

## Archaeology, History, Fluvial Geomorphology, and the Mystery Mounds of Northwest Florida

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*Abstract. A mysterious mound in the forested wilderness between the Apalachicola and Chipola Rivers in northwest Florida was recorded in 1979 and eluded explanation for nearly two decades. Local collectors called it an Indian mound, though one reported iron spikes, suggesting a post-contact age. It was long and flat-topped, with what appeared to be large old potholes. After several visits, it was discovered that there were two such mounds, on opposite sides of a creek meander. Small tests produced no artifacts until two prehistoric potsherds and an iron fragment were recovered in 1990. Meanwhile, the site was published as a Fort Walton temple mound center. Further investigation included bringing in specialists in soils, geomorphology, and forestry, to rule out natural origins or a historic logging function. Research in land records and oral tradition finally led to a local historian, who said the "mounds" were Confederate gun batteries. Since they are a mile from the riverbank, this did not make sense. Then documentation was found of the Civil War construction, use, and abandonment of Batteries Gilmer and Cobb from 1862-1864, and also a map demonstrating that the creek had been the main channel of the Apalachicola River before Confederate obstructions shifted it to the present channel. Investigations in 1997-98 included mapping the mounds, recovery of representative artifacts, and location of the river obstructions. Interesting aspects of the project concern the intersection of archaeology and history and of human action and fluvial geomorphology, as well as the conservation and loss of knowledge, and the crucial need for reliable field data for scientific model building.*

This is the story of field and archival investigation that was begun just to understand a site and record it correctly. No hypothesis testing comes in until later, but this is often how most science really is done. Sabloff (1992:267) has reminded us that most archaeologists are still doing culture history; it is the required foundation for everything else. To establish this foundation, one needs a conservative attitude about the data until they are solid enough for model building and speculation, which may not happen quickly. In this research project, the fragments came together and reliable answers were achieved after a long quest to solve a fascinating mystery.

The mounds recorded as 8Gu14 and 8Gu94 are located in northwest Florida's lower Apalachicola Valley, within the ten-mile-long "Cutoff Island" formed by the Chipola River with its mouth and its cutoff channel into

the Apalachicola (Figure 1). The mounds' remoteness has always made investigation difficult, and it was only in the 1990s that their identities became known. The 1998 Apalachicola Valley Remote Areas Archaeological Survey made possible more field study of these sites and discovery of many avenues for further research. The project final report (White 1999) describes all work, recovered materials, and data. Here we summarize the account of the search for the sites' origins, the documentation and interpretation, and further, the insights gained for archaeology, history, and geomorphology, not to mention the puzzle of lost historical knowledge and the process of scientific modeling.

### Environmental and Cultural Background

The Apalachicola delta of northwest Florida (Figure 1) is a region of few towns and vast stretches of bottomland forest. The Flint River, which originates near Atlanta, and the Chattahoochee, coming from the north Georgia mountains, meet at the Georgia border to form the Apalachicola, which then flows 107 river miles (172 km) to the Gulf of Mexico. The largest tributary of the Apalachicola is the Chipola River, which originates in southeast Alabama and flows south into the main channel of the Apalachicola River at navigation mile 28 (28

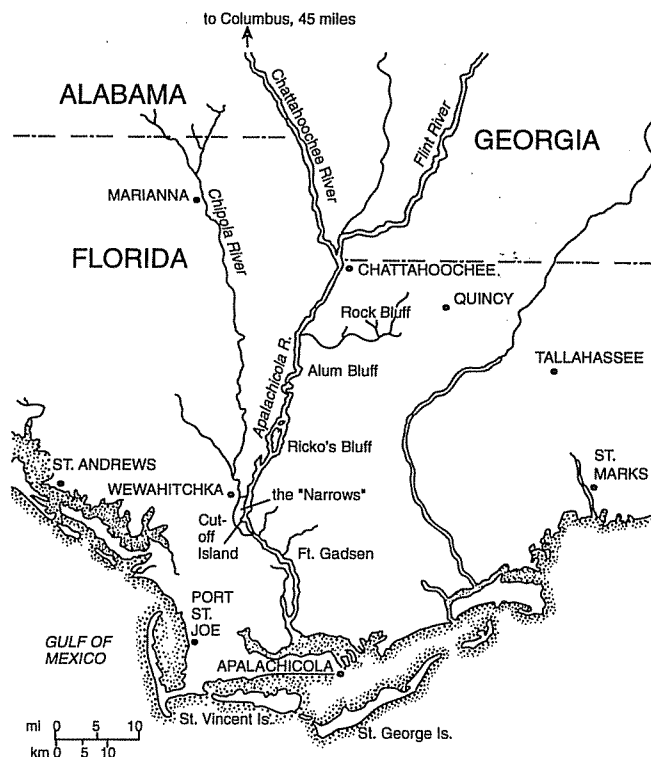


Figure 1. The Apalachicola-Lower Chattahoochee River system (adapted from Turner 1988:4).

miles [45 km] up from the mouth at Apalachicola Bay and the Gulf of Mexico, at the city of Apalachicola). But upstream some 14 miles (23 km) from its confluence with the larger river, the Chipola has formed another channel, called the Chipola Cutoff, that flows into the Apalachicola at river mile 42. Below this is the "Cutoff Island," a stretch of swamp forest surrounded by the waters of these major streams and very difficult of access. The occasional human traffic within the 20 square miles (about 50 km<sup>2</sup>) of the cutoff island is usually for the purposes of hunting and fishing in the fall/early winter dry season.

Several smaller, intermittent creeks flow within the Chipola Cutoff Island, including one named Virginia Cut (Figure 2). At some spots along the west bank of the Apalachicola, including the north end of this creek, there are huge piles of dredging spoils from the river. The spoil piles appear as weird hills of pale sand reaching heights of 10-15 meters. Sometimes they have some weed growth as they get spread out and erode back down into the river (so as to be dredged up again). Other than spoil piles and the rare dilapidated hunting cabin or houseboat, there is nothing else along the lower stretches of the Apalachicola but typical hardwood bottomland forest—oaks, tupelo, bay, sweetgum, some water maples and cypresses in the wetter areas. Wetland shrubs, poison ivy, and thorny greenbrier carpet the ground and form high vine canopies that make general passage through the terrain less than swift. In autumn the land is fairly solid and the vegetation dies back. Winter in this region is the rainy season, with high water conditions reached along the floodplain by late February.

The Apalachicola Valley has a rich archaeological record, especially in Woodland and Mississippian (Fort Walton) mound sites, as first documented by C. B. Moore (1903) nearly a century ago (Brose and White 1999; Willey 1949). The many burial mounds, shell middens, and later temple mound centers, villages, and cemeteries reflect dense aboriginal populations and the evolution of late prehistoric chiefdoms similar to those elsewhere in the Southeast (White 1985, 1994). Little is known of the region at the time of the Spanish entrada, though one Fort Walton mound on the Chipola Cutoff channel produced European artifacts (Moore 1903:445-466). Fifty miles (80 km) to the east, in Tallahassee, the historic Apalachee Indians are well documented during the earliest historic period. But the Apalachicola Valley's original natives apparently were wiped out quickly, and there are few records (White n.d.) even in the mission period of the seventeenth century. Later, Lower Creek peoples moved south into this depopulated land and evolved into the groups known as Seminoles.

Only a few non-aboriginal homesteaders lived in the rural interior areas of the delta during the eighteenth and nineteenth centuries, but brisk commerce and so-

cial interaction were carried on at the port towns on the coast, such as Apalachicola and Port St. Joe. Cotton and other crops, lumber, fish, and honey, were brought in to market. By the time of the Civil War, the city of Apalachicola was very important for the transport of cotton and other products shipped along the great Chattahoochee-Apalachicola river system. Confederate forces sought to fortify the river to defend against Union intrusions, while the Union navy blockaded Apalachicola Bay. After the war, commerce never resumed at the same pace. Timber and turpentine industries dominated until after World War II, when trees began to be processed for pulp and paper mills. The recent economic climate has slowed this industry and the threat of development, even "Disneyfication," hangs over the beautiful wilderness, though much of the land is now part of reserves such as the Apalachicola National Estuarine Research Reserve (ANERR) and Florida's Apalachicola River Wildlife and Environmental Area.

