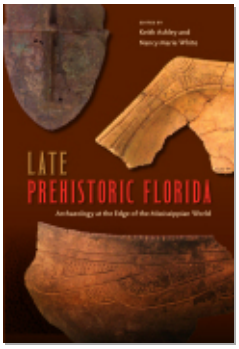
Late Prehistoric Florida

Keith Ashley, Nancy Marie White



Published by University Press of Florida

10

Fort Walton Culture in the Apalachicola Valley, Northwest Florida

NANCY MARIE WHITE, JEFFREY P. DU VERNAY, AND AMBER J. YUELLIG

Fort Walton is the Mississippian variant in northwest Florida–south Alabama–southwest Georgia, defined 60 years ago by Gordon Willey (1949a), and characterized by agricultural villages, temple mounds, and Mississippian forms of ceramics that are, however, *not* shell tempered like most other Mississippian pottery, as well as other distinguishing elements. This chapter expands on our current knowledge and interpretation of Fort Walton in the Apalachicola–lower Chattahoochee Valley region with some new information (Marrinan and White 2007). Fort Walton societies were indeed complex, ranked, possibly stratified chiefdoms (to use a convenient, though ambiguous and debatable term) participating in the wider Mississippian world. But they had a traditional and distinctive material culture that mostly evolved in place and may reflect some degree of isolation or maintenance of some ethnic or geographic identity.

Geography, Sites, and Types of Evidence

The Apalachicola River forms at the confluence of the Chattahoochee and Flint rivers and flows some 177 km (110 river or navigation miles) south to the Gulf of Mexico. The only Florida river with snowmelt, the Apalachicola is the lowest part of the great Chattahoochee basin, which originates 870 km inland in the Blue Ridge Mountains. The Chattahoochee-Flint confluence marks the border between Georgia, on the east bank, and Florida, on the west bank of the Chattahoochee for its lowest 25 river miles (figure 10.1). Above that the river marks the Alabama-Georgia border, and Fort Walton culture extends about another 40 km upstream. This rich environment had abundant resources and fertile alluvial bottomland good for

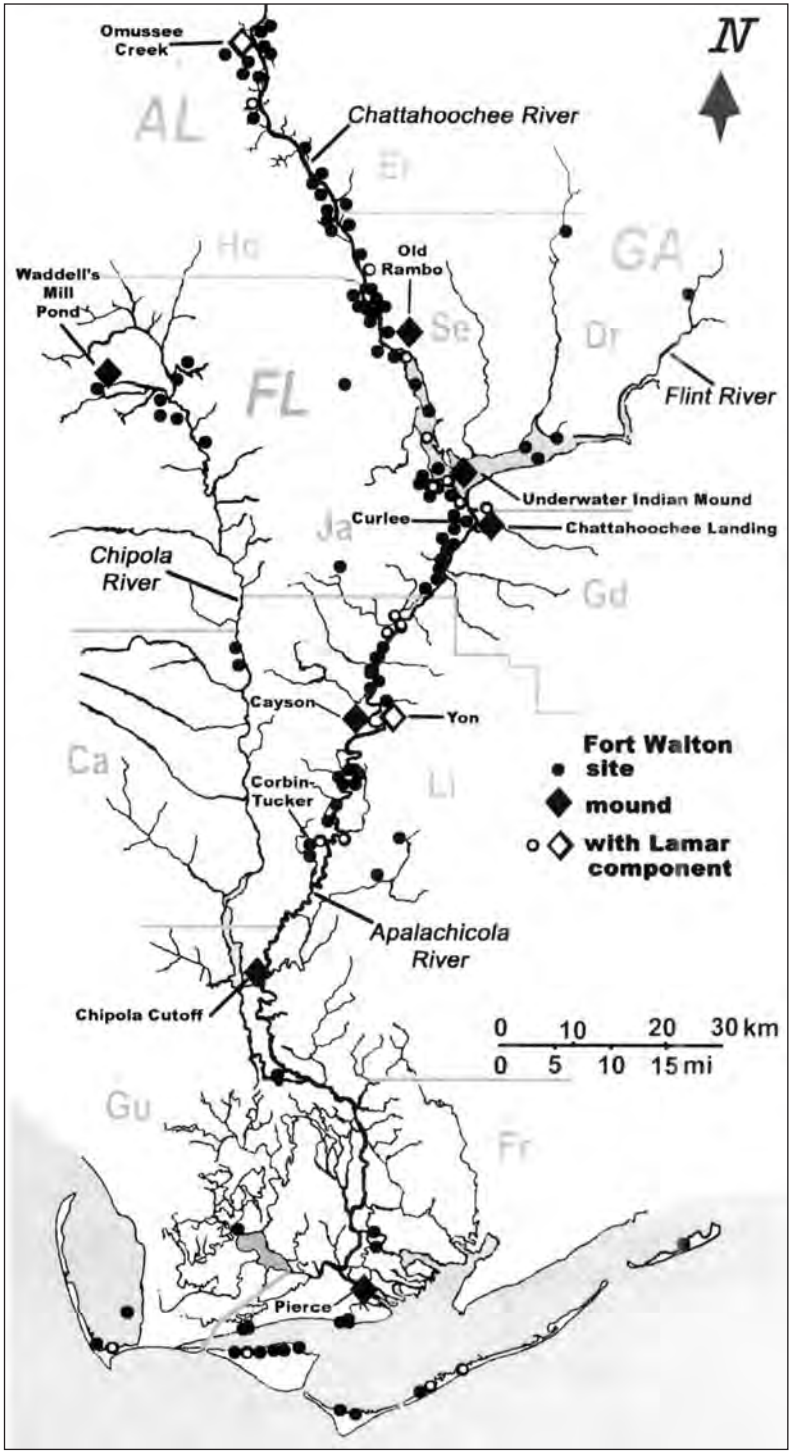


Figure 10.1. Map of Fort Walton sites, including those with Lamar components, in the Apalachicola/lower Chattahoochee Valley.

agriculture. The lower delta is low-lying and swampy but full of aquatic resources that made for a different (nonagricultural) late prehistoric adaptation. The same is true for the coast, sheltered by white-sand barrier islands and shallow bays with abundant fish, crustaceans, and shellfish.

Fort Walton sites range from small probable farmsteads to large villages with temple mounds in typical Mississippian layout (Lewis and Stout 1998; Lewis et al. 1998; Payne 2002). On the coast and lowest part of the delta, sites are usually shell middens. Mounds are interestingly distributed and enigmatic (detailed in Marrinan and White 2007: table 1); figure 10.2 shows them schematically. It is still unclear how contemporaneous or sequential they are.

The Apalachicola Valley proper has four known temple (platform) mound centers (Moore 1902, 1903): Pierce (8Fr14) on the west bank at the river mouth, Yon (8Li2) and Cayson (8Ca2) in the middle valley on opposite sides of the river, and Chattahoochee Landing (8Gd4) at the upper, east side right below the confluence. Across the river from Chattahoochee Landing, the Curlee site (8Ja7, now washed away) was probably a riverbank cemetery, not a mound (White 1982). A platform mound of possible Woodland origin with later Fort Walton burials and expansion (near another, conical probable Woodland mound) is Waddell's Mill Pond (8Ja65) in the upper drainage of the Chipola River, the biggest tributary of the Apalachicola (Tesar 2006; Tesar and Jones 2009). A conical burial mound with a Fort Walton (and a Middle Woodland) component was Chipola Cutoff (8Gu5, now washed away), near the upper confluence of the Apalachicola and Chipola rivers (Moore 1903; White 2011). Two mounds along the lower Chattahoochee are Old Rambo (9Se15) on the east bank in Georgia, possibly conical, tentatively assigned to Fort Walton (Moore 1907: 437; White 1981); and Seaborn (or Mound below Columbia or Omussee Creek mound, 1Ho27), a platform mound at the northernmost extent of Fort Walton culture, 240 km (150 navigation miles) upstream from the Gulf on the west bank in Alabama (Belovich et al. 1982; Blitz and Lorenz 2006; Moore 1907: 444–46). A possible additional Fort Walton mound (with Middle Woodland materials) at the now-drowned mouth of the Flint River was the Underwater Indian Mound (9Se27; White 1981). None of these mound centers has had enough research to permit the kind of interpretation possible for better-known Mississippian sites elsewhere in the Southeast. However, recent field, archival, and collections work has produced interesting new data and insights.

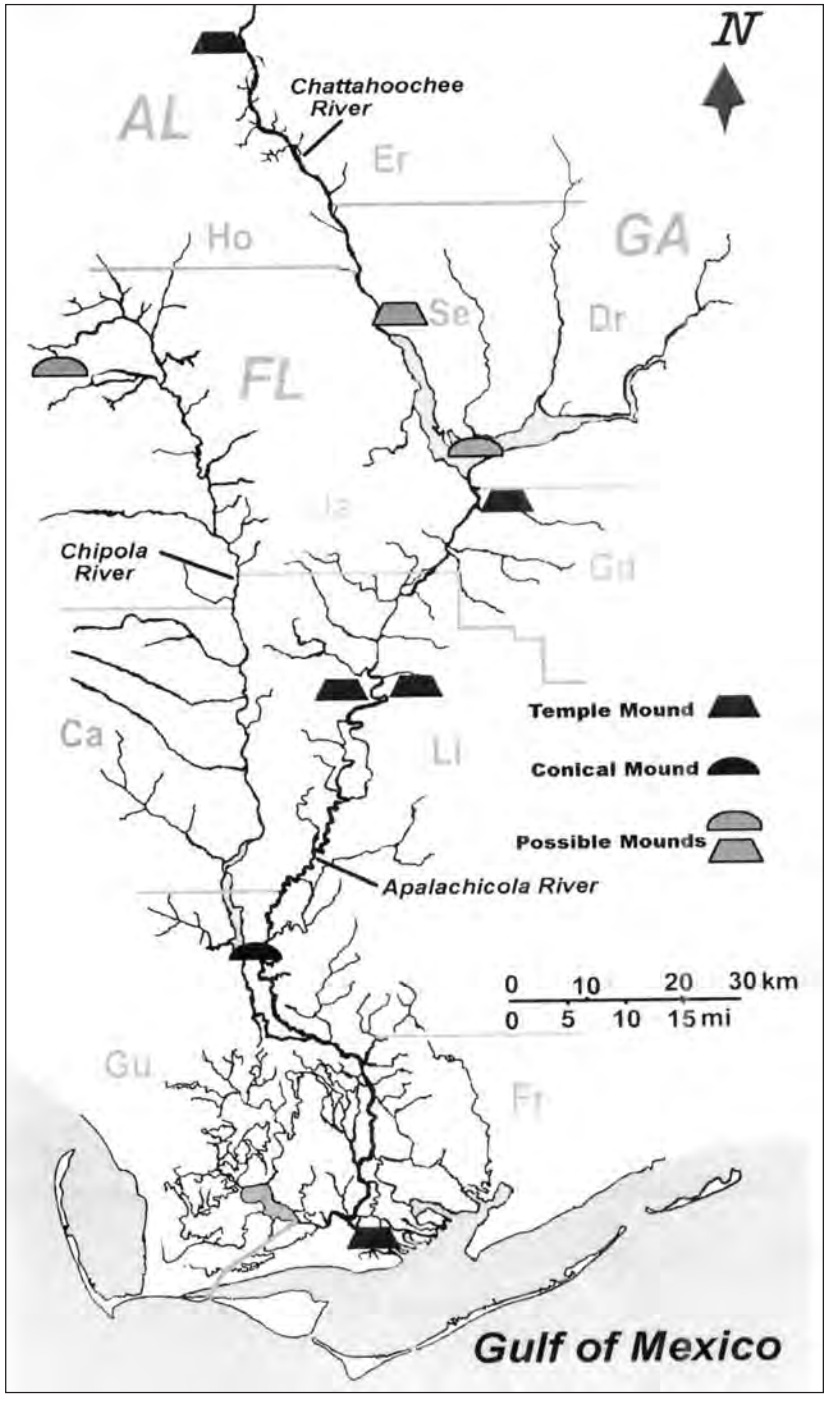


Figure 10.2. Schematic map of Fort Walton mound sites in the Apalachicola/lower Chattahoochee Valley.

