Of the remaining six, four are suspected to represent the visitas of Vera Cruz, Sarabay, San Pablo, and San Mateo (Ashley and Thunen, 2000; Johnson, 1998; Russo et al., 1993; Smith et al., 2001; Thunen, 1999). Of these, Sarabay (Armellino site, 8DU631) and San Pablo (Greenfield site #8/9, 8DU5544/45) have been subjected to trench and block excavations. Limited salvage testing conducted nearly 20 years ago at the suspected visita of San Mateo (Riverwoods site, 8DU11831) purportedly uncovered San Pedro pottery, olive jars, majolica, and a native structure (Holland, 1987), though a report of findings has yet to be written.

At present, the variety of evidence from these sites does not support the archetypical image of a consolidated and palisaded settlement as depicted in the 1591 DeBry engraving. Based on survey and limited excavation results, preliminary distribution data at suspected contact and mission-period habitation sites reveal that San Pedro sherds were spread across broad areas often marked by distinct shell heap deposits, similar in many ways to earlier St. Marys II deposits in the region. This distributional pattern, if it holds up under further archaeological scrutiny, might relate to a settlement pattern based on dispersed household farming with a small core area containing chiefly residences or a council house that during the mission period may have housed a church or chapel.

ALTAMAHA/SAN MARCOS PERIOD (ca. A.D. 1625–1702)

The early 17th-century social geography of the St. Marys region consisted of the depopulated remnants of indigenous Mocama societies gathered at the missions of San Juan, San Pedro, and Santa María and their associated visitas. It appears likely that immigrant Timucua speakers from the southern Georgia interior had been relocated either to visitas or the missions themselves to augment dwindling coastal population numbers resulting from the spread of disease. By 1650, Mocama speakers that once lived at 20 or more coastal mainland and barrier island settlements had been reduced to settlements in the three missions. In 1665, San Juan del Puerto was the only mission settlement of any kind in the St. Marys region, and by the early 1690s it was the only Mocama mission within the entire Mocama province (Worth, 1995b, 1997).

Spanish documents clearly indicate that during the early 17th century some Guale Indians from northern coastal Georgia were moved to St. Augustine and that during the second half of the century a wholesale relocation occurred to missions in the northeastern Florida (Deagan, 1993; Saunders, 2000; Worth, 1995b). Mission-related sites of the 17th and early 18th centuries in the St. Marys region are highlighted by the presence of Altamaha/San Marcos series pottery, a grit-tempered ware often stamped with complicated or simple designs (Larson, 1978; Otto and Lewis, 1974; Saunders, 2000; H. Smith, 1948). Colonoware forms also occur. Although the appearance of Altamaha/San Marcos pottery on sites in the region traditionally has been interpreted as evidence of relocated Guale or Yamasee occupations, it now appears that Altamaha/San Marcos pottery was the dominant 17th-century mission ware manufactured by coastal Guale, Yamasee, and Mocama Indians north of St. Augustine (Hann, 1996: 86; Rolland and Ashley, 2000: 38, 41; Saunders, 2000a; Worth, 1995b, 1997: 13–14).

When missionization began the Mocama potters of the St. Marys region were making San Pedro pottery, but its dominance clearly ended by the mid-17th century. Pinpointing exactly when San Pedro period pottery gave way to Altamaha/San Marcos–period pottery in the St. Marys region is a thorny undertaking with the data at hand. According to documentary evidence, San Pedro and San Juan were Mocama missions throughout their tenure in the St. Marys region, and neither received significant numbers of Guale or Yamasee immigrants (Hann, 1996: 86; Worth, 1997: 14). As such, the two missions should contain mostly San Pedro pottery in domestic contexts. While this appears true for the San Pedro mission (1587–1655), it is not the case for San Juan (1587–1702).

When the results of three testing and/or surface-collecting investigations were combined at Dungeness Wharf site (San Pedro mission), San Pedro pottery outnumbered Altamaha/San Marcos pottery 3 to 1 (>1500 total sherds; Ehrenhard, 1981: 23, 31; Milanich, 1971a: 117; Rock,
At San Juan, the ratio of Altamaha/San Marcos to San Pedro was 6 to 1 (>7000 total sherds), based on the combined results of McMurray (1973), Dickinson and Wayne (1985), and Hart and Fairbanks (1982). Variability exists in the ratio of the two pottery series across the archaeological sites at San Juan and San Pedro, and a more thorough synthesis of the ceramics from the two missions and adjacent sites related to the missions needs to be undertaken.

It is worth noting that in spite of the relocation of other Christian Timucua populations to San Juan, its population was consistently lower during the second half of the 17th century than during its early years (Hann, 1996: 262–264; Worth, 1995b). This, along with the sheer dominance of Altamaha/San Marcos relative to San Pedro pottery, implies a lengthy period for on-site production of Altamaha/San Marcos wares at San Juan del Puerto.

Relying on in-depth knowledge of Spanish mission documents, Worth (1997: 11) offers important insights that might help to target an approximate date range for when Mocama potters shifted to making Altamaha/San Marcos pottery. He states:

most of the myriad settlements characterizing the Mocama region during the late 1590s and 1600s appear to have been simply abandoned during the first quarter of the 17th century, long prior to any long-distance immigration by other ethnic groups . . . [and] there is no documentary evidence for even a single mainland Mocama site that was reoccupied by immigrant Guale and Yamasee Indians during the Mission period.