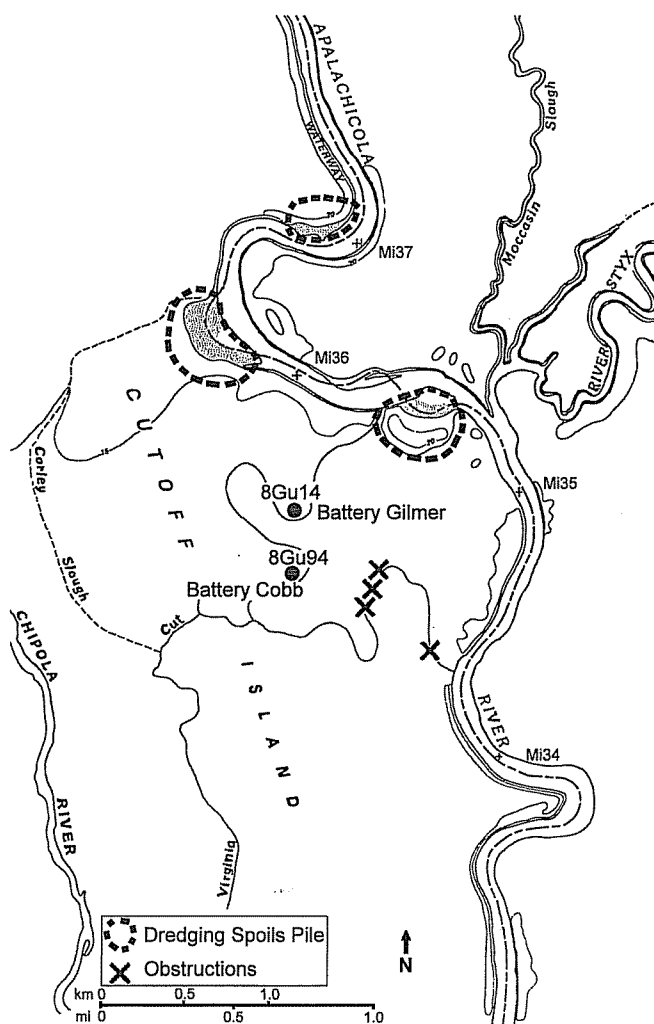


Figure 2. Location of Batteries Cobb (8Gu94) and Gilmer (8Gu14) shown on USGS 7.5 minute quadrangle, Wewahitchka, Fla., 1990.

*Research Narrative: History of Investigations*

*Discovery and Lack of Evidence.* In May 1979, Calvin Jones and Randy Daniel, archaeologists with the Florida Division of Archives, History, and Records Management (now the Division of Historical Resources, DHR), recorded a mound deep in the forest of the Chipola Cut-off Island, on the bank of Virginia Cut creek. An informant reported large iron spikes and nails, leading Jones to speculate that the site was a contact-period Fort Walton mound, perhaps from the time of de Soto. The site was named the Jones-Daniel Mound, 8Gu14. Jones's sketch map showed it as flat-topped, 4 m high and 35 m long, oriented east-west, and with a cover of large old hardwood trees, some of which were growing in the bottom of two old excavations on the north side. The size and the two large apparent potholes suggested that the mound might be one of C. B. Moore's, though Moore did not indicate any site in this location. Jones excavated two test units, his typical "CJ holes" measuring 1 m x 0.5 m. These were taken to depths of 1.5 m and 1 m, respectively, and produced no cultural material. The soil was very sandy. He also found no evidence of an accompanying prehistoric village between the mound and the river or the nearby creek, where he noted the saturated soil at this time of the year.

The site number, 8Gu14, says something about archaeological knowledge of Gulf County a mere two decades ago—it was only the fourteenth recorded site at a time when the Florida Site File listed thousands for more populated counties. By the 1980s, White had embarked upon a research program in Apalachicola Valley archaeology. During a 1986 summer survey in the Chipola drainage with University of South Florida (USF) field school students, a helpful resident of the town of Wewahitchka took the crew to a site that he thought was a prehistoric Indian mound. The trek began by boat, traveling downriver six miles, then hiking for an hour into dense forest. The location corresponded with that recorded for 8Gu14. It was a mound with some potholes, but no indication that it was an archaeological site; no cultural materials or midden soils were encountered on the surface or in a 50 x 50 cm shovel test. The mound was not rectangular, but sinuous, almost banana-shaped. White's sketch map shows it had three high spots, was wider at the southwesterly end, and measured roughly 50 m long, oriented northeast-southwest. The large depressions could have been excavated by Moore, but they were sloping off the sides instead of in the center, which would be more typical of his work. Only years later was it realized that in 1986 we had not seen the Jones-Daniel mound (8Gu14) but were actually at a second mound, later designated 8Gu94.

Meanwhile, John Scarry and Claudine Payne, modeling late prehistoric Fort Walton political systems along the Apalachicola in a 1982 paper, included the Jones-Daniel mound in their map of the valley's temple

mounds, and used the site when inferring chiefdom boundaries. The size of the chiefdoms (or "polities") was determined by the size of their mounds. Jones's 1979 sketch had shown a fairly small mound and the site form was labeled "Fort Walton?" and indicated there were no artifacts. But the Jones-Daniel temple mound was placed in the center of a small polity in this valley (Scarry and Payne 1982). In the revised, published version of the paper, it was described as a "subordinate center," but was not pictured with chiefdom boundaries on the map and not included in the computer simulation and analysis (Scarry and Payne 1986).

*Prehistoric Materials.* The Jones-Daniel mound also was published as a Fort Walton temple mound center in a work on the emergence of Mississippian chiefdoms (Scarry 1990:229) in the same year that Jones and White renewed investigation at the site. Jones sketched the mound again, showing its long axis running southwest-northeast, and at least three large sloping potholes. A 0.5 m x 1.5 m test was excavated on the southeast corner of the summit where the mound looked the least disturbed. Soils were screened through a quarter-inch mesh. The excavation was taken to 110 cm depth, then cored with a 1" diameter soil probe to 2.75 m. Soils continued to be very pale brown sands until 2.30 m deep, where the sand became more orange. From the top 30 cm were recovered two very small sand-tempered plain aboriginal potsherds, and at 72 cm depth Jones noted a small rectangular iron fragment. Another test into the flat, surrounding bottomland some 200 m from the mound, seeking the village presumably associated with this prehistoric center, produced nothing (White 1998:Figure 1).

The prehistoric sherds were too shallow, too few, and too late in coming to be convincing. They should have been classified within the type "red herring," since they were a false lead whose pursuit led in directions that hindered proper identification of the site. While Jones held out for some kind of cultural origin, White thought the mound was a natural erosional remnant, or an unusual historic site. A prehistoric mound center in this valley should have produced far more cultural material. After this field trip, Jones's comparison of his new sketch map with his 1979 map made it clear that there were two different mounds. A 1993 visit during the season of high water allowed White to visit the first one, 8Gu14, and excavate three tests. One was an expansion of Jones's 1979 cm unit on the east side of the summit to 2.5 m long. The others were 50 x 50 cm shovel tests in the center and southwest summit. A test in the center had 5 cm of dark brown topsoil overlying 60 cm of reddish clayey coarse, grainy sand, below which was pale yellowish brown sand extending over a meter deep. At the west end, testing disclosed 13 cm of grayish brown topsoil overlying the pale sand. Clearly the reddish soil was some kind of unusual material localized in the cen-

ter of the summit; soil samples were taken. All soils were screened, but no cultural materials were found. On the northwest side of the summit was a fallen piece of fencing, three large wire nails, and a large staple. These later proved to be of unknown, but recent, origin. Meanwhile, granulometric and other analyses of mound soil samples indicated that they were not typical for this low-lying swampland.

*Historical Evidence.* In February 1994, both mounds were visited in the same trip. At the second one, recorded as 8Gu94, a 1 x 0.5 m test was excavated into the summit on the northeast end. Nothing was recovered in the first meter, after which we cored into the bottom another 1.5 meters, this time with a 4 inch bucket auger. A single iron fragment (probably a nail) was recovered at a depth of 241 cm. Jones dug another test measuring 50 x 150 cm into the side of the central "pothole" of the mound (Figure 3). Within the top 165 cm (as measured from the top of the mound; or 85 cm below the surface of the pothole) he recovered a blue transfer-print whiteware sherd, cut nails, and metal flakes. The soil was the same orange coarse sand as seen at 8Gu14. Coring to 350 cm below the top of the mound, we encountered wood fragments and powdery whitish soil that could have been ash.

These operations indicated that the mounds probably were historic, but of unknown function. During succeeding field seasons elsewhere in the valley, White conferred with a forestry expert regarding traditional timber management practices, but these did not include raising mounds of dirt for any purpose.

During the 1996 field season, the mounds were revisited in the course of investigating impacts to archaeological sites resulting from the record 1994 flood in northwest Florida (White 1996). The two experts in soils science and geomorphology were persuaded to visit the sites. Reopening Jones's original 1979 test at Gu14 and



Figure 3. Calvin Jones excavating test into side of "pothole" (gun platform) of Battery Cobb, 8Gu94, in 1994; view facing south.

the 1990 test at Gu94, they determined that the mounds definitely were artificial. There was little indication of how the sand got there, only the certainty that it was not naturally occurring soil for this swampland location.

*Identity Discovered.* Having eliminated the impossible, whatever was left, however improbable, had to be the answer, i.e., that the mounds were historic. Therefore, we examined local tax records, even though it was thought that the land was always state-owned. In July 1996, White arrived at the Gulf County Courthouse realizing that the entire Chipola Cutoff Island had never been surveyed into sections; this presents serious difficulties when researching many types of official documents. The courthouse receptionist advised seeking help from a distinguished elderly gentleman working independently in the office. George Core had been clerk of county court for 50 years until his recent retirement, and now conducts various kinds of historical research and writing on people, places, and events in Gulf County. He knew the history of many archaeological and historic sites, even old, hidden moonshine stills. He did not even have to look at the maps, but knew about the mounds instantly. He said: "I played on those mounds when I was a boy. They're Confederate gun emplacements."

Core related how he learned of the mounds when he was about nine or ten, from a man now long dead. Around 1940, he thought, someone tried to remove a cannon that had been left on one of the mounds. It had slipped down into the mud and gotten buried, and supposedly was still in there somewhere. But one question he could not answer was why Civil War fortifications were placed so deep in the swamp. How could artillery shells be shot through a mile of forest to attack the enemy on the river? Perhaps they cut a wide sighting line to aim through? It did not make sense, but at least it was likely to be documented. On various Civil War maps, however, nothing appeared in the area. Further, archival maps did not resemble the modern map in fluvial configuration, and it was hard to determine where our sites were located on them.