Structural evidence, while limited, includes remains of at least one plaza, daub buildings, occasional wall trenches, postmolds, hearths, storage and refuse pits, and darkened or burned-clay areas that might be floors. At Waddell's Mill Pond, a rectangular postmold pattern (7×14 m) near the western edge of the platform mound was labeled a townhouse (Tesar and Jones 2009). Bullen (1958b) uncovered 30 postmolds at the Chattahoochee River #1 village site (famously J-5, now 8Ja8) but could not determine any structure outline; his map shows at least one straight line of posts and one or two short segments of possibly curved lines. Four pits filled with charred maize aligned in the cardinal directions in a square may relate to a structure (they may also represent ceremonial activity or just insect control). At the Curlee site, White (1982) documented an apparent wall trench and large postmolds in a possible arc. A wall-trench feature was excavated at the Cayson site (Brose 1975).

There is so far no unquestionable evidence for Mississippian-type palisades, embankments, or ditches at any Fort Walton sites. The only possibility is at Waddell's Mill Pond, where Gardner (1966) reported an artificial embankment he called a stockade ridge curving around the hilltop occupation (on top of the occupied caves). It was between a few centimeters and over a meter high and a meter or more wide. Of his four trenches across this ridge, only one exposed postmolds (n=5). Jones's 1973 investigations included one 2-×-2-m unit into the ridge, described only as "reveal[ing] part of the palisade wall" (Tesar and Jones 2009: 69). Because the site was occupied from the Early Archaic onward, with a large Middle Woodland component and two mounds, which cultural component this ridge/possible fence line is associated with is unclear. Furthermore, the mounds and heavy occupation areas are outside of it. If it really was a wall of posts in an earthen ridge, its hilltop location may mean it was not for defense but for delimitation or concealment of some ritual or elite area (Cobb 2003: 69). More evidence is needed before it can be called a "defensive palisade protecting [the] occupants" (Tesar and Jones 2006: 790).

Subsistence remains from several Fort Walton sites include maize, wild plants, and typical terrestrial and aquatic fauna. Coastal and estuarine sites are smaller but provide more evidence (because of the preservative properties of shell): mollusks, fish, and turtles, but so far no maize. Extremely curious is the fact that, for unknown reasons, Fort Walton sites produce far less chipped stone than do sites of earlier and later time periods in the same region and also less than in contemporaneous Mississippian settlements elsewhere in the Southeast. This has been known for a long while

Figure 10.3. Celts from Fort Walton burials at the Corbin-Tucker site (in collection of landowner): *top*, from Test Unit E; *bottom*, from Test Unit G (note more serpentine raw material and vertical stain on butt from hafting).

(Bullen 1950: 124), though never explained. But imported greenstone is significant, mostly as celts (figure 10.3) with, near, and apart from burials. There are also marine shell artifacts, commonly of lightning whelk (*Busycon sinistrum*).

Burials occur in cemeteries, in temple mounds, in burial mounds, and isolated in middens. At least two platform mound centers (Pierce and Chattahoochee Landing) were built near existing Middle Woodland mounds, and there are several cases of Fort Walton burials intrusive into older Woodland mounds. Besides the examples noted above, the Middle Woodland burial mound at Richardson's Hammock (8Gu10) on St. Joseph Bay had at least one Fort Walton burial (White et al. 2002: 5). Fort Walton burials are primary and secondary, and grave goods are diverse but occasionally include Southeastern Ceremonial Complex (SECC; e.g., Galloway 1989; King 2007; Reilly and Garber 2007) items such as copper, a sherd engraved with a "sun circle" motif (White 1982: plate 18), and a Williams Island or "spaghetti-style" engraved shell gorget (Wheeler 2001; White 2011). Fort Walton burial practices are quite variable (Shahramfar 2008; Willey 1949a: 456–57), complicating efforts to extract social data (though

mortuary practices throughout the greater Mississippian world do demonstrate a rich diversity; Sullivan and Mainfort 2010).

Lacking extensive mound-village excavations, we have few data on site layout and sociopolitical organization to compare with Mississippian elsewhere. Fort Walton societies may have been hierarchical and economically stratified, with elites and commoners, labor specialization, and hereditary leaders, or they may have been merely socially ranked, kin-based entities with differential treatment according to status, but no real economic inequality. So far we have no adequate means to evaluate either scenario (or numerous variations thereof), but this is the case for most Mississippi-period archaeological cultures (Butler and Welch 2006; Cobb 2003; Muller 1997). However, given the existence of hereditary chiefdoms in the Suwannee Valley, with far less material evidence but ethnographic documentation (see Worth, chapter 7, this volume), as well as in other places once considered to have more simply organized societies (such as Amazonia; Heckenberger 2005: 325), it is probably safe to say that Fort Walton societies were complex and economically stratified to some degree. As Blitz (2010: 3) has noted, all-inclusive, broad definitions of what is Mississippian, even when widely accepted, do not work when applied in many specific regions in different environments that shared some but not all of the same cultural practices.

We do have a growing database of Apalachicola Valley radiocarbon dates associated with diagnostic ceramics (Marrinan and White 2007: table 2), showing Fort Walton emerging soon after A.D. 900 and continuing, at least in some places, well into postcontact times, perhaps as late as 1700. We think the nature of Fort Walton sociopolitical systems in individual societies or at specific sites probably changed a lot through time. Whether they conformed to models of political cycling (Anderson 1994, 1996a); fusion-fission (Blitz 1999; Blitz and Lorenz 2006); growth and dominance through warfare, migration, and/or ideological power (O'Brien 2009; Pauketat 2007); or other processes of change, growth, and/or decline is still far from being demonstrated archaeologically.

Ceramics

Assemblage Composition

Most diagnostic Fort Walton vessel forms and types are easily recognizable as classical Mississippian styles (figures 10.4–10.8). Lake Jackson Plain/Incised (figure 10.6) is similar to Mississippi Plain jars. Cool Branch

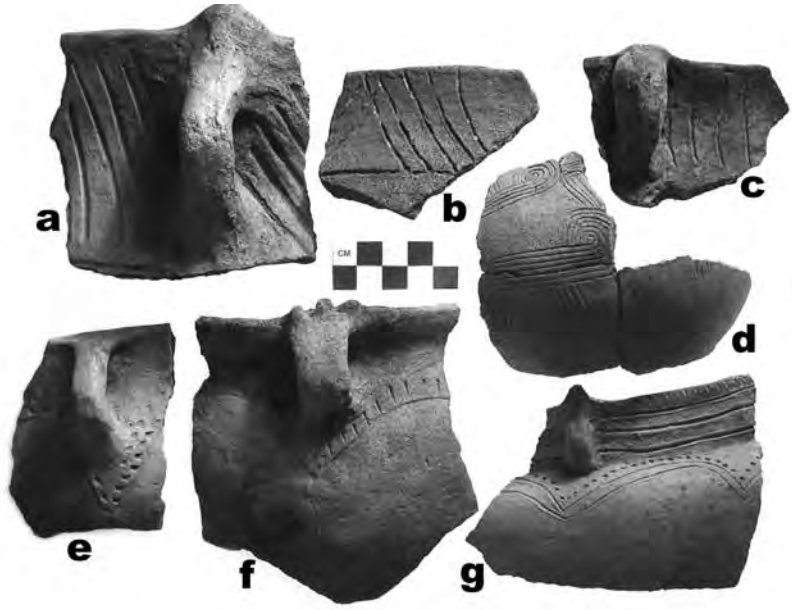


Figure 10.4. Fort Walton ceramic types (with catalog numbers): *a–c*, Marsh Island Incised rims: *a*, with loop handle, rim point, grit temper (Feat. 07-4 at Yon, 8Li2-07-284); *b*, with grit and grog temper (Curlee site Perry collection MI33); *c*, with broken lug, grog temper (Curlee site Perry collection MI35); *d*, body of grit- and grog-tempered Point Washington Incised bowl or bottle (burial at Corbin-Tucker site, 8Ca142-91, 244, 315, 316); *e–g*, Cool Branch Incised rims (all Curlee site Perry collection): *e*, with strap handle, grog temper, double-arc punctations (CB7); *f*, with notched strap handle, "eyelash" punctations (short incisions), grit and grog temper (CB3); *g*, with B-lug, ticks, 3 incisions on neck, double arc incisions, grit and grog temper (CB6).

Incised jars with incised arcs on the body and often punctations (like eyelashes) over them (figure 10.4e–g) are sand-/grit-/grog-tempered versions of Moundville or Dallas Incised. (Cool Branch Incised may have originated outside the Fort Walton area, farther up the Chattahoochee [Du Vernay 2011].) Fort Walton Incised is more distinctive, with incisions and punctations on typical Mississippian carinated bowls (figure 10.5 bottom, figure 10.8a–d), but also other shapes. The most unusual form in this type is the six-pointed open bowl (figure 10.5 top, figure 10.8i), which may be exclusive to Fort Walton (though it occurs in shell-tempered form in Pensacola ceramics to the west [Harris, chapter 11, this volume]). Other important types are Point Washington Incised (figure 10.4d), with scrolls or other incisions but no punctations, and Marsh Island Incised (figure 10.4a–c), with

Figure 10.5. Fort Walton Incised partial vessels: *top*, six-pointed open bowl (grit temper, ticked on exterior lip) from burial at Corbin-Tucker site (cat. no. 8Ca142-304); *bottom*, casuela bowl (grit temper, ticked lip) from Perry collection, Curlee site (FW41).

parallel diagonal incised lines on the vessel neck only. In early Fort Walton, check-stamped pottery is abundant, holding over from Late Woodland (late Weeden Island) times.

Fort Walton pottery is predominantly tempered with grit, with lesser amounts of sand and/or grog (crushed hardened or fired clay). Shell-tempered sherds are rare, typically only about 2 to 5 percent of an assemblage, with more of them earlier than later in time. Willey's (1949a) original typology works well for sorting sherds in the lab, unlike later revisions using

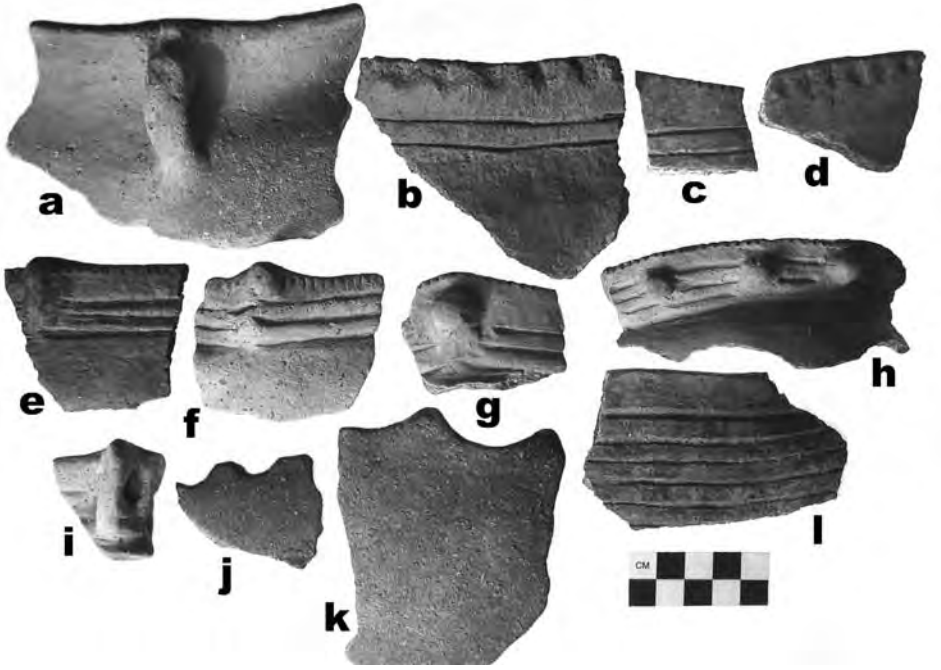


Figure 10.6. Lake Jackson rims showing attributes, all from Curlee site Perry collection: *a*, strap handle with nodes, grog temper (LJ100); *b*, notched, 2 incisions, grit temper (LJ16); *c*, ticked, 3 incisions, grit temper (LJ285); *d*, notched, grit and grog temper (LJ31); *e*, D-lug, ticks, 3 incisions, grit and grog temper (LJ388); *f*, B-lug, ticks, 3 incisions, grit and grog temper (LJ468); *g*, node, ticks, 3 incisions, slight rim point, grit temper (LJ462); *h*, many nodes, ticks, 4 incisions, grit and grog temper (LJ442); *i*, loop handle, rim point, 3 incisions, grit and grog temper (LJ102); *j*, scalloped, grog temper (LJ616); *k*, scalloped, grit and grog temper (LJ612); *l*, 5 incisions, grit temper (LJ60).

subtypes (Bullen 1958b; Griffin 1950) or the type-variety system (Scarry 1985), which have countless problems (Blitz and Lorenz 2006: 237; Marrinan and White 2007; Tesar and Jones 2006; White 1982: 85). A sorting guide developed out of Willey's typology and including later-named types (e.g., Cool Branch Incised [Sears 1967]) has been used in our labs and elsewhere in the panhandle for more than 20 years (White 2009). For sherds not fitting clearly into named types, we use generic terms based on temper, surface treatment, and other less-diagnostic attributes, rather than importing inappropriate type names from other regions. Fort Walton

assemblages include some cob-marked, red-painted, black-painted, and engraved ceramics made on the typical local paste.