With this said, we should not expect to find much Altamaha/San Marcos at any Mocama site away from the missions, particularly those on the mainland. However, appreciable quantities of Altamaha/San Marcos, beyond what one might expect from trade, have been recovered at the three presumed visitas mentioned above: Riverwoods site (8DU11891), Greenfield Site #8/9 (8DU5544/45), and Armellino site (8DU631).

Archaeological testing at the Armellino site on Big Talbot Island, which is not known to have been home at any time to Guale or Yamasee immigrants, yielded 986 San Pedro and 516 Altamaha/San Marcos sherds (Thunen, 1999), suggesting that Mocama potters were making Altamaha/San Marcos wares prior to consolidation at San Juan del Puerto. Similar mixtures of San Pedro and Altamaha/San Marcos have been recovered at the Brady Point site (8NA921) on the mainland across from Santa Marie de Sena and the Devil’s Walkingstick site (9CM177) on the mainland west of San Pedro de Mocama (Borremans, 1985; DesJean, 1985; Hendryx et al., 2004; Walker, 1985). These two locations also likely represent visita settlements.

Two other archaeological sites tentatively matched to documented Mocama settlements deserve mention. Excavations at the Cedar Point site (8DU81) on Black Hammock Island, northwest of San Juan del Puerto, have uncovered the suspected location of the transplanted mission of San Buenaventura de Guadalquini (Thunen et al., 2006). This mission had been located on the south end of St. Simons Island, but moved to northeastern Florida in 1685, where it was renamed Santa Cruz de Guadalquini (Hann, 1996: 271; Worth, 1995b: 198). It remained there until around 1697 when its residents moved to San Juan. To date, while more than 1000 Altamaha/San Marcos sherds have been recovered along with late 17th-century majolica, no San Pedro pottery has been identified (Thunen et al., 2006).

Finally, several testing projects at Greenfield Site #8/9 have identified refuse deposits believed to be associated with a refuge community at around 1700 known as Pilijiriba (Arnade, 1960; Hann, 1996: 290, 297; Johnson, 1998: 45–50; Smith et al., 2001: 40–41, 60–67). In the “San Marcos Area” of the site, several hundred Altamaha/San Marcos ware fragments were recovered along with a handful of San Pedro sherds; the latter of which may relate to earlier deposits. This differs from other areas of the site to the northeast, where San Pedro pottery dominates, at times to the exclusion of Altamaha/San Marcos ceramics (Johnson, 1998; Poplin and Harvey, 1990; Smith et al., 2001). These other areas are assumed to represent contact and early mission contexts, some of which are believed to be associated with the visita of San Pablo.

Collectively, the above information suggests that the in situ transition from San Pedro to Altamaha/San Marcos pottery assemblages could have realistically taken place any time between 1600 and 1650. Acknowledging that the implementation of a single transition date is
not possible, I forward 1625 as a preliminary and loose date until more fine-grained archaeological and/or documentary evidence comes to light.

SUMMARY

The archaeological manifestation of the contact-era Mocama of the St. Marys region has proven difficult to pin down because of our inability to distinguish early from late 16th-century contexts, particularly in the absence of European artifacts. I now believe evidence is mounting to support San Pedro as the archaeological correlate of the contact-era Mocama speakers of the St. Marys region, developing out of the St. Marys II archaeological culture during the mid-to-late 15th century. By approximately 1625, the indigenous San Pedro pottery was being replaced by Altamaha/San Marcos pottery, which became the principal ware among all coastal mission Indians north of St. Augustine. At this time, specific transitional dates between St. Marys II–San Pedro and San Pedro–Altamaha/San Marcos continue to be elusive, but a solid chronology is coming into focus.

Interestingly, our current understanding of the St. Marys II archaeological culture, which was based exclusively on fishing-hunting-gathering and residential mobility, does not square with the information set to paper by early European invaders. If the organization of the coastal Timucua in reality bore any resemblance to that of “farming chiefdoms,” as some documents suggest, then such a way of life must have transformed rather quickly out of a long history of foraging during the San Pedro period in the century prior to European contact. A question we should begin to consider is: how much of an effect did documented endeavors by earliest Spanish explorers (e.g., Juan Ponce de Leon, Lucas Vásquez de Allyón, Pánfilo de Narváez, and Hernando de Soto) as well as illicit coastal slave raiders have on shaping the contact-era coastal Timucua way of life, as described in historic accounts of the 1560s?

NOTES

1. St. Marys Cord Marked has been introduced as an alternative type name for pottery formerly referred to as Savannah Fine Cord Marked in the St. Marys region (Ashley and Rolland, 2002). In the pre-2002 literature on the region, cord-marked pottery is variously designated Savannah, Savannah-like, Savannah-derived, and Savannah-influenced. St. Marys Cord Marked differs both temporally (a.d. 1250–1500) and technologically (thinner and sand tempered) from Savannah fine cord marked (see Ashley and Rolland, 2002, for a justification for this distinction). The label St. Marys II also has been introduced as a temporal replacement for Savannah, to signify sites or site components marked by St. Marys Cord Marked pottery (Ashley and Rolland, 2002; cf. Russo, 1992). Support for dividing the Mississippian period of extreme northeastern Florida into the St. Johns II (a.d. 900–1250) and St. Marys II (a.d. 1250–1450) periods is supported by archaeological evidence, including nearly 40 calibrated radiocarbon assays from 18 sites (Ashley, 2005; Ashley and Rolland, 2002). Previous researchers have placed the production of Cord Marked pottery at Kings Bay, Georgia, as early as a.d. 600, but contexts yielding these early dates were from multicomponent sites marred by ceramic mixing due to site reoccupation.