Finally, in 1997, Knetsch located not only official war records detailing the planning, construction, maintenance, and demise of the defensive mounds, but also a map showing their locations. We had the answer for why the mounds were so far from the riverbank: they weren't. They were constructed right on the bank, to defend against any invading Union boats. Then obstructions were placed in the river below them so that the intruding enemy would have to stop and could be attacked. The obstructions caused the river itself to move; the main channel at that time had been what was now Virginia Cut. The gun emplacement mounds had been built over a wooden trestle constructed 265 miles upriver in Columbus, Georgia. Sand to cover this struc-

ture was brought in from about 14 miles upriver, accounting for its unnatural appearance in the swamp. In place by 1863, these two defensive works were occupied by Confederate troops for about a year and a half, then abandoned by 13 July, 1864. They were named Battery Cobb (8Gu14) and Battery Gilmer (Gu94), and had had two and three cannons, respectively. Their story, as gleaned from Civil War documents, was very dramatic.

### *Historical Background*

*1861-62: Blockade and Defense.* The Apalachicola River was of enormous strategic importance for Florida and the Confederacy during the Civil War, as it provided a transportation route deep into the interior of the South, to Columbus, Georgia (Figure 1). The city of Apalachicola was not prepared for defense when it became the first Florida port to be blockaded in 1861 (Taylor 1995:36). Some blockade runners were successful, especially because they could use the many small creeks, remote and hidden tributaries and distributaries running through the river swamps. Also, the Union ships were too large to get far up into silted-in Apalachicola Bay (Rogers 1986:51-65).

The city erected a small defensive battery, which was soon moved to St. Vincent Island, then back again (Johns 1963:57). Governor John Milton asked the Confederate government to help defend the city, but most Florida troops were needed in Tennessee (U.S. War Department [USWD] 1882, VI:354-356, 393-398). By May 1862, the situation along the river had been investigated and the recommendation was made to install a battery at old Fort Gadsden, a remnant of the Seminole Indian wars some 40 years earlier. Instead, guns were sent to Ricco's (or Ricko's) Bluff, at river mile 57, when the beleaguered city of Apalachicola was no longer defensible. Ricco's Bluff was on a sharp bend in the river, which would bring any Union vessels within short range of the guns. It also was considered to be in a healthier environment (USWD 1901, VI:413 and XIV:547-548).

Some citizens of Apalachicola attempted to follow the troops to Ricco's Bluff, but most scattered into the forest, leaving behind about 500 souls, mostly slaves and poor women and children, and including some individuals who aided the enemy's blockading fleet by supplying information and supplies (Buker 1993:35; Johns 1963:72; Rogers 1986:67; Willoughby 1985:9-10, 1999:84-86). On April 2, 1862, a small Union detachment took a few vessels in the river and declared the city of Apalachicola captured. Union forces occupied the city long enough to raise their flag and warn against sympathy for the Confederacy, then departed within 36 hours (Rogers 1986:67-69; Willoughby 1999:87). Apalachicola never was occupied permanently or controlled by either Union or Confederate forces, but this

temporary action alarmed the people of the lower Chattahoochee Valley, who began demanding defenses (Johns 1963:72, 116).

The entire river system was a vital artery for commerce, connecting crucial segments of the network that spanned the Atlantic to encompass the largest cotton consumers, the English mills and importers and their New York branch offices (Rogers 1986; Willoughby 1993:6-9, 1999:87). Though often blind to its importance, the Confederacy needed Florida's crucial contribution to the exports that paid for desperately needed arms and equipment from the factories of Europe (Taylor 1995:30).

The obstacles placed in the Apalachicola River were a major bone of contention between the State and Confederate governments. A Confederate engineer investigated Ricco's Bluff and other defenses, found them inadequate, and advised the placement of obstructions at Fort Gadsden, 20 river miles upstream from Apalachicola, or else at "the Narrows," another 15 miles upriver (Rogers 1986:72; Hillhouse 1992:28-29; Willoughby 1999:89-91). Governor Milton opposed the construction of obstacles because of the need to move troops along the river and to keep it navigable, but he did argue for more gun batteries (USWD 1901, LII:357-358). On November 11, 1862, Milton wrote to President Jefferson Davis, "It has been proposed to sink permanent obstructions in Apalachicola River. The object accomplished would be the destruction of Apalachicola as a commercial port for the prosperity of Columbus, Ga. ...Florida will submit gracefully to any sacrifice necessary to the high purposes of the Confederacy, but will resist to the bitter end speculation for the benefit of other localities by the sacrifice of the rights of the State." If the obstacles must be placed in the river, he continued, the Confederate government must assign a competent engineer and then pay for their removal at the end of hostilities (USWD 1901, LII:267-68). The governor had his way with the issue when the task was assigned to Captain Theodore Moreno of the Engineer Corps (Hillhouse 1992:28-29, 32; USWD 1901, XIV:686-687).

By the end of November 1862, Georgian Howell T. Cobb, commanding the Department of Middle Florida, was instructed to defend the Apalachicola. On December 3, Cobb wrote that there was great apprehension that the Union troops would soon be moving up the river to capture Columbus. "The importance of holding Southwestern Georgia cannot be over-estimated," he observed. "It is the only section of our State which was blessed with good crops this year and is now looked to for supplies both of corn and bacon." He also said that the crops of Middle Florida were good that year too, and the coast was producing over 2,000 bushels of salt to ship northward to the armies in the field. Therefore it was imperative to halt any invasion (USWD 1901, XIV:696-697, 703-704).

Captain Moreno was to build obstructions and gun batteries on the river at Fort Gaines, at Rock Bluff, and, "At the Narrows, at Fulton's Bend, on the Apalachicola" (USWD 1901, XIV:707-709). On December 22, Cobb wrote, "...the points selected by Captain Moreno and approved by the commanding general were the best that could be occupied. The most important of these points was the one in the Narrows, about 90 miles below the junction of the Chattahoochee and Flint Rivers. At that point the channel is narrow, and on both sides of the river, extending several miles in the interior, there is a swamp, which cannot be traversed by infantry." In his opinion, the Narrows obstructions constituted the "main defense of the river." The only drawback to the site was the need to keep river transportation to it open because that was the only means of supplying these fortifications. Yet, Cobb stated: "The position of the Narrows is in every respect the important one, and its defense should be made as complete as possible. I have therefore directed Captain Moreno to place there three 32-pounders, and with the approval of the commanding general I would as soon as possible erect another battery bearing upon the channel of the river at the same point. In these two batteries I should place the best and heaviest guns that could be had and concentrate as far as practicable our defense of the river at that point" (USWD 1901, XIV:728-731). An enclosure with the letter describes construction techniques:

"The plan decided on for mounting them [the guns] is to prepare suitable timber frame work at Columbus (which can be speedily done), take them down and mount the guns (three), and then fill in with sand, as is done in the trestle work on railroads. This is regarded as the speediest way of getting them in position on account of the great difficulty in getting sand enough (14 miles distant) for immediately elevating the whole battery. Lumber, carpenters, and materials are promptly available only at Columbus. We beg you to urge on Governor Milton to press forward to that point 50 negroes immediately, with overseers, to go on with necessary work. We left 50 negroes there already at work and a detachment of about 20 men from Alum Bluff" (USWD 1901, XIV:731-732).

This plan was approved and the work finished before the beginning of the year. The batteries were named after Cobb and Major-General J.F. Gilmer, the next-ranking officer (Nulty 1990:80-83).

1863: *Batteries Cobb and Gilmer*. One major problem with the location of these defenses was the environment. On July 10, 1863, Cobb reported that the health of the troops on duty was particularly bad, so much so that he feared he would have to abandon the post almost entirely during the summer and fall. He said, "At the Narrows, I shall, during the sickly season, only keep such a guard as will protect the place, and shall put troops at a more healthy point, from which they can easily be carried in the event of an attack to the batteries" (USWD 1901, XXVIII:189-190).

