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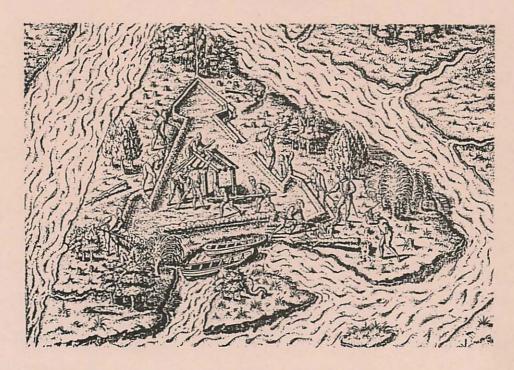
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Chester B. DePratter and Stanley South
with a contribution by
Bruce F. Thompson



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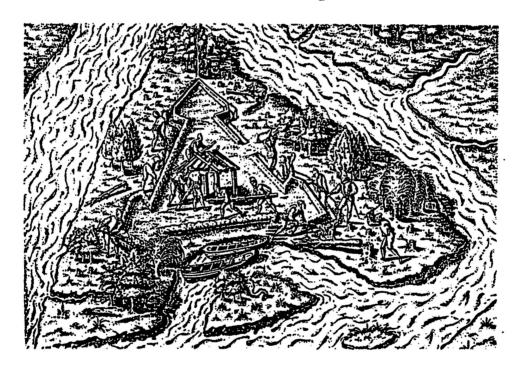
The University of South Carolina Research and Productive Scholarship Committee

Prepared by the
UNIVERSITY OF SOUTH CAROLINA
S.C. INSTITUTE OF ARCHAEOLOGY AND ANTHROPOLOGY

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Chester B. DePratter and Stanley South with a contribution by Bruce F. Thompson

THE DOCUMENTARY SEARCH - Historical Background

Shorly after Columbus returned from his first journey to the New World, King Ferdinand and Queen Isabella of Spain requested that the Pope confirm Spain's claim to Columbus' discoveries. The Pope established a line of demarcation approximately 330 miles west of Azores and Cape Verde Islands (about 36° West Longitude). The 1494 Treaty of Tordesillas between Spain and Portugal moved the line to about 1220 miles west of Cape Verde (about 48° West Longitude). By this treaty, Spain held claim to all lands west of the demarcation line, including North America, Central America, the Caribbean, and most of South America. Portugal held claim to lands to the east of the line including Brazil, Africa, and Southeast Asia (Blum et al. 1970:52, 58-59).

By the 1520s, Spain's claim to land west of the Tordesillas demarcation line was beginning to be challenged (Garraty and Gay 1972:622-3; Lyon 1974:6). The French had established an extensive fishery in Newfoundland by 1520 (Fig. 1), and at about the same time French vessels began to prey on Spanish shipping returning from the New World (Quinn 1977a:153). While Spanish explorers such as Ponce de León, Lucas Vázquez de Ayllón, and Panfilo de Narváez explored and attempted to colonize eastern North America during the first quarter of the 16th century, Francis I, King of France (1515-1547), in 1524 dispatched Giovanni di Verrazano to explore that same coastline in a search for a northern route to the Orient (Quinn 1977a:154-158). At the same time French seamen and traders moved into Brazil which had been reserved to Portugal by the 1494 Treaty of Tordesillas (Eccles 1972:1-2).

In 1525, Charles the V. Holy Roman Emperor and King of Spain, defeated Francis I at the battle of Pavia and took him prisoner (Garraty and Gay 1972:531). Francis I was soon released, however, and thereafter France continued to expand its presence in the New World, although the Portuguese were able to mount an attack and drive most of the Frenchmen from Brazil during Francis' captivity (Eccles 1972:3). French privateers began to raid throughout the Caribbean Sea, and in 1534 Francis I dispatched Jacques Cartier to Newfoundland to follow-up on Verrazzano's explorations and to continue the search for a passage to the Orient (Lyon 1974:6) (Fig. 1).

Cartier was gone from France for only four and one half months during which he explored the Gulf of St. Lawrence (Quinn 1977a:171-175). Cartier returned to the Gulf of St. Lawrence in 1535, and on this second trip he entered the St. Lawrence River and sailed some distance upstream (Quinn 1977a:176-183). During Cartier's reconnaissance up the river, a portion of his force remained on the bank of the St. Lawrence at Sainte Croix, where they built a fort. This fort represented the first French settlement in North America (Quinn 1977a:181). After spending a harsh winter in their fort, Cartier and the surviving members of his expedition returned to France in July of 1536 (Quinn 1977a:181-183).

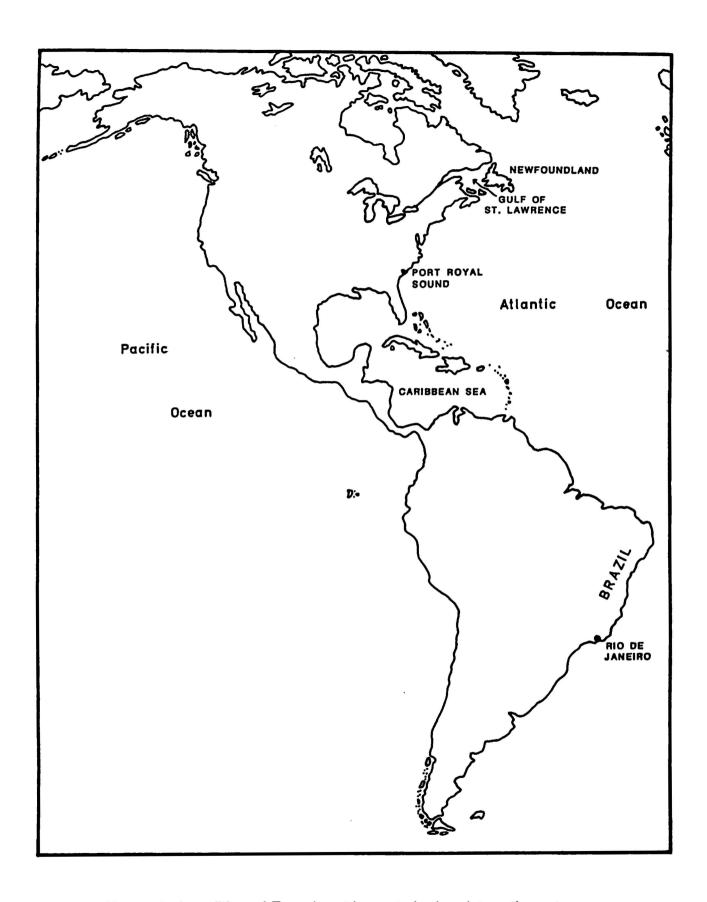


Figure 1. Localities of French settlements in the sixteenth century.

Cartier was back in Canada in the vicinity of Sainte Croix in the summer of 1541 with several hundred men, and he built the new settlement of Charlesbourg Royal to house them. After a stay of only several months, Cartier again abandoned his outpost and returned to France (Quinn 1977a:185-187). Charlesbourg Royal, renamed Francy Roy, was reoccupied two months after Cartier's departure by another French expedition led by Jean Francois de la Roque, seigneur de Roberval. Roberval's colony, which included a number of women, lasted only a little more than a year; by September, 1543, Roberval and the survivors of his colony were back in France (Quinn 1977a:187-189). Despite the fact that the colonizations attempted by Cartier and Roberval failed, they alerted the Spanish crown to the continued interests of France in the region (Lyon 1974:7). In the meantime, Spanish colonies had been established in Central America, the northern part of South America, and throughout the Caribbean Sea.

In the late 1530s, Spanish claim to "La Florida" was reasserted by Hernando de Soto who received the Governorship of Cuba and the rights to explore the territories previously assigned to Ayllón and Narváez (U.S. De Soto Expedition Commission 1939). Setting out from the west coast of present-day Florida, de Soto and his 600 man army spent the next four years exploring much of the southeastern United States (U.S. De Soto Expedition Commission 1939; Hudson et al. 1989). In 1543, the surviving members of the De Soto expedition finally arrived in Mexico, with their tales of hostile natives and sparce mineral resources in the interior of "La Florida." Discouraged by the failure of this expedition, the Spanish crown did not promote further exploration of the reigon for another quarter century.

French privateers continued to harass Spanish traders and treasure fleet in the Caribbean Sea and Gulf of Mexico on into the mid-portion of the l6th century. The Spanish crown dispatched a fleet to counteract this threat to their rich trade in 1548, and soon French privateering ships were being sunk or captured in great numbers in both the Caribbean and along the west coast of Europe (Lyon 1974:8-11).

The Portuguese were also forced to defend their claim to Brazil and their extensive trade contacts there from French incursions during the same era, and they were able to drive most of the French intruders from the region (Boucher 1989:7). By 1550, however, the French had reestablished their trading bases in Portugal, controlling Rio de Janeiro and adjacent portions of the South American coastline (Eccles 1972:8). By the early 1550s, Spain and France were again at war, and France drew up plans for a major offensive in the Caribbean (Lyon 1974:12). The Spanish Crown soon learned of these plans, and Pedro Menéndez de Avilés, a daring Spanish sea captain who was later to play a key role in the settling of Florida, organized a fleet to counter this threat to the Indies. In the meantime, French privateers attacked and seized several major Spanish towns in Cuba and Hispaniola. An eighty-one ship Spanish rescue fleet sailed for the Caribbean in October 1555, and within a year, Spanish order was once again restored to the region (Lyon 1974:14).

At the same time that Menéndez was active in the Caribbean, the French Admiral Coligny attempted to established a French colony in Brazil. That colony was intended to provide a foothold for future colonial endeavors in the region, to provide a refuge for oppressed Huguenots, and to weaken the Catholic claim to the Americas (Eccles 1972:8, Boucher 1989:9). Nicolas Durand de Villegaignon, commander of the Brazil expedition, settled a small colony on an island near Rio de Janeiro in November, 1555, but the colonists were soon beleagured by food shortages and mistreatment by their commander. An attempted mutiny failed, and the colony struggled along until 1560 when the last of the colonists were driven out by the Portuguse (Eccles 1972:8-9).

In 1556, Philip II assumed the throne of Spain following the abdication of his father Charles V, and three years later the Hapsburg-Valois conflict involving Spain and France was ended by the Peace of Cateau-Cambrésis (Garraty and Gay 1972:531; Lyon 1974:16). With peace restored, Philip II turned his attention once again to exploration and settlement of "La Florida." With funds supplied by the king, in 1559 Luis de Velasco, viceroy of New Spain, dispatched Tristán de Luna and a thousand colonists to settle in what is today the state of Alabama, Luna was soon replaced as commander by Angel de Villafañe, who dispatched a ship to explore the harbor at Santa Elena on the East Coast of "La Florida" (Lyon 1974:17; Quinn 1979:II, 271-75). Finding no suitable site for settlement there, Villafañe abandoned "La Florida." Failure of this costly expedition forced Philip II to reconsider the need to further explore the remaining unclaimed portions of "La Florida." In September, 1561, Philip announced that Spain no longer had an interest in settling the southeastern part of North America (Quinn 1979: II, 200, 277). In Europe, great social changes were underway. Religious reforms initiated by Martin Luther were spreading from country to country and city to city. Henry II, King of France, died in 1559, and his successor, Francis II, lived only a year. By the time Charles IX assumed the throne in 1560 when he was only ten years old, social order in France had begun to break down (Garraty and Gay 1972:564; Buisseret 1972:19-41; Salmon 1975:117-143).

The weakness of the French Crown resulted in widespread disturbances which soon devolved into open civil war (Buisseret 1972:39-52; Lyon 1974:21). Protestantism had spread throughout France, and Huguenot forces were able to seize several ports in 1562 (Lyon 1974:21-22). French Admiral Gaspard de Coligny, backer of the failed Villegaignon colony in Brazil, dispatched an expedition to Florida to find a safe haven for Huguenot refugees. An account by one of the survivors of the expedition says that Catherine de Medici, Queen Mother of France, a Monsieur de Vendöme, and Admiral Coligny each gave a thousand ducats to support the endeavor (Wenhold 1959:56). Jean Ribault was chosen to lead that expedition.

Ribault's First Expedition

On February 18, 1562, Jean Ribault departed from the French port of Le Harve with two ships containing 150 men (Quinn 1979:II, 287). After a difficult crossing that took about eight weeks, the expedition arrived off the east coast of Florida (near Anastasia Island) on April 30. The next day Ribault sailed north along the coast until he reached the mouth of the St. John's River, which he called the River May (Quinn 1979:II, 288). Three or four days were spent in exploring the mouth of the river and meeting with local Indians, and then the Frenchmen erected a stone column engraved with the royal coat of arms to establish their claim to this land (Quinn 1979:II, 290). The expedition then sailed north in its search for a place to establish a permanent colony.

After passing the several islands and estuaries along the Georgia coast (Fig. 2), Ribault's ships arrived at Port Royal Sound on May 17, 1562. Although Ribault had bypassed each of the harbors further south, he decided to enter Port Royal to work on his ships and to obtain fresh water, wood, and other supplies. There were apparently some among the crew who counceled against entry into the harbor, but Ribault proceeded with his plan. Once his ships had negotiated the treacherous bars at the harbor entrance, Ribault observed what he called "one of the greatest and fayrest havens of the world "(Quinn 1979:II, 292) (Fig. 2).

Ribault and his crew then spent a week exploring within the bounds of Port Royal Sound (Fig. 3). First they explored an arm of the harbor that ran to the west or northwest from the entrance (this is today called the Broad River), sailing twelve leagues inland

(Quinn 1979:II, 297). Although they failed to find any large Indian villages along this river, the men in this exploration party encountered a number of Indians (perhaps at the western end of Archer's Creek) who traded freely with them and who spoke of a great Indian lord who lived inland (Quinn 1979: II, 297).

On May 22, the explorers stopped at a small island (probably Daws Island--see Figs. 4 and 5) near the harbor entrance and erected another of the stone columns that they carried to mark their claims (Quinn 1979:II, 293, 297). Some time after the column was put in place, Ribault returned to the place where he had earlier met with the Indians. His plan was to take two of their numbers back to France with him. The Indian chief provided Ribault with two of his subjects, but they were not willing participants in this journey. Rene Laudonnière, Ribault's second-in-command, reports that he spent a great deal of time with these two men, learning a portion of their language and even compiling a written glossary of words and phrases as he learned them (Quinn 1979:II, 298). Ultimately, these two Indians made their escape by stealing a small boat (Quinn 1979:II, 293, 299).

His exploration of the Broad River completed, Ribault moved his ships back into the sound so that he could address the crews of both ships. In what Laudonnière reports as a fiery and impassioned speech, Ribault stated that he had decided Port Royal should be the site of the colony he was looking to establish (Quinn 1979:II, 293, 299-300). At the end of his speech, Ribault asked for volunteers to remain behind in a small fort while he and the ships returned to France to obtain reinforcements and the supplies needed for a colonial venture. Many members of the crew willingly volunteered, and ultimately Ribault selected 26 men, including "gentilmen, souldiers, and merryners," to defend the French claim to this port (Quinn 1979:II, 294, 301). Albert de la Pierria, "a souldier of long experyence," was placed in charge of the volunteer garrison (Quinn 1979:II, 294).

At the point, Ribault sailed up the north branch of the harbor (the Beaufort River today) to search for a place to build a fort (Figs. 3 and 5). As Laudonniëre (Quinn 1979:II, 30l) reports it, the ships "sayled up the great river on the North side, in coasting an Isle which ended with a sharpe point toward the mouth of the river." Having traveled some unspecified distance, they "discovered a small river, which entered into the Islande," and they explored that river. They found the river to be large enough to harbor "Gallies and Galliots in good number," and the point at which the river touched the high ground was chosen as the site for the fort. Ribault (Quinn 1979:II, 294) states that the volunteers were "installed and fortified... in an island on the northest [east] side, a place of strong scytuation and commodyous, upon a river which we have called Chenonceau and the inhabytacion and fortresse Charle forte."

Ribault and the ships' crews spent the next two week constructing the fort which was "in length but sixteene fathome [toises], and thirteene in breadth, with flankes according to the proportion thereof" (Kerrigan 1951:46; Bennett 1975:200; Quinn 1979:II, 301). A strong house of wood and earth with a straw roof was constructed inside the fort, and all the necessary supplies were taken from the ships and placed inside the strong house (Wenhold 1959:57; Quinn 1979:II, 301, 304). Eight cannon were also placed in the fort (Wenhold 1959:55; Quinn 1979:II, 313).

With the fort completed, Ribault and the two ships departed on June 11, 1562, with the promise that a relief expedition would return within six months (Wenhold 1959:57; Quinn 1979:II, 294). Ribault's account says that he and his ships explored north along the coast of the Carolinas before finally turning east toward France (Quinn 1979:II, 294). Ribault's small fleet was back in France on July 20, 1562 (Quinn 1979:II, 302). Civil war was still underway at the time, and Le Harve was under seige by royalist forces, so Ribault was unable to obtain immediately the needed supplies and reinforcements. In the meantime,

Ribault and his ships became involved in the defence of the harbor at Dieppe (Quinn 1977b:20). Late in 1562, th Huguenot forces in France recruited the assistance of Queen Elizabeth of England in their struggle. With the aid of her forces, the Huguenots were able to break the seige of Le Harve, and Ribault apparently participated in the occupation of that port by a combined French Huguenot/English force (Quinn 1977b:21).

At some point during this period late in 1562, Ribault was able to make a report to Admiral Coligny concerning his discoveries and the small outpost that he had established on Port Royal Sound. The war must have impaired Coligny's ability to assist Ribault in resupplying that outpost, because by early 1563, Ribault was in England seeking aid from Queen Elizabeth (Quinn 1977a:243-244; 1977b:21). Through a meeting with the Queen or some other contact, Ribault eventually recruited the assistance of Thomas Stukeley, a young courtier. By March, 1563, Stukeley had outfitted five ships and received a royal licence to sail for Florida (Quinn 1977b:21).

In March, 1563, the Huguenot/English alliance disintegrated, and shortly thereafter, the English switched to the royalist side in the French civil war. Ribault, who was still in England, was arrested as he attempted to return to France. Prior to his arrest, Ribault had his journal/report to Coligny translated into English to stimulate interest in his Florida endeavor. In June 1563, the English version of Ribault's account was published. It is this English translation that still survives; the French original has been lost (Quinn 1977b:21).

Stukeley, in the meantime, had been preparing to sail for Florida in July, 1563, but he was warned by the Spanish ambassador to England to stay away from Florida (Quinn 1977b:21). Stukeley apparently decided to heed this advice, because instead of sailing to Florida, he stationed his ships in the English Channel where they preyed on French shipping (Quinn 1977a:244).

In the small outpost on Port Royal Sound, matters had become quite complicated due to Ribault's long absence. Captain de la Pierria and his men cultivated the friendship of the local Indians and worked at strengthening their fort. When supplies began to run low, several members of the garrison made a journey south to the Indian towns on the northern Georgia coast to obtain corn and beans (Quinn 1979:II, 303). Not long after these supplies were obtained, the storehose within the walls of Charlesfort caught fire, and these newly obtained foodstuffs and most of the supplies and possessions belonging to the men of the garrison were destroyed. The next day, local Indians came to the fort and built a new storehouse for the Frenchmen, but by then members of the garrison were undoubtedly discouraged by Ribault's failure to return and by the losses caused by the fire (Quinn 1979:II, 304-305).

Further discord was caused by the actions of Captain de la Pierria. One soldier, named Le Chere, had been banished to a small island for some infraction, and another, a drummer named Guernache, was hanged at the Captain's command. These and other unspecified actions caused the remaining members of the garrison to mutiny, and in the ensuing struggle, Captain de la Pierria was killed (Quinn 1979:II, 305, 313). Nicolas Barre (or Barré) was selected commander by the mutineers, and La Chere was rescued from his place of exile (Quinn 1979:II, 306). At some time after the mutiny, a young boy named Guillermo Ruffin fled from Charlesfort to take refuge among the local Indians, because he felt that there was no one among the crew who knew enough about navigation to steer the ship across the ocean (Wenhold 1959:58).

The mutineers decided to build a ship and abandon their outpost which by then they had occupied for nearly a year. The ship, a 20-ton vessel, was built with materials at hand. Wood and pitch were obtained from the surrounding forests, and Spanish moss was used

to caulk the hull. The Indians provided cordage, and sails were made from the shirts and sheets of the Frenchmen (Quinn 1979:II, 306, 308, 314). The forge and cannons were taken from the fort and placed on the ship; some of the cannon may have been used as ballast. The ship must have sailed sometime in April 1563 according to testimony of Guillermo Ruffin (Wenhold 1959:58). On board the ship were the 22 remaining members of the Charlesfort garrison.

Laudonnière (Quinn 1979:II, 306-307) provides our best description of the fate of these mutineers on their journey home. According to his account, which could only have been obtained from members of the crew, the men found their small ship becalmed with only a third of their journey completed; in three weeks they traveled no more than 25 leagues. Their food supplies dwindled, and soon they were forced to chew their shoes and other leather gear for sustenance. Some drank sea water while others drank their own urine in desperation.