Yuellig (2007) documented the Perry collection, over 10,300 sherds obtained by a collector from the Curlee site (White 1982). This site was a large Fort Walton village and cemetery (or less likely, a mound) with high-status grave goods, right on the riverbank, now all washed away after construction of a dam just below the Flint-Chattahoochee confluence in 1950. The ceramics appeared to date to early Fort Walton because of the high frequency of check-stamped sherds. Testing had uncovered a deeply buried, earlier dark midden zone, up to a meter thick, under a thinner (20 cm thick), later midden zone. The two midden strata were separated by pale, mostly culturally sterile sand. The one radiocarbon date, from the top of the earlier midden, originally reported as A.D. 1190 (White 1982: 63), is now calibrated at closer to 1250 (table 10.1). Maize cobs indicated an agricultural village; the site is directly across the river from the Chattahoochee Landing temple mound.

The Perry materials were all from the eroding riverbank; we assume the majority would have been from the earlier, thicker midden. The Perry collection type frequencies correspond well with those from excavated levels from this earlier midden (though surface collections may be biased in favor of decorated sherds). Diagnostic types such as Fort Walton Incised and Lake Jackson (Plain and Incised) constitute over 10 percent of the collection. Check-stamped sherds make up about 20 percent, and the nearly 6,800 plain sherds are 66 percent by count and 59 percent by weight (Yuellig 2007: table 2).

What we now call the ceramic type Lake Jackson has been traditionally divided into Lake Jackson Plain and Lake Jackson Incised, recognizable only from rim sherds, as the rest of the vessel is plain-surfaced. The original definitions of the two types overlap (Sears 1967: 37; Willey 1949a: 458–60, plate 44). Plain has one horizontal incision below the rim or no incision, and Incised has one, two, or more incisions, while the rest of the vessel attributes, including rim treatments, are the same. We continue (Yuellig 2007) the unpublished work of the late B. Calvin Jones of the Florida Division of Historical Resources, who noted individual rim treatments for Lake Jackson sherds (and 20 years ago gave White copies of his sketches). Rims (figure 10.6) may be plain, ticked (tiny incised lines or fingernail punctations on the lip edge), notched or pinched, scalloped (rare), or incised with short, wide, vertical, parallel lines; they may also have handles, lugs (like

Table 10.1. Details of Fort Walton radiocarbon dates discussed in this chapter

Site	Lab #	Material	Measured Radiocarbon Age	$^{13}C/^{12}C$ Ratio	Conventional Radiocarbon Age	Calibrated Date Range A.D. (1 sigma)	Calibrated Date Range A.D. (2 sigma)	Intercept Date A.D.	Reference
Curlee, 8Ja7	DIC 1048	Charcoal from TU4–6S, L2–3, -70–80 cm, stratum IIId	760±50	*	*	1224–1280	1168–1380	*	White 1982: 63; Yuellig 2007
Yon, 8Li2	Beta 91164	Charcoal next to mound burial	1020±60	-26.8	990±60	1000–1055; 1090–1150	970–1195	1025	White 1996; Du Vernay 2011
	Beta 91165	More charcoal next to mound burial	970±50	-27.1	930±50	1030–1180	1010–1225	1055; 1090; 1150	
	Beta 91844	Charcoal from earliest mound construction	870±50	-28.1	820±50	1195–1270	1065–1075; 1155–1285	1235	
	Beta 110362	Charcoal from TU D Feature 17	870±60	-29.6	800±60	1205–1280	1065–1075; 1155–1295	1250	
	Beta 235137	Charcoal from TU I Feature 07–4	850±40	-24.4	860±40	1160–1220	1040–1100; 1120–1260	1200	

	Beta 239749	Charcoal from TU E L7, with Lamar ceramics only	140±40	-25.5	130±40	1680–1770; 1800–1890; 1910–1940; 1950–1950	1660–1960	1690; 1730; 1810; 1920; 1950	
Corbin-Tucker, 8Ca142	Beta 30633	Pine charcoal from Stratum II of Feature 1	1080±90	-25	1080±90	880–1030	770–1170	990	White 1994; Marsh 2006
	Beta 68757	Pine charcoal from Stratum I of Feature 1	1060±80	-25	1060±80	900–1030	800–1170	1000	
	Beta 40905	Charcoal near burials, under copper disk	1840±110	-25	1840±110	70–340	50–430	210	
	Beta 213055	Bone, burial E1(?)	70±40	-18.3	180±40	1660–1680; 1730–1810; 1910–1950	1650–1710; 1720–1880; 1930–1950	1670; 1770; 1800; 1940; 1950	
	Beta 217850	Bone, burial G4	230±40	-16.1	380±40	1450–1520; 1590–1620	1440–1640	1480	
Pierce, 8Fr14	Beta 221908	Charcoal, core 1, -100 cm, 200 m SE of platform mound	780±40	-27.1	750±40	1260–1290	1220–1300	1270	White 2007; USF archaeology lab

(continued)

Table 10.1—*Continued*

Site	Lab #	Material	Measured Radiocarbon Age	$^{13}C/^{12}C$ Ratio	Conventional Radiocarbon Age	Calibrated Date Range A.D. (1 sigma)	Calibrated Date Range A.D. (2 sigma)	Intercept Date A.D.	Reference
Lighthouse Bayou, 8Gu114	Beta 165601	Shell Pile 2, Lamar ceramics only	120±50	-25.0	120±50	1680–1770; 1800–1940; 1950–1950	1660–1950	1690; 1730; 1810; 1920; 1950	White 2005
	Beta 193568	Shell Pile 3 (near Pile 2), Lamar ceramics only	150±50	-26.4	120±50	1680–1770; 1800–1940; 1950–1950	1660–1950	1690; 1730; 1810; 1920; 1950	
	Beta 177996	Shell Pile 12, Fort Walton ceramics	380±60	-25.0	380±60	1440–1530; 1560–1630	1420–1650	1480	

Note: Asterisk (*) marks unreported data.

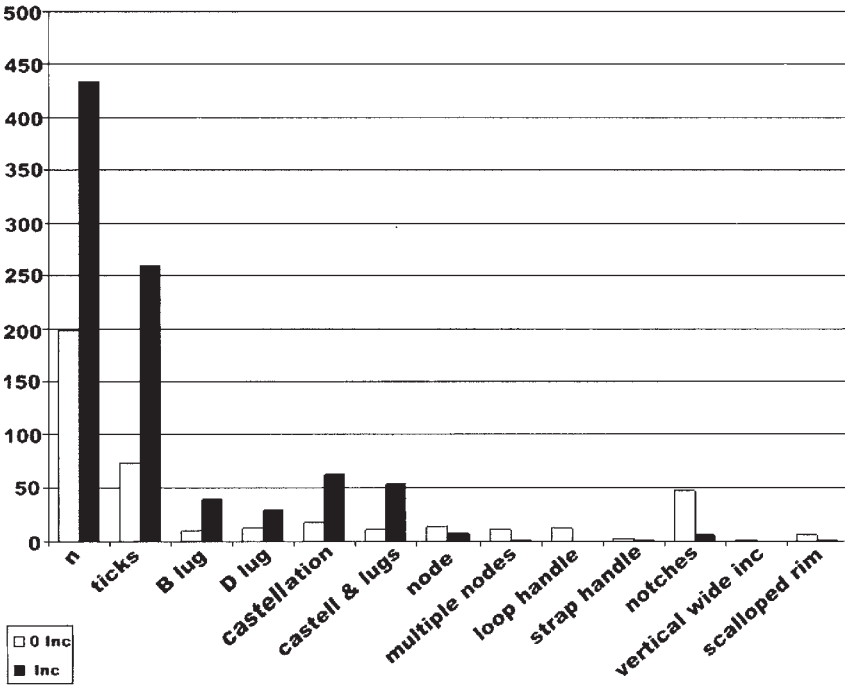


Figure 10.7. Frequencies of the different Lake Jackson rim attributes, also comparing sherds with incisions and no incisions Perry collection, Curlee site.

filled-in small handles in D or B shapes), nodes (rounded protrusions lower down the neck), and/or castellations (rim points). Such rim treatments are similar to those seen on the basic (and shell-tempered) Mississippian jar forms (e.g., Phillips et al. 1951).

Data on rim attributes of 631 Lake Jackson sherds in the Perry collection (figure 10.7) demonstrate that there were more jars with incisions below the rim than no incisions, and more ticks and lugs than other attributes such as handles or notches. Notched rims most often had no incisions below the lip, as did the scalloped rims and those with nodes or handles. The same rim treatments are seen on the types Marsh Island Incised and Cool Branch Incised (Sears 1967: 32, 37). What significance these attribute frequencies and co-occurrences may have is still unknown, but at least the quantification makes possible real comparison with assemblages at other sites. Further, we demonstrate the ambiguity and lack of utility in separating Lake Jackson into more than one type.

Temper

Grit is the predominant temper that distinguishes Fort Walton ceramics (Willey 1949a: 458), but there are lesser amounts of sand and grog and combinations of tempers. Grit temper is distinguishable from sand in that the quartz particles are bigger and more angular, because they are from crushed rock. Grit is white, clear, brown, or a distinctive red. Admittedly, distinguishing between big sand grains and grit particles can be difficult (e.g., Blitz and Lorenz 2006: 227), because they may appear to be on a size continuum. Sand is usually smaller and smoother as a result of its water travel as alluvium. Other workers have reinterpreted the characterization of typical Fort Walton ceramic pastes. In a study of ceramics from a mound in south peninsular Florida dating to the Safety Harbor period (see Mitchem 1989 and chapter 8, this volume), Cordell (2005) never mentions grit temper. She defines Lake Jackson paste as sherd tempered, meaning tempered with clay bits made by crushing old potsherds, distinguishable probably by the straight edges of the vessel surface remaining on the temper particles. There are some important issues here, the first being how to tell most sherd particles, which would not manifest straight edges, from other grog particles. Second, Lake Jackson paste has long been recognized as having a lot of grit temper as well (e.g., Willey 1949a: 458–59). The third issue is whether Fort Walton ceramics in the Tallahassee region, home of the Lake Jackson site, actually have a much higher instance of grog temper (and see Marrinan, chapter 9, this volume), and whether it can be quantified. Hardly any of the literature on Fort Walton sites reports temper in detail, but Griffin (1950: 104) noted that although the "vast majority of the sherds" he recovered from the Lake Jackson site had coarse grit, there was also some sand tempering.