By October 3, 1863, word had reached the city of Apalachicola that the Confederate Army had obstructed

the main channel. There were also plans to place obstructions in the two main tributaries, Moccasin Creek and Virginia River, which might offer Union vessels a means of circumventing the existing obstructions. The Florida governor and leading citizens protested that obstructions of the tributaries would cut off Apalachicola's supply routes and starve the people, and that even the existing obstruction on the main river was useless since the enemy's very lightest boats could not even make it over the mudflats of Apalachicola Bay (USWD 1901, XXVIII, Part 2:389-390). Governor Milton continued to note that the real reasons behind the existing and planned obstructions were the selfish motives of Georgia and Alabama to aid commerce rather than to perfect military defenses (USWD 1901, LIII:299). The criticism drew official responses arguing for more obstructions in the smaller streams, including a letter from Colonel D. B. Harris, Chief Engineer for the Military District, which was accompanied by the map in Figure 4. Harris said, "...it is evident that if Moccasin Creek is not obstructed, the batteries and obstructions of the

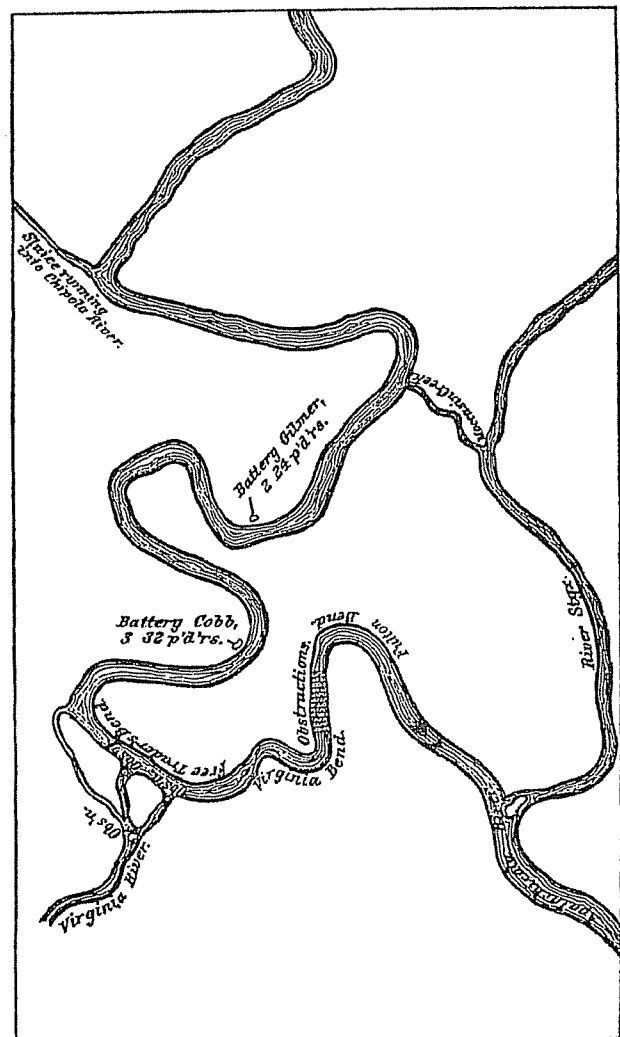


Figure 4. 1863 map of the gun batteries and river obstructions (adapted from USWD 1901, XXVIII, Part 2:425).

Apalachicola will prove useless for purposes of defense, and a mere waste of time and material and money...The sketch of the river, made from the deck of a steamboat, will show the passage through Moccasin Creek and that through the sluices of Free Trader's Bend. There is another and a much longer route through Gum Swamp, but at this stage of the water a small open boat can hardly pass through it, and it would take a great deal of work to take a steamboat through it in a freshet. This swamp is 6 miles long...the caliber of our largest (32-pounders) is so small, and the range down the river so long, that we may be shelled out of our works without being able to reach the enemy with our shot..." (USWD 1901, XXVIII, Part 2:423-425).

On November 16, 1863, Major M. Stanley, Chief of Artillery, Department of West Florida, reported the progress and state of the defenses of the Apalachicola, providing the most extensive description of our sites:

...The defenses at the obstructions consist of the obstructions themselves and of two earthworks; the obstructions, of wooden piles locked together, chains stretched across the divers, and a sunken hulk, all covered with drift-wood, and presenting a formidable obstacle to any enemy attempting to ascend the river. The lower earthwork stands upon a low, flat bank, 600 or 700 yards from the obstructions, and mounts three 32-pounders separated from each other by traverses, under which are the magazines. The guns are mounted en barbette, and, having a traverse of not more than 30, do not command the rear and flanks. The rear is entirely unprotected by a parapet...The upper battery is 600 or 700 yards from the lower, stands on like ground, and is in all respects similarly constructed. It mounts two 24-pounder guns, which command the lower battery, but not the obstructions, a dense forest intervening. One of the guns is mounted on a 32-pounder carriage...I cannot close this portion of my report without calling the attention of the general commanding to the unfortunate position of the defense at the obstructions. Our only communication with them is by water, the banks consisting for miles in every direction of impenetrable swamps. It is possible for an enterprising enemy, with small boats, to gain the rear of our position through creeks which flow out above and re-enter the river below, and this cuts off our only communication, and we have no armed vessels with which to dislodge him. Indeed, it is possible for such an enemy to take the upper battery in the rear, and turn its guns upon the lower one, while the guns of the latter do not command the former. It is said that one of the superintendents in the construction of the defenses is now with the enemy, and is thoroughly acquainted with the whole position (USWD 1901, XXVIII, Part 2:506-509).

*1864-65: The End.* Although reported as having two 24-pounders, the "upper battery," according a monthly report for May 3, 1864, had been modified to include one 24-pounder and one 32-pounder, making the entire fortifications the strongest along the river. As the Union forces advanced through Mississippi and Alabama, however, the main threat to Columbus and its manufacturing came not from the south, via the river, but overland from the west (Willoughby 1999:99). The changing military situation necessitated a rethinking of the strategy of defending the Apalachicola River. In reporting on the conditions at Batteries Cobb and Gilmer, on July 12, 1864, Major G.U. Mayo, Assistant Inspector of Artillery for the Department of South Carolina, Geor-

gia, and Florida, noted the following: "Fort Cobb: On the Apalachicola River, just above the obstructions, so that it can be easily flanked. The post is to be abandoned and a company goes tomorrow, 13th instant, to remove the armament, three 32-pounders and two 24-pounders. The carriages need repairing and paint to preserve them. The ammunition there is, with few exceptions, in good order, but the battery is not, and has not been for months, in condition to resist even a feeble attack. ...The magazine is badly constructed, and the way in which it is kept reflects no credit upon the ordnance officer of the district" (USWD 1901, XXXV, Part 2:584-587).

Though unhealthy and poorly maintained, these fortifications on the Narrows were part of a larger system for the Apalachicola-Chattahoochee Rivers that comprised the first line of defense against Union raids into Georgia. This military strategy was accomplished with very few troops and few pieces of hardware, since both were more desperately needed by the armies fighting to the north (Scharf 1887; Turner 1974, 1988). Milton's estimation that the obstructions would stop all river traffic, however, was ultimately proven wrong. In January 1865 the Federals moved inland from St. Andrews Bay eastward, by way of smaller creeks and then hauling a cutter overland in a wagon to the Chipola River, through which they entered the Apalachicola above the obstructions. They attacked Ricko's Bluff and other places and then moved downstream to capture some men at Fort Gadsden, somehow easily circumventing the obstructions along the way (Rogers 1986:84). The new path of the Apalachicola through the former Moccasin Creek was apparently already in effect.

After the small Confederate victory in Florida on March 6 at the battle of Natural Bridge, inland near St. Marks, there was a hasty effort, championed by the governor of Georgia, to outfit a special ship to run the blockade at Apalachicola. This would have required removal of the obstructions, which Milton had wanted for so long. But Florida's governor now feared such an action would destroy Apalachicola and result in a Union invasion, and refused to cooperate. In despair, he returned to his plantation near Marianna and shot himself on April 1; the end of the war and Florida's surrender came less than two months later (Rogers 1986:85).

The obstructions remained in the river, having forced the main channel to jump to Moccasin Creek, which widened, but was still a narrow, hazardous passage for river traffic. The former river channel silted up and filled in, becoming an intermittent creek (Figure 5), and the forest grew back over the abandoned gun mounds.

#### *1997-98 Investigations*

With this fascinating history revealed, archaeological exploration was renewed (White 1999). A brief re-



Figure 5. Virginia Cut, a small creek between the two batteries that was once the main channel of the Apalachicola River.

connaissance was done in 1997, this time with a transit and metal detector. The 1998 project targeting remote areas of the Apalachicola Valley specifically included more extensive investigations at the gun mounds. Mapping was completed (Figures 6 and 7), and transects were surveyed with three metal detectors, including a pulse induction detector that was usable underwater. We also videotaped as much as possible between rainstorms, cored with a 4 inch bucket auger, and used computer printouts of digitized infrared aerial ortho-photo imagery of the Cutoff Island to plot a course to where the obstructions might be.

*The Gun Batteries.* Realizing what were called potholes for so long were in fact gun platforms, we sought evidence of structures underneath the foreign sand with a deep core into the more westerly platform at Battery Gilmer. This produced no structural evidence other than a nail fragment. At Battery Cobb, Jones's 1994 test had already yielded what were now explained as tiny bits of wood that might have been from the trestle. At both mounds, from the base to the summit the metal detectors turned up older square cut nails and more recent round wire nails (Nelson 1968), as well as hinges and other metal objects. Battery Gilmer produced less metal attributable to the Civil War period—only three cut nails and one spike, but 33 recent wire nails, as compared with Battery Cobb's 43 cut nails, 3 spikes, and only one wire nail. The spikes actually might have been some kind of tool for chiseling or screwdriving functions, since the ends were not pointed but wedge-shaped or spatulate (Figure 8, top two). The most interesting artifact, from the central summit of Battery Gilmer, is a club-shaped metal piece with a sharp point at one end (Figure 8, bottom), tentatively identified as a fuse auger for cleaning the cannon so it could be refired (Ripley 1984:227). No historic ceramics were recovered from Battery Gilmer. At Battery Cobb were found just a few more mostly tiny sherds: plain whiteware, pink transfer print, (Figure 9) and green salt-glazed stoneware.