One by one, the men died as the weeks passed. The ship began to leak, and soon the crew had to work constantly to keep their vessel from sinking. Just at the time when all seemed lost, one crew member rallied their spirits by convincing them they would reach France with only three more days of sailing. The three days passed, with no food or water to strengthen the now desperate crew, and hope for rescue once again faded. The decision was made to kill and eat one of the crew; La Chere, who had been mistreated by Captain de La Pierria at Charlesfort, was the one chosen to die. La Chere was killed and his flesh divided equally among his companions (Quinn 1979:II, 306-307).

Finally, the ship reached the waters off the coast of England where it was sighted by an English ship, perhaps one of Stukeley's ships, although Laudonnière says only the ship was English. Aboard that ship was a crew member who had been in Florida on Ribault's first voyage. The most feeble members of the crew were put ashore, presumably in France, while the others were taken to England to meet with the Queen concerning their experiences in Florida (Quinn 1979:II, 307). Thus ended Ribault's first expedition.

The Second French Expedition to Florida

By the Spring of 1564, there was a lull in the civil war taking place in France, so Admiral Coligny decided to dispatch another expedition to Florida. Ribault was still imprisoned in England, so command of the second expedition was assigned to Ribault's former second-in-command, René de Laudonnière (Quinn 1977b:22; Quinn 1979:II, 319). With the war over, support was obtained from both Catherine de Medici, who had helped to sponsor Ribault's fleet, and Charles IX, the young French King. Laudonnière was provided with three ships and a company of three hundred men. Among those men was an artist, Jacques Le Moyne de Morgues, who was, once he reached Florida, to "chart the seacoast and to observe the situation of the towns and the depth and course of the rivers, and also the harbours, the houses of the people, and anything new there might be in that province" (Lorant 1946:36; Bennett 1968:92; Hulton 1977:ll9).

Laudonnière's fleet left Le Harve on April 22, 1564 and cleared Teneriffe (in the Canary Islands off the east coast of Africa) on May 5. Two weeks later they were in the West Indies, and by June 22 Laudonnière and his intact fleet were in the River May, or the St. Johns River as it is called today. Laudonnière immediately reestablished contacts with the local Timucuan Indians, ruled by Chief Satouriwa, who had been friendly when visited by the first French expedition in 1562. Athore, son of Satouriwa, took the Frenchmen to

the stone monument left by Ribault, and they found that the Indians were worshipping the monument as a sacred place (Quinn 1977b:22-23; Quinn 1979:II, 319-22).

Laudonnière used pinnaces and other small vessels to explore the coast and rivers around the mouth of the St. Johns, and soon he chose a bluff located six miles upstream from the sea as the place to build his fort and base of operations. They built a large triangular fort on the bank of the river; the fort was named "La Caroline" (Quinn 1979:II, 325-26).

In the month before Laudonnière's arrival in Florida, a Spanish expedition had sailed along the coastline searching for Ribault and Charlesfort. Hernando Manrique de Rojas, commanding a small frigate, sailed from Cuba in May, 1564 (Wenhold 1959:48). He followed the Florida coast north to an area where he thought he would find the stone column reportedly left there by Ribault. He searched the harbor and unsuccessfully tried to communicate with the local Indians, but he failed to find the column. He then sailed north, stopping at several harbors along the way, but still the location of Ribault's marker eluded him. Ultimately, Rojas arrived on what is today the South Carolina coast, and there he spoke with the local Indians who told him of Charlesfort, and of the departure of the Frenchmen. He also learned that there was a Frenchman, a fugitive from Charlesfort, who resided in a nearby Indian town. The Frenchman was sent for, and he was soon brought before Rojas (Wenhold 1959:54).

The Frenchman turned out to be Guillermo Ruffin, the boy who had fled from Charlesfort in 1563. Ruffin was questioned about the fort, its armaments, the mutiny, and the departure of the ship carrying the remainder of the garrison. After telling the Spaniards all he knew, Ruffin led them to Charlesfort. The Spaniards burned the store house inside the fort, and they then turned their attention to the stone marker. Ruffin led Rojas and his men to the island where the marker was located, and they took it down and carried it aboard their small vessel. Upon concluding that the Frenchmen had abandoned Port Royal Sound and that there were no additional settlements elsewhere, Rojas sailed for Cuba on June 15, 1564 (Wenhold 1959:61). He returned directly to Cuba, not making any further attempt to locate Ribault's marker on the St. Johns River (River May). Rojas and his ship arrived back in Havana on July 9, 1564 (Wenhold 1959:45).

At the very time that Rojas was sailing south for Cuba, Laudonnière and his fleet were sailing north along the Florida coast toward the River May. These two expeditions, one Spanish and the other French, must have passed each other, unobserved, somewhere along the Florida coast in the later part of June, 1564. Thus Laudonnière and his second French expedition just missed detection by Rojas.

Laudonnière and his men completed their fort, and then turned their efforts to constructing two boats for use in exploring the river and nearby coastline (Quinn 1977b:23). Apparently Laudonnière had not brought supplies adequate to feed his men, because shortly after arrival in Florida, the men of Fort Caroline were receiving reduced rations of wine and other foodstuffs (Quinn 1977b:24). Parties were dispatched from the fort to explore the interior and to trade with nearby Indian groups, but there was little for most of the men of the garrison to do to occupy their time (Quinn 1979:II, 326-36). Soon, the men grew restless, and divisions arose between the Huguenot and Calvinist portions of the crew (Quinn 1977b:24-25).

Laudonnière had dispatched his larger ships back to France shortly after the fort was begun, but one of his smaller ships remained with him. In November, 1564, the garrison at Fort Caroline mutined, imprisoning Laudonnière on a small boat, and taking the other leaders of the expedition into custody. The mutineers armed the small boats available to

them, and on December 5, they sailed out of the harbor in search of Spanish shipping (Quinn 1979:II, 334-6). In March, 1565, the mutineer crew of one ship returned with a captured Spanish ship, but their companions on the other ships had been either killed or captured by their Spanish prey, for they were not heard from again (Quinn 1979:II, 336-7). Laudonnière was able to trick and capture the leaders of the returned mutineers; he had them summarily executed, and the mutineers rejoined the garrison (Quinn 1977b:24-25). In January, 1565, Laudonnière had two boats built. He dispatched them to search Port Royal Sound to discover the fate of Guillermo Ruffin, but he had already been taken prisoner by the Manrique de Rojas by then (Quinn 1979:II, 340).

The Fall of 1564 and the Winter and Spring of 1565, the Frenchmen faced great difficulty due to a continued shortage of food and little assistance from their Timucua neighbors. Laudonnière expected Ribault to arrive with reinforcements and relief supplies by April, 1565, but when he had not arrived by June, preparations were begun to abandon Fort Caroline and Florida. Because Laudonnière had sent his larger ships back to France, his remaining smaller ships had to be remodelled in order to make them sea-worthy. Timbers were stripped from the palisade and buildings of Fort Caroline for use on these ships (Quinn 1979:II, 344).

By early August, the needed ships had been completed, and final preparations for departure were begun. Just at this point in the planned abandonment, an English fleet commanded by the Englishman, John Hawkins, arrived at the mouth of the harbor. Laudonnière refused Hawkins' offer to transport his men back to France, but he did purchase a ship to provide additional comfort for his men in the ocean crossing. Hawkins also provided supplies needed for the journey (Quinn 1977b:26-28: 1979:II, 35l-2).

With his ships completed and ready for departure by the first week of August, 1565, Laudonnière and his men waited aboard ship for favorable winds (Quinn 1979:II, 352-3). On August 28, Ribault and the rescue fleet arrived on the St. John's. Ribault commanded five ships and 800 men; he carried orders to relieve Laudonnière and send him back to France (Quinn 1977b:29). Laudonnière unwillingly gave up his command, but Ribault offered him the opportunity to remain in Florida and accept the position of second-incommand. Ribault began making repairs on the fort which Laudonnière had partially dismantled in preparation for abandoning it. The French colony was in place, and Ribault, surrounded as he was by a force on nearly 1000 men, must have felt confident of his ability to hold on the the coast of Florida.

The Spanish Response

Philip II, learning of the developing French interest in Florida, initiated plans to eliminate this obvious threat to Spanish shipping. Late in March, 1565, he finalized an agreement with Pedro Menéndez de Avilés who agreed to conquer and settle Florida at his own expense (Lyon 1971:4). At about the same time, a courier arrived from Cuba with information concerning Laudonnière's arrival in Florida. The same ship that carried the courier also carried several French deserters who had been captured while privateering in the Caribbean (Lyon 1971:4). These captives provided Philip II with abundant information concerning French Fort Caroline including a map of the fort and its defenses (Lyon 1971:5, n. 9).

Two months later, Philip learned from his ambassador in Paris that a second French fleet was being prepared to reinforce Laudonnière and Fort Caroline (Lyon 1971:5). Philip

realized that if the French were able to establish Fort Caroline as a permanent outpost, then they would have ready access to the Bamaha Channel through which his treasure fleets passed on their return to Spain. They would also have a base from which to mount expeditions against Spanish shipping and outposts in the Caribbean. Philip could not allow such a base to develop, so he modified his agreement with Menéndez. Instead of having to conquer Florida totally at his own expense, Menéndez received royal support in the form of munitions, troops, and supplies (Quinn 1979:II, 384-89; Lyon 1971:5). Menéndez's mission was not only the conquest of Florida but also the eradiction of the French presence there.

In May 1565, Ribault sailed for Fort Caroline in a fleet of seven ships containing more than a thousand men (Quinn 1979:II, 354). Within a month of Ribault's departure, Menéndez set out from Cadiz in ten ships and a force of a thousand soldiers and sailors (Lyon 1971:6). Ribault arrived at Fort Caroline on August 28, and he immediately took command despite Laudonnière's unwillingness to relinquish that position (Bennett 1975:153-154). Ribault ordered the ships unloaded and the fort rebuilt in anticipation of a Spanish attack. That attack was not long in coming.

Menéndez, aware that Ribault's fleet would further strengthen the French position, raced toward Florida, bypassing the opportunity to stop in Cuba or Santo Domingo to obtain reinforcements (Lyon 1971:6). He arrived on the coast of Florida only a week after Ribault, and he immediately attacked the French ships anchored at the mouth of the St. Johns River adjacent to Fort Caroline (Quinn 1979:II, 356-57, 392; Lyon 1971:7). After a brief naval engagement, Menéndez broke off and sailed south along the coast where he established St. Augustine as his base of operations. In the meantime, Ribault decided to follow the Spanish fleet and attack them before they could regroup (Quinn 1979:II, 357, 392). He sailed south with his ships while Laudonnière was left at Fort Caroline with the women and children and a force of less than 200 men, many of whom were ill or noncombatants. With the labor available to him, Laudonnière attempted to strengthen the partially disassembled fort (Quinn 1979:II, 358).

Ribault attacked the Spanish ships involved in unloading gear and supplies at St. Augustine, but he was able to inflict only minor damage before the Spanish ships dispersed or took refuge within the shallow harbor. As Ribault attempted to return to Fort Caroline, a strong wind, perhaps a hurricane, scattered his fleet (Quinn 1979: II, 357, 392). Menendez, seeing an opening, mounted an overland expedition against Fort Caroline; he was led through the intervening forest by a French deserter (Quinn 1979: II, 359). After a difficult two day march, Menéndez and his force of 500 men arrived on the St. Johns River (River May) near the fort. On September 20, 1565, the Spanish attacked during a heavy rain, and the small force of defenders was soon routed (Quinn 1979: II, 358-96). Many of the French were killed in the battle, and others were captured and had their throats cut by their Spanish attackers. Some of the women and children and several musicians were spared by Menéndez. Still others, including Laudonnière and Jacques Le Moyne, the artist, escaped and took refuge on several French ships anchored near the fort (Quinn 1979: II, 359-60, 396-97; Lyon 1971:9). Several of the smaller vessels were scuttled, and the two remaining ships sailed directly for France to avoid further contact with Menéndez' forces (Lyon 1971:9).

In the meantime, Ribault's ships had been driven ashore to the south of St. Augustine by the storm that had thwarted their preemptive strike. Most of the men from these vessels regrouped under Ribault's command and attempted to return to Fort Caroline by walking along the beach (Quinn 1979: II, 398-99, 403; Lyon 1971:10). Menéndez soon learned of these stranded Frenchmen, and he led a series of attacks against them. The Spaniards overwhelmed the Frenchmen, and many of the Frenchmen who were not killed outright

were captured. Menéndez had these captives, including Ribault, put to death except for a number of Catholics, musicians, and ship builders who were spared (Lyon 1971: 10, 14; Quinn 1979:II, 398-99, 403-404). Of the combined Laudonnière/Ribault force, only about 150 escaped into the interior and 60 or 70 escaped to France by ship (Quinn 1979:II, 404). In October, the storehouse at Fort Caroline, now renamed Fort San Mateo by the Spanish, burned accidentally, and because of short supplies, the French women and children captives held there were put onto ships headed for Spain (Lyon 1971:13; Quinn 1979:II, 403).

In January 1566, the ships carrying Laudonnière, Le Moyne, and other survivors of the assault on Fort Caroline arrived in France. Shortly afterwards, news of the death of Ribault and most of his men arrived. The French government was appalled by these reports. Charles IX of France demanded that Philip II punish Menéndez and pay reparations to France, but Philip refused. He did release all captured women and children under 14, but the remaining captives were held for trial (Lyon 1971:16-17). Thus ended the French attempt to colonize Florida.

Le Moyne's Artwork

As was noted earlier, an artist, Jacques Le Moyne de Morgues, accompanied Laudonnière's expedition to Florida in the Spring of 1564, and he was one of the lucky few who escaped Menéndez' assault on Fort Caroline. Charged with charting the sea coast and recording lifeways of the Indians of Florida, Le Moyne completed at least 43 Florida watercolors during his lifetime (Lorant 1946; Hulton 1977). These watercolors depicted Ribault's explorations during the 1562 expedition (Fig. 2, 3), the construction of Charlesfort (Fig. 4), a plan of Fort Caroline built by the 1564-65 expedition, and numerous scenes of Timucuan Indians who resided in the vicinity of the St. John's River (River May).

Little is known concerning the origin of Le Moyne's paintings. We know, for instance, that Le Moyne did not accompany Ribault on the 1562 expedition, and yet several of his watercolors show, in great detail, the explorations of that first expedition. The coastline and harbors shown in those paintings are so accurate that they must have been based on the first hand observation by either Le Moyne or by someone else who shared his knowledge (and drawings or sketches) with Le Moyne. The remaining watercolors were undoubtedly based on Le Moyne's own observations, since he was at Fort Caroline for more than a year.

We will never know if the watercolors were done from life, or whether they were painted after Le Moyne escaped Menéndez' attack on Fort Caroline and returned to Europe. Is it possible, for instance, that during Menéndez' surprise attack in a pouring rain, Le Moyne was able to escape carrying with him a packet of watercolors (see Hulton 1977:8-9)? Or was he forced to abandon his original works and recreate them from memory later? This later possibility seems unlikely given the extreme accuracy of the shorelines depicted (compare, for instance, Figs. 4 and 5).

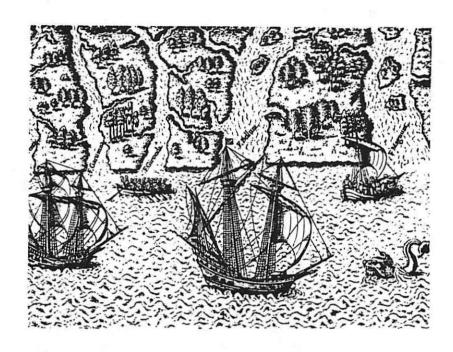


Figure 2. De Bry (1591) engraving of Le Moyne (1564) watercolor showing French exploration of the Georgia coast. De Bry Plate 4.



Figure 3. De Bry engraving of Le Moyne watercolor showing Ribault exploration of Port Royal Sound. De Bry Plate 6.

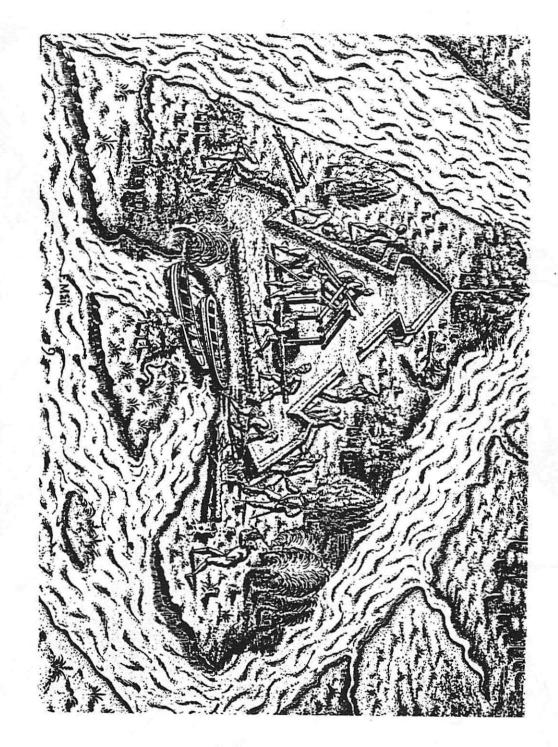


Figure 4. De Bry engraving of Le Moyne watercolor showing Ribault's men constructing a fort. We interpret this fort to be Charlesfort built in 1562. This is De Bry Plate 9.

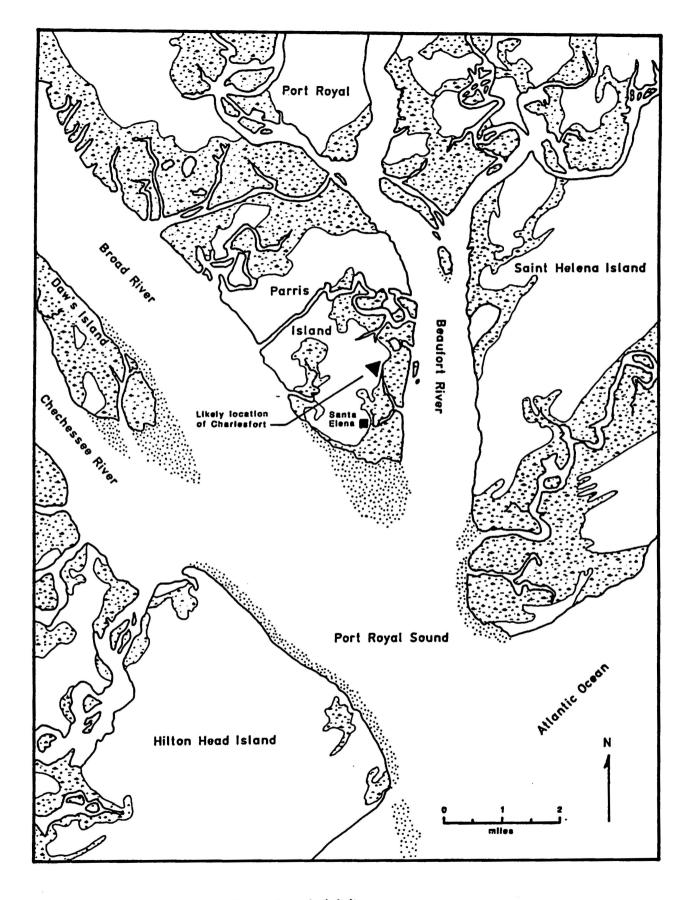


Figure 5. Port Royal Sound and vicinity.

So, we are forced to conclude that Le Moyne either had detailed sketches that he carried with him when he escaped and he later painted the watercolors, or he did the watercolors while at Fort Caroline and was able to carry them with him when he escaped. Either way, we still need to know the source of his information concerning the 1562 explorations, since he apparently was not with Ribault on that expedition.

There are several possibilities. First, it is clear that Jean Ribault was quite interested in the lay of the land, the depth and desirability of harbors, and the suitability of the land for settlement. His account is filled with observations on these subjects including descriptions of harbors and measurements of water depth. These could easily have been plotted by Ribault on a series of charts or sketches. Ribault's (Connor 1927:90) account of the first expedition mentions "a portrature of carte" that he made, but that document has not survived. Another possibility is that Laudonnière made a series of charts or maps, because his account is likewise filled with observations on harbors, rivers, and water depths. Although Laudonnière does not mention, in his written account, the fact that he was compiling a series of charts, he does mention a notebook in which he recorded a vocabulary of Indian words collected in Port Royal Sound (Quinn 1979:II, 298). It is possible, though unverified, that Laudonnière recorded charts or sketches of harbors in this notebook.

A third possibility is that Le Moyne was working from his own observations, though those observations could only have been made in 1565, two years after Charlesfort was abandoned. We do know that in January 1565, Laudonnière, who was then settled at Fort Caroline, had two small boats built that were intended to travel to Port Royal Sound to locate Guillermo Ruffin. Those boats did complete their search, but they did not find Ruffin, because he had already been captured by Manrique de Rojas and taken to Cuba. No document states that Jacques Le Moyne was part of this expedition back to Port Royal Sound, but if he were, it would have given him the opportunity to sketch the coastline explored during the 1562 expedition and to observe firsthand the layout of Port Royal Sound.