In the Apalachicola Valley, temper seems to be whatever is handy, except for shell. The sherds of a Point Washington Incised vessel shown in figure 10.4d demonstrate this. They clearly fit together but must have had different life histories after the pot broke. The upper-left sherd is more worn and its grog temper more exposed, while the lower-right sherd looks sand tempered and the lower-left looks grit tempered, with an unsmoothed coil mark on the inside. Temper is thus not spread evenly throughout. If temper indicates even the least bit of meaningful tradition, it may be due to geography, with quartzite cobbles available on the Chattahoochee-Apalachicola river system to grind up for grit and perhaps fewer such rocks in the Tallahassee Red Hills. But none of this explains the reluctance of these

Mississippi-period potters to use crushed shell temper as most of their contemporaries across the Southeast were doing.

There is potential for great confusion if we do not describe temper clearly. The type definitions often depend upon the presence of a specified paste, and then the types are used as proxies for some phase or other tradition, at which point the discussion gets many degrees removed from the original data. The shorthand of "phases" and other derived terms may mask real differences or similarities among assemblages. We must go back to the original data and agree on terminology; ceramic paste is a good place to start.

Occasionally Fort Walton ceramics have crushed limestone temper, especially in the lowest portion of the Chattahoochee Valley, including the upper Chipola, where there are chert and limestone outcrops and caves (Blitz and Lorenz 2006: 227; Bullen 1949b; Gardner 1966; White 1981). A little limestone-tempered pottery also appears in the shell middens of the lower valley (White 1994). Also important is the distinctive micaceous paste of Apalachicola–lower Chattahoochee basin ceramics (of all time periods); glittery mica flecks are natural in the region's soils.

Yuellig (2007: table 3) tabulated ceramic tempers in the Perry collection. On the basis of that work, we quantify temper in table 10.2 for all 1,199 specimens of the two most diagnostic types, Fort Walton Incised (rim and body sherds) and Lake Jackson (by definition, only rims). Grit is the most common at over 70 percent. About 10 percent is grog tempered, 4 percent sand tempered, and then there are several temper combinations. Six sherds did have a tiny amount of shell in with the grit (not enough to classify them as shell tempered), and one had both shell and limestone and thus was listed as Lake Jackson instead of Pensacola ware. Of the nearly 7,000 plain sherds, 81 percent have grit temper; 7 percent, sand temper; 3 percent, grog temper; and 6 percent, combinations of two or three of these. Shell-tempered plain pottery, with or without other tempers, made up 3.4 percent; whether it was produced locally is unknown. Shell-tempered sherds were classified as either Pensacola Incised (if they had incisions or punctations) or shell-tempered plain (rather than distinguish between Pensacola Plain and any other of the many shell-tempered Mississippian plain types). With all the cautions necessary in basing interpretations upon a surface collection, long experience in this region leads us to see these relative frequencies of temper as typical in a Fort Walton assemblage.

Prehistoric people in the Apalachicola Valley used grit, sand, and grog

Table 10.2. Temper in two diagnostic Fort Walton ceramic types in the Perry collection, Curlee site (8Ja7)

Ceramic Type	Grit		Grog		Grit & Grog		Sand		Grit & Sand		Grog & Sand		Grit & Shell		Shell & Limestone		Total	
	N	%	*N*	%	*N*	%	*N*	%	*N*	%	*N*	%	*N*	%	*N*	%	*N*	%
Fort Walton Incised	423	74.5	59	10.4	38	6.7	23	4.0	15	2.6	6	1.1	4	0.7	0	0	568	100
Lake Jackson	453	71.8	60	9.5	61	9.7	28	4.4	20	3.2	6	1.0	2	0.3	1	0.2	631	100
Totals	876	73.1	119	9.9	99	8.2	51	4.2	35	2.9	12	0.6	6	0.5	1	0.1	1,199	100

tempers in their ceramics from Early Woodland onward. Retention of the traditional and, by Fort Walton times, distinctive local tempers instead of changing to the Mississippian crushed shell may reflect a strong Woodland pottery-making practice that smoothly transformed in place into Fort Walton. Even the incised/punctated Fort Walton designs (such as scrolls) are often similar to those on Woodland types. The lack of shell tempering is very interesting because there was certainly no lack of shell—marine, freshwater, or even fossil shell on sandbars along the river and in the subsoil. Perhaps there was a deliberate goal demonstrated in everyday craft production to maintain some kind of strong regional tradition, social memory, or identity within the Mississippian world. The Pensacola series of shell-tempered Mississippian ceramics, sometimes with Fort Walton elements (such as incised-punctated designs or the six-pointed bowls), centers on Pensacola and Mobile bays, 200–300 km west of the Fort Walton region (see Harris, chapter 11, this volume). The area in between, around Choctawhatchee Bay, has an interesting blend of both Pensacola and Fort Walton ceramics that might be expected in a border area.

Refining Chronology

Within the type Fort Walton Incised, Yuellig (2007) identified in the Perry collection nine variations in the incised designs (beyond the distinctive six-pointed bowl design), mostly of the classic running scroll or guilloche pattern. These were named curvilinear running scroll, rectilinear running scroll, stylized curvilinear running scroll, stylized rectilinear running scroll, unidentifiable scroll, unusual square pattern, unusual unknown pattern, and other unusual variations (figure 10.8). Reexamining all the sherds in the excavated ceramic assemblage at the Curlee site (White 1982b), she found that earlier levels in the lower midden contained only four of the nine variations, but later levels in the lower midden and the entire upper midden stratum had seven variations. This possible increase in ceramic design diversity through time is easily testable in future work at other sites.

Within the Perry collection and assemblages from other sites, check-stamped pottery has not yet been thoroughly investigated. We use the generic name because, though it is probably Wakulla Check Stamped holding over from late Weeden Island times, it has no features distinguishing it from several other check-stamped types in this region that occur in different time periods (Marrinan and White 2007: 295–96). This is true for check-stamped ceramics in neighboring regions as well (e.g., Brown

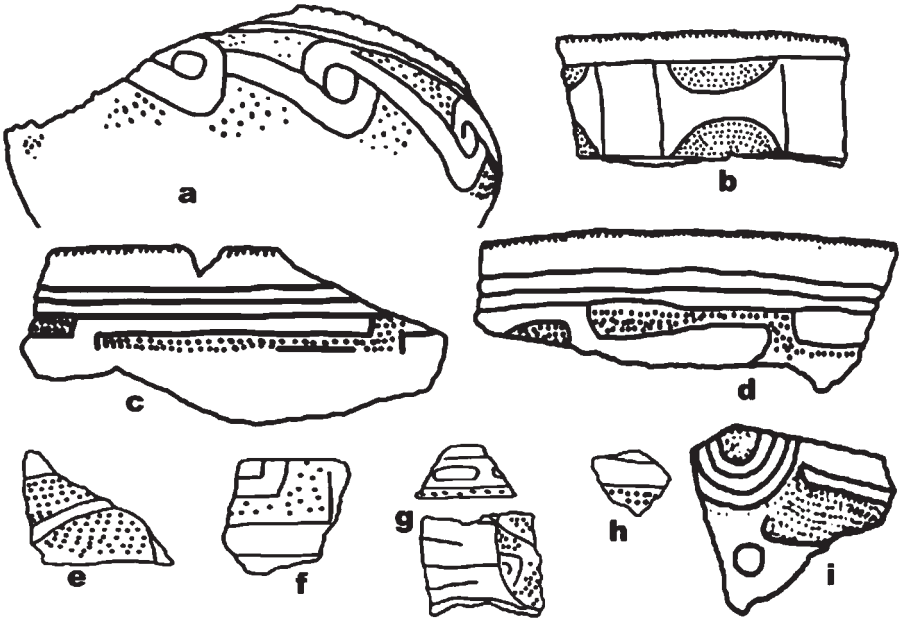


Figure 10.8. Fort Walton Incised design styles classified by Yuellig (2007): *a*, curvilinear running scroll; *b*, stylized rectilinear running scroll; *c*, rectilinear running scroll; *d*, stylized curvilinear running scroll; *e*, unidentifiable scroll; *f*, unusual square pattern; *g*, unusual unknown pattern (two); *h*, unidentifiable; *i*, rim point from six-pointed bowl. All are rims except *e*, *f*, lower *g*, and *h*.

2009). A small study (Rosenthal 2010) comparing Fort Walton check-stamped sherds from the Perry collection with others from late Weeden Island and Deptford sites in this valley found that those of Fort Walton age had slightly more rectangular checks, more grit temper, and more frequent slight linearity in the checkerboard pattern (the type Deptford Linear Check Stamped was not included in the study, only standard check-stamped from a dated Deptford component); the total sample size was under 200 sherds and may reflect site-specific idiosyncrasy.

Willey (1949a: 458) recognized long ago that check-stamped ceramics carry over from late Weeden Island into Fort Walton. They constitute perhaps half of a typical late Weeden Island assemblage, and their numbers diminish to something around 20 percent in early Fort Walton. By the time of the latest component at the Curlee site (the upper midden), they constituted 7 percent of the Fort Walton assemblage (White 1982). By later Fort Walton times, this type disappeared. Though Willey thought it served as the basis for Leon (Lamar) Check Stamped, this is probably not

the case, as we now think Lamar is something intrusive and much later in the Apalachicola Valley. As detailed below, new analyses from the Yon and Corbin-Tucker sites show a localized distribution of check-stamped pottery in domestic areas, suggesting that it may be functionally as well as temporally distinct within Fort Walton assemblages.

A distinguishing characteristic indicating change through time within Fort Walton is this eventual disappearance of check-stamped pottery. Besides the possible increase through time in design variation on Fort Walton Incised vessels, we suggest a few other temporal markers. Cob-marked pottery appears very early. The six-pointed bowl form may appear by middle Fort Walton and last very late. The type Marsh Island Incised is now solidly dated to at least early to middle Fort Walton, around A.D. 1200 (see discussion below). At some point very late in or more probably after the Fort Walton ceramic sequence, complicated-stamped and other very different ceramics of the Lamar complex from Georgia begin to appear (Willey 1949a: 485–86). These are also not shell tempered, possibly indicating some important relationship within the larger Mississippian world. When or why Lamar ceramics first show up in the Apalachicola Valley has been unknown, though they are associated with the Mission period (seventeenth century) in Tallahassee, where they are called Jefferson ware (Willey 1949a: 488–93). Our new work (detailed below) shows that Lamar is later than, or possibly contemporaneous with but separate from, contact/Mission-period Fort Walton.

Pierce Mounds

Pierce (8Fr14; Moore 1902: 217–29), at the river mouth, commanded north–south river traffic and east–west travel along the Gulf and bays. It is a continuous *Rangia* and oyster shell midden with at least nine mounds that together made up a major center from Early Woodland onward. The Fort Walton portion surrounds the small flat-topped mound (of shell) on the east side. The Fort Walton artifact assemblage is mostly from disturbed surfaces; ceramic types are typical Fort Walton diagnostics. Focused research at Pierce has become possible only after recent clearing for planned development. The topographic map seemed to show several mounds arranged in an oval with a plaza in the middle. A core outside this oval, 200 m southeast of the platform mound, revealed a dark, meter-thick Fort Walton midden dated to about A.D. 1270 (table 10.1). Testing in 2007 in the middle of this possible plaza recovered no evidence of anything prehistoric.

We also tested the lower slope of one low, flat-topped rise that had only modern glass on top and nothing below, so it is still not demonstrated to be an aboriginal mound. Perhaps the Fort Walton component is smaller than originally thought, and the site was more important as a regional capital during the Middle Woodland. But Fort Walton people deliberately utilized what had been an earlier sacred center.

Pierce and Chattahoochee Landing are the only two multiple-mound Fort Walton centers in this valley. Cayson has a large temple mound and a probable small (burial?) mound; Waddell's Mill Pond has a platform and a conical (probably Woodland) mound, and the rest are single-mound sites. Both Pierce and Chattahoochee Landing have mounds dating one or two millennia before Fort Walton, but each clearly has at least one temple mound and a Fort Walton village. Furthermore, Pierce sits at an important geographic location at the bottom of the river, and Chattahoochee Landing is at the top of the Apalachicola, right below the Chattahoochee-Flint confluence. These two sites were long-standing mound complexes when Fort Walton people first used them. They are shown with an individual temple-mound symbol on figure 10.2 because we have not yet established how many of the other mounds date to Fort Walton.