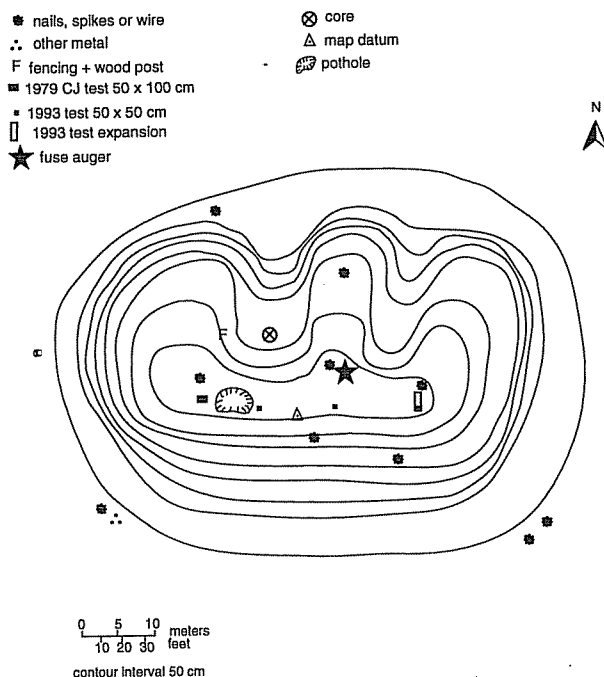


Figure 6. Battery Gilmer, 8Gu14, topographic map showing test excavations and materials.

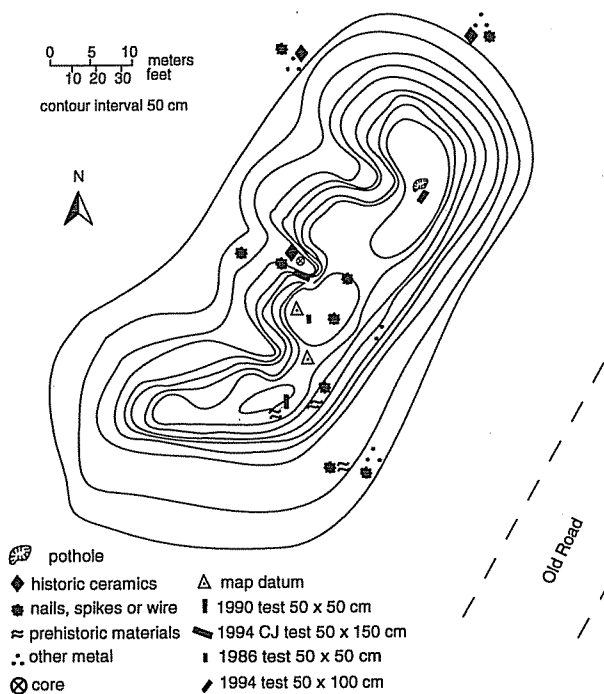


Figure 7. Battery Cobb, 8Gu94, topographic map showing test excavations and materials.

Modern bullets, shell casings, and beer cans attested to the continued presence of hunters/local adventurers.

Excavating 5-10 cm into the southeastern slope of Battery Cobb near two metal detector hits produced two more prehistoric items—a chert secondary flake and another aboriginal sherd. The 1990 test that had yielded



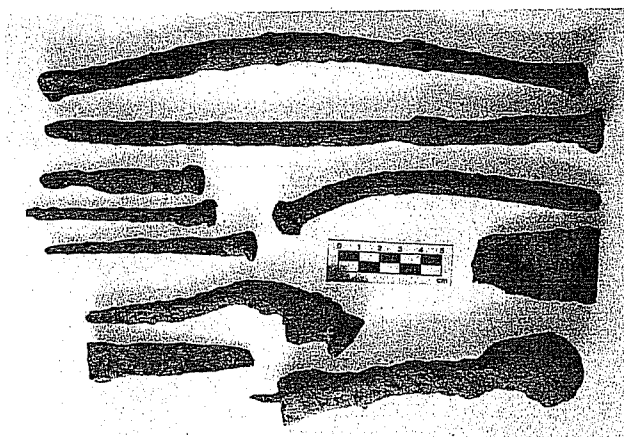


Figure 8. Iron artifacts (top to bottom): from Battery Cobb, three square-cut spikes with spatulate or chisel ends (cat. #s Gu94-98-4, -97-3, and -98-2); (left) three large square cut nails (cat. # Gu94-98-4); (right) hinge (cat # Gu94-98-1); from Battery Gilmer (below scale): square cut iron spike with wood bits rusted on (cat. # Gu14-97-1), (left) hinge (cat # Gu14-97-5), and possible fuse auger (cat. # Gu14-98-6; note point on left end).

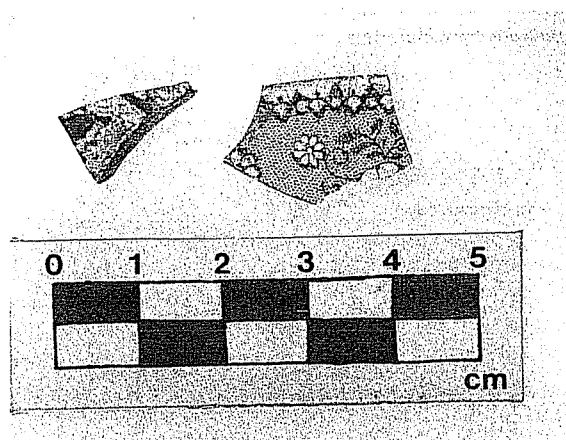


Figure 9. Historic ceramics from Battery Cobb: blue transfer-printed whiteware sherd from Calvin Jones's 1994 profile trench into gun platform, 52 cm depth (cat # 94-1) and pink transfer-printed whiteware rim (cat. # 98-1) from north end of summit.

the prehistoric sherds also was located on the southeast side, on the summit right above these finds. It appears that a chunk of prehistoric cultural sediments was brought in from somewhere upriver, perhaps in one mule-wagon-load, and dumped in this southeastern side during mound construction.

Finally, analysis of soils taken from both mounds and the surrounding bottomland documented the strong contrast between the solid brown clay swamp muck and the pale sandy mound fill. It is understandable from an engineering standpoint why the dry, coarse sand might have been brought in, as the dark swamp soils have a higher moisture and organic content, and would dry and shrink. Still, logistically it might have been far easier and quicker to build the platforms with locally dug soil

(but labor was of less importance if slaves could be impressed).

*Old Channels and Features Around Mounds.* Old roads are everywhere in the bottomland forest, including some running alongside the two mounds, but all led to dead ends, possibly because of channel shifting. Some might lead to soldiers' camp or small supply boat docks. Coring, shoveling, and metal detecting revealed no cultural materials along the roads, but some artifacts were discovered along the Virginia Cut channel north of and between the two mounds—a large square wing nut, a crushed copper or brass pipe, two large pins/springs identified as trace harnesses for caissons, iron stove parts, and an old bedspring, suggesting Civil War debris but also later occupation.

Locating the Civil War obstructions proved very difficult. Exploring the farthest downstream segment of the old—now mostly dry—river channel was easy, walking inland from present river mile 34.2. About 400 m up this channel a 12-inch square-cut pine beam with nails in it lay along the bank as if washed there recently. The "X" in Figure 2 marks this location; the place may not be part of the original obstructions, but a spot where some remains of them ended up.

The main obstructions are shown on the historic map as occupying much of a segment of channel meander east of the mounds (near Fulton's Bend; Figure 4). Searching along the creek from Battery Cobb proved fruitless when the entire landscape became a series of stream channels that either terminated in dead ends or multiplied until one was unsure of the map location. Finally, we headed eastward through the jungle by compass. Strong metal detector readings were obtained at a wide, shallow, dry old channel segment covered in younger trees. We located not only square pine beams like the one downstream, but also found metal slats sticking up out of the mud, at a 45-degree angle. This was clearly the place indicated on the old map, and shown on Figure 2 with the multiple "Xs." The river flowed north here, turning around on itself in this tight meander and probably accounting for the name, "the Narrows." The slats were 34 m apart at the widest distance and may have been bent by the flow of the river, or they may have been stuck up this way originally in a constructed crib.

*Discussion of Materials.* The artifact assemblage from the two sites and the surrounding area is remarkably small. A year and a half of military activity should have left more material remains. Perhaps even with three metal detectors, the coverage was too spotty. Another possibility is that most of the artifacts were nonmetallic and therefore less able to be found, but the larger tests and cores also recovered very few non-metal items. The best explanation is that there was not much left when the site was abandoned and its equipment moved

elsewhere. The wooden trestle may have some portions undecayed beneath the sand mounds, but little else. If the associated camp is ever found, it may prove to have the larger material assemblage expected of a lengthy habitation. Most items recovered from the two mounds are construction materials, primarily nails and spikes. Ceramics were few and tiny.

The metal slats found sticking up within the main channel obstructions appeared to be narrow gauge flat rail, historically sometimes used to transport logs out of the forest. They also resemble the iron rail uncovered at a Civil War gun emplacement in Pensacola (Swindell 1976:1-5). There the rail was in situ on the gun platform in a semicircle, held to the floor with large iron spikes. It functioned as a traverse track to facilitate turning the gun carriage. An 1861 photograph shows a similar gun emplacement, also near Pensacola, which included a semicircular track for a cannon mounted on a front pintle wooden barbette carriage (Swindell 1976:8-12). The guns at Battery Cobb were mounted *en barbette* (Manucy 1949:12) so that they could be turned 30 degrees, though those at Battery Gilmer were stationary. Perhaps this was extra rail that could be put to good use after the guns were in place.