There is still another possibility. When Menéndez captured Fort Caroline, he found within its walls many of the abandoned belongings of the French garrison. In an account of the Spanish attack, Francisco López de Mendoza Grajales provides a description of some of the items found inside the fort. After listing weapons, foodstuffs, "Lutheran" books, playing cards, and sundry other things, he reports that there had been a mapmaker among the occupants of Fort Caroline. He states that this man was 'the Lutheran who was a great mapmaker and necromancer [sorcerer] and who had a thousand other bad things, and had been a Friar" (Bennett 1964:160). Grajales notes that this man was among the French dead. The Spanish held many French musicians captive, so it is possible that this identification of the dead mapmaker was made by one of these captives. Now, if there were a mapmaker among the French, and if the Spanish were not talking about Le Moyne, then this mapmaker may have been an additional source of information on which Le Moyne based his watercolors.

So, where does that leave us? Le Moyne either based his watercolors on his own observations, or he drew in part on information supplied by Ribault, Laudonniére, and unknown "mapmaker," or other sources. He either escaped the Fort Caroline attack with his original watercolors, or else the watercolors were done from sketches in Europe after Le Moyne's return home.

After his hasty departure from Fort Caroline and from Florida, Le Moyne returned to France with the remainder of the Fort Caroline survivors. By 1581 he had made his way to

England to escape religious persecution in his homeland; once there, Sir Walter Raleigh and Lady Mary Sidney became his patrons. By 1587, Le Moyne had met Theodore De Bry, a German publisher who was preparing a series of volumes on the exploration of the New World (Hulton 1977:11). De Bry did not obtain any of Le Moyne's watercolors on his 1587 trip, and when he returned to England the next year, Le Moyne was dead. De Bry purchased the watercolors from Le Moyne's widow, and he incorporated engravings based on them in his 1591 volume (Hulton 1977:11).

Because the watercolors have since been lost, there is no way to evaluate the accuracy of De Bry's engravings or their faithfulness to Le Moyne's originals. Once again, the accurate depiction of Port Royal Sound in the De Bry engravings suggests that the engravings must have been faithful copies.

The captions published with De Bry's engravings are still another problem. Were they supplied by Le Moyne, or were they compiled by De Bry from published acounts and interviews? Skelton (1977:46) concludes that the captions were "certainly from Le Moyne's pen," but this is more an assumption than a proven fact. It is clear that most of the captions were written by someone who was on the expedition and who actually saw the places and activities depicted, but there are some problems. Among the foremost of these is De Bry's Plate 9 which depicts construction of a fort (Fig. 4).

The fort shown on Plate 9 has been consistently identified by historians as Fort Caroline, although we are convinced that it is Charlesfort that is depicted (see also Quinn 1977a: Fig. 2). Despite the fact that the caption for this plate states that the fort shown was being constructed on the River May, or the St. John's, the island shown is clearly identical to an island located in the center of Port Royal Sound on two other De Bry plates (compare Fig. 3 to Fig. 4). Also, this fort in De Bry's Plate 9 is significantly different from De Bry's Plate 10 which does show Fort Caroline. Given this evidence, we concluded that it is the caption for De Bry's Plate 9 that is in error.

If that caption is, in fact, incorrect, how did that happen? There is no way to know for certain. Perhaps Le Moyne died in the midst of the final work on his watercolors and their captions, and De Bry had to come up with a caption based on information available to him. Whatever the truth behind this problem, we have proceeded under the assumption that De Bry's Plate 9, based on Le Moyne's watercolor, shows Charlesfort and not Fort Caroline.

With that assumption stated, we can turn to the question of where Charlesfort was located within Port Royal Sound. Fig. 5 allows comparison of De Bry's Plate 9 with a modern map of Parris Island in Port Royal Sound. As can be seen on that figure, both the shape of Parris Island and the orientation of the surrounding rivers correlate well with De Bry's engraving. The modern map even contains a small island in the Beaufort River that coincides with a similar island on the De Bry example.

If Parris Island is indeed the island shown on the De Bry engraving, then where is Charlesfort? Based on comparison of the maps on Fig. 5, we concluded that Charlesfort must have been along the eastern side of Parris Island adjacent to Means' Creek. Means' Creek would then be the Chenonceau River of the French. This placement fits well with the description of the fort provided by Laudonnière.

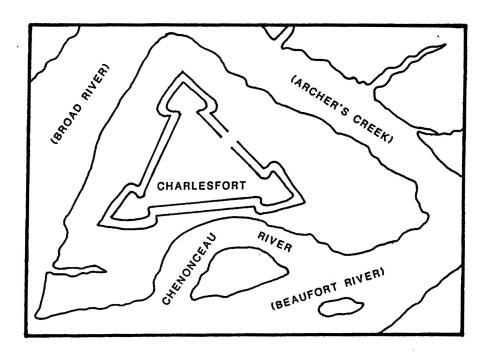


Figure 6a. Tracing from De Bry's engraving of the construction of Charlesfort with modern river names applied.

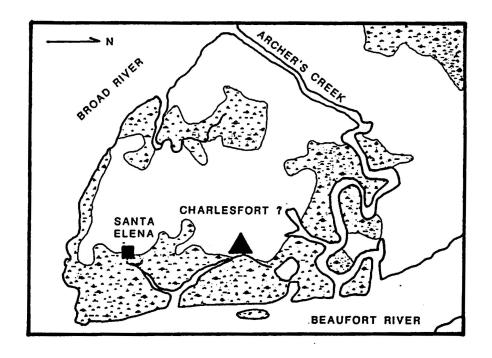


Figure 6b. Parris Island with presumed location of Charlesfort based on De Bry's engraving in Figure 6a.

Laudonnière (Quinn 1979:II, 300-301) states that Ribault's ships sailed up the "great river" on the north side of Port Royal Sound (as opposed to the Broad River which he placed on the west side). In doing this they "coasted" or sailed along an island "which ended with a sharpe point toward the mouth of the river." This island is clearly Parris Island (Figs. 5 and 6). While proceeding along the shoreline of this island, they discovered a "small river" which "entered into the island." They sounded this river and found it deep enough and broad enough to harbor "Gallies and Galliots in good number," and it was on this creek that they decided to build Charlesfort. Again, we concluded that the creek they discovered was Means' Creek and that Charlesfort was placed along the eastern margin of Parris Island. The research described in the remainder of this report was directed toward testing of this conclusion.

THE SEARCH FOR CHARLESFORT

Project Background

Our project began on January 27, 1989, when, using our analysis of the historical record, we visited the suspected site of Charlesfort on the banks of Means' Creek on Parris Island, South Carolina. The area we pinpointed at that time was the place where a boat going up the deep water channel of the southward flowing Means' Creek could first touch high ground (Figs. 7 and 8). From this point northward the creek borders the high ground for 1,350 feet before turning away into the marsh. Our argument for the location of Charlesfort, and the results of preliminary trenching on site 38BU958, were presented in a working draft dated April 28, 1989 (included as Appendix I in the present study). Our case for the location at the specific juncture of the deep water channel with high ground was based on easy accessability by sailing vessel to high ground and our knowledge that many early sites are located in such places (South and Hartley 1985). In addition, at this junction of deep water with high ground, we found a majolica apothecary jar sherd with sixteenth century attributes at the high tide line of Means' Creek. We hoped to find more such clues with an exploratory trench.

The original exploratory trench we dug at 38BU958 crossed two depressions that appeared to be the remains of ditches. This exploratory trench appears as trench segments 5-12 in Figures 16 and 17. We mapped a topographic plot of the surrodunding area and noticed that the surface depression appeared to be roughly 83 by 102 feet, the approximate dimensions of Charlesfort (Appendix I: Fig. 5). This was an exciting discovery, making us think that we were indeed close to discovering the site of Charlesfort in spite of the fact that a great deal of erosion has taken place along the bank of Means' Creek in the past four hundred years (Figs. 7 & 8). Our draft report (Appendix) was designed to provide a background for the project and a research design to address various questions if the site did prove to be that of Charlesfort.

Our Original Trenching Method at Site 38BU958

In February and March 1989, we conducted preliminary projects to lay the groundwork for an expedition carried out in the month of May 1989 (Appendix I). This May project was designed to expose the dry moat ditch of Charlesfort. Because we felt strongly that the surface depression we saw at 38BU958 was likely the Charlesfort moat,



Figure 7. The junction of the deep water channel of Means' Creek with high ground. Note the evidence of erosion of trees along the shore.



Figure 8. The junction of high ground with the marsh showing the evidence of erosion of trees into the marsh.



Figure 9. The north-south exploratory trench on site 38BU958.



Figure 10. The backhoe in operation on site 38BU1173.

we laid out a grid there to be shovel excavated in ten foot squares (Figs. 16 & 17). However, before we began excavating full squares we felt it wise to dig a two foot wide trench parallel to, and thirty feet west of, our original trench in which we had seen the two ditch disturbances (Fig. 9). This trench runs through squares 113 and 120 on Figure 17. When this trench was completed two apparent ditch disturbances were exposed. These disturbances corresponded to the surface depressions that we had seen on our topographic map (Fig. 17). This was encouraging.

We then cut east-west trenches at right angles to our previous north-south trench as additional verification that we had found Charlesfort, but here we were disappointed. The expected trench disturbance was not to be seen (Fig. 17). At this point we decided to cut a profile through the discoloration seen in squares 119 and 120 to further determine the nature of the feature we were following. When this profile was completed we found that the depression was apparently caused by the topsoil zone being depressed into the subsoil, leaving a ditch type outline, but not being the same as a dug ditch. There was no excavated edge to the depression we were following. Depressions and mounds that were the result of bulldozing activity were present throughout the area and the northern ditch we were following apparently resulted from a bulldozer depressing the surface. The correlation of these depressions with the size of the Charlesfort moat appeared to be fortuitous.

In order to determine whether this was also the case with the southernmost ditch and depression at 38BU958, we cut a profile through the discoloration in squares 113 and 114 (Fig. 17). Here we found that the depression was indeed a ditch, unlike the northern feature, having a clearly defined edge. We then used a backhoe to cut trenches 1.5 feet wide to obtain cross-sections of this ditch. A moat ditch would be relatively level on the bottom and we wanted to determine if this ditch had a level bottom or whether it tapered toward the creek. We found that the bottom of the ditch sloped sharply as it approached the creek. In only 35 feet it dropped four feet in elevation (Fig. 17)! Clearly this south ditch was designed to drain the area west of the creek bank. It was probably dug by the U.S. Marines to drain the relatively flat area west of the ditch. What we had hypothesized as the south moat of Charlesfort proved to be a false lead as had the north depression.

At this point a reevaluation of the situation was in order. What we had thought of as a possible moat turned out to be a combination of a bulldozer depression and a drain ditch. Since no French or Spanish artifacts of the sixteenth century had been found as the soil from the various trenches was sifted, our high hopes for this being the specific site location of Charlesfort were shattered after one and a half days of digging.

The Backhoe Trench Search Method

With the data not supporting our hypothesized location for Charlesfort we turned to a different strategy for trying to locate the fort. We believed that the most likely site would be where the deep water channel of Means' Creek touched the high ground. This occurred over a distance of 1350 feet to the north of our original trenches.

We began a surface survey of this area and found plantation period artifacts from the early nineteenth century along the northern edge of this deep water/high ground juncture. We also found fragments of fired clay daub, a clue to previous use of clay for construction, something we knew the French and Spaniards of the period would have used. We also found several Indian sherds of the type dating from the sixteenth century. The discovery of these artifacts, including an Irish halfpenny dated 1763 (Noel Hume: 1970: 156-157), prompted us to assign a different site number to this area, which was located immediately east of runway 27 of the Marine Corps' Page Field. This site was designated as 38BU1173 (Figs. 11 and 12). This was also a convenient place to make a

distinction between site 38BU958 and 38BU1173 because Means' Creek makes a rightangled bend from a southwestern to a southeastern flow at this point. We chose a small gut just south of the bend in the creek as the dividing point between the two sites.

Our strategy for locating Charlesfort somewhere along the 1350 foot junction of deep water and high ground depended on the fact that we know there was a dry moat around a building located inside the fort, with raised bastions of embanked earth supporting artillery pieces. If this moat was crossed by a backhoe trench, we would be able to see the outline of the moat ditch where the trench crossed it. A backhoe was brought to the site (Fig. 10).

We felt justified in using a backhoe to search for the moat because in our walkover along the high ground we observed disturbance caused by machines clearing and constructing Page Field. There were pushed up piles of soil and depressions throughout the area. We needed to see the undisturbed subsoil to locate any disturbances into it in the past.

Since considerable erosion has taken place along Means' Creek we knew we would have to place the backhoe trench as close to the present edge of the bank as possible in case most of the fort was washed away by erosion. We assumed the fort was placed close to the edge of the bank and that it was located along the loop of Means' Creek as seen in the Le Moyne map of Charlesfort being constructed (Figure 4). This part of Means' Creek is the only part that touches high ground today.

We anticipated that our backhoe trench would reveal any artifacts from the sixteenth century whenever the trench came into the area of the Charlesfort site. French faïence (tinash glazed earthenware) might be expected to be present in small amounts, since this ware was being made by 1548 in France and spread rapidly into popular use (Lane 1970: 6-9). Fired clay daub was another of the artifacts we were anticipating as clues to the presence of wattle-and-daub structures such as the two known to have burned inside the fort at different times (see Appendix I for details).

In addition to these artifacts we were looking for the type of pottery known to have been manufactured at the time by local native Americans. Such pottery was well known from the authors' familiarity with it from excavations at Spanish Santa Elena, pottery dating only a few years later in time than Charlesfort (South 1982: 49). Several sherds of such pottery were located on the surface of site 38BU1173. Santa Elena was located only a mile south of the area where we expected to find Charlesfort (Fig. 11).

With the above considerations in mind we began using a backhoe to cut a trench that eventually turned out to be almost a mile long (4,969 feet) and extended across three sites, 38BU958, 38BU1173 and 38BU1193, in search of Charlesfort (Fig. 12).

The backhoe team was usually composed of the operator, Tommy Charles, and a shovel person who kept the bottom of the trench cleaned out so that the features revealed at the bottom of the disturbed topsoil zone could be seen. The topsoil zone varied in thickness from one to two feet. This depended on the degree of prior disturbance by Marine Corps bulldozing activity, which was considerable along the shoreline where clearing by pushing brush into the creek had been done during airfield construction.

The transit team usually composed of South who, with a helper pulling tape, set a series of transit reference point nails along the backhoe trench as it was extended toward the south. In the bottom of the trench features of four basic types were seen as darker soil colors against the yellow to white subsoil sand background. The most prevalent type of

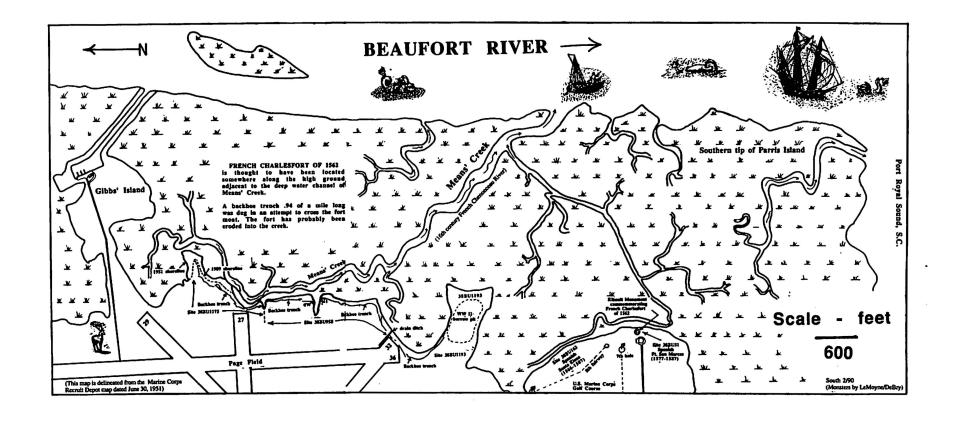


Figure 11. Map of the southeastern tip of Parris Island showing the relationship between the Charlesfort and Santa Elena sites.

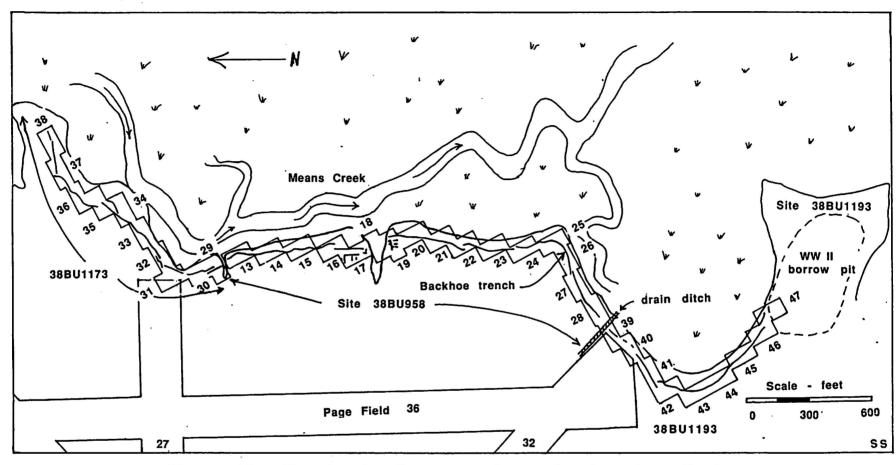


Figure 12. Key to the figure numbers showing the mile long backhoe trench dug in the search for Charlesfort.

feature was 1) tree root stains, having a characteristic darker center with lighter outer soil color. Large tree root discolorations often appeared to be linear ditches when crossed by the backhoe trench. When there was a doubt as to whether a feature was a tree or a ditch, parallel ditches were cut adjacent to the backhoe trench to expose more of the feature.

Oystershell features were the second most prevalent type of feature. Some of these refuse features contained native American pottery fragments of the Wilmington Ware Group (South 1973: 54-55). These were designated as 3) Wilmington Indian features.

Other features with or without oystershells represent holes dug during the plantation period of occupation during the early nineteenth century. These contained British ceramics such as whiteware, pearlware, creamware or transfer-printed ware within the feature (South 1977: 210-212), and were designated as 4) plantation features.

When the thousands of transit-plotted trench and feature measurements were taken over the mile long trench across the three sites and translated into a master site map, the resulting field map, at a scale of one inch equals ten feet, measured forty-five feet long! Such a fold-out map would be too cumbersome to handle in a report of this type and more difficult to manage while reading, so the map for each site was re-drawn in adjoining sections and reduced to produce three sets of maps. The map set for site 38BU958 is numbered from north to south as Figures 13 through 28 of this report. The key for locating these figures is seen in Figure 12.

The Backhoe Trench at 38BU958

From the north end of site 38BU958 south to our original excavations seen in Figures 16 and 17, we found no sign of sixteenth century artifacts. Eight shell deposits and four tree root stains are the only discolorations located in this segment of our trench. Figures 16 and 17 reveal our shovel-cut two-foot wide trenches on the area of the site originally thought to be the location of Charlesfort, where the deep water channel of Means' Creek [the French Chenonceau River] first touches the high ground of Parris Island. The 1.5 foot wide backhoe trenches are also shown on these figures. The concrete reference points A and B are also shown here. All measurements for site 38BU958 were taken from these reference points.

Site 38BU958 continues toward the south from Figure 18, on the south side of the gut formed by a creek. The reference points in this area of the site are represented by double letters. Since the deep water channel of Means' Creek turns away from the high ground at this point, leaving only marsh adjacent to the high ground, our hope of finding Charlesfort along this marshland was less than it had been where deep water and high ground meet. However, we hypothesized that perhaps the creek had once flowed along this high ground 428 years ago, and we therefore continued our trench toward the south.

On the south side of the gut a series of tree holes and an oystershell feature caused us to think we might have found the Charlesfort ditches (Fig. 19). Additional backhoe trenches were cut in an effort to determine if ditches had been dug here, but all we found for our efforts were large tree hole stains and stained subsoil areas not representing dug features. We did observe shallow, recent fireline ditches cut in this area but their depth was too shallow to be revealed by our backhoe trench.

Virtually no artifacts of any type were found along this high ground adjacent to the marsh except near R.P. NN (Fig. 25). In this area brick fragments and a pit filled with late

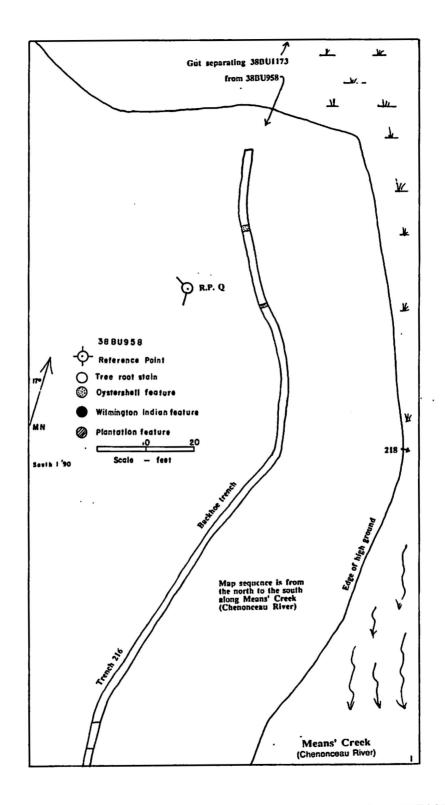


Figure 13. The backhoe trench at the north end on site 38BU958.