If Fort Walton people built their own mound and/or village sites near Woodland mound centers and also used Woodland mounds for their own later burials, they may have been paying homage to the distinctive heritage of their Woodland ancestors while simultaneously establishing new Mississippian traditions. They may have used the earlier mounds as foundations for platform mounds too; there is evidence of this farther up the lower Chattahoochee beyond the Fort Walton area (Blitz and Lorenz 2006: 94–95) and elsewhere in the Southeast (e.g., Weinstein 2006: 148, 158). Woodland-period flat-topped platform mounds are now also known in small numbers throughout the Southeast (e.g., Mainfort 1988), including Florida (Milanich et al. 1984). Reuse and rebuilding of them by Mississippi-period peoples has been documented (Blitz and Lorenz 2006: 94); a possible example of this in the Fort Walton region is at Waddell's Mill Pond (Jones and Tesar 2006).

Corbin-Tucker Site

Corbin-Tucker (8Ca142) is a village and cemetery in the middle Apalachicola Valley recorded in the 1980s when plowing for pine plantation unearthed Fort Walton pottery. Testing in 1988 uncovered a habitation area

on the south (downstream) side and a cemetery (White 1994). A refuse pit in the domestic area produced the only preserved fauna: freshwater mollusks, terrestrial snails, gar and other fish, turtle, and raccoon and other mammals. Ethnobotanical specimens from this feature consisted of pine, oak, unidentifiable woods, acorn and hickory nutshell, and seed fragments including a possible wax myrtle seed. Other botanical remains from the site were additional wood fragments, including *Prunus* (plum/cherry) in both the domestic and cemetery areas. Two charcoal samples from the refuse pit dated to about cal A.D. 990–1000 (table 10.1), and it contained check-stamped and plain ceramics. The village area around this feature constituted the southern two-thirds of the site and produced check-stamped and plain ceramics and a few diagnostics: a Lake Jackson and a shell-tempered plain sherd, plus a few indeterminate incised and punctated sherds. Since there were no recognizable sherds of any late Weeden Island types indicating a Late Woodland presence, the assemblage is considered early Fort Walton, not inconsistent with the date. The very few pieces of lithic debitage recovered from the whole site (10 flakes in total from five excavated units) also suggest that it is culturally Fort Walton, because late Weeden Island sites have much larger lithic assemblages.

At the north end of the site, 50 m from the dated feature, is the cemetery with elite burials. Remains exposed in a 1-×-1-m test unit (TU E) included a woman's skull with a copper disk (figure 10.9 top) on the forehead and a large greenstone celt (figure 10.3 top) under the chin (Marrinan and White 2007: fig. 8), as well as many long bone fragments and sets of teeth. Additional brief testing was conducted here in 1990 to obtain material for dating, because the ceramics interred with the dead were all Fort Walton (figures 10.4d, 10.5 top) but somewhat different from those in the occupation area. More burials were encountered (figure 10.10) in a 1-×-2-m unit (TU G), including skulls, long bones, teeth, another celt (figure 10.3, bottom), a *Busycon* shell cup and other marine shell artifacts, and a ceramic mushroom-shaped object. An additional copper disk came from the edge of the original unit; it was of wood with a thin copper cover and a central boss (figure 10.9 bottom). Charcoal from a few centimeters below this disk was radiocarbon-dated to cal A.D. 210 (table 10.1), obviously not a Fort Walton date and probably erroneous, because the site produced no Woodland material at all.

Preservation conditions were awful; most of the individuals buried were represented only by teeth and bone fragments, not enough to tell whether some were just trophy heads, whether all were bundles, or whether the

Figure 10.9. Copper disks from the Corbin-Tucker site cemetery (in collection of landowner).

smaller bones simply decayed. The remains were jumbled together such that it is impossible (without massive amounts of DNA analysis, perhaps) in many cases to tell which bones and teeth go together. There were no burial pits, just churned-up soil, evidence of many earlier and later interments. Study of the human remains by honors student Elan Marsh (2006) included a University of South Florida (USF) Undergraduate Research grant for AMS dates. With forensic anthropologist Erin Kimmerle and her students assisting, we identified between 10 and 19 individuals within the total three square meters of cemetery exposed.

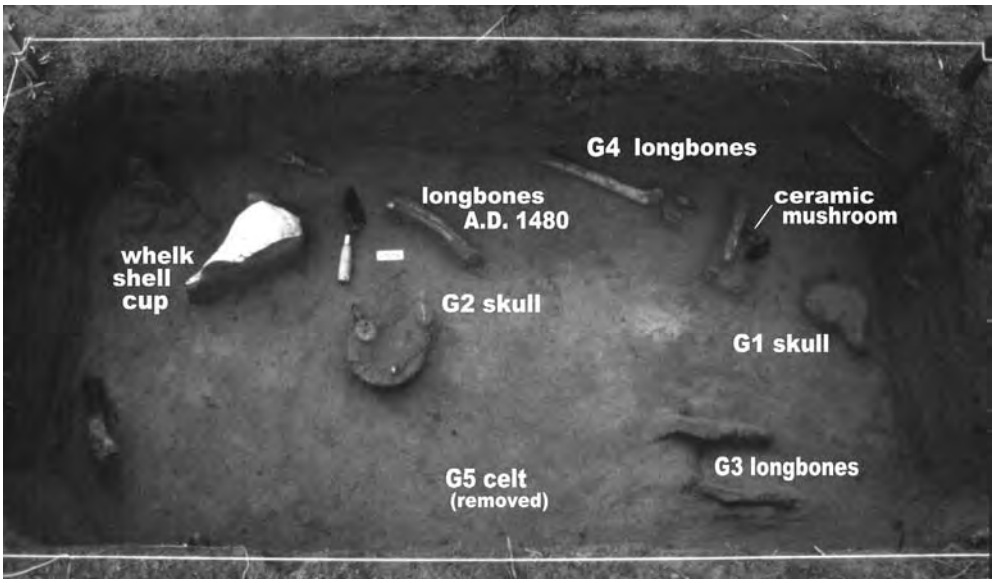


Figure 10.10. Test Unit G at the Corbin-Tucker site, showing elite burials of at least five individuals (celt shown in figure 10.3 [lower] had been removed at time of photo).

Long bone fragments from Individual G4, near the ceramic "mushroom," were dated to cal A.D. 1480 (table 10.1), late Fort Walton. Individual E1 was the first uncovered, the woman lying on her right side facing north, with the celt and the copper disk. Teeth of at least four other individuals, some articulated, lay around her, including near her skull a canine from a child between 3 and 10 years old. Bone fragments not far from her skull, thought to be from her legs (Marrinan and White 2007: 307) but possibly from another person (E6 or someone else), were dated to between A.D. 1670 and 1770 (table 10.1, ruling out the obviously too recent intercepts), much later than the usual Fort Walton, in historic Mission or post-Mission times. Though the earlier date has a two sigma range that includes early historic time, it does not overlap with this later date. No historic materials came from this cemetery, but the first copper disk, embossed with a raised center and small bumps around the circumference (figure 10.9 top), could be an early historic style (White 1994: 190). If this date is correct, the cemetery was apparently so important to late prehistoric Fort Walton people that their descendants continued to use it for a couple centuries well after contact, continuing maintenance of their distinctive heritage.

The ceramic assemblage from the cemetery gives a few clues. There is no Lamar; the types (Fort Walton Incised, Lake Jackson, Cool Branch Incised,

Point Washington Incised, and a few shell-tempered sherds) are similar to those at sites dating hundreds of years earlier within Fort Walton. Among the Fort Walton Incised sherds were at least two and possibly three six-pointed open bowls (figure 10.5 top), suggesting a late date and mortuary association for this vessel form. Check-stamped sherds were few (only five) and only from the surface and uppermost levels, not associated with any burials. Combined with the dates, the fact that the domestic area at Corbin-Tucker had different ceramics from those of the cemetery area suggests that it could be an earlier component or that the domestic assemblage was functionally different from the ritual materials in the cemetery. Alternatively, the ceramics could indicate that what had been a village very early in Fort Walton had changed over the (up to six) centuries to become an important (family?) burial place, a tradition that continued even while the rest of the culture was coming to an end. Perhaps the tradition was all the stronger because of the movement of new peoples and influences into the valley after contact and depopulation.

Yon Mound and Village

Upstream from Corbin-Tucker in the middle valley, Yon (8Li2) is a single mound and village site on the east bank. Recorded by Moore (1903), it has been sporadically investigated since (Brose 1975; Scarry 1984; White 1996). In 1995, 2000, and 2007, USF conducted test excavations, opening 10 units and over 100 cores (figure 10.11). The mountain of materials and data recovered (Du Vernay 2011) provide new information on occupational history, mound construction and use, and ceramic stratigraphy. Habitation was dense all around the platform mound and concentrated close to the river. Midden soils and artifacts did not occur beyond 100 m south or 200 m east or west of the mound. Village evidence includes daub, bone tools, a celt fragment and greenstone flakes, a few lithic tools and debitage, typical Fort Walton ceramics, and some pit and postmold features. A few late Weeden Island sherds (Keith Incised, Tucker Ridge Pinched) were recovered from TU D, west of the mound. Radiocarbon dates on charcoal from deep in this unit, as well as from a domestic feature in TU I on the east side of the mound, indicate occupation between cal A.D. 1200 and 1250 (table 10.1). A later Lamar component (described below) is present on and east of the mound.

The dated Feature 2007-4 provided valuable subsistence information. It was a large garbage pit with abundant pottery, antler, bone, shell,

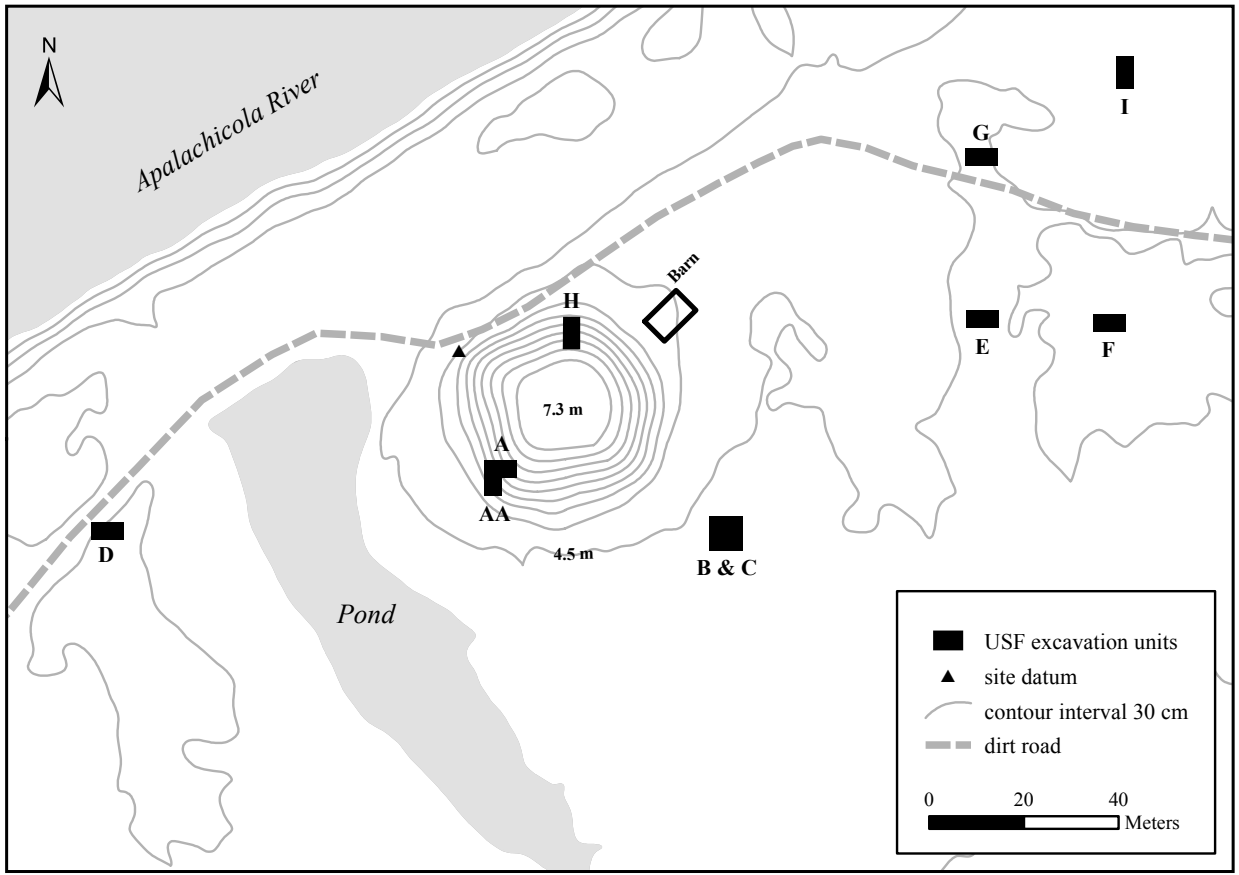


Figure 10.11. Yon mound and village site (excavation units not to scale).