In sum, at the gun mounds we found no cannon (despite the informant's statement), and in the river channel no large chains or sunken boats, though all these things may remain, buried deep in the muck. The soldiers' camp and the additional obstructions in the channel southwest of Battery Cobb, shown on the period map, remain undiscovered. The camp undoubtedly contains a wealth of materials and information, and the obstructions we did locate probably would be fascinating to excavate.

### Discussion

After a total of 55 worker days of difficult labor at the sites, we know their origin, have evidence of their use, and have documented their research potential. Preservation concerns are paramount, of course; the remoteness of the sites is no deterrent for motivated looters. It would be tragic to have newly recovered evidence of lost knowledge rapidly perish like Aristotle's lost book on laughter—upon discovery, destroyed by the monk who had curated it in *The Name of The Rose* (Eco 1980). Meanwhile, the account of this work has some interesting avenues for exploring diverse research issues.

*The Intersection of Archaeology and History.* After decades of processual vs. postprocessual debate, we know that ethnoarchaeology and historic archaeology are the best arenas for successful cognitive archaeology because there is at least some record, however biased, of the ideological and social systems of the people who left the material remains. We also must be careful not to

think that archaeology must be either scientific or historical. Feinman (1997:375) notes that archaeologists can do historical analysis in a systematic, comparative, scientific manner and work toward explanations of long-term culture change.

This article is not the place for an extended presentation of Civil War history and archaeology. There is increasing work in these areas (e.g., Geier and Winter 1994), and no shortage of research on Civil War topics. It is not only the American conflict that has generated the most literature (Williams 1998), but also continually the subject of novels, movies, television specials, historical re-enactments, web pages, and other media presentations (e.g., Hitchens 1999). In *Confederates in the Attic: Dispatches from the Unfinished Civil War*, Tony Horwitz examines how Americans' obsession with the Civil War is today so colored by Hollywood images and parochial emotions as to make it a totally different perception for any given individual, Southerner, Yankee, foreigner, or whoever is doing the perceiving. Much of what commonly is understood about this war is more mythic than factual, and it really was mostly poor men fighting a rich man's conflict (Williams 1998). But its enormous appeal is its human scale, as it marks "the transition from the chivalric combat of old to the anonymous and industrial slaughter of modern times...Most of the War was fought across a pastoral, preindustrial landscape. Entire campaigns hinged on how many miles soldiers could walk in a day, how much forage they could gather for their horses, how much heat or ice both man and animal could endure" (Horwitz 1998:385). This is attractive drama for both science and history, with issues that can be addressed directly with data from the difficult environments of Batteries Cobb and Gilmer. Besides the gun emplacements and what technological materials and information they may contain, there is the potential for material evidence of the (forlorn?) soldiers at a crucial time in U.S. and Florida history.

*The Batteries and Camp.* Temporary military camps from the Civil War are notoriously hard to find using traditional archaeological methods (e.g., Smith 1994:12), but a long archaeological campaign in this Florida wilderness might turn up the habitation area associated with the gun batteries. What could be learned from these sites? We know a construction crew of perhaps 100 slaves spent what must have been many weeks building the fortifications. In December 1862 the Florida legislature granted the governor the authority to request from slaveholders a sufficient number of slaves for any construction task necessary to the Confederate government, and if the slaveholder did not grant the request, the governor was given the power to impress the needed slaves (Johns 1963:151). After construction of the forts, little is known about the troops and their life there. Hillhouse (1992:51, 181-182) mentions one individual (Lt. John H. Ellis) assigned to the new Fort Cobb in Feb-

ruary 1863. A search of relevant Civil War records (muster rolls, etc.) could reveal how many stationed at the batteries were actually from Apalachicola Valley counties and more familiar with the local environment.

The troops occupied the post for about 17 months, and saw the men running the war very rarely. Otherwise, there were probably only crews on occasional small supply vessels that could sneak in on smaller streams from January through middle springtime. While spies or defectors from the Confederacy informed Union officials concerning these defenses, most of the time the men at Batteries Cobb and Gilmer were probably very alone, just waiting for the enemy, who never came.

Geier and Winter (1994:99) note the growing scholarly interest in the experiences of individual Civil War soldiers, and the preservation and study of military facilities such as fortifications and encampments, not only in their structures and layouts, but also of "the human aspects of their construction and occupation. These aspects include the circumstances confronted by the personnel who manned them, as well as the quality of life of soldiers who commonly had to contend with poor weather conditions, inadequate food and medical supplies, and the boredom presented by long periods of inactivity." Turner (1988:xii) has compared the "tension and lack of action in naval operations along the [Apalachicola and Chattahoochee] rivers to a 'cold war,'" and sees even more of a contemporary parallel with the conflict in Viet Nam, with the stories of "men confronting national policy, local politics, tropical heat and disease, and faulty equipment—when what they had set out to do was fight and win a war."

As for everyday life at these forts, we know little, but can surmise a few things. Organized religion flourished in the military camps, as did the use of alcohol; one minister is recorded as complaining that officers of state troops at Apalachicola consumed too much whiskey (Johns 1963:185; Rogers 1986:56). It is also clear that life in the Apalachicola swamps was unhealthy, as General Cobb expressed in a letter to his superiors in late 1862 (Hillhouse 1992:50). Soldiers' camps in this valley were infested with disease and rats, which became the rations when food ran low (Williams 1998:119). An officer visiting Batteries Cobb and Gilmer wrote, "I have never in my life seen so miserable a place, entirely surrounded on all sides by water, mud, and swamp. The batteries are miserable contrivances, poorly constructed and worse manned and armed" (Gift 1863). After slogging through the forested wetlands so much, we can imagine young, green boys and men in worn uniforms, living in tents, making do with battered, old equipment and utensils, alternating between boredom and weariness, with some periods of fear—fear of the enemy, fear of shortage of food and supplies, fear of dying of disease, fear of never seeing loved ones again as they perished uselessly in the steaming (or freezing) swamp. On the other hand, a positive view is also possible. The

lush green, beautiful bottomland forest offered deer and small game, swamp cabbage and fruits, and abundant fish in the streams. There was also the privacy to drink and pray and carry on in the camaraderie of men in wartime. For most of the year the climate would have been benign.

*The River Obstructions.* The highly seasonal nineteenth-century river generally was navigable by large and commercial vessels by about Christmas and continued so until May or June (Willoughby 1993:14, 118, 1999). Fortunately for the cotton business, this coincided with the harvest season. In the winter rainy season (and possibly with summer rains also), roads would have been impassable, wide watery paths through the forest. Today remnants of this seasonality remain, though far less so because dredging of the river bottom during times of low water allows barge traffic year-round.

After the Civil War, a resolution of the Florida legislature (1868:24) asked Congress for funds to render that segment of the river safe for navigation, stating that, because of the obstructions, "all steamboats, barges, cotton boxes, lumber, timber, and log rafts are compelled, in navigating the said river to its mouth, to pass through a difficult, narrow, and hazardous channel way, known as Moccasin Sluice, which was forced open by the river current after the placing and locating the aforesaid obstructions, and which is often obstructed and rendered very hazardous of passage by fallen trees, logs, and drift." The language of the rest of the resolution shows that Florida was unhappy with the economic effects of conditions imposed by the war giving precedence to other southern states upriver.

The effects of these defenses on the Apalachicola are fascinating to explore in the light of the political economy of the situation and competing commercial and military factions during and after the war. For example, though cotton production continued to increase in the Apalachicola Valley from the 1840s through the 1860s, the city of Apalachicola's share in this production steadily decreased, not only due to obstructions in river traffic, but even more to the new railroads, which could bring the product to commercial centers such as Columbus and Savannah independent of seasonal water levels (Rogers 1986:42-43; Willoughby 1993:131; Willoughby 1999). The objections Governor Milton and other Florida leaders had raised against the plan to sink obstructions in the river reflected their concern for their own economy and their disgust at the attempts by commercial interests to divert trade from Apalachicola. With the obstructions left in place, the city of Apalachicola was lost as a dependable import-export center and the rail connections became more important (Williams 1998:68).

The Confederacy was slow to realize Florida's crucial role as imports of cheap foreign salt, so necessary for tanning hides, preserving meat, and other essential

army uses, were dwindling due to the blockades. With its hundreds of miles of coastlines and the renewal of long-abandoned methods of salt production such as extraction from seawater, Florida could only provide this vital commodity if transportation routes were protected (Knetsch 1998; Taylor 1995:44-65). These routes also were needed to ship meats, citrus fruits, corn, sugar, distilled spirits, and medicines that Florida was increasingly pressed to produce as the Confederacy's agricultural base shrank during the conflict (Taylor 1995:89). Supplying the war elsewhere may have meant having little left at home. The paucity of material items recovered from Batteries Cobb and Gilmer might mean that everything was cleared out thoroughly when they were abandoned, or that there was little there to begin with. The material record of the living area certainly would provide more data on this question. It is possible that blockage of transport routes, as well as the general lack of money, supplies, and support, meant that those defending the Apalachicola had to make do with very little.