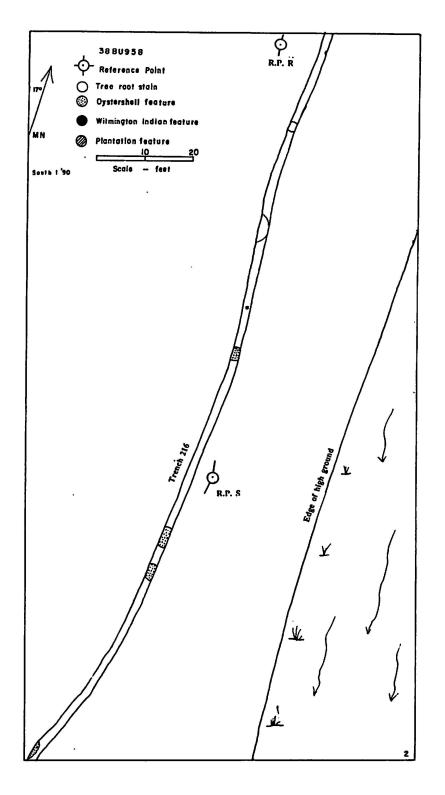


Figure 14. The backhoe trench showing oystershell features.

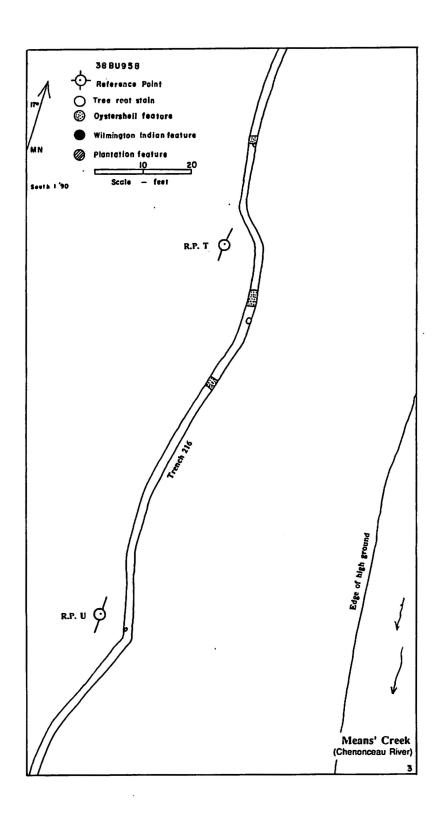


Figure 15. Oystershell features in the backhoe trench near R.P. T.

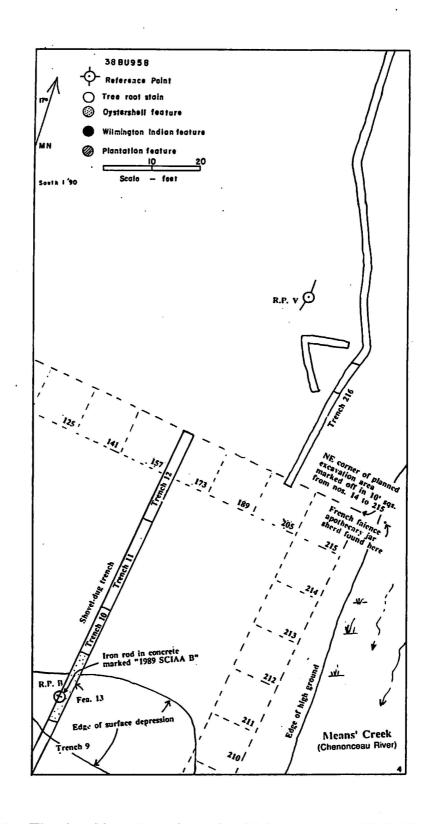


Figure 16. The backhoe trench and grid layout near R.P. B.

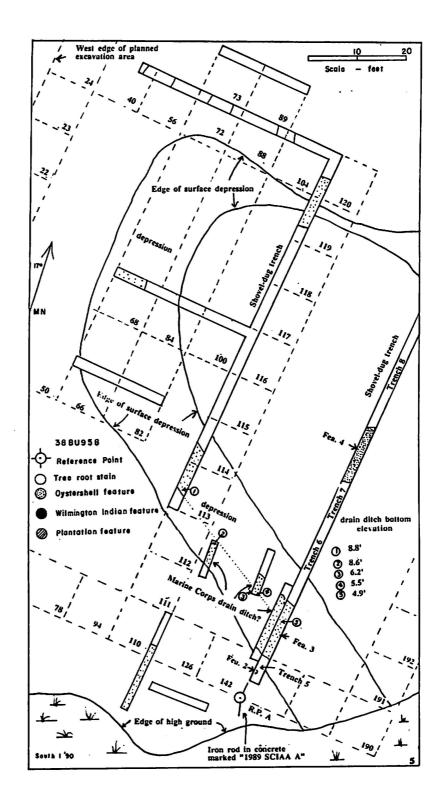


Figure 17. The shovel dug trenches north of R.P. A in search of Charlesfort.

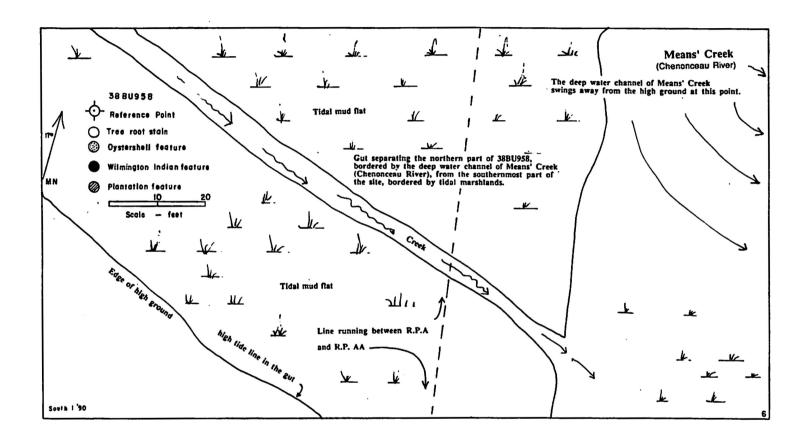


Figure 18. The gut separating the north and south halves of 38BU958.

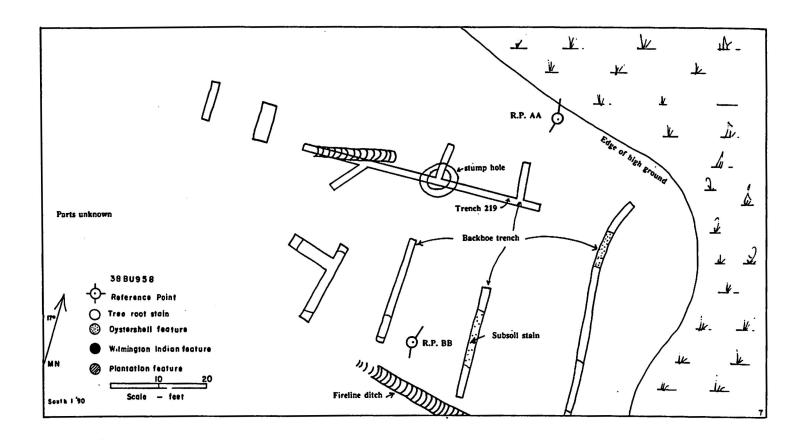


Figure 19. The backhoe trenches dug in the area of R.P. AA and R.P. BB.

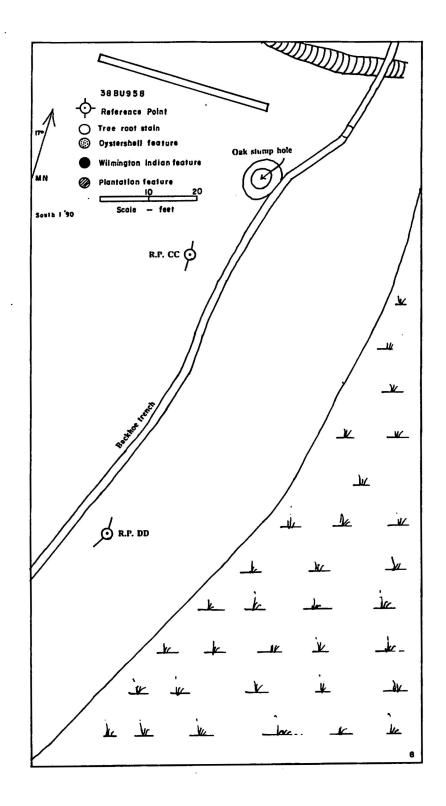


Figure 20. A section of the backhoe trench between R.P. CC and R.P. DD.

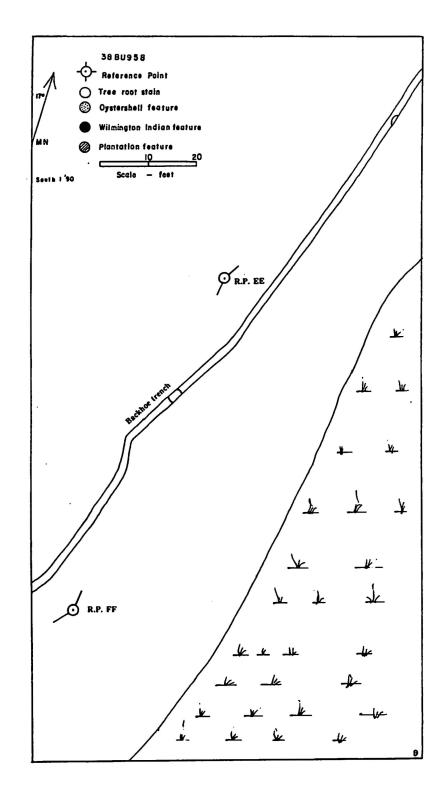


Figure 21. A section of the backhoe trench between R.P. EE and R.P. FF.

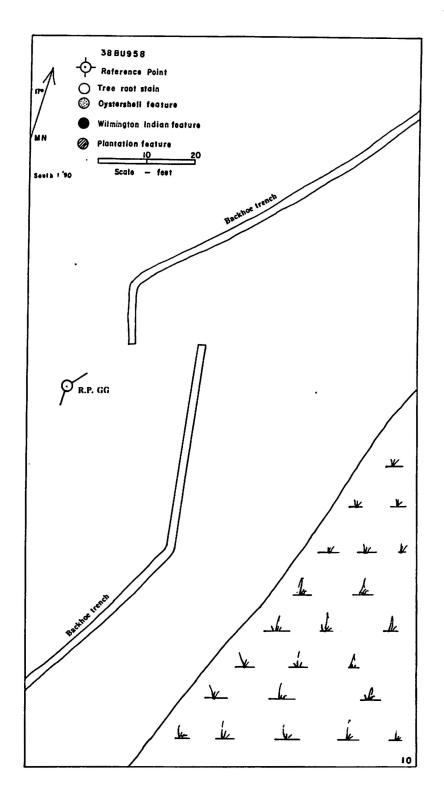


Figure 22. The backhoe trench near R.P. GG.

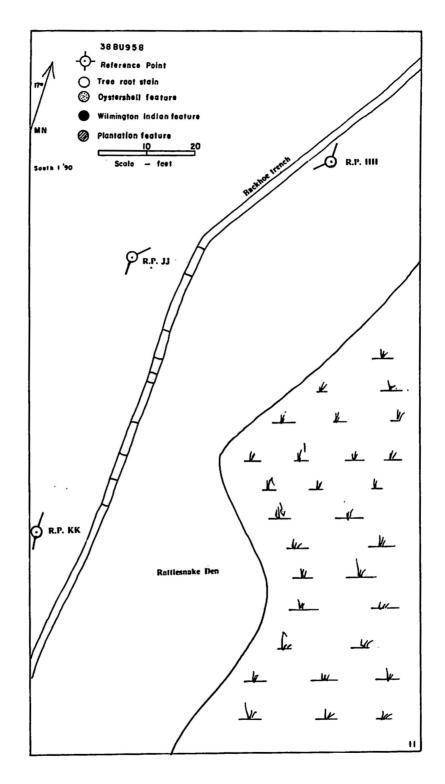


Figure 23. The backhoe trench with tree stains near the snake den.

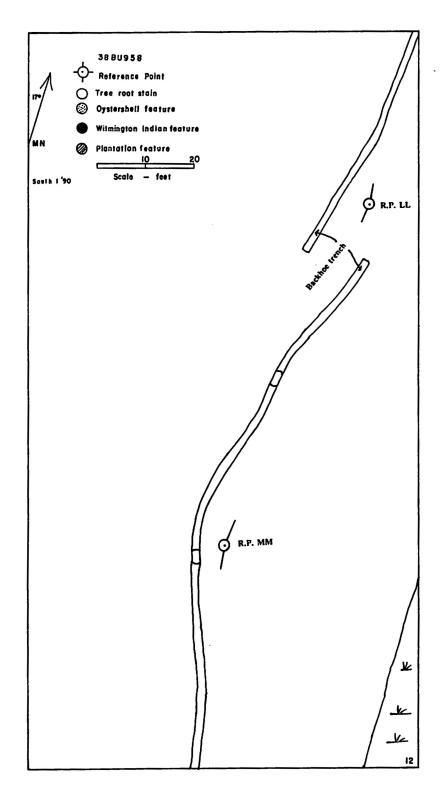


Figure 24. The backhoe trench near R.P. LL and R.P. MM.

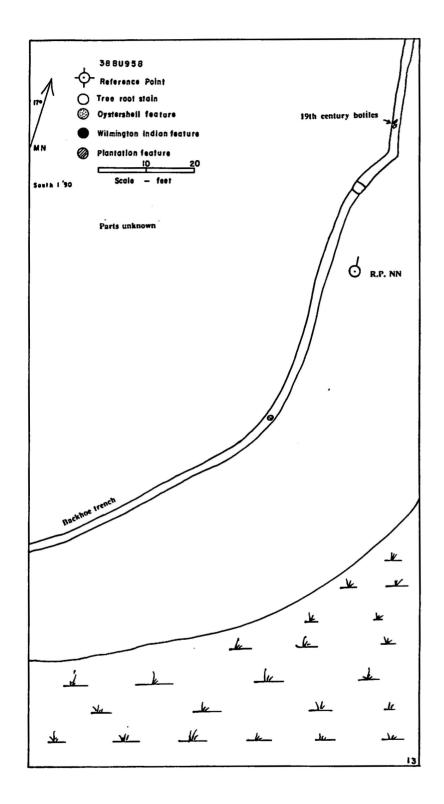


Figure 25. The backhoe trench curve at the nineteenth century plantation.

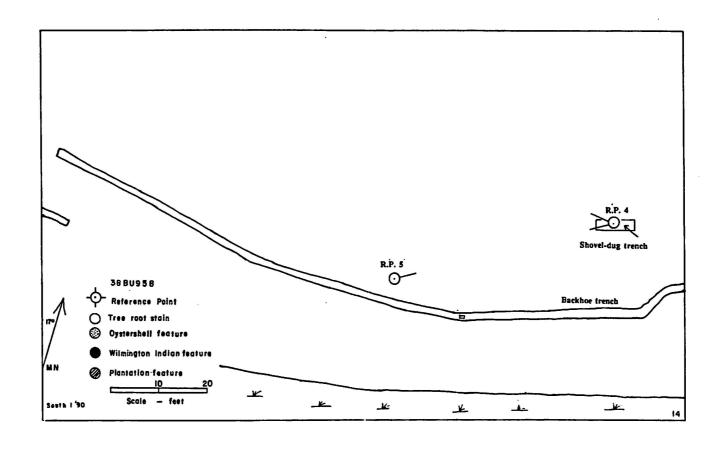


Figure 26. The east-west running trench near R.P. 4 and R.P. 5.

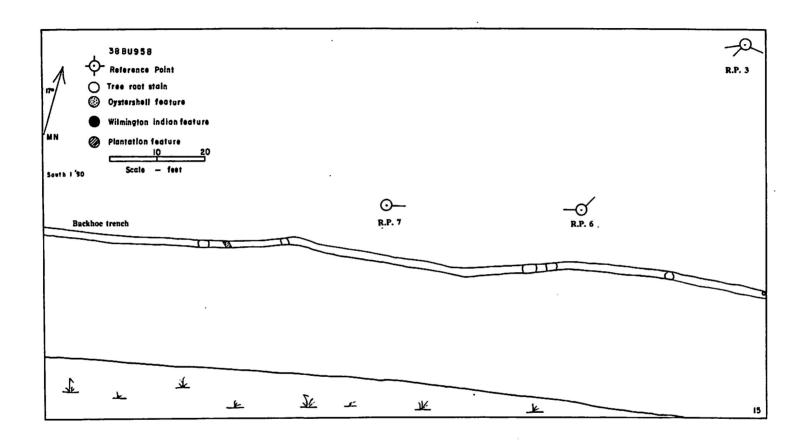


Figure 27. Tree stains in the trench near R.P. 6 and R.P. 7.

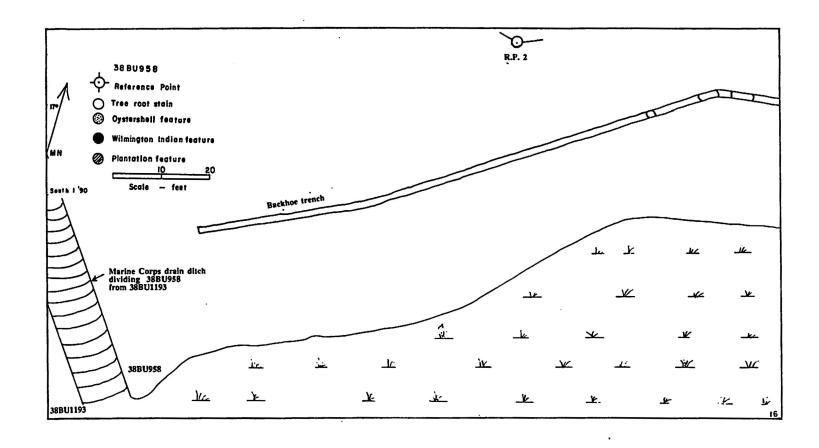


Figure 28. The trench at the south end of site 38BU958.

nineteenth century type bottles was found. This reflects the presence of a plantation in this area where the shoreline makes a right-angle turn toward the west around an old oxbow channel of Means' Creek. Artifacts of the late nineteenth century in some abundance were found along the shoreline here. From this point until the trench reached the edge of a Marine Corps drain ditch (Fig. 28), the reference points carry arabic numbers originating from reference point C, located in the center of a large yellow X at the end of Page Field airstrip number 32, on site 38Bu1193 (Fig. 39). This drain ditch was chosen as a good point for separating the south end of site 38Bu958 from site 38Bu1193 (Figs. 12 and 28).

Although the deep water and high ground along the northern part of site 38BU958 presented the best prospect for the location of Charlesfort, our backhoe and other trenches failed to locate either features or artifacts of the sixteenth century period there.

The Backhoe Trench at 38BU1173

We found a 1763 coin and fired clay daub and plantation period artifacts on the surface of site 38BU1173. Although the coin dated from the eighteenth century the ceramics and other artifacts indicated the site was occupied in the early nineteenth century, suggesting the coin was an heirloom. We surmised that the site might also have been of interest to Jean Ribault in the sixteenth century as well, because it has high ground adjacent to the deep water channel of Means' Creek, with a good view of Port Royal Sound. Sails of ships entering the sound could easily have been seen from this site (Figs. 5 and 12).

Marine Corps bulldozer activity was extensive all along this part of the shoreline, with high mounds of soil pushed into a ridge along the edge of the high ground paralleling Means' Creek. Test trenches were cut inland from this ridge. Two concrete reference points, A and B, were placed near the end of runway 27 to be used for all measurements on the site (Fig. 32). Another reference point, a nail, was driven into the center of a large yellow cross painted on the asphalt at the end of the runway (Fig. 31).

Shovel-dug test trenches were excavated to get an understanding of the depth of the disturbed topsoil zone as a guide for determining how deep the backhoe needed to go (Figs. 32 and 33). Another reason the test trenches were dug was to see if artifacts from previous occupations were still to be found in situ or whether the bulldozing activity had removed all previous topsoil to the subsoil level. We found that Wilmington Period pottery, early nineteenth century ceramic fragments, and Marine Corps artifacts were present in the disturbed topsoil, though in places we found undisturbed midden remnants.

Following completion of our test trenches, we ran a backhoe-excavated trench along the entire shoreline of 38BU1173. The backhoe trench on site 38BU1173 resulted in ten maps (Figs. 29-38). The map series runs from the southwestern edge of the site at the gut separating site 38BU958 from site 38BU1173, and proceeds to the north and then to the northeast to the end of the penninsula on which the site is located (Figs. 12 and 29-38).

The backhoe trench skirts the end of the Marine Corps Page Field runway number 27 (Fig. 31). A Marine Corps concrete septic tank was crossed by the backhoe trench at the end of the airstrip. A number of ditches were found in the trenches near reference markers A and B (Fig. 32), and Marine Corps artifacts such as plastic wrappers from C rations were found in some of them.