a grinding stone, and two tiny bone (fish?) hooks, as well as numerous large Marsh Island Incised sherds (figure 10.4a), representing at least five vessels. Feature contents were studied by honors student Elicia Kimble (2008), who identified the faunal remains under the tutelage of Irv Quitmyer of the Florida Museum of Natural History. Quitmyer (1997) had earlier identified the few Yon faunal samples from 1995 as mammal, fish, and shellfish. The 2007 feature sample had greater diversity, probably because of its better preservation in the presence of the freshwater shells, which helped neutralize acidic soils. The fauna in this feature added seven taxa to the list for the site, including more fish, raccoon, snake, and rodents. Though clearly deer and other mammals were important, the role of fish in the subsistence system of these inland farmers was probably far greater than we realize. The high numbers, species diversity, and small sizes of the fish suggest they were netted.

Yon mound is 7.3 m high, flat topped, and close to square, with no discernible ramp. Extensive coring around it produced no evidence for a plaza. Excavation into the lower slope of the mound's southwest side in 1995 (TUs A and AA) produced Fort Walton and Lamar ceramics, a single red glass seed bead, small metal and glass fragments in the upper levels, and evidence of multiple construction stages and basket loading. Below the mound was the flat surface of pale, yellowish brown riverbank sand upon which construction had begun (and upon which the earliest Fort Walton midden was deposited). Over this alluvium was a thin (12 cm), flat layer of darker fine sand that may have been a prepared surface for mound building. Charcoal from an early basket load was dated to cal A.D. 1235 (table 10.1), consistent with village dates.

An intrusive burial of an adult was encountered in TU A, extended in a pit clearly cutting into the basket-loaded stratigraphy from an upper stratum only 20 to 66 cm below the mound surface. The decayed skeletal remains were left unexcavated, but the rest of the 1-×-2-m unit was continued next to it, higher up the mound slope, to obtain stratigraphic information. The bones (a skull, one arm, legs) were accompanied only by a greenstone celt inside the upper arm. The burial was partially surrounded by a curved line of charcoal, from which two samples produced similar radiocarbon dates in the mid-eleventh century (table 10.1)—up to 200 years earlier than the early mound date, but the ranges overlap. This is up to 600 years too early for what we think is the age of Lamar. The best explanation is that this was a Fort Walton burial and the charcoal was from a wooden artifact (a staff?) that may have been curated from an earlier time (possibly

showing heritage maintenance again). In the upper part of the burial pit was another greenstone celt, small and worn, perhaps thrown in during the filling of the grave as a last offering. A second unit excavated into the lower slope of the mound on the east side in 2007 produced far fewer ceramics and only Lamar types. Under the base of the mound and above the culturally sterile pale riverbank sand here, the prepared-base layer was absent, and the deep stratigraphy in the 2-m-long profile showed the earliest construction sloping in the opposite direction from the mound slope. This could mean that an earlier low platform was constructed farther east of the present mound or that a trench had perhaps been dug around the earlier mound.

A significant research question at Yon is the temporal relationships of various ceramic types. While the Fort Walton component is securely dated to A.D. 1200–1250, the Lamar complex now appears to be protohistoric. In the six units dug on the south and east sides of the mound, the uppermost levels usually contained some Fort Walton ceramics but also Lamar Complicated Stamped and Plain types. Under this were levels dominated by common Fort Walton diagnostics. Cob-marked sherds were few but always in deep levels, suggesting they are early. The small amount of check-stamped pottery was all localized in the midden on the west (downriver) side of the mound. Because the date from the west side is contemporaneous with the dates for Fort Walton from elsewhere around the site, the localization of check-stamped ceramics may indicate a functional difference, an association with some domestic activity. The spatial limitation of check-stamped sherds to the domestic midden area is also the case at Corbin-Tucker (described above), and Bullen (1958b: 348–49) found a similar situation at J-5.

Unlike at Corbin-Tucker, there are no six-pointed Fort Walton Incised bowls at Yon. This may be because these fancy vessels were strictly for burial purposes or because they were temporally or ethnically different (or combinations of these reasons). Typical Fort Walton Incised vessels of casuela bowl and other shapes and Lake Jackson jars are abundant, however. One sherd of a beaker or bottle (recognizable by its small diameter of 4 cm) was recovered from the mound in TU A. Marsh Island Incised has been a poorly known minority type; Willey (1949a: 466) had "limited data" and provided only a very brief description, though Griffin's (1950: 105–6) excavations at the Lake Jackson site expanded the definition a bit. Marsh Island Incised is now solidly dated to around A.D. 1200 in Feature 2007-4 at Yon. Interestingly, this type is represented by only 35 of the 10,000

sherds in the Perry collection from the Curlee site (Yuellig 2007). If the date from Curlee is correct, that site should be roughly contemporaneous with Yon, though it may be a generation earlier or later.

The relationship of Fort Walton with Lamar is becoming clearer with a new date on the Lamar component at Yon. We isolated the clearest Lamar level, in TU E, east of the mound, with no Fort Walton ceramics. A charcoal sample here produced a date with five calibrated intercepts (table 10.1), the earliest (and only reasonable) two being A.D. 1690 and 1730. This compares favorably with the only other good Lamar date in the region, from the Lighthouse Bayou site (8Gu114), some 80 river miles downstream and around the west side of the delta on St. Joseph Bay. Lighthouse Bayou consists of scattered shell piles dating to both prehistoric and protohistoric times. Pile 12, with Fort Walton ceramics, was dated to cal A.D. 1480, while Piles 2 and 3, with Lamar ceramics but no Fort Walton types, produced two radiocarbon dates of between A.D. 1690 and 1730 (the two reasonable of five intercepts, again; White 2005a). While the earlier date's two sigma range does extend into early historic time, it does not overlap with that of the later date. Lamar thus appears to have been perhaps as early as a generation after the latest Fort Walton—from the late Mission or post-Mission period. If the radiocarbon dates from Yon and Lighthouse Bayou are correct, each could be a Fort Walton occupation site that later, foreign people returned to, possibly after the site was empty for generations or even centuries. X-ray fluorescence analysis of samples of Fort Walton and Lamar types of sherds from Yon (Du Vernay 2011) indicated clear differences in paste between the two, supporting the idea of different manufacturing techniques associated with ethnicity and/or time.

Old Rambo Landing Mound

We add this brief note about Moore's (1907: 437) Mound near Old Rambo Landing (9Se15), to which he devoted only a couple sentences and which has had little attention since. This mound was on the east bank of the Chattahoochee 19 river miles (31 km) up from the confluence (see figure 10.2). It was circular, 20 m in diameter and 2 m high, and looted when Moore got there; he judged it to be "domiciliary" and did not mention any artifacts. A. R. Kelly's 1948 site form at the University of Georgia (UGA) said he collected plain sherds near a circular mound 15 m in diameter and 1.5 m high. Joseph Caldwell did another site form in 1953 and included a map showing a village area on the north and south sides of the mound, with the larger,

southern one labeled "Weeden Island II" and a "chipping area" identified to the southwest.

Visiting the site in 1980, White (1981a: 490–93) found huge agricultural fields, some with crops too high to see anything. The judgment then was that the mound had been plowed down but something might remain below the plow zone. A Fort Walton Incised rim and other, less-diagnostic sherds (two indeterminate incised, one fabric-impressed, many plain sand, grit, and grog tempered) were recovered, as well as six chert flakes. In 2005 we looked at the UGA artifact collection for 9Se15 and found it to contain chert, check-stamped and cob-marked pottery, and even one Chattahoochee Brushed sherd attributable to the Creeks of the late eighteenth to early nineteenth century. The materials other than this last-mentioned sherd might indicate a Late Woodland (late Weeden Island) site with typical check-stamped pottery (on the downriver side), lithic debitage, and a conical mound, either reused or kept in use by early Fort Walton people. Caution is required here not only because so little information is available but also because the confused site numbering in this part of Georgia in the 1940s and 1950s meant that different sites were often given the same number (White 1981: 24–27).

Discussion

Investigations of the sites described are still ongoing, but we have more knowledge than ever before of Apalachicola–lower Chattahoochee Valley Fort Walton and its place in the wider Mississippian sphere.

Spatial and Temporal Distinctions

The ceramic sequence is becoming clearer: check-stamped and cob-marked pottery is very early (perhaps A.D. 800–1000), holding over from late Weeden Island; both disappear in later Fort Walton. Marsh Island Incised is still a minority type but more common in middle Fort Walton; Bullen (1958b: 348) saw it decline in later levels at J-5. The Fort Walton Incised six-pointed open bowl seems unique to the region, associated with burials, and possibly appearing or lasting very late (though there are some 40 sherds of these bowls in the Perry collection from the Curlee site, which is thought to date to early–middle Fort Walton) or perhaps representing some subgroup affiliation or functional specialty. This shallow, flared-rim open soup bowl/plate shape is common in Mississippian times but with

shell temper and a round rim. Farther upriver on the lower Chattahoochee, this Mississippian shallow bowl (still grit/sand tempered) is called Columbia Incised (Blitz and Lorenz 2006: 239–40). Its manifestation with the six-pointed rim shape is, however, apparently confined to the Fort Walton region, with a shell-tempered version (Pensacola Incised) also seen very late in the sequence, often postcontact, in the Pensacola area (Harris, chapter 11, this volume). A rare variant of this vessel form is the five-pointed open bowl (e.g., at the Chipola Cutoff mound [Moore 1903: 449–51]).

A very small number of sherds of bottles or beakers are known from Fort Walton sites; these are usually classified as Fort Walton Incised. These distinctive forms are important on the Chattahoochee above the Fort Walton area. They occur mostly in mound contexts, such as at Cemochechobee mounds near Fort Gaines, Georgia (Blitz and Lorenz 2006; Schnell et al. 1981), which also produced effigy bottles. Beakers and bottles also are important southward as far as the Safety Harbor area around Tampa (Mitchem, chapter 8, this volume). Apparently nowhere in Florida has anyone recovered Mississippian-style hooded water bottles or effigy bottles like those from farther up the Chattahoochee and elsewhere across the Mississippian Southeast. Bullen (1958b: 346) noted "one or two" bottle sherds from J-5, and Moore got a stirrup-spout bottle neck from Chipola Cutoff Mound. There are up to five sherds of beakers or bottle necks (all rims of vessel openings about 6 cm in diameter) from the Curlee site (three from midden contexts, one from the disturbed cemetery, one in the Perry collection) and one sherd from Yon, as noted above.

An artifact type of interest is the ceramic mushroom, described above from the Corbin-Tucker site (figure 10.10). Three similar specimens came from Chipola Cutoff Mound; Moore called them stopper-shaped objects. He illustrated only the one with a central depression on top and an encircling line of triangular punctations around the side edge of the top (Moore 1903: 382, 386); the other two were plain. The illustrated one might be a stamp rolled along a surface to make a pattern (on ceramics, cloth, or skin?). Gardner (1966:54, 63) excavated five ceramic mushrooms from the Waddell's Mill Pond site and noted that they had been called pottery trowels, bottle stoppers, and ear plugs. He illustrated three of them, including one with an incised and punctated design on the top face that would seem to rule out use as a pottery-smoothing trowel and make it more likely an ear decoration or body stamp. Another one from Waddell's Mill Pond had a nodelike projection. These artifacts possibly had many functions, given such a variety of shapes.