In sum, though we can trace the military communication and specific events and actions of the war through historic documents, archaeology can offer a different perspective, making it "possible for us to listen anew to those segments of society who were affected by the war and its aftermath but whose voices, for the most part, have been lost in the filtering process of history" (Geier and Winter 1994:xiv). For half the nation, the Civil War and its end brought the ruin of an economic system and the end of a way of life, with recovery not only slow, confused, violent, and resentful, but arguably still in process (Horwitz 1998; Smith 1994:4). Archaeology's multievidential reach, including artifact and geomorphological data, for example, combines with history for a holistic perspective (Smith 1994:8).

*Fluvial Geomorphology and Human Action.* After the Civil War the obstructions were not removed, and the river channel has not returned to its former course. Dredging the river bottom began in the 1950s to allow barge traffic year-round; this continues today despite the small number of barges. The area of "Corley Reach," the segment of the river near Corley Slough, always has been a navigation problem. According to the U.S. Army Corps of Engineers' (1986 vol. 1:17-22 and plate 15, vol. 2:appendices A1-A2) main plan for the river, from 1957 to 1968 the dredging had to be increased due to increased sedimentation. In 1969 the Corps engineered two cutoffs of meanders, hoping to aid navigation. This can be seen on the quad map in Figure 2. The pile of dredging spoils at about mile 36.3, where the mouth of Corley Slough once was, covers and cuts off an old meander. Another spoil pile, located at the end of Virginia Cut, covers what was another meander right at the north end of the river segment that was rechanneled by the Confederates. In fact that meander is exactly what

was labeled Moccasin Creek on the Confederate map (Figure 4). It connected on the east side with the River Styx, the downstream segment of which today has become the main Apalachicola channel. The remainder of River Styx can be seen today on the quad map joining with Moccasin Slough to empty into the Apalachicola at the old confluence of Moccasin Creek with River Styx on the Confederate map. Although (because?) those meanders have been cut off, dredging has continued to increase. In 1984 the area had to be dredged five times. Today the Corps dredges the bottom here more than any other place on the whole 107-mile-long river. It appears they are fighting an old natural channel to maintain an artificial one.

The lessons of fluvial geomorphology and the intersection of natural and cultural landscapes are interesting here, and archaeology has practical value in understanding hydrology and resource management. Clearly, the modern channel of any southeastern river is a result of many human activities such as damming, dredging, straightening, and other manipulations made famous by the Corps of Engineers but done equally well (if not on such a huge scale) by local interests. Given the modern obsession with complex technology, however, we sometimes forget that historic peoples have always been major environmental manipulators, probably since long before the Egyptians diverted the Nile for various constructions. The shifts of the main channel of the Apalachicola River that account for its present configuration between mile 34 and 37 today are directly the result of manipulation to enhance military objectives.

*Conservation and Loss of Knowledge.* In the course of these archaeological investigations, it turned out to be oral history—the information of an elderly resident who was an expert in local history—that led to the proper identification of the mounds. This emphasizes yet again the importance of contacting local people who know the land better than the outside scientist ever could. All archaeologists know this, but the scope of many recent projects fails to include searching for local collectors and informants. It also reinforces the importance of employing different and independent research methods. In addition, it demonstrates an interesting aspect of the passing on of local knowledge. In little over a century, the identity of what were the strongest, most important defense works on the Apalachicola River was lost to local history. Ten years of interviewing hundreds of local collectors produced only one person who knew the features were not Indian mounds. The few local histories written do not mention the site.

Figure 1 was adapted directly from Turner's (1988:5) map accompanying her narrative of the Confederate Navy operations on the Chattahoochee-Apalachicola River system. The original, however, had "the Narrows" in the wrong place, about 10 miles upstream from its

correct location. Perhaps, though the memory of the river obstructions and the difficulties they caused remained, the actual location, originally remote enough and later made more so by the shifted channel, became forgotten. As many practitioners of archaeology, history, ethnography, and oral history are realizing, research on memory and place must be a regular part of studying the human past (Glassberg 1998:7). Without informants, especially elderly ones who know the history (political, economic, biological, archaeological) of an area, unrecorded knowledge can be lost, and later reconstructions may become wildly unreliable. Losses will only become greater as other communications media, such as the Internet, expand at the expense of oral history. Thus is seen the importance of archaeology for expanding, confirming, or regaining history.

*Scientific Archaeology and Real Data from the Swamp.* The story of the Confederate gun mounds also has implications for understanding late prehistoric cultural processes and settlement patterns in the Apalachicola Valley and the need to obtain support for hypotheses once they are constructed. Archaeological explanation too often subscribes to William of Occam's simplistic principle because it is easy and elegant, but human behavior in the past, not to mention the material evidence of it, is often far more complex and contorted than we think. Therefore, there is no substitute for accurate, detailed, and robust primary empirical data from which to build models, and additional, independent data with which to test them. The validity of archaeological knowledge, based on the adequacy and correctness of field and lab observations, is molded by guiding assumptions, and then enhanced by both garnering additional data and critically evaluating the assumptions, especially their unexamined premises (Kehoe and Nelson 1990:1). It is important in understanding the production of knowledge to note what the researcher/writer chooses to emphasize in the telling of the story and how it is supported by the facts.

Based only upon the fact that 8Gu14 was recorded as an earthen mound of possible Fort Walton affiliation, the site was included in attempts to model late prehistoric native chiefdoms, even though it had a questionable cultural affiliation and had produced no artifacts. Though later removed from the computer analysis and specific model, the site continued to appear on maps of Fort Walton political centers (Scarry and Payne 1986). Citation circles and academic inertia being what they are, the idea that the site was not only prehistoric, but also a temple mound center, was stuck in the literature (Scarry 1990:229), accepted, and repeated, as was a model of the development of Fort Walton phases and chiefdoms (e.g., Scarry 1996, 1999) that is still based on just a few, sometimes questionable mound sites. Re-evaluations of Fort Walton are now in progress (Marrinan and White 1998).

The larger issue is the foundations of archaeological knowledge upon primary data. In the academic and CRM archaeology world, more prestige sometimes is accorded those theoreticians who examine culture process or meaning by synthesizing, modeling, and interpreting. Whether processual or postprocessual (or both) in perspective, however, they may be secondary producers, using mostly the data of other people, the field researchers who have laboriously obtained and processed the information and materials and produced the initial interpretations. As many remember from archaeological theory class, how many of the readings were by those (ideal archaeologists) who had themselves excavated the materials as well? How many project reports these days actually are written by the person directing the work and looking at the site, the landscape, the soil, and the materials? It is difficult to do it all, and collaboration among investigators is important, but crucial and diagnostic field data should be verified before hypotheses are constructed upon them.

In the past, such a first-hand knowledge of the data may have been more common, and useful for inspiring caution. Gordon Willey's (1949) masterful synthesis of Florida archaeology was criticized for not classifying everything in terms of the Midwestern Taxonomic System that was popular at the time, but Willey did not want to produce questionable assignments of the data that such pigeonholing would entail. That his work has become the standard for the region belies this criticism and justifies his refusal to "run ahead of the data" (Willey 1999).

These approach being ethical issues. Once, at a job interview one of us (White) was invited to speak about her work and was directed to relate just theory, just the wildest possible hypotheses, absolutely unconnected with any data. This seemed to be impossible science fiction—even fraud. The requirement for slow, conscientious, often painstaking processing of details to reach a supportable conclusion often is contrasted with the the wild, but brilliant, intuitive leap that produces the flash of insight in science. But these are not necessarily dichotomous investigative styles. Intuition is just the computer-brain's excellent processing of so many bits of information that a logical conclusion cannot help but flash into the mind. The only requirement is *enough* bits of information (Goodfield 1981). There is no substitute for fieldwork, or at least an intimate familiarity with all those bits of field data, real data, and the process of obtaining them, even if they have to come from the deep, dark (and for some, uncomfortable) swamp.

#### Notes

*Acknowledgments.* A brief version of this paper was presented at the Florida Anthropological Society meeting, April 1999. We appreciate helpful comments from many reviewers, especially Claudine Payne. The research was supported by a Historic Preservation grant

from the Division of Historical Resources (DHR), Florida Department of State, and research permits were granted by the DHR and the Division of State Lands, Florida Department of Environmental Protection. Many people have made this work possible, especially the students and avocational archaeologists who trekked into the sites. The Apalachicola National Estuarine Research Reserve (ANERR) and director Woody Miley provided personnel and equipment, including computer-generated map imagery by resource manager Roy Ogles. ANERR staff Jimmy Moses and Pat Millender, and avocational archaeologist Jeff Whitfield have given the most logistical support. Phil and Suella MacMillan donated lodging at the Neal Land and Timber Company camp, as well as historic forestry information. Gulf County expert George Core first told us the sites were Civil War gun mounds. USF archaeologist Brent Weisman helped with artifact identifications, and he and the DHR's Susan Harp provided other assistance. Bob Holcombe of the Civil War Naval Center in Columbus, Georgia, provided additional documentation. USF geographer Robert Brinkmann analyzed mound soils, and he and Florida State University geologist Joe Donoghue helped rule out a natural explanation. Mary Lynn Kennedy assisted with the graphics. B. Calvin Jones, who first recorded the sites, made two additional field trips and was the first to realize there were two mounds. Jones died in February 1998; we are confident this article has been faithful to his views and interpretations. He must be still chuckling about the the whole project from the great swamp forest in the sky.