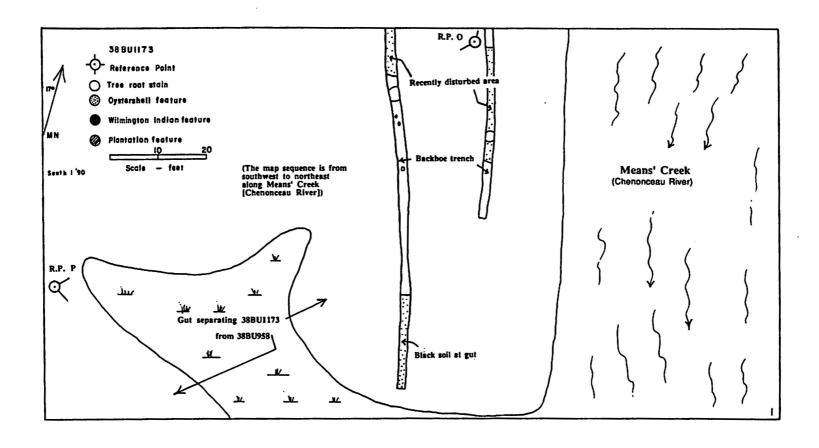


Figure 29. Backhoe trenches at the southwest end of site 38BU1173.

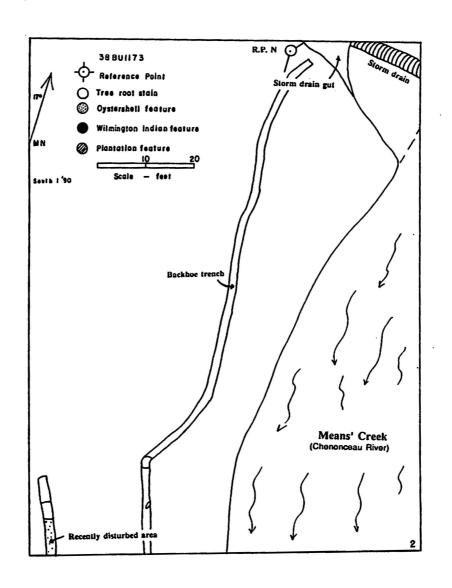


Figure 30. The backhoe trench south of the storm drain at 38BU1173.

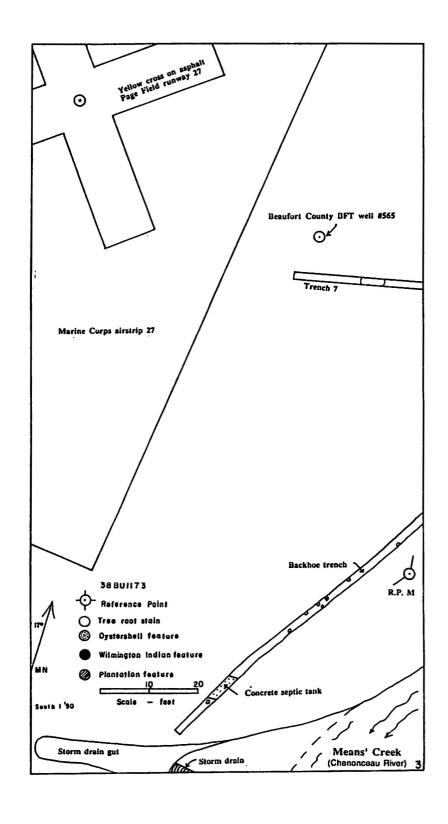


Figure 31. The backhoe trench east of Page Field airstrip 27.

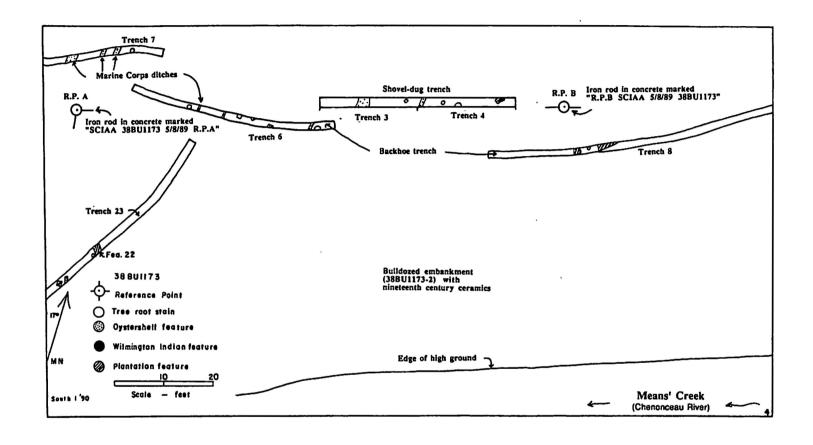


Figure 32. The trenches in the area of R.P. A and R.P. B on site 38BU1173.

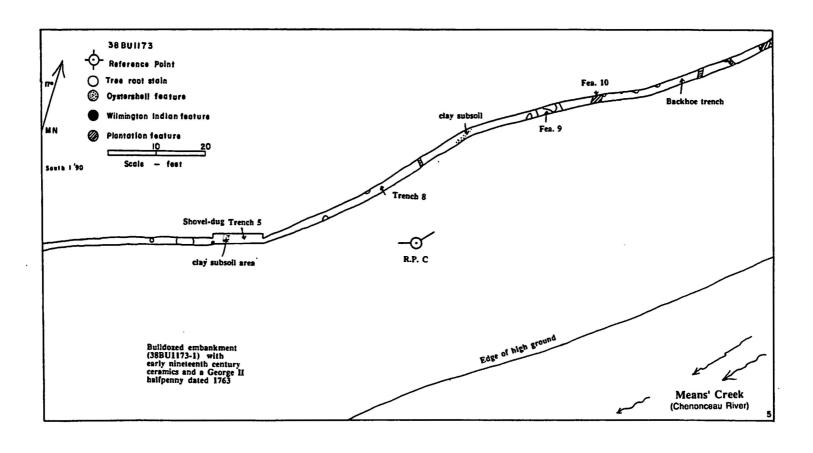


Figure 33. The backhoe trench in the area of R.P. C.

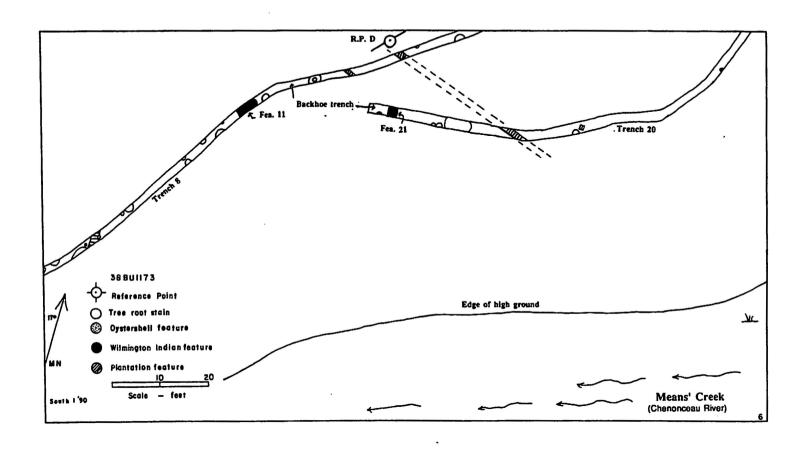


Figure 34. Wilmington and Plantation Period features near R.P. D.

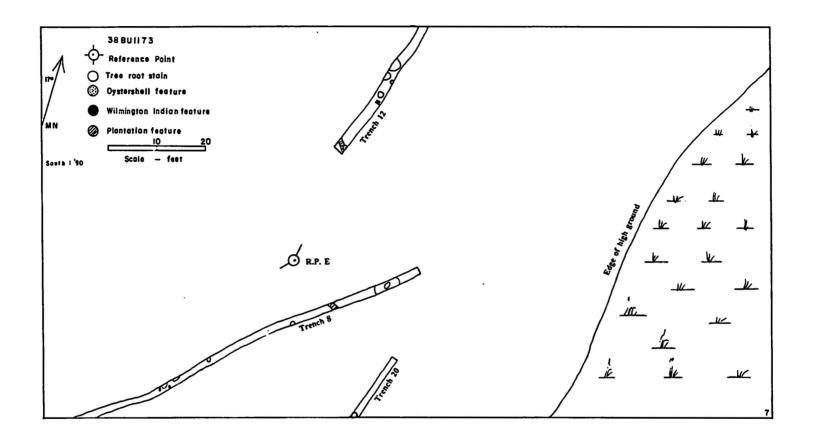


Figure 35. Backhoe trenches near R.P. E.

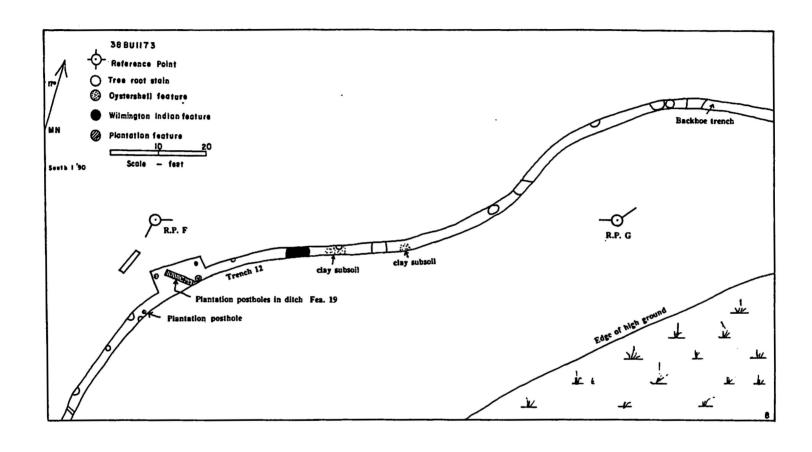


Figure 36. Plantation and Wilmington Period features near R.P. F.

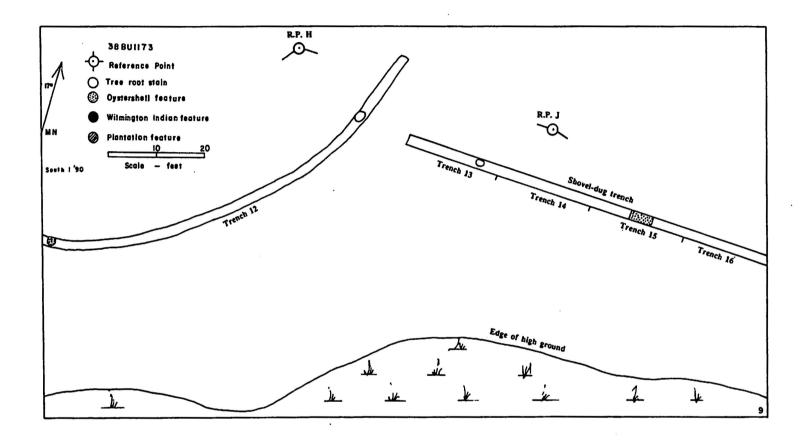


Figure 37. Backhoe and shovel-dug trenches near R.P. H and R.P. J.

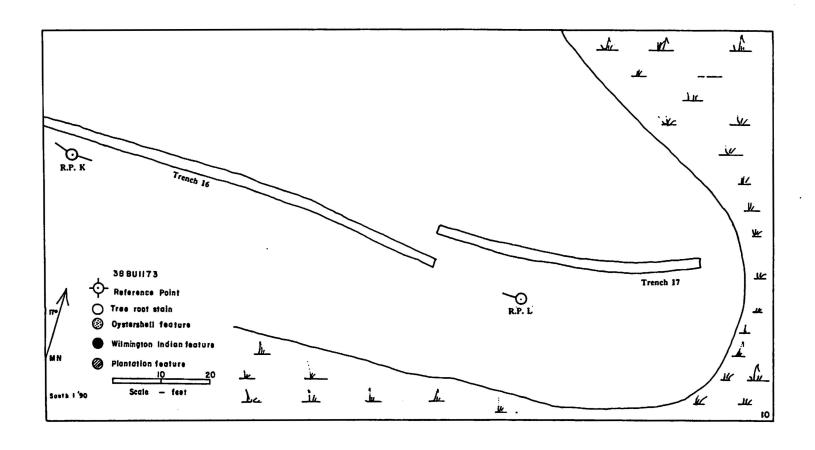


Figure 38. The end of the trench at the east end of site 38BU1173.

Early nineteenth century plantation period ditches were identified by the presence of pearlware, creamware, and white ball clay pipestems (South 1977: 210-212). Other oystershell midden features contained Wilmington Ware Group pottery fragments (South 1972: 54-55), (Fig. 34). These features, dating hundreds of years before the French arrived in the area, demonstrated that if they survived the bulldozing activity in the area then any Charlesfort features would also have survived.

Near R.P.F the backhoe trench crossed a ditch with a row of postmolds (Fig. 36). The presence of a Wilmington Period sherd in the fill of the ditch made us think the feature might have been from that period until we also found a cut nail in the fill, revealing that the structure represented

by the postmolds in the ditch dated from the plantation period of the nineteenth century (Noël Hume: 1970: 252-254).

Near the northeastern end of the backhoe trench at R.P. J, the pine forest was so dense that the backhoe was not able to maneuver between the trees, so that portion of the trench was excavated by shovels and human labor (Fig. 37). As the end of the penninsula was approached the surface

elevation dropped, becoming only a foot or so above the level of the surrounding marsh (Fig. 38). No features nor artifacts were found here, except a pot-metal practice bomb from Marine Corps activity during World War II. Such bombs were also found on the site of Santa Elena, a mile south of site 38BU1173 (Fig. 11).

Although 38BU1173 contained artifacts from the prehistoric Wilmington Period as well as an eighteenth century coin and ceramics and other objects dating from the early nineteenth century, little evidence was seen for occupation of the site in the sixteenth century except two surface collected sherds of complicated stamped pottery that could date from that time. The search for Charlesfort along the high ground bank of site 38BU1173 did not produce evidence of French occupation of the sixteenth century.

The Backhoe Trench at 38BU1193

With no sign of Charlesfort on sites 38BU958 or 38BU1193, we turned our attention to an oxbow bend of Means' Creek south of site 38BU958 (Fig. 12). It seemed to us that if the oxbow were an active channel of Means' Creek in the sixteenth century, then the fort might well have been located at the center of the oxbow bend. A fort positioned here might well fit the location of the fort as depicted by LeMoyne (Fig. 4). We were less enthusiastic about the prospects of finding the fort at this location, because the ground was lower here and the active creek channel was several hundred feet distant across the marsh. Nevertheless, we returned to Parris Island for a week in October, 1989, to continue the backhoe trench around the oxbow in a continued search for Charlesfort.

Site number 38BU1193 had been originally assigned to a site containing Wilmington and other native American pottery fragments and oystershell midden located around the marsh shoreline of the peninsula (Fig. 12). A large borrow pit was dug into the penninsula during the construction of Page Field during World War II, leaving a marshy hole in the middle of what had been higher ground. With our backhoe trench extending around the entire loop of the oxbow bend we extended the definition of Site 38BU1193 to include the area from the tip of the peninsula to the drain ditch adjacent to airstrip 32. This ditch was designated as the dividing line between site 38BU958 and 38BU1193 (Fig. 12).

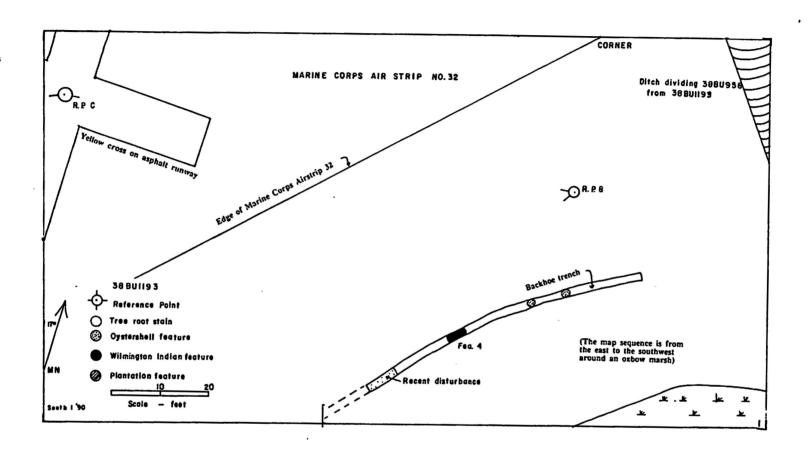


Figure 39. The north end of site 38BU1193 south of airstrip 32.

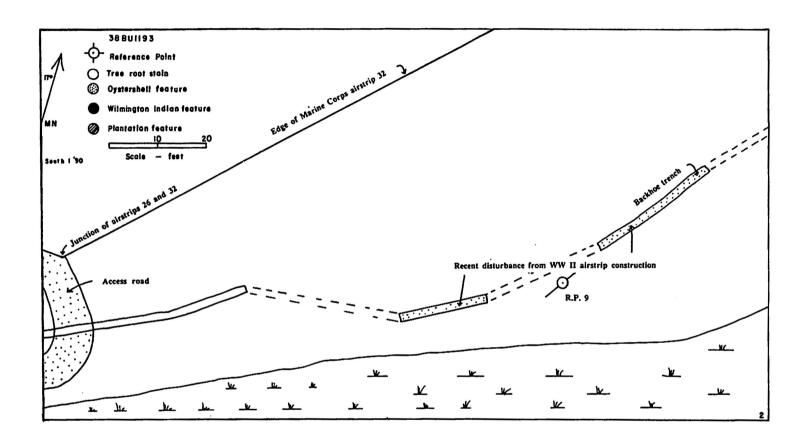


Figure 40. Disturbed subsoil area at the junction of airstrip 26 and 32.

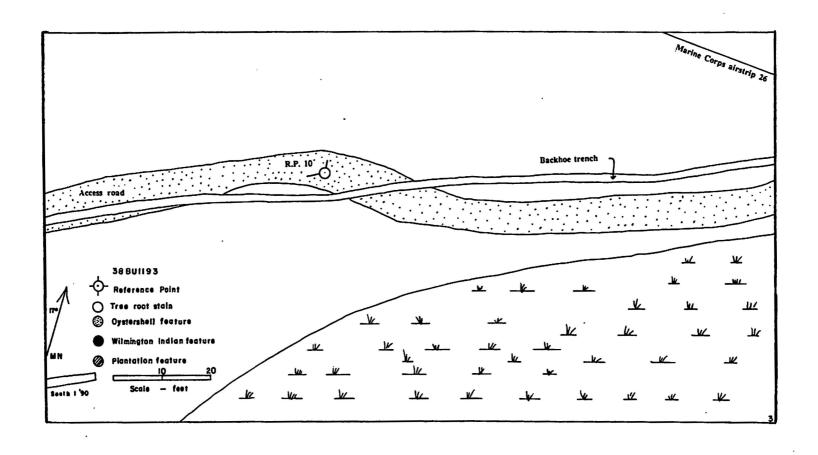


Figure 41. The featureless backhoe trench near R.P. 10 on site 38BU1193.

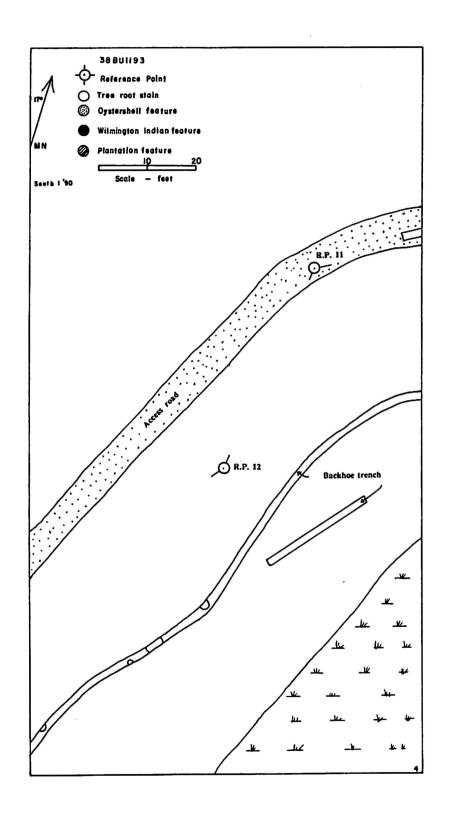


Figure 42. Backhoe trenches near R.P. 12 at site 38BU1193.

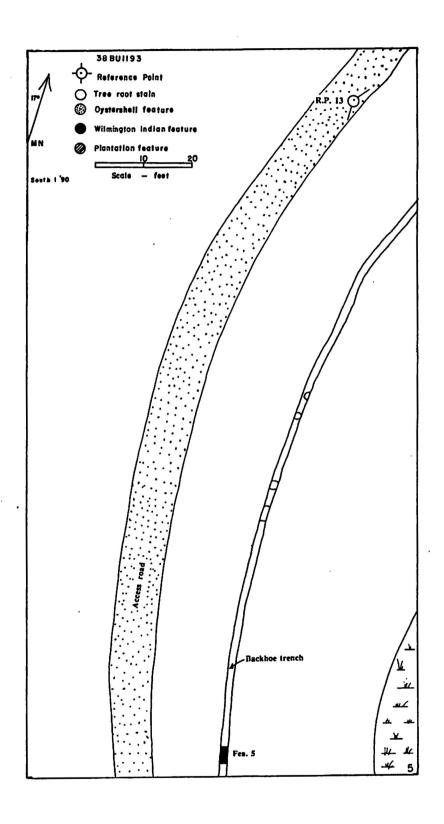


Figure 43. Wilmington Feature 5 south of R.P. 13, site 38BU1193.