Fort Walton people were clearly agricultural; maize has been recovered at several inland sites (table 10.3). Coastal and inland sites have also produced charred acorns, hickory nuts, cane, palm, wood, and fruit bits, as well as a wide array of faunal remains, indicating hunting, fishing, and shellfish collection from fresh, brackish, and marine waters (White 1982, 1994, 2000, 2005a; White et al. 2002). Inland sites such as Curlee, Yon, and Corbin-Tucker have small piles of freshwater bivalves, suggesting deposition of food garbage from one household, perhaps one meal. Up to 40 percent of the Late Woodland (late Weeden Island) sites all over the valley have such piles of freshwater shell as well (White 1981). If the sea-level data presented by Marquardt and Walker (chapter 2, this volume) are correct, the transition from Woodland into Mississippian may be marked by lower water levels that may have exposed more shellfish beds. Or perhaps increasing use of riverbanks for agricultural fields meant more harvesting of easily available mollusks (possibly a task for children while adults planted crops).

The maize remains are all from inland sites. Cob-marked pottery at Yon, in the middle valley, is the farthest-downriver evidence for farming. Below that there is no evidence but also few plant remains in general, and even fewer known sites, so the sample is biased. The picture is one of probable intensive farming inland in the upper and middle valley, coupled with a wide collection of wild resources. In the lower delta wetlands and coastal areas, subsistence continued to emphasize aquatic resources, as in earlier times. Perhaps some maize may have been brought in when the in-laws upriver came down to visit. To the west, there are reports of maize from the Choctawhatchee basin (Harris, chapter 11, this volume; Mikell 1990) and the Bottle Creek site in the Mobile delta region of coastal Alabama (Brown 2003: 22). It may have been brought in, not grown there on the swampy, low, salty coast. The Bottle Creek maize is thought to have been brought there already processed, possibly as tribute (Scarry 2003).

Many mysteries remain within Fort Walton material culture, such as the paucity of chipped stone. The 10 chert flakes (in five units, totaling 11 m^2) at Corbin-Tucker amount to an average density of one flake every 1.1 m^2 for both village and cemetery. From his Fort Walton village at J-5, Bullen (1958b: 346) got only 289 chipped stone pieces from the 450 m^2 (estimated from his fig. 10.13 map) that he dug, a density of one piece every 1.5 m^2 (though he may not have used screens). All but three of these were debitage; among the three worked fragments was a side-notched point base that must have been from an earlier time period, picked up by

Table 10.3. Maize from Fort Walton sites in the Apalachicola/lower Chattahoochee Valley

Site	Evidence	Context/Date	Reference	Comments
Omussee Creek (or Seaborn, or Columbia) mound, 1Ho27	Cob fragments, 8- or 10-row, similar to northern flints	In a feature associated with first and possibly second platform mound stage	Neuman 1961; Blitz and Lorenz 2006	Analysis by Missouri Botanical Gardens; mound is just outside Florida in S. Alabama
J-5 (Chattahoochee River #1, 8Ja8)	Kernels, cob frags. of 10-row and poss. 8-row, looks like Caribbean flints	Charcoal from Fort Walton zone C14 dated to A.D. 400±200 (= cal 2-sigma 1317–1467)	Bullen 1958; White 1981	Examined by Mangelsdorf and Galinat at Harvard
Curlee, 8Ja7	Charred cobs, Eastern 8-row, one 12-row but no popcorn or small flints	Surface collection by many local residents; one fragment washing out of midden; site date is cal 2-sigma 1168–1380	White 1982	Analysis by Missouri Botanical Gardens
Waddell's Mill Pond, 8Ja65	6 charred cobs, fragments	24 inches deep in midden next to pond/stream/cave	Gardner 1966	Never analyzed
Thick Greenbriar, 8Ja417	Kernels, cupules, cob fragments, probably 8-row, probably flint	Good context in an earlier midden dated to cal 2-sigma 1270–1430	White 2000; Rodriguez 2004	Analysis by E. Sheldon of SITE, Inc., Montgomery, Ala.
Thick Greenbriar, 8Ja417	Possible cob fragment	Good context in later midden, all Fort Walton with Spanish items (glass beads, iron spike), dated 1485 (intercept), cal 2-sigma 1420–1660	White 2000; Rodriguez 2004	Analysis by E. Sheldon of SITE, Inc., Montgomery, Ala.

Fort Walton surface collectors. When projectile points are found at Fort Walton sites, they are most often small triangles, usually called Pinellas points, ubiquitous in late prehistory but appearing as early as Late Woodland. A reason for the lack of Fort Walton chipped stone tools that has been thrown around in conversation over the years is that these people used sharpened cane or bone arrow points instead of stone. If this is indeed the case, we must ask why, when the rest of the Mississippian peoples (not to mention previous and succeeding cultures) were happy with stone points and knives. One explanation could be that this, too, was part of asserting ethnic or geographic identity.

Relationship between Fort Walton and Lamar

Though still few, the data suggest that the Lamar ceramic complex resulted from something new appearing during or after late Fort Walton. As yet we have no subsistence or other distinctions for Lamar, and one seed bead from Yon plus three radiocarbon dates from Yon and Lighthouse Bayou hardly constitute adequate proof for a late seventeenth- to early eighteenth-century date. But preliminary tabulations of lithic materials at Yon suggest there are more in Lamar levels than in earlier Fort Walton levels (Du Vernay 2011), possibly suggesting ethnic or other cultural distinctions, and other differences may emerge as more data are processed. Meanwhile, the dates from Corbin-Tucker cemetery and other sites and the mixture of Fort Walton and early Spanish artifacts at places such as Chipola Cutoff Mound and Thick Greenbriar site (Moore 1903; White 2000, 2011) suggest that Fort Walton as a cultural tradition was able to hang on into historic times.

It is tempting to imagine indigenous Fort Walton people, already characterized by their non-shell-tempered pottery and other distinctions amid the wider Mississippian world, continuing their traditional practices as long as possible in the face of large-scale disruption. They may have been decimated from the impact of European diseases that filtered in even in the absence of direct Spanish contact. These original valley inhabitants could have continued their own material culture and burial rituals in small numbers and remote places. Such a situation is not uncommon. By the early 1800s, California's Yahi Indians numbered only a few hundred, but the last one, Ishi, practiced his traditional cultural ways until he came down out of the remote hills in 1911 (Kroeber 1961). Closer to home, the

Calusa of south Florida lasted two centuries after contact (Marquardt and Walker, chapter 2, this volume).

Historic pressures may have resulted in the native Fort Walton adaptation being either replaced by or absorbed into something new when Lamar appeared. Lamar pottery appears as early as A.D. 1350 in north and east-coastal Georgia, and then in South Carolina and eastern Alabama, as well as down the Chattahoochee into southwest Georgia. But it is associated with historic Indians of many different cultures and linguistic groups, including both Muskogean speakers and the Iroquoian-speaking Cherokee (Hally 1994), as well as the Apalachee Indians of the Tallahassee-area missions. In the Apalachicola Fort Walton region, Lamar ceramics may represent the ancestral Creeks later documented there (themselves ancestral to the first Seminoles). But such an ethnic affiliation is still difficult to see archaeologically, as well as to pinpoint in time, despite all we know about Creeks in Georgia (Knight 1994; Williams 2008; Worth 2000).

An important question is why these people or even just the Lamar ceramics did not appear in northwest Florida and the corner of southwest Georgia and southeast Alabama earlier. A strong Fort Walton presence may have prevented it. Blitz and Lorenz (2006) do see a mixture of Fort Walton and Lamar ceramic types farther up the lower Chattahoochee after 1400, so movement downriver may have started this early and accelerated later. In fact, the earliest historic Indians in the Tallahassee area, as encountered by Narváez and De Soto, were probably Fort Walton peoples, who began dying off immediately as a result of early contact and were quickly replaced by groups from the north, bringing their Lamar pottery. These Lamar groups then became the Apalachee of the early 1600s who were missionized and produced Jefferson ware, which is the same as Lamar pottery. Willey (1949a: 493) noted the relationship and suggested this answer to the puzzle a half century ago but did not have associated accurate dates.

Smith (1956: 123) and others after him (e.g., Payne and Scarry 1998; Scarry 1996) suggested that Fort Walton culture represented the prehistoric and early historic Apalachee, but Brose (1990) cautioned against using the Apalachee as a model for Fort Walton when there was at least a century of radical change between the two. Marrinan (chapter 9, this volume; Marrinan and White 2007) noted the mixture in the Tallahassee area of Fort Walton and Lamar-like ceramics at sites from both contact and Mission periods and the difficulty of teasing apart what may be separate components, possibly even separate ethnic groups (even if they were in the process of merging). In the Apalachicola Valley, we do not even know

the ethnic identity of the pre-Mission- and Mission-period indigenes, not to mention the post-Mission groups, and associating ceramic series with ethnicity is always tricky (even if appealing).

Some 12 percent of the Fort Walton sites in the Apalachicola Valley have Lamar components. They are very interestingly distributed (see figure 10.1), with a cluster at the top of the river around the forks, a few in the middle valley, and a few on the barrier islands. The reason for this distribution is unknown; perhaps it relates to the quality of land for agriculture inland, the probable locations of briefly occupied mission sites around the forks, and the movement along the coast and barrier islands from European-Indian interaction during historic times. One Lamar question we continue to investigate is whether there are any pure Lamar sites, or whether Lamar materials always occur with Fort Walton. The dramatic picture of a dying people either being assisted by or taken over by their relatives from upriver can only be correct if the dates overlap. If they do not overlap, then we have an alternative scenario of natives from elsewhere moving into a completely depopulated area much later in time. We also have the question of why they waited so long to take over such rich lands or how closely they were even related to the Fort Walton people in the first place (though both made grit-tempered pots).

Fort Walton Development

At the other end of the temporal spectrum is the perennial question of Fort Walton origins. Since Willey's original description, models have been generated to characterize the emergence of Fort Walton sociopolitical systems (e.g., Brose 1984; Brose and Percy 1978; Knight 1991; Marrinan and White 2007; Milanich 1994; Scarry 1990; White 1982). Most now agree that there was no invasion of corn-carrying, temple mound–building peoples but instead a fairly seamless development from Late Woodland into the Fort Walton brand of Mississippian. The Middle and Late Woodland Weeden Island ceramics so prominent in this region are clearly ancestral in form, temper, and decoration to Fort Walton types. Maize was already being grown in Late Woodland times (Milanich 1974, 1997), so Fort Walton may represent an expansion of gardening with this productive crop into full-blown farming. Such agricultural intensification can be combined with factors ranging from population growth to influences from the wider Mississippian world to explain the emergence of more complex society here. Evidence for this was seen long ago (e.g., Bullen 1950: 124)

in the settlement shift from a pattern of late Weeden Island sites in many different ecological zones to a pattern of larger, predominantly riverbank sites during Fort Walton times, better for agriculture as well as possibly intensified communication and transportation.

Upriver from the Fort Walton area, on the upper part of the lower Chattahoochee, from about 160 river miles inland northward, Blitz and Lorenz (2002, 2006) have documented the presence of a Mississippian cultural variant named Rood, manifested at the multiple-mound centers at Rood's Landing, Singer-Moye, and Cemochechobee, as well as at several single-mound sites. Early Rood is dominated by shell-tempered ceramics, like a more typical Mississippian adaptation and unlike the contemporaneous Fort Walton archaeological culture downriver, though some small proportion of Fort Walton ceramics show up after about A.D. 1400. These researchers explain the appearance of Rood in terms of an in-migration of Mississippian peoples. But this interpretation is less important for us here than their good documentation for something else going on at the edge of the Fort Walton region that may represent real ethnic differentiation within Mississippian. The existence of Rood only strengthens the picture of a vibrant Fort Walton people maintaining their own identity but fully participating in Mississippian ceremonialism and economic/subsistence reorganization. Rood, to the north of Fort Walton, and Pensacola, to the west, are more typical Mississippian manifestations in that they are dominated by shell-tempered pottery. Pensacola may share even more than just ceramic styles (such as six-pointed bowls) with Fort Walton, in that the coastal segment of this adaptation may not have been agricultural. If people with different but related cultural traditions lived to the north and west of them, the emerging Fort Walton groups seem to have been holding their own and culturally evolving in place. In fact, Blitz and Lorenz (2002: 130–31) even suggest that Fort Walton developed in place "as a regional defensive reaction to the real or perceived threat of intrusive Rood populations on their northern frontier."