### References Cited

- Brose, David S., and Nancy Marie White (editors)  
1999 *The Northwest Florida Expeditions of Clarence B. Moore*. University of Alabama Press, Tuscaloosa.
- Buker, George E.  
1993 *Blockaders, Refugees, & Contrabands. Civil War on Florida's Gulf Coast, 1861-1865*. University of Alabama Press, Tuscaloosa.
- Eco, Umberto  
1980 *The Name of the Rose*. Warner Books, New York (English translation 1983).
- Feinman, Gary M.  
1997 Thoughts on New Approaches to Combining the Archaeological and Historical Records. *Journal of Archaeological Method and Theory* 4(3/4):367-377.
- Florida Legislature  
1868 *The Acts and Resolutions adopted by the Legislature of Florida at its First Session (1868)*. Office of the Tallahassee Sentinel, Tallahassee.
- Geier, Clarence R., Jr., and Susan E. Winter (editors)  
1994 *Look to the Earth. Historical Archaeology and the American Civil War*. University of Tennessee Press, Knoxville.
- Gift, Lt. George W.  
1863 Letter to Miss Ellen Shackelford, the Refuge, April 11th, 1863. From the George W. Gift Letters #1152, Southern Historical Collection, University of North Carolina, Chapel Hill. On file at the Civil War Naval Center, Columbus, Georgia.
- Glassberg, David  
1998 Presenting History to the Public. The Study of Memory and Uses of the Past. CRM 11:4-8. National Park Service, Washington, D.C.
- Goodfield, June  
1981 *An Imagined World. A Story of Scientific Discovery*. Harper & Row, New York.
- Hillhouse, Don  
1992 *Heavy Artillery & Light Infantry. A History of the 1st Florida Special Battalion & 10th Infantry Regiment, C.S.A.* Published by the author, Jacksonville, Florida, and P.O. Box 2651, Department A, Rome, Georgia 30164.
- Hitchens, Christopher  
1999 Rebel Ghosts. *Vanity Fair* 467:34-44.
- Horwitz, Tony  
1998 *Confederates in the Attic: Dispatches from the Unfinished Civil War*. Pantheon Books, New York.
- Johns, John E.  
1963 *Florida During the Civil War*. University of Florida Press, Gainesville.
- Kehoe, Alice B., and Sarah M. Nelson  
1990 Introduction. In *Powers of Observation: Alternative Views in Archaeology*, edited by A. Kehoe and S. Nelson, pp. 1-4. Archaeological Papers of the American Anthropological Association, Number 2.
- Knetsch, Joe  
1998 Salt and the Civil War in North Florida: Making, Speculating, and the Raids. Presentation before the Wakulla County Historical Society. Division of State Lands, Florida Department of Environmental Protection.
- Manucy, Albert  
1949 *Artillery Through the Ages*. National Park Service Interpretive Series, History No. 3. Washington, D.C.
- Marrinan, Rochelle A., and Nancy Marie White  
1998 Smoke and Mirrors in Modeling Fort Walton Culture, Northwest Florida. Paper presented at the annual meeting of the Southeastern Archaeological Conference, Greenville, South Carolina.
- Moore, Clarence Bloomfield  
1903 Certain Aboriginal Mounds of the Apalachicola River. *Journal of the Academy of Natural Sciences* 12:440-490. Philadelphia.
- Nelson, Lee H.  
1968 Nail Chronology as an Aid to Dating Old Buildings. *American Association for State and Local History Technical Leaflet* 48, *History News* 24 (11; November 1968).
- Nulty, William H.  
1990 *Confederate Florida. The Road to Olustee*. University of Alabama Press, Tuscaloosa.
- Ripley, Warren  
1984 *Artillery and Ammunition of the Civil War*. Fourth edition. Van Nostrand Reinhold, New York.
- Rogers, William Warren  
1986 *Outposts on the Gulf. Saint George Island and Apalachicola from Early Exploration to World War II*. University Presses of Florida, Gainesville.
- Sabloff, Jeremy  
1992 Visions of Archaeology's Future: Some Comments. In *Quantaries and Quests. Visions of Archaeology's Future*, edited by Luanne Wandsnider, pp. 266-272. Occasional Paper No. 20, Center for Archaeological Investigations, Southern Illinois University at Carbondale.
- Scarry, John F.  
1990 Mississippian Emergence in the Fort Walton Area: The Evolution of the Cayson and Lake Jackson Phases. In *The Mississippian Emergence*, edited by Bruce D. Smith, pp. 227-250. Smithsonian Institution Press, Washington, D.C.  
1996 Stability and Change in the Apalachee Chiefdom. In *Political Structure and Change in the Prehistoric Southeastern United States*, edited by J. Scarry, pp. 192-227. University Press of Florida, Gainesville.  
1999 How Great Were the Southeastern Polities? In *Great Towns and Regional Polities in the Prehistoric American Southwest and Southeast*, edited by J. Neitzel, pp. 59-74. University of New Mexico Press, Albuquerque.
- Scarry, John F., and Claudine Payne  
1982 Mississippian Polities in the Fort Walton Area: Application and Evaluation of the Renfrew-Level XTENT Model. Paper presented at the 39th annual Southeastern Archaeological Conference, Memphis.

- 1986 Mississippian Politics in the Fort Walton Area: A Model Generated from the Renfrew-Level XTENT Algorithm. *Southeastern Archaeology* 5:79-90.
- Scharf, J. Thomas  
 1887 *History of the Confederate States Navy from Its Organization to the Surrender of Its Last Vessel*. Rogers & Sherwood, New York.
- Smith, Steven D.  
 1994 Archaeological Perspectives on the Civil War. The Challenge to Achieve Relevance. In *Look to the Earth. Historical Archaeology and the American Civil War*, edited by C.R.Geier, Jr. and S.Winter, pp. 3-20. University of Tennessee Press, Knoxville.
- Swindell, David E., III  
 1976 Archaeological Excavations of Gun Emplacement Number 17 (8Es126): A Suspected Confederate Battery at Pensacola, Florida. *Bureau of Historic Sites and Properties Bulletin* No. 5:1-14. Florida Division of Archives, History, and Records Management (now Division of Historical Resources), Tallahassee.
- Taylor, Robert A.  
 1995 *Rebel Storehouse: Florida in the Confederate Economy*. University of Alabama Press, Tuscaloosa.
- Turner, Maxine  
 1974 Naval Operations on the Apalachicola River, 1861-1865. *Alabama Historical Quarterly* 36 (entire issue, Fall and Winter 1974-75).  
 1988 *Navy Gray. A Story of the Confederate Navy on the Chattahoochee and Apalachicola Rivers*. University of Alabama Press, Tuscaloosa.
- U.S. Army Corps of Engineers  
 1986 Final Navigation Main Plan for the Apalachicola-Chattahoochee-Flint Waterway. Volume 1, Report, and Volume 2, Appendices. U.S. Army Corps of Engineers, Mobile District, Mobile, Alabama.
- United States War Department (USWD)  
 1880-1901 *War of the Rebellion: Official Records of the Union and Confederate Armies*. 128 Volumes (volumes used are from Series I, numbers VI, XIV, XXVIII [Part 2], XXXV [Part 2], LII [Part 2], and LIII. Government Printing Office, Washington, D.C.
- White, Nancy Marie  
 1985 (editor) *Archaeology of Northwest Florida and Adjacent Borderlands: Current Research Problems and Approaches*. *Florida Anthropological Society Publications* No. 11, *The Florida Anthropologist* 38 (1-2) Part 2.  
 1994 *Archaeological Investigations at Six Sites in the Apalachicola River Valley, Northwest Florida*. NOA Technical Memorandum NOS SRD 26, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Washington, D.C.  
 1996 *Archaeological Investigations of the 1994 Record Flood Impacts in the Apalachicola Valley, Northwest Florida*. Report submitted to the Division of Historical Resources, Florida Department of State, Tallahassee.  
 1998 Calvin Jones, A Legend in Florida Archaeology. *The Florida Anthropologist* 51(2):75-78.  
 1999 *Apalachicola Delta Remote Areas Archaeological Survey, Northwest Florida Volume 2: Confederate Batteries Gilmer (8Gu14) and Cobb (8Gu94) in the "Cutoff Island" of the Lower Apalachicola-Chipola River Valley*. Report to the Florida Division of Historical Resources, Tallahassee.
- n.d. Prehistoric and Protohistoric Fort Walton at the Thick Greenbriar Site (8Ja417), Northwest Florida. Ms. submitted to *The Florida Anthropologist*.
- Wiley, Gordon R.  
 1949 *Archaeology of the Florida Gulf Coast*. Smithsonian Miscellaneous Collections, Volume 113, Washington, D.C. Reprinted by University Press of Florida, Gainesville, 1999.  
 1999 Inconsequent Thoughts and Other Reflections on Florida Archaeology. Keynote address to the Florida Anthropological Society, April 1999, Fort Walton Beach.
- Williams, David  
 1998 *Rich Man's War. Class, Caste, and Confederate Defeat in the Lower Chattahoochee Valley*. University of Georgia Press, Athens.
- Willoughby, Lynn  
 1985 *The Apalachicola River and the Civil War*. Unpublished Graduate Research Paper, Historical Methods, Florida State University, April 1985.  
 1993 *Fair to Middlin': The Antebellum Cotton Trade of the Apalachicola/Chattahoochee River Valley*. University of Alabama Press, Tuscaloosa.  
 1999 *Flowing Through Time. A History of the Lower Chattahoochee River*. The University of Alabama Press, Tuscaloosa.