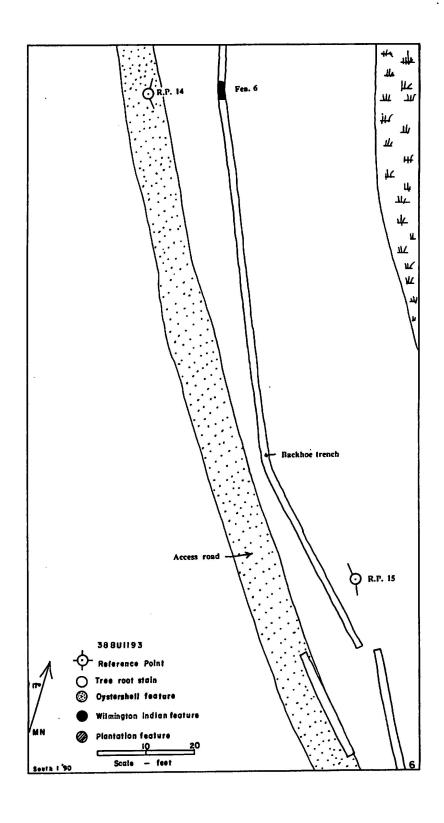


Figure 44. Wilmington Feature 6 at R.P. 14, site 38BU1193.

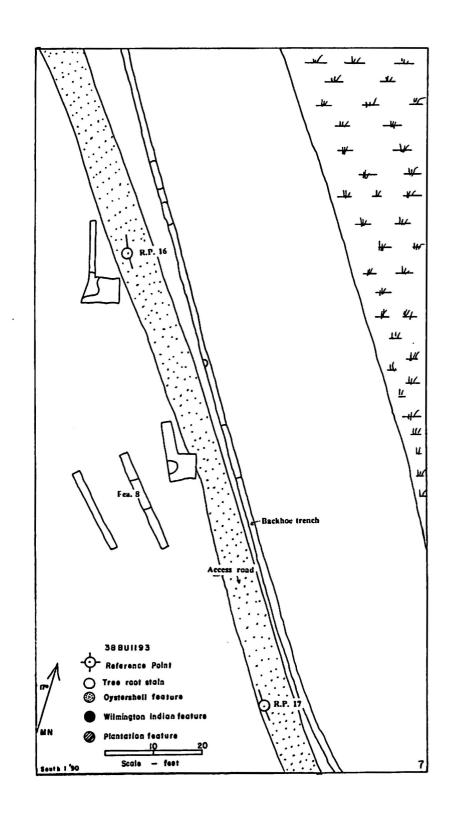


Figure 45. Backhoe trenches near R.P. 16 and R.P. 17, site 38BU1193.

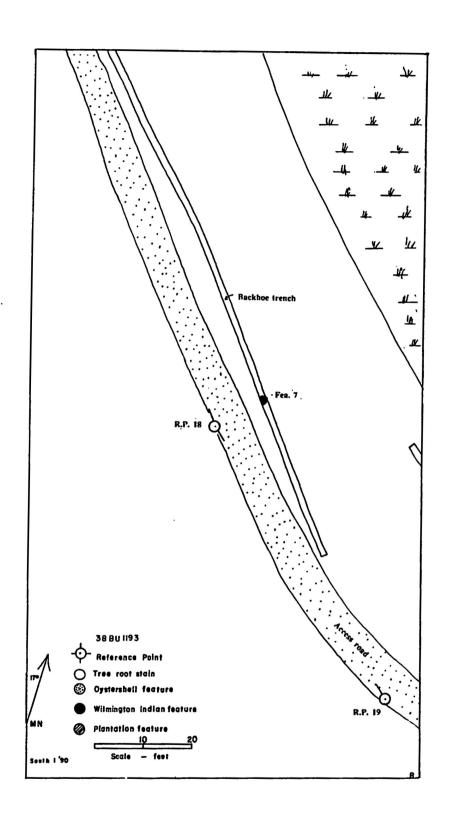


Figure 46. Wilmington Feature 7 near R.P. 18, site 38BU1193.

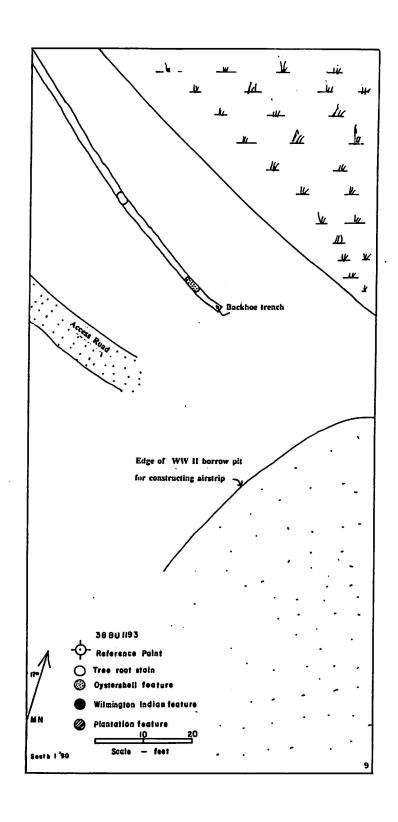


Figure 47. The south end of the backhoe trench at the borrow pit.

A yellow cross had been painted by the Marine Corps at the end of runway 32 and another at the end of runway 36 (Fig. 12). A reference point nail, R.P. C, was placed in the center the large cross at the end of runway 32 and R.P. D was placed in the center of the cross on Runway 36. All measurements for site 38BU1193 were taken from these reference points.

Four oystershell features, 4-6 and 7, contained Wilmington pottery (Figs. 39, 43, 44 and 46). Other than these Wilmington Period features, no cultural features were found except three oystershell features of unknown affiliation (Figs. 39 and 47). These may well have also been from the Wilmington period of occupation on the site.

At the end of the Page Field runway 32 a deep disturbance probably caused by the construction of the airfield was observed in the trench (Figs. 39 and 40). Other than this and the above mentioned cultural features, only tree root stains were seen around the oxbow bend.

With this disappointment at not finding any evidence of occupation of the area during the sixteenth century, the search for Charlesfort came to an end.

What Happened to Charlesfort?

The evidence for the location of Charlesfort along the bend of Means' Creek as revealed by the contemporary accounts and LeMoyne's Map 9 (Fig. 4 and Appendix I) is convincing. Our mile long backhoe trench failed to produce any evidence of the fort or of French or Spanish occupation in the sixteenth century. We attribute this to the extensive erosion that has occurred along the high ground bank of Means' Creek. Evidence for this erosion is seen along the shoreline of Means' Creek where remnants of trees eroded from the bank litter the shoreline (Figs. 7 and 8).

Other evidence of erosion is seen when a map drawn in 1951 by the Marine Corps is compared with the shoreline plotted by us in 1989 (Fig. 11). Along the shoreline of site 38BU1173 considerable loss of high ground is seen to have occurred during the last 38 years. When this length of time is increased to over 400 years, it is apparent that much erosion has taken place along the brink of these sites.

Additional evidence for the effects of erosion along Means' Creek is seen at the site of Santa Elena, one mile south of the Charlesfort site location (Fig. 11). At Santa Elena erosion of 150 feet of shoreline has destroyed one-half of Forts San Felipe and San Marcos (South 1985: 3, 10). The creek adjacent to Santa Elena is a much smaller branch of Means' Creek than the main channel eroding the high ground at the Charlesfort site. With Charlesfort measuring only 83 by 102 feet, less erosion than has occurred at Santa Elena would easily have erased any sign of the French occupation on Parris Island. We think this is exactly what happened and why our backhoe trench revealed no evidence of Charlesfort. Charlesfort, adjacent to Means' Creek or the Chenonceau River, has been completely eroded away.

UNDERWATER SURVEY AT PARRIS ISLAND

Bruce F. Thompsom

The 1989 search for remains of Charlesfort included an underwater component which was conducted by SCIAA underwater staff, Judy Wood, from the Savannah District, Corps of Engineers, and an array of volunteers. Our marine search involved a reconnaissance of Means' Creek, underwater metal detection, visual inspection of targets, and a profile of the creek just below 38BU1193 (Fig. 48, Area A). These events occurred between May 11th and July 28th of 1989, and they represent only a cursory attempt to locate 16th century artifacts that might lie at the bottom of Means' Creek, which runs between the site search area and the eastern marshes.

As an adjunct to the primary goal of searching for Charlesfort was the secondary objective of locating evidence of <u>Le Prince</u> (<u>El Principe</u> in contemporary Spanish accounts), a French ship which ran aground in Port Royal Sound in late December, 1576. Chester DePratter, co-principal investigator of the Charlesfort search, discovered archival information which places the shipwreck in the vicinity of Parris Island. Our <u>Le Prince</u> search included a reconnaissance of the waters east of Parris Island, a magnetometer run from the Marine Corps yacht basin south to a point just off Parris Island spit, a series of magnetometer transects over an identified anomaly target, and a test probe of suspected signatures (Fig. 48).

Charlesfort Search

Purpose

A marine archaeological component to the Charlesfort search was initiated due to three propositions: 1) if survivors of Charlesfort were unable or unwilling to take their artillery with them on their heroic departure from the island (See Appendix I), then there is a high probablitity that some of these guns may have been thrown into Means' Creek; 2) if Charlesfort were positioned adjacent to the creek, then one would expect to find artifacts that were thrown into the water through everyday activity of its inhabitants; and 3) if the site of Charlesfort has been destroyed by Means' Creek through erosion, then artifacts originally in or around the fort should now be incorporated in creek sediments.

We anticipated that a magnetometer survey along the creek channel would provide a good sampling of iron debris on the creek bottom or beneath its surface. Handheld metal detectors and divers would be used to pinpoint locations of anomalies identified with the magnetometer. Finally, a profile of the creek deposits related to the water level would provide preliminary data on erosion conditions along the creek and types of bottom sediments.

Magnetometer Survey

Charlesfort survivors built a twenty ton vessel to escape the island in 1563, and they could have used some of the fort's cannons as ballast. A preliminary study of the cannons by Chester DePratter indicate there would have been too much weight using all eight guns (See Appendix I). Two of the guns were brass falcons probably weighing 700 to 800 pounds each and the other six were iron culverins probably weighing between 1,200

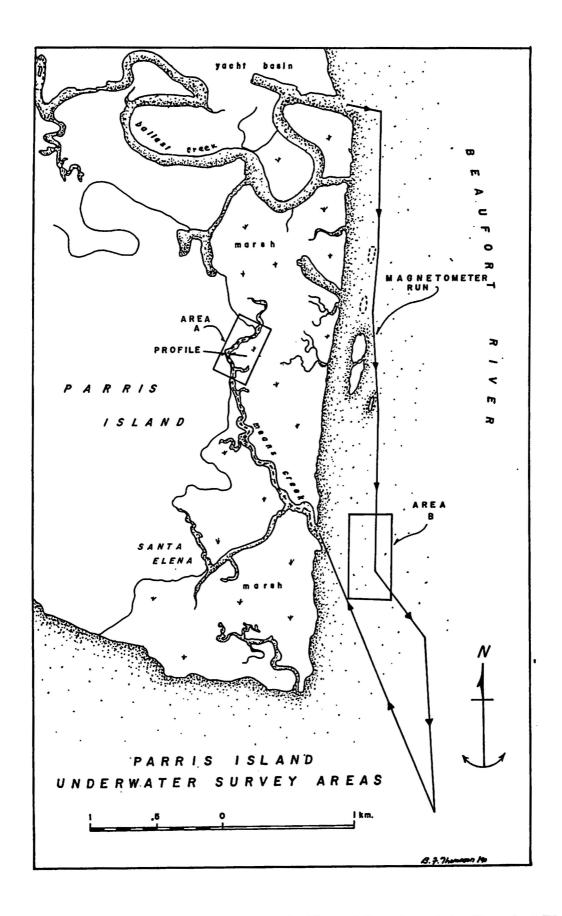


Figure 48. Underwater survey areas in Means' Creek and the Beaufort River.

and 2,000 pounds each. Even the most conservative accounting would place the total weight of these cannons at between 8,700 and 13,500 pounds, much more than would be needed to ballast a twenty ton vessel with 22 men and supplies on board.

If the survivors who finally fled Charlesfort did not take all eight of the fort's cannons with them, it is possible that they may have thrown some of them into the creek. For this reason, we conducted a magnetometer survey along the entire length of the Charlesfort fork of Means' Creek. Judy Wood, U. S. Army Corps of Engineers, Savannah District, arranged for the use of a Geometrics 806A marine magnetometer. She also volunteered to serve as its operator. Positioning along the creek was done by timekeeping and ranging, thus making difficult precise plotting of anomaly locations. The magnetometer was run in both upstream and downstream directions in an attempt to cross-check our findings.

The creek survey revealed eight major anomalies (Fig. 49, #5-12) and two extensive debris fields (Fig. 49, Groups 13 and 14) where the creek touches the high ground. Monopolar spikes, like anomaly numbers 7, 8, 10, 11, and 12, are similar to what we would expect for cannon signatures. However, time did not allow us to ground truth these targets, and they are more than likely recent debris. Diverse human activity on Parris Island through the centuries has resulted in extensive refuse disposal in the creek; even though the recorded anomalies may not be 16th century cannons, they still warrant closer scrutiny and more precise plotting of their locations.

Target Groups 13 and 14, within Study Area A, are separated because of the type of signatures found (Fig. 49). In Target Group 13, there were three distinct monopolar spikes of over 40 gammas each, indicative of large masses of metal. Debris revealed within Group 14 was so extensive that it was impossible to separate individual signatures. For this and other reasons, we decided to attempt a handheld magnetometer search and visual ground truthing in the area of Group 14. Both Groups 13 and 14 were adjacent to the land site, 38BU1193.

Handheld Magnetometer Search and Visual Target Inspection

If Charlesfort were located adjacent to the creek, we could expect to find artifactual remains of everyday life thrown into the creek. Many of these artifacts would have been made of iron, i.e., barrel hoops, spikes, scrap, etc., which would make them detectable by handheld marine metal detectors. On May 11-12, 1989, an initial reconnaissance of the creek at the north end of the Group 14 area involved one diver carrying a handheld metal detector and bouying targets as they were found. A second diver followed the same path attempting to uncover the target items by hand. Several pieces of modern pipe and scrap iron were found in this manner, but we found no 16th century material.

Profile of Mean's Creek

If erosion has destroyed the site of the fort, then we should expect to find some artifacts from the fort on or below the creekbed. Magnetometers and divers were used in our search for the artifactual remains of Charlesfort, but we had no method as yet to study the erosion factors facing us. Influenced by Stan South's suggestions to study the creek make-up, we decided a profile of the creek might provide valuable information about the way in which the area has changed over the years. The the profile was taken adjacent to the terrestrial search area (Site 38BU1193), where there was easy access to the creek and a relatively workable water depth at low tide (Fig. 48, Area A).

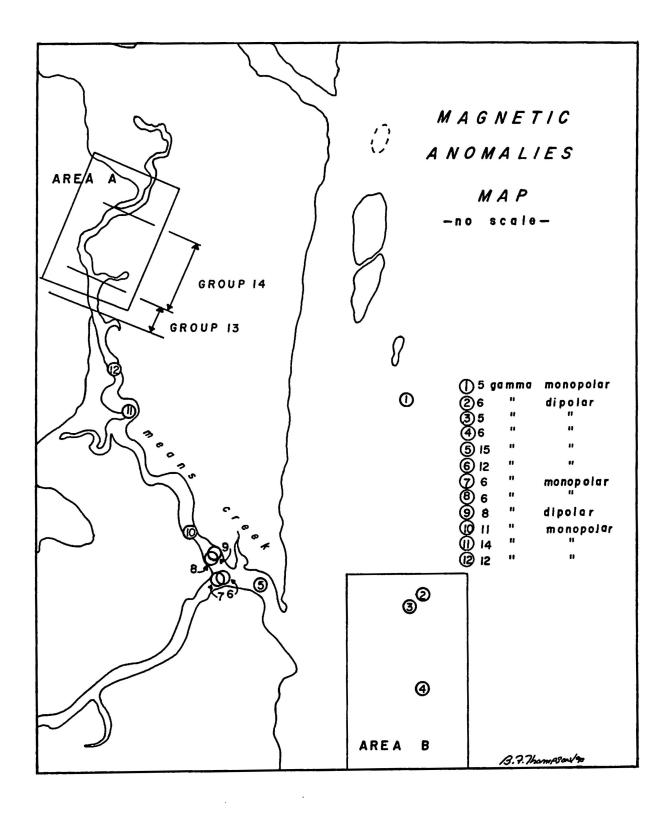


Figure 49: Plot of magnetic anomalies in Means' Creek and the Beaufort River.

A line was stretched and leveled above and across the creek, then measurements were taken from line level to water level, to the creekbed and through sediment beds to a depth of 1.5 m below the creek bottom (Fig. 50). A clay bed in the east end of the profile slopes beneath the creekbed where it is overlain by a loose silt/clay layer 40-80 cm thick. A distinct sand layer lies below the silt /clay zone at 1.2 m in depth under the marsh at the west end of the profile and pinching off as it approaches the eastern quarter of the creekbed. An oyster shell layer lies atop the creekbed across the central portion of the creek's width.

Upon completion of the profile measurements, the incoming tidal current made further work difficult and the dive was terminated. Within an hour after mean low tide, porpoise were spotted to the south of our work area. Visibility in the creek was normally good except during strong tidal flows.

Results and Recommendations

The following recommendations include the entire Means' Creek system, both the Charlesfort Search Area fork of the creek and the Santa Elena fork of the creek (Fig. 48). The reason for including the Santa Elena fork of the creek is that we know the French, in 1576-77, threw several Spanish cannons from Santa Elena into the water (Connor 1925:265), though at least some of those cannons were later recovered by the Spanish. This means we have the possibility of finding either French or Spanish cannons somewhere within the creek system. The results of our preliminary magnetometer run down the Charlesfort fork of Means' Creek indicate several single signature hits along the creek channel and two considerable debris fields where the creek touches land just before and just inside of Area A (Fig. 49).

The following procedures are recommended if future work is to be attempted on Means' Creek:

- 1) A detailed magnetometer survey of both branches of the creek in unison with a precision electronic positioning system would provide clear magnetic contours of both individual hits and major debris fields.
- 2) Utilizing the same positioning system as in (1) above, a complete sub-bottom sonar (ground penetrating electronics) survey would provide information on both artifact locations and a series of subsurface profiles.
- 3) Targets uncovered during these exercises should then be ground truthed (probed, dredged, exposed, and visually inspected) utilizing a prioritization scheme dictated by the comparative data and signature locations.

Le Prince (El Principe) Search

..."she came to this harbor of Santa Elena, where God was pleased that on crossing the bar, she should be wrecked. All the men escaped, with their arms and munitions, and they came to land at this fort [Fort San Felipe at Santa Elena], which was burned and ruined, where they found your Majesty's artillery that was here, and threw it into the sea."

-Pedro Menendez Marques to the King, Santa Elena, October 21, 1577 (Connor 1925:269)

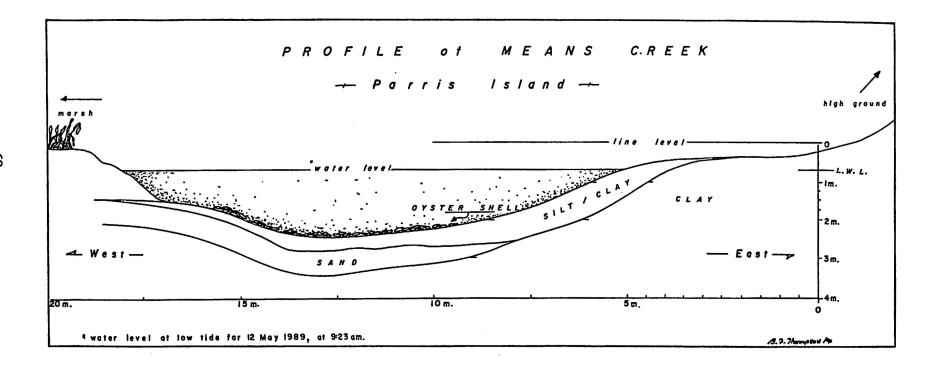


Figure 50: Profile of Means' Creek adjacent to 38BU1193.

Purpose

According to both Menéndez and Iñigo Ruíz de Castresana, the poop of Le Prince was visible in 1577 as the ship lay aground somewhere in Port Royal Sound (Connor 1925:269, 1930:27). She was French-owned, possibly English-built, with 500 tons capacity (Connor 1925:269). Menéndez Marqués (Connor 1925:269) says there were only 180 men aboard, but Iñigo Ruíz (Connor 1930:27) states that there were 280 Frenchmen aboard, and 200 of them were killed by Indians. If Le Prince ran aground on a sandbar off Fort San Felipe, then she should be detectable by remote sensing. Her iron cannons, fittings, and tools would be picked up to a considerable depth by a magnetometer, but the signal might be of low intensity.

Should the <u>Le Prince</u> have grounded firmly before high tides and winds could dislodge her, she would have slowly sank into the sands and have been further buried by wave action, sediment dynamics, and her own weight. With archival references mentioning only the poop of the vessel, there is also the likelihood that a portion of her hull might have separated from the wreck site. The Governor of Cuba was told by Menéndez Marqués that a storm "cast the ship's poop into the river of Santa Elena, but it is not known where the hull struck" (Connor 1925:337). With these considerations in mind, we set out to collect as much basic site data as possible. Once again, we used the handheld metal detectors, Geometrics magnetometer, and metal probes as our search implements.