Fort Walton Political Systems

Explanations of Fort Walton sociopolitical organization are numerous; many of the models have become more and more derived and unusable. Though proposed as hypothetical, many are taken as received wisdom by subsequent researchers, instead of being tested with new data (Marrinan and White 2007). This chapter being more of a descriptive summary

of Fort Walton material culture and less of a theoretical treatise, we will not dwell on the beleaguered concept of the prehistoric "chiefdom" and whether or how Fort Walton exemplifies it in the wider Mississippian context. Blitz (2010) has recently noted how flexible, variable, and regionally diverse nearly all societies traditionally classified under the Mississippian rubric actually were. Our interpretive viewpoint is similar to what he documents for most current Mississippian studies: eclectic, emphasizing what can readily be inferred from the empirical evidence, combined with moderate use of more humanistic, less grounded speculation. We agree with Smith (1990), who called for good documentation of local Mississippian developmental sequences before we can compare them and explain culture change at a broader level.

More recently Smith (2007: xxii) suggested that the use of ideological innovations to explain Mississippian emergence might be inadequate to account for the broad range of variation across the Southeast and that little research has explored the transformation from Late Woodland to Mississippian or investigated the smaller, local chiefdoms as compared with the complex regional centers. We note throughout this chapter a great deal of continuity from Woodland to Fort Walton, in-place development out of the solid, at least horticultural late Weeden Island base. Perhaps the distinctive settlement pattern changes, from dispersed to more aggregated and concentrated along the riverbanks, reflect not only the intensification of maize agriculture but also the "corporate" organization (e.g., Smith 2007: xxviii) and community integration of the Fort Walton chiefdoms. There is so far no evidence for the development of Fort Walton out of conflict or warfare. Nor do any data support more-humanistic models attributing increasing sociopolitical complexity to the emergence of individual "agents" such as war leaders, economic leaders, "big-man" personalities, or religious specialists (e.g., Smith 2007), self-aggrandizers who are hard to discern in the archaeological record anyway.

Finally, no evidence indicates movements of people into the region or the supplanting of indigenous groups to account for Fort Walton origins, as hypothesized, for example, farther up the Chattahoochee (Blitz and Lorenz 2006) or at Etowah in north Georgia (Cobb and King 2005). Rather than new people intruding and reinventing old traditions to validate claims to power, perhaps Fort Walton politics and ceremony involved heirs of established groups strengthening leadership by continuing a long-hallowed local tradition and adding just a little new Mississippian flavor throughout Fort Walton. Near the end, when populations had become decimated or

after they had died out completely, we think new people (Lamar) did move downriver and claim some Fort Walton sites, including at least one mound (Yon), but by this historic time all Mississippian societies had been transformed into something very different.

We have discussed mostly small, local centers; Fort Walton multimound centers in this valley are rare. At Chattahoochee Landing and Pierce, many of the mounds were made sometime during the Woodland period, but the locations of these two sites, at the two most strategic spots in the valley, must have contributed to their political importance. At Cayson, in the middle valley, there may be two mounds, but one may be a burial mound, and most of the site data remain unreported. Whether having multiple-mound centers makes for a "complex chiefdom," with single-mound centers indicating only "simple chiefdoms," is a topic still worth exploring. So is the concept of mound size relating to importance of a site and the amount of power it represented (Blitz and Livingood 2004). Those who think greater size and numbers in population, architecture, or other material evidence equals greater political power should consider Florida's capital today, the small city of Tallahassee, compared with Miami, Jacksonville, or Tampa (not to mention the same situation with other state capitals).

Also argued constantly in discussions of Mississippian organization is the concept of cycling, becoming more or less complex through time as complex chiefdoms emerge and collapse "amid a regional landscape of simple chiefdoms" (Anderson 1994: 323). It can also be interpreted as continual aggregation and dispersion through time or even moving from hierarchical and stratified to more egalitarian and ranked societies. Complexity is often taken to mean levels of hierarchy, as represented by mounds. But we still do not know how hierarchical or economically stratified any Mississippian societies were.

If fisher-foragers of south Florida such as the Calusa were organized in real, tributary, but nonagricultural chiefdoms (e.g., Marquardt and Walker, chapter 2, this volume) and historic north-central Florida peoples with nondescript archaeological evidence were historically documented as complex societies (Worth, chapter 7, this volume), certainly more-sedentary farmers far northwest of these groups and closer to Mississippian heartlands of the Southeast were complex chiefdoms. But how much of the hierarchy was due to social ranking and how much to real economic difference? These are tricky issues to test with material data. Possibly only skeletal analyses showing that some people were beaten, sacrificed, or starved and that others were not could demonstrate such stratification.

Coercion versus persuasive organization versus willing aggregation are not easy to distinguish in the archaeological record, and dominance can be achieved with radically different strategies (e.g., Beck 2003, 2006). Not all leadership is hierarchical, either, and political power can be held by many different kinds of leaders (Sullivan 2001, 2006). There is a huge Western bias at work in inferring that hierarchical and centralized organization was needed to accomplish mound building or other major works; and heterarchy or other kinds of horizontal, cross-cutting social divisions are now recognized as equally possible (Blitz 2010: 4–6). Whatever status was associated with Fort Walton elite grave goods, it seems to have been available to women as well as men, as seen at the Corbin-Tucker site, as well as at Lake Jackson and possibly other Fort Walton sites (Marrinan, chapter 9, this volume; Shahramfar 2008). Because at so many traditional Mississippian sites adult males are more often buried in mounds and with prestige goods than are adult females (Blitz 2010: 17), perhaps some kind of honored status for women is another distinguishing characteristic of Fort Walton (though what fancy perishables might have been placed in graves remains unknown). The existence of hereditary positions as indicated by wealth items buried with children is less easy to confirm, due to both a lack of evidence and some logical difficulty with this explanation.

Change through time in Mississippi-period chiefdoms has been related to environment, subsistence, politics, social evolution, mortuary practices, ideology, and a host of other factors. Issues of agency and political leadership are currently prominent, if difficult to document archaeologically (e.g., Butler and Welch 2006). But to infer cycling or any other diachronic picture, we need tightly dated sites (to see whether they are contemporaneous or sequential), clear inter- and intrasite settlement patterns, and a host of other information yet to be obtained. Plus we need to examine assumptions. While some rising and falling of Mississippian chiefdoms certainly seems to be prehistoric, there is far more evidence in historic times for this kind of sociopolitical fragmentation, traceable in large part to the disruption induced by the European invasion. Finally, concerning mound size and site complexity, we challenge the perceived wisdom to suggest that conflict and constant competition for resources and political limelight may not have been the most important things in Fort Walton daily life. If constructing new mounds or adding new stages to existing mounds, making them bigger, took place every time there was regime change (e.g., Anderson 1994; Hally 1996), then smaller/fewer mounds may mean not less complexity but more stability! Smaller or fewer mound centers might even

have meant less competition and a more peaceful existence. In the rich Apalachicola/lower Chattahoochee Valley, there may have been little competition for the abundant resources. There is a decided lack of evidence for fortifications at Fort Walton sites. Though this might be due to the lack of large-scale excavations that might uncover such features, it might also be because the conflict or threats that characterized Mississippian elsewhere in the South were minimal here.

There has been in the literature the notion that late Fort Walton sites are absent from the Apalachicola Valley and early Fort Walton sites are absent from the Tallahassee Hills area to the east (see Marrinan, chapter 9, this volume). Coupled with the prominence of the Lake Jackson site in the latter area, this has led some (Brose 1984; Knight 1991; Payne and Scarry 1998; Scarry 1990, 1994; Tesar 1980) to hypothesize a late prehistoric "segmentation" of Fort Walton, with one segment then moving eastward and becoming more complex in Tallahassee. Knight (1991) suggested that the Apalachicola Valley was overpopulated but that this never led to developing more than simple chiefdoms, while Lake Jackson was a complex chiefdom that emerged when colonies of people migrated eastward from Apalachicola because of demographic pressure. Scarry (1994: 169) said that farmland was limited in the Apalachicola Valley but not in the Tallahassee area, where land was more productive and could support larger populations. Payne and Scarry (1998: 42–44) derive the historic Apalachee Indians from these hypothesized later prehistoric movements of people eastward and partly base their analysis upon numbers of sites, ignoring site sizes and what aggregation into chiefdoms might have meant. None of these scenarios has ever been supported by the data, nor have any means of testing them been determined. There is no documentation of demographic pressure or of any shortage of resources or good farmland in the rich Apalachicola Valley. Several late Fort Walton sites are now known, including some with postcontact and Mission-period dates, as noted above. The hypothesis of early postcontact depopulation here makes better sense than the explanation that late prehistoric natives were just moving eastward in droves for no demonstrated reason.

Meanwhile, the valley's abundant, yet differentially distributed, resources could make other areas of investigation more productive. For example, examining the relationship between inland riverine sites and their coastal/estuarine counterparts has the potential to show differing social organization and economic strategies on the part of societies producing the same material culture. For coastal people, the avoidance of sedentism

and farming life need not have meant less complexity or any less economic interaction along waterways, but perhaps more mobility and seasonality.

In sum, the material record suggests that Fort Walton is clearly a Mississippian culture but with great regional distinctiveness. No techno-functional or environmental reasons can be postulated for preferring non-shell-tempered ceramics or using far fewer chipped stone tools than anyone else or having distinctive bowls or other aspects of material culture different from mainstream Mississippian (whatever that might be!). The explanation has to lie in the realm of regional identity, possibly long-standing participation in communal traditions established in Woodland times, even while they were being gradually transformed in the light of Mississippian influences from the outside. Meanwhile, although we would love to picture peaceful folks organized into sociopolitical entities headed by chiefs who were sisters and cousins, nicely and profitably interacting with friends in other cultures upriver and relatives downriver in the coastal wetlands and coordinating with other clan matriarchs the communal building of some mound centers that lasted for centuries, we are some distance from producing testable hypotheses for such speculation.

But coast-inland cultural differences and economic interaction are important research issues, not only within the region but also possibly to explain relationships with the wider Mississippian world. The Apalachicola delta coast and barrier islands, especially St. Joseph Bay, were prime locations for harvesting large gastropods, especially *Busycon sinistrum*, the left-handed or lightning whelk. While coastal Fort Walton people were apparently eating these and making expedient tools from the shells (White 2005a), the lack of evidence that they used them for fancier things may mean they were trading them far into the continent to be used for the elaborate Mississippian ceremonial items so famous in the SECC. This is what Mitchem (chapter 8, this volume) and others have suggested for Safety Harbor and other Florida Mississippi-period groups. The hypothesis of shell movement might be investigated relatively easily with some trace element analyses. Within the Apalachicola–lower Chattahoochee region, perhaps coastal people were sending up Gulf shell and yaupon holly for black drink in return for maize from Fort Walton groups in the interior, who themselves made a few shell tools but sent most of the big shells farther along. These prehistoric lifeways involving interregional interaction while keeping intraregional cohesion may have been so successful that they continued for a while in the face of massive depopulation and change. The demise of Fort Walton must have come a couple centuries after Old

World invaders arrived and began the disruptive processes that caused other aboriginal peoples to move southward into Fort Walton lands and change the landscape and the lifeways forever.

Acknowledgments

For comments on this chapter we thank other contributors and reviewers, especially Rochelle Marrinan. Du Vernay appreciates grants for the Yon mound and village research from the Florida Archaeological Council (Griffin Award) and Sigma Xi and thanks Steven Fernandez for assistance in producing the Yon site map.