Magnetometer Run

A reconnaissance team visited Parris Island on May 11th, 1989, in order to take a small boat along a route from the Marine Corps yacht basin, south along the island's eastern shore and down to Means' Creek. The intent of this reconnaisance was to look over the entire study area, to note natural sedimentation as it occurred along the sand islands, and associated tidal flats, and to determine the possibility of there being remains of Le Prince somewhere within the suspected area.

According to a local informant (Steve Wise, personal communication), winter is the season that produces the greatest erosion of sands along the sandbars, which includes the large island, three smaller tidal flats, and sand spits between the yacht basin and Means' Creek (Figs. 48 and 49). Reworking was obvious on the large sand island where a channel had been cut diagonally across its midriff. We employed handheld metal detectors to sample debris on this sandbar. Bullets from modern-day Parris Island were the only artifacts noted during the reconnaissance.

On May 30-31, 1989, using a small johnboat, four crew members, and the Geometric 806A marine magnetometer, we accomplished two survey runs between the Marine Corps yacht basin and the Parris Island spit to the south. Due to the shallow waters, between one and ten feet in depth at low tide, the magnetometer sensor was attached to a swimmer's float and trailed 50 feet behind the boat. The magnetometer survey was accomplished in two phases: phase I was the May 30th reach from the yacht basin to the southern sand spit off Parris Island, and phase II was the May 31st ranging over the 300 m X 650 m survey Area B (Figs. 48 and 49). During our study, corners of Area B were marked with anchored bouys.

We positioned targets along both the reach and within Area B by ranging along bouy lines and geographic features, while marking two-minute intervals on the chart recorder. The locations of targets plotted by this method are tenuous at best, but they do provide a general view of metal concentrations within the study waters. Single signature targets 1 through 4, although low in intensity, are indicative of older and deeply buried remains. Targets 1 through 3 fall within the suspected <u>Le Prince</u> study area and were recognized on three of six passes made during the second phase of our magnetometer survey.

Probe Test

On July 28, 1989, a small team of volunteers and the author returned to the Area B search field to perform a probe test in the vicinity of high probability signatures. A 1.5 m probe was pushed into the sand over a 10 m X 10 m square grid at regular intervals of 50 cm. We anticipated striking ballast stones within 1.5 m of the surface, if these anomalies were, in fact, indicative of a shipwreck, but we found nothing to indicate the source of the magnetic anomalies. Clearly, more work is needed in this area.

Results and Recommendations

Although the <u>Le Prince</u> search was secondary in importance to the Charlesfort search, several positive results were noted by our preliminary survey. We were able to gather environmental data relating to currents, tides, visibility, and sediment movements. A real bonus was the discovery of magnetic signatures indicating the presence of iron in an area suspected to be the location of <u>Le Prince</u>.

The following recommendations are offered for future work at the <u>Le Prince</u> search site:

1) Work in Area B will require fencing off areas to be surveyed and tested, because shark activity in the Beaufort River is considerable. Several sharks and porpoises were seen by the crew during the daylight probing exercise accomplished in July.

2) Utilizing a positioning system, Area B should be re-magged with precise changes in the magnetic field of the area mapped. A detailed contour of those changes will

produce visual evidence for the layout of the site and its debris field.

3) The magnetometer survey could better cover the study area if the magnetometer box and batteries are secured in a floating container while the sensor is "walked" over the ranges at low tide. This would eliminate the problem of maintaining course headings in a small boat subjected to tidal currents and wind.

4) Once contour maps have been drawn, dredges and caissons can be used to ground truth suspect targets. As dredging lowers the caissons, test probing should be carried out to a depth of several meters.

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APPENDIX I

The Search for Charlesfort (April 28, 1989-Working Draft)

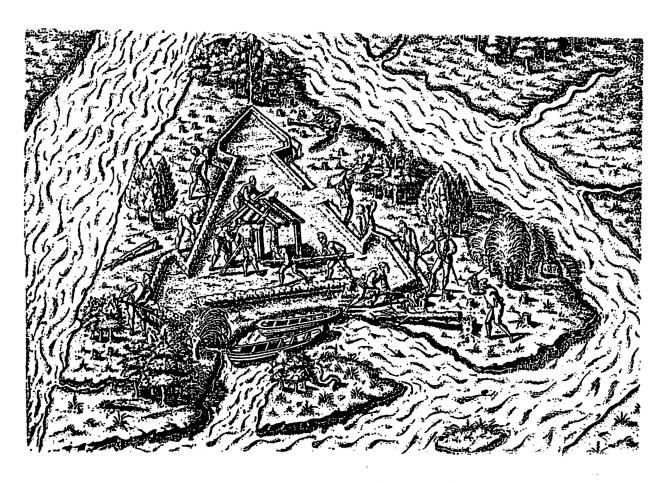
The Search For Charlesfort

by Chester DePratter and Stanley South

(Working Draft April 28, 1989)



South Carolina Institute of Archaeology and Anthropology
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29208



A SITE FOR THE FORT IS CHOSEN

Frontispiece. La Moyne's Plate 9, Showing the Construction of Charlesfort. on Chenonceau River [Mean's Creek on Parris Island, S.C.].

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The Search For Charlesfort

bу

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We Study the Historical Record

In September, 1561, Philip II of Spain opened the question as to whether Spain was interested in the southeastern part of North America as a place for settlement. In March of the next year he formally announced his decision that it was not. This opened the door to others, including the French, to lay a claim to what had been considered the domain of Spain. The opportunity to gain personal wealth was a motivating factor for those Frenchmen who moved to claim part of Florida, but escape from religious repression was also a concern. As Spain expressed a disinterest in Spanish Florida, France moved to lay claim to part of that territory (Lyon 1976: 22; Quinn 1979: 277).

On April 1, 1562, French commander, Jean Ribault, arrived in Spanish Florida with two ships. After exploring the area around the St. Johns River in what is today northeast Florida, Ribault sailed north along the coast. On May 17th, he arrived in South Carolina's Port Royal Sound, describing it as "one of the goodlyest, best and frutfullest cunteres that ever was sene" (Quinn 1979: 293). A quick check of the harbor "where without danger all the shippes in the worlde myght be harbored" (Quinn 1979: 293) convinced Ribault that this was indeed a place suitable for staking a French claim. He decided to leave a small contingent to guard Port Royal while he and his ships returned to France to obtain more men and supplies.

Ribault spent about two weeks constructing a fort to house the 27 men who volunteered to be left behind. This fort, named Charlesfort for 12 year old Charles IX, King of France, was located on "a small river, which entered into the Islande...deep inough to harbour therein Gallies and Galliots in good number" (Bennett 1975: 35; Quinn 1979: 301). Located in "a very open place, joyning upon the brinke [of the river]", the fort measured 16 toises (ca. 102 feet) by 13 toises (ca. 83 feet) and was probably triangular in shape (Bennett 1975: 220; Kerrigan 1951: 46).

Once the fort was completed, Ribault sailed for France with the intention of returning in only a few months with reinforcements. War in France prevented Ribault's timely return, and those left in the fort soon mutinied, killing their commander, Albert de la Pierria. Nicholas Barre was elected to replace Albert. After suffering rthrough several winter months of hardship caused by a storehouse fire and a shortage of food, the

mutineers decided to build a boat in which they would sail for France. In the spring of 1563, thle boat was finished and 22 men deserted their post. They were soon becalmed in mid-ocean, where supplies ran out and they were forced to resort to cannibalism, eating one of their group named La Chere (Quinn 1979: 307). Their ship was eventually captured by English privateers and taken to England from where most of the men were ultimately repatriated (Bennett 1975: 38-51).

In June, 1564, Manrique de Rojas was dispatched from Cuba to find and destroy Charlesfort which was seen by the Spanish Crown as an intrusion on Spanish territory previously explored by Ponce de Leon and Lucas Vásquez de Ayllón (Wenhold 1959: 45). Rojas arrived in Port Royal Sound in mid-June, 1564; in a nearby harbor he found a young French boy, Guillermo Rouffin, who had fled from Charlesfort when his comrades departed. Rouffin led Rojas to Charlesfort where the Spanish burned the building within the abandoned fort (Wenhold 1959: 61).

In the same month of June, 1564, a second French expedition commanded by René Goulaine de Laudonnière, arrived on the St. Johns River and there built Fort Caroline (Lorant 1946; Bennett 1975). Ribault arrived shortly thereafter and took command in August, 1564. Only a month later a Spanish expedition commanded by Pedro Menéndez de Avilés arrived to confront the French intruders. In a series of bloody assaults, the Spanish overran the French positions and slaughtered the defenders. Menéndez thereafter established a fort at St. Augustine, but he placed the capitol of Spanish Florida at Santa Elena on Parris Island on Port Royal Sound in 1566 (Lyon 1984). The French were never again a factor in the serttlement of the Atlantic coast of "La Florida."

Where was Charlesfort?

There are several sources of information relating to the location of Charlesfort. Ribault (Connor 1927), Laudonnière (Bennett 1975), and Rojas (Wenhold 1959) wrote firsthand accounts of their adventures. There are also two maps showing the coastline explored by the French in 1562-1564, and both contain generalized locations for Charlesfort. Nicholas Barre, commander at Charlesfort after the mutiny, drew one of the maps (Cumming 1963), and Jacque Le Moyne de Morgues, an artist who arrived with Laudonniere in 1564 (Lorant 1946) drew the other. In addition to his regional map, Le Moyne also painted a series of watercolors, later engraved by DeBry (1591), detailing episodes from the French expedition. It is the engravings of those watercolors that provide a previously unrecognized key to the location of Charlesfort.

There have been many attempts to locate the remains of Charlesfort. Salley (1925: 33) details a list of nineteenth century speculations which range from the St. Johns River to

Saint Helena Sound in South Carolina. By the first quarter of the twentieth century the southern tip of Parris Island was the generally accepted location of Charlesfort (Rivers 1856; DeSaussure 1907; Salley 1919). In 1923, Major George Osterhout excavated at the presumed site of Charlesfort on Parris Island and was convinced that he had found that fort (Osterhout 1923, 1936). Others (Ross 1925: 353; Connor 1927: 7-8; Salley 1927: 114; Manucy 1957) argued that Osterhout had in fact excavated Spanish Fort San Marcos which had guarded Santa Elena from 1577 to 1587. Osterhout's fort was confirmed as Ft. San Marcos by South's (1979, 1980, 1982, 1983, 1984, 1985; South, Skowronek and Johnson 1988) Santa Elena excavations.

Once Osterhout's placement of Charlesfort came into question, other places on Port Royal Sound including Ballast Creek (Salley 1925: 119), Battery Creek (Cumming 1963; Quinn 1977a: 243, 1977b: 20, 1979: 278; South 1982), the U.S. Naval Hospital Grounds on Beaufort River (South 1982), and Pigeon Point just north of Beaufort (South 1982), (Fig. 1) were suggested as potential sites for the fort.. No trace of the fort has been found at any of these locations, however.

We Analyze the Evidence

In a recent reevaluation of Le Moyne's (Lorant 1946) work, we have identified a likely and previously uninvestigated location for Charlesfort. Le Moyne was an artist who was recruited to the second French expedition to "chart the sea-coast and to observe the situation of the towns and the depth and course of the rivers, and also the harbours..." (Lorant 1946: 36). His watercolors, later engraved by De Bry (1591) provide a detailed record of the coastline and of Indian lifeways observed by the French. His Plates 5 and 6 (Lorant 1946) are clearly identified in captions as Port Royal Sound and when compared to modern maps it is clear that those plates are accurate representations of the landscape.

But it is Le Moyne's Plate 9 that provides a previously unrecognized key to finding Charlesfort (frontispiece). The caption for that plate (Lorant 1946: 53), ("A Site for the Fort is Chosen") which shows a fort being constructed on an island, implies that the fort is Fort Caroline and the river fronting the fort is labeled as the River May (the St. Johns River), (Fig. 2). Comparison of the island shown in Le Moyne's Plate 9 with Le Moyne's charts of Port Royal Sound shows that the island illustrated is clearly the same as the island shown in the center of Port Royal Sound. That island today is called Parris Island. Further comparison of Plate 9 with Plate 10 (Lorant 1946: 55), which does illustrate Fort Caroline, indicates that the two forts shown are different forts, and the fort illustrated on

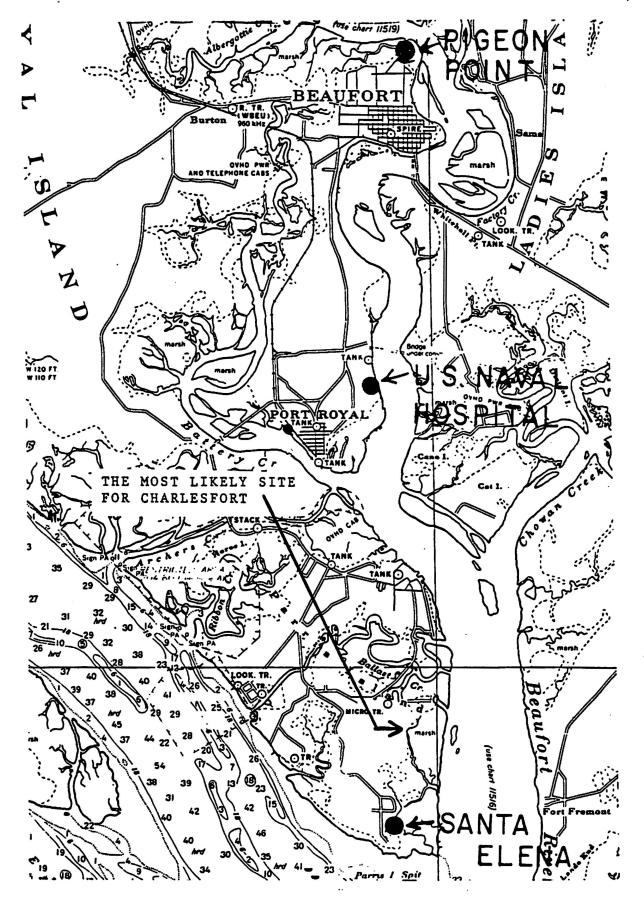


Figure 1. The most likely site for Charlesfort in relation to Santa Elena.

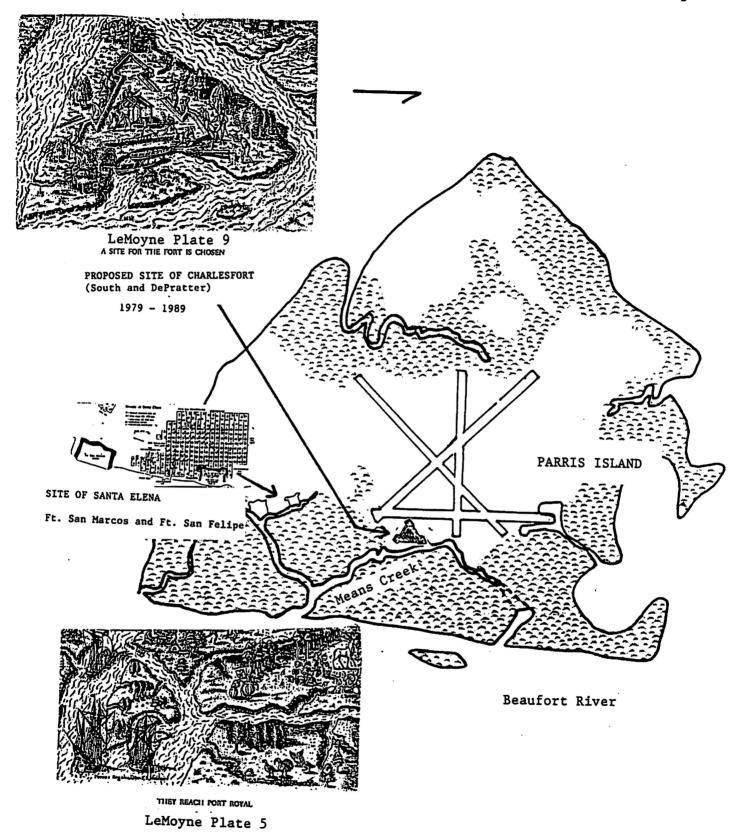


Figure 2. The location of the proposed site of Charlesfort as indicated by drawings of Jacque Le Moyne.

Plate 9 has to be Charlesfort. This conclusion is further strengthened by the fact that the Plate 9 fort is clearly placed on Parris Island (Fig. 1). We independently came to this same conclusion and thought we were unique in this until we discovered that (Quinn 1977a: Fig. 2) had also identified the fort in Plate 9 as Charlesfort. However, he indicated that he thought the site was on Battery Creek, north of Parris Island (Quinn 1977a: 243). We arrived at a different conclusion.

Carrying our research one step further, we have compared Le Moyne's illustrations to modern maps, and we feel that we can identify the actual location of Charlesfort. On Le Moyne's map we can identify Parris Island, Means Creek, Archer's Creek, and a small bar/island located adjacent to Parris Island in the Beaufort River. The small creek on which Le Moyne's map places Charlesfort is a loop leading off of Beaufort River, and the course of that creek is clearly identifiable on modern maps as Mean's Creek (Figs. 1 and 2).

We Visit the Suspected Site of Charlesfort

Our first step was to obtain a permit to visit the site from Col. J.B. Hicks, Jr., of the United States Marine Corps Recruit Depot on Parris Island, a cooperation that has always been characteristic of our dealing with the Corps and its representatives. Our objective was to visit Mean's Creek where it touches high ground, the point where we expected Charlesfort to be located. On January 27, 1989 we visited the pinpointed area.

Accompanying the two of us on our visit were Steve Wise, Director of the Parris Island Museum, Gary Dukes, Assistant Environmental Officer at the Parris Island Marine Recruit Training Depot, Bruce Frank Thompson, Conservator for the South Carolina Institute of Archaeology and Anthropology, and Mona Grunden, an archaeological researcher from Beaufort. We found that the high ground there would clearly be suitable for placement of a fort with a view of the Port Royal Sound entrance.

On the basis of our site visit, we identified a 500 yard long strip of shoreline as the likely location of Charlesfort. The most likely location fell along the high ground where the creek intersects the land. This stretch of shoreline revealed a concentration of depressions and low embankments beside a small stream entering Mean's Creek, that was of particular interest to us (Figs. 1 and 2). This area, thought to be a possible location of the fort has been disturbed by tree planting activities, but most of the disturbance appears to be superficial in nature. We were very interested in returning later to investigate the site with an exploratory trench.

A scatter of prehistoric and recent historic artifacts along the high ground indicated that there was a site there. Based on this knowledge, we obtained a site number,

38BU958, for use in our preliminary testing. If discrete concentrations of occupational debris are later found along the bluff, other site numbers will be assigned as needed.

We Return to Test the Site

We were so encouraged by our visit that we submitted a proposal for funding a two week project to the University of South Carolina Committee for Research and Productive Scholarship. By the time the proposal was written we were so excited over the prospect of locating Charlesfort that we couldn't await the results of our funding request. We asked Bruce Rippeteau, Director of the South Carolina Institute of Archaeology and Anthropology, for funding of a weekend of work by volunteers on the site. He granted our request and agreed to fund an additional week as well. With motel and food for the weekend available, we undertook a mini-expedition to the site with volunteers Tommy Charles, Janet Reddy, Robert South, Bruce Frank Thompson, Marisín Thompson, and Kristy Yarbrough. Also accompanying us was John Bullington, Director of station WNSC-TV 30, in Rock Hill, South Carolina. John was interested in filming an archaeological project from the very first moments of planning, exploration and discovery, a concept rarely seen in television production.

The ten hour project was carried out on February 25th and 26th. Our goal was to cut a two foot wide trench as far as possible along the edge of the high ground beginning at the point where Means Creek first touches land (Fig. 3). We began our trench just north of a lone pine tree beside a gut formed by a small stream entering Mean's Creek (title page). At that strarting point we poured a concrete marker around an iron rod, marking it "1989 SCIAA A." Our base line ran at an angle 7 1/2° E of magnetic north to a second iron rod 100 feet from "A" and marked "1989 SCIAA B." We assigned an elevation of 10.0 feet to the "B" reference point until an actual elevation could be determined later.

Our research strategy involved excavating a long two-foot wide trench to the subsoil level in order to reveal any fort moat ditches or other features as well as to provide us with some understanding of the degree of soil disturbance of the area. We were also interested in knowing whether there were sixteenth century artifacts along our 500 yard long research area.

In our proposal to the Committee for Research and Productive Scholarship at the University of South Carolina we had stated that we would probably use a machine to excavate the trench, "approximately 30 inches wide, that will scrape away disturbed topsoil about 30 feet inward and parallel with the shoreline, revealing the darker moat outline against the lighter subsoil color when the trench crosses it. It is expected that the

moat will be from 10 to 15 feet wide. Other features that may be encountered include the remains of two burned buildings known to have been inside the fort walls. All excavations will be tied into permanent bench marks from which transit plotted maps of the site will be drawn" (Depratter and South, February 23, 1989). However, on this weekend project we excavated a two foot wide trench 160 feet long using shovels manned by the volunteers (Fig. 3).

What We Found in Our Test Trench: Charlesfort?

Excavation of the exploratory trench on site 38BU958 began five feet north of Reference Point A and proceeded toward the north. Ten feet from the reference point our trench revealed a depression, but we did not know if it was a Marine Corps drain ditch or the moat of Charlesfort. This depression had been seen on the surface of the ground but it was not known if it had been a Marine Corps drain ditch or the moat of Charlesfort. This ditch discoloration was found to be 13.5 feet wide, in keeping with our anticipated moat width of from 10 to 15 feet based on South's work (1979:10) at Spanish Fort San Felipe, one mile to the south, where the moat was 14 feet wide.

Some fragments of modern glass, a nail and rotten wood found in the upper one foot of fill within this depression revealed that it had been partly filled during the nineteenth or twentieth centuries. The question of whether this feature is the moat of Charlesfort will have to await further excavation to recover any artifacts near the bottom of the ditch. It was tempting to rush ahead and cut a profile through the ditch, but we decided to reserve more complete testing of this feature for a subsequent visit to the site.

This ditch feature was assigned provenience number 3. Number 1 was reserved for any surface artifacts, and 2 was assigned to an iron object found near the south edge of the ditch. About mid-way between the two reference points we found Feature 4, which was an oystershell midden filled feature (Fig. 4); no artifacts were found associated with the midden.

Provenience numbers 5 through 12 were assigned to each 20 foot length of the exploratory trench (from south to north) in the event that artifacts were found as the trench was being cut. Only a few artifacts were recovered, including a few brick fragments, an Indian ceramic sherd and a fragment or two of nineteenth or twentieth century glass. No artifacts from the sixteenth century, either French or Spanish, were found in the topsoil zone of the trench, although none of the soil was screened.

Just south of Reference Point B, we found a disturbed area. This feature, possibly another ditch, was 15 feet wide. With this discovery, it appeared that we had

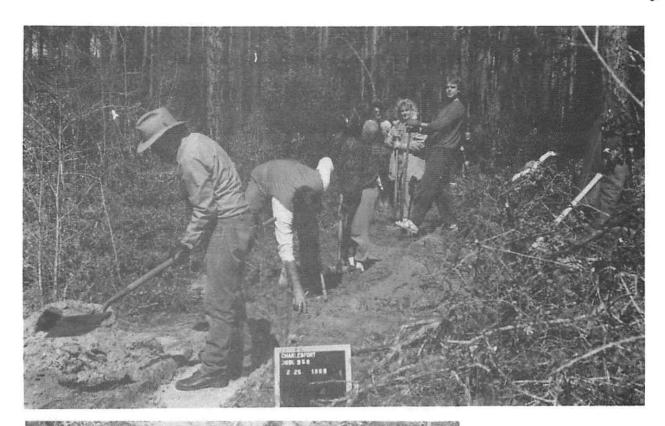




Figure 3. A Site for Our Trench is Chosen.

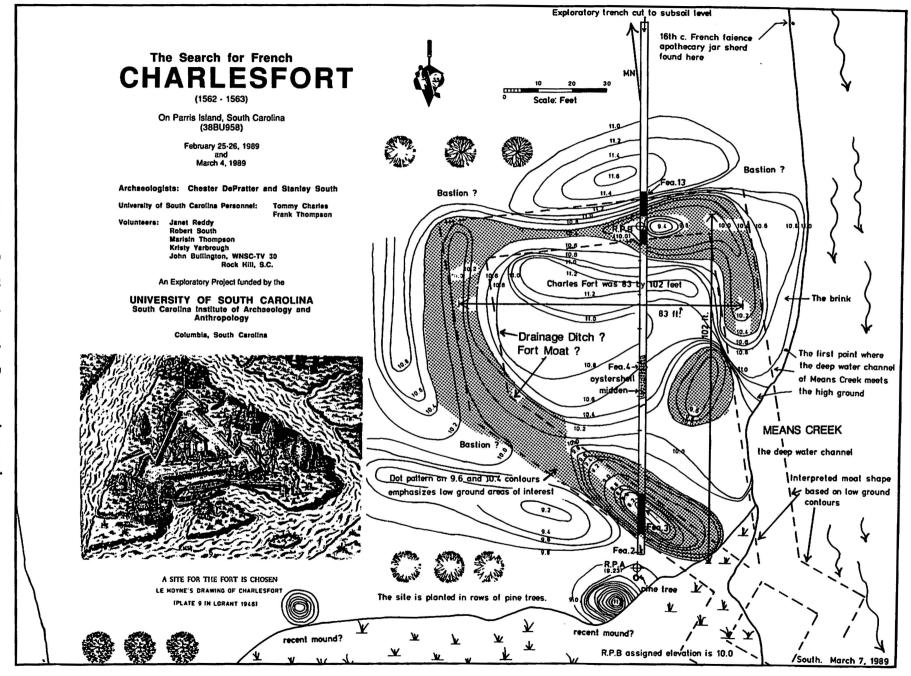
Figure 4. Oystershell Midden is Found in Our Trench.

two ditches approximately 100 feet apart, but these ditches were not parallel to each other. The southernmost ditch was angled toward the northwest from the exploratory trench, with the northernmost ditch being more nearly at a right angle to our trench. The non-parallel orientation of the ditches was interesting in that Charlesfort was said to have been a triangular fort 83 by 102 feet in size (Bennett 1975: 220; Kerrigan 1951: 46).

As the trench was being excavated, one of our volunteers found an interesting ceramic sherd on the shoreline near the north end of our 160 foot long trench. That sherd was a fragment of tin-ash glazed earthenware, a type that might be expected to have been used at Charlesfort. It had a pinkish glaze color, unlike the whiter Spanish majolica sherds from Santa Elena. Little is known about sixteenth century French faience, but this sherd, from an apothecary jar, is an excellent candidate. This evidence is largely circumstantial, however, being based on comparison with the pinkish glaze color characteristic of faience known from the seventeenth and eighteenth centuries (Faulkner 1987: 207). We know, however, that apothecary jars using Italian shapes, were being made in France from the mid sixteenth century and that by the third quarter "faïence blanche" was being made so cheaply that almost anyone could afford it (Lane 1970: 6, 8).

The combination of two ditches 100 feet apart in our test trench and the discovery of what might well be a sixteenth century French faience sherd suggested that we may have found the remains of Charlesfort. We needed a good topographic map of the area to determine the relationship of the depressions found in our test trench to other ridges and depressions nearby. To obtain such a map of the site, Stan South, his son, Robert, and Kristy Yarbrough returned to the site on March 4th with a transit to shoot topographic data. When the contour map was drawn, an exciting discovery was made. Results of the topographic mapping are shown in Figure 5.

A low area, having four sides, but basically triangular in shape was clearly revealed as a result of this mapping. The depression of the ditch is shaded in Fig. 5. The ditch features revealed by our excavated trench were seen to be part of this linear depression, with the midden feature (Fea. 4) falling near the center of the enclosed area. It is possible that this depression is the partially filled moat of Charlesfort. If so the southernmost bastion might have been positioned as the dashed line indicates in Figure 5. When the French boy Rouffin was found by Rojas he told the Spaniards that Charlesfort had four bastions (Quinn 1979: 314); Wenhold 1959: 57). Le Moyne, however, shows Charlesfort in his drawing as having been a triangular fort (Lorant 1946:53, Frontispiece and Fig. 2,



in this report). Researchers have not been able to reconcile these two conflicting descriptions. Could it be that Charlesfort was a four sided, but basically triangular, fort such as suggested by the topographic map (Fig. 5)? Only further determination of the plan view of these ditch features in relation to the depression seen on the surface will answer this question. Certainly a most impressive fact is that the north-south measurement from the center of the depression is found to be 102 feet, and the east-west measurement is 83 feet, the same as the known dimensions of Charlesfort (Fig. 5).

At this point, limited data suggested that we may, after many fruitless searches and misidentifications by historians and archaeologists, have indeed found French Charlesfort of 1562-1563. Our enthusiasm was so great that we decided to approach Joseph Judge of the *National Geographic Magazine* to request funding for two weeks work on the site in order to attempt to positively determine whether we had discovered the ruins of Charlesfort. Being well acquainted with the documents of the period (Judge 1988), Mr. Judge agreed to support a two week project to verify what our work thus far strongly suggested, that French Charlesfort has been found.

What Have We Found? Charlesfort? Another French Fort? A Spanish Blockhouse?

If the data we have discovered does prove, upon further excavation, to be a bastioned fortification, how do we know that it is Charlesfort and not some other fort? Were there other forts in the area at this time? This is a good question, since there were two French forts known to have been in the area, as well as a Spanish blockhouse of the later period of Santa Elena (Connor 1925: 87, 263-269, 337; 1930: 51, 89; Hoffman 1978; Lorant 1946:53). These forts must be considered as we deal with Charlesfort.

On February 4, 1573, ten years after Charlesfort was abandoned, a farmer, Martin Diaz, who had lived at Santa Elena for three years, reported on a scandal involving Juan de la Vandera, the commandant at Santa Elena at the time. Diaz said that (Connor 1925: 87):

Juan de la Vandera, in order to appropriate a married woman, sent her husband to Spain; and without orders from his general he left the fort and built a blockhouse near the houses of the settlement, and took the said woman to the said house. And her husband was in Spain; and after he had kept her a certain time, he cast her out of his house before the husband returned, and went off with a woman neighbor of his; and after the said husband came back, and knew of the case, he led her a very hard life. For these things, and others he does not remember, the said settlers were determined to ask the said Vandera to let them go to Havana: and on being advised thereof, he embarked in a canoe, and went to the fort of

Santa Elena, where he made the said settlers prisoners one by one, and two by two, and imprisoned them very wrongfully, trying to sentence them there to take from them what they had in property [emphasis added].

The important point is that Vandera left Santa Elena and built a blockhouse on a site accessable to Santa Elena by canoe. The site we are dealing with as the suspected site of Charlesfort is the nearest point of land accessible from Santa Elena by canoe (Fig. 1). Could Vandera have built his blockhouse on the site of Charlesfort ten years after the fort was abandoned by the French? He may well have and we will keep this possibility in mind as we explore the suspected Charlesfort site, which might, in that case, contain both French and Spanish artifacts. A model for the size of a blockhouse of the period is available in the excavated one built by Menéndez Márques in the original postholes of the casa fuerte at Santa Elena, which measured 50 by 70 feet (South 1985: 13). The Vandera blockhouse could have been smaller than that at Fort San Felipe, however. We have no indication of whether a dry moat ditch was dug around Vandera's blockhouse, as was the case at Santa Elena, though if he used the site of Charlesfort, its moat would still have been standing open.

Also to be considered is the matter of another French fort in the neighborhood of Santa Elena, built in December 1576 by 180 Frenchmen who had been aboard the vessel *El Principe*. This ship sunk during a storm while anchored off Santa Elena which was temporarily abandoned at that time. The Frenchmen went to the site of Fort San Felipe, which was burned and in ruins, and they threw the Spanish artillery they found there into the sea (Connor 1925: 265-269; 1930: 89). Menéndez Márques, in charge of Santa Elena when the Spaniards returned there in 1577, said that he suspected that the vessel, though in French hands, was English, and that when the Frenchmen first arrived ashore after the wreck of their ship (Connor 1925: 265, 269):

the Indians, thinking they were Spaniards, made very pitiless war upon them, in such wise that there were deaths on the one side and the other; but as soon as they understood that they were strangers, Frenchmen, and friends of theirs, they took them in and showed them much friendliness, and so they remain among them.

Menendez Márques did his utmost to find the fort where the Frenchmen had fortified themselves after they went ashore following their shipwreck at Santa Elena. Márques was rewarded in his search. He said (Connor 1930: 89):

At last I found it, in a wood near a river. According to the plan thereof, there were more people than I thought, because it was shaped in a triangle, with three cavaliers [bastions], all made of sod [earth] and fagots

[bundles of sticks about eight feet long], with its curtain largely of wood, and it had from cavalier to cavalier sixty-six paces. I found five houses within, one piece of bronze artillery of about twelve quintals, one man who was hanged, and many bones of dead people. I burned and destroyed the whole fort; then I came to this fort. I learned afterward that the man who was hanged was a Spaniard [emphasis added].

The important information here (bold type) is that the triangular fort measured 66 paces, which would be approaching 200 feet, about twice the size of Charlesfort. Therefore, the ditches of Charlesfort and the *El Principe* fort, both triangular forts, can be distinguished by size alone. Historian Mary Ross (1923: 61), says that the *El Principe* fort was found "in a wood near a river north of Santa Elena." Her interpretation fits the location of the suspected Charlesfort site, although we are unsure of Ross's source.

It is apparent that, because of the closeness in size of the depression we have found with the known dimensions of Charlesfort, there is a good likelihood that we have located Charlesfort. Because of the likely presence of other French and Spanish structures along the bluffline adjacent to Mean's Creek, we plan to continue our exploratory trench toward the north for some distance from our starting point. This site, with the deep water channel of Mean's Creek adjacent to ten foot high ground, is an excellent one for use by both the Spaniards and Frenchmen in the sixteenth century, and we intend to explore it as fully as funding will allow.

II. We Are Funded. What Method Will We Use to Find a Fort?

After we received the funding for two weeks from *National Geographic* we received notification from the University of South Carolina's Committee on Research and Productive Scholarship that an additional week of work on the site had been funded. This, with one week funding supplied by the South Carolina Institute of Archaeology and Anthropology, will allow a one month expedition to be carried out. The expedition is planned for the month of May. Besides the co-principal investigators, the crew will be composed of Tommy Charles and Bruce Frank Thompson of the Institute staff and volunteers Ashley Chapman, Thomas Little, Robert South and Ruth Troccoli.

A first step in further work on the site will be to use a metal locator to attempt to find any buried metal objects so that we will know where to expect such artifacts when we position our excavation test units. The reason for using this method is not to immediately recover objects but to inform ourselves of their presence or absence so that excavation units can be placed to the greatest advantage for most effective data recovery. In excavation of our various exploratory squares and trenches we will be using power screens to provide the

maximum artifact recovery from the soil we move. Our interest in artifacts is great, since there are no other French sites of this period ever excavated in the Southeast. Recovery of French artifacts of the sixteenth century is a major goal of the project.

The excavation method we will use will be to cut trenches across the line of the visible depression seen on the surface of the ground (Fig. 5). By thus revealing the contrasting soil colors of the ditch and the subsoil we can determine where the ditch goes and if there are bastions located at the corner angles of the depression. If the ditches are found to form bastions around the corner angles, then we will know we are dealing with a fort moat. Mapping the extent of this ditch is a primary goal of this archaeological search so that the exact size of the fort moat can be determined. In this process we hope to be able to reveal the location of the entrance to the fort, shown on the Le Moyne map to be located on the north side of the fort.

After we have cut a long trench crossing both moat ditches we plan to excavate cross sections of the moat to allow the soil layers revealed in the profiles to be recorded and artifacts to be collected. This will also reveal the exact size and depth of the moat ditch and will allow associated artifacts to be recovered. Artifacts from the bottom of the ditch and artifacts directly associated with other features, such as the oystershell midden deposit and artifacts found in association with any structural ruins, will be critical for identifying the builders of the fort and the time period involved.

Another goal is to examine the center of the area enclosed by the visible depression to look for evidence of the burned buildings known to have once stood inside (Quinn 1979: II, 305-310, 314). Our north-south trench across both moats will also cross this central area, allowing us to address this question. The evidence would likely be found in the form of fired clay created when clay-daubed structures burned, creating brick-like lumps of clay known as daub. A third goal would be to recover artifacts remaining from the occupation of the area by anyone in the past, from Indians, to French, to Spaniards, to plantation period owners and their black slaves. With these data in hand we will know much more about the site's occupational history than we now do.

To possibly recover French artifacts from Chenonceau River [Mean's Creek] adjacent to the suspected Charlesfort site, we have budgeted a two day underwater research project. Items such as cannon or other artifacts may have been dropped or thrown into the creek (see title page for a view of the creek from Reference Point A). Christopher Amer, Head of the Underwater Division of the South Carolina Institute of Archaeology and Anthropology will undertake a dive from the bank of Mean's Creek to explore the nature of the bottom of the stream and to attempt to locate any artifacts of interest. He will be assisted by Bruce Frank Thompson, Ashley Chapman, David Beard and Joe Beatty.

If We Find Charlesfort What Questions Are We Asking? III. Research Design

As we have discussed above, the primary question at this time is, what is represented by the intriguing depression we see on site 38BU958? If it is a fort, which one is it? What nationalilty is represented? What size is is? What buildings are inside? How many? From what period of time? What artifacts are present? What are their associations? How wide is the moat? How deep is it? What artifacts are associated with the oystershell midden of Feature 4? How deep is this feature? With what is it associated? If it is a fort, how much remains and how much has washed away? How many bastions does it have? How does this relate to the documents that have survived? These are standard questions addressed to the archaeological record itself. Broader questions are also of great interest to us.

Material Culture and Process - Expectations

The short time of occupation of Charlesfort, about one year by less than thirty men, makes our expectation of artifact quantity much less than it was at Santa Elena, where hundreds of people lived for 20 years. French sites of this period in North America are extremely rare, so any identifiable French objects will be totally new information to us. The French artifact data will be of great value in identifying French objects in the collections of artifacts from Spanish Santa Elena and St. Augustine and other Spanish colonial sites. It is our expectation that some of the artifacts destroyed in the burning of the storehouse/barracks building and the replacement building built by the Indians will remain in the earth to be recovered by sifting the soil.

The Fort

The fort moat will be the primary evidence we will use to identify the size of the fort, with the artifacts providing the cultural and temporal identification. The bastions, in particular, are diagnostic of forts versus domestic sites. If we find a bastion, we will know that we are not dealing with a drainage ditch. Some of the embankments for Charlesfort may be represented in the higher ridge areas paralleling the depression thought to be the location of the fort moat (Fig. 5). The presence of military items such as artillery,

crossbow parts, arquebus parts, arquebus balls, etc. are also indicators of a military presence and function.

The Moat and the Parapet

In the Le Moyne drawing of Charlesfort (Frontispiece) we see the Frenchmen excavating the ditch (moat) around the fort with shovels and mattocks and throwing the earth into a defensive embankment along the inside of the ditch. It is the moat ditch that we think is represented by the depression we have found. The embankment would have taken up from 8 to 10 feet of space parallel with the ditch on the inside of the enclosure of the fort. Sod or wood would have been used to hold back the earth to keep it from falling back into the ditch. A wooden wall may have been set into the earth in a ditch paralleling the moat, with dirt thrown behind it. The bastions, however, would have been higher than the parapet along the three curtain walls of the fort.

The Bastions

Rouffin stated that Charlesfort had four bastions (Quinn 1979:314), while Le Moyne (Lorant 1946: 53) illustrates it with only three. The depression we have found has four corners and thus four bastions are suggested. We would not be surprised, however, if there was not a bastion at the angle on the west side of the area (Fig. 5), since the distance between that angle and the northwest corner is so short. The corners of the depression we have found do not indicate bastions, but this is not surprising since the bastions would have been higher than the parapet embankment inside the fort so the artillery could sit on the highest ground. This means that more earth would have been piled high at each bastion, and after the fort was abandoned, and after 427 years pass, the extra earth would likely have totally filled the moat around the bastions. This is our speculation at present to explain the absence of a depression representing a moat around the corners of the depression we see.

The earth at the bastions was likely held in place by a wooden wall, which was the case at the Spanish bastions at fort San Felipe (South 1983). Rojas was instructed to seek out and find a wooden fort, "razing the fort so completely that no trace of it shall remain" (Quinn 1979: 310). Rojas burned the wooden building he found at Charlesfort. If he also burned the retaining walls around the bastions we may find the burned wall timbers lying in the moat as was the case at Fort San Felipe.

The Buildings Inside the Fort

Inside the outline formed by by the moat we may be able to tell the two structures mentioned in the documents. Rouffin said that the first house was "an enclosed house of wood and earth covered with straw" (Wenhold 1959: 57; Quin 1979: 314), revealing that it was of wattle and daub construction. The second house was built by Indians for the Frenchmen and Indian structures are typically made of wattle and daub with thatched roofs. It seems likely, therefore, that both buildings inside the fort were of this type construction. Such buildings are easily set on fire, accidently or intentionally, by allowing sparks to come in contact with the thatched roof.

At Santa Elena, South has found abundant evidence of the use of wattle and daub houses built there by the Spaniards (1979, 1980, 1982, 1983, 1984, 1985; South, Skowronek and Johnson 1988), in the form of burned lumps of fired clay daub which formed the walls of the building. We anticipate that the fires that destroyed the two consecutive houses that stood inside Charlesfort would also be identifiable through fired clay daub. This is one of the questions we will be attempting to address using posthole data and architectural debris.

If the depression seen to enclose an area the size of Charlesfort is indeed indicative of the moat of Charlesfort, a building about 20 by 40 feet would neatly fit in the rectangular area at the northern part of the area enclosed by the depression (Fig. 5). The oystershell midden (Fig. 4) would then be located just to the south of that structure, as one might expect if the refuse was discarded beside the structure. We plan to address these questions by opening a trench across the site of the suspected building.

The Gate

Le Moyne's map of Charlesfort (Frontispiece) reveals that the gate was located on the north side of the fort, with the moat not being dug at that point. If the depression we are dealing with is indeed the moat of Charlesfort, then we would expect to find a gap in the ditch on the north side where the gateway was located. We have noticed that the depression we have identified as a possible moat narrows greatly at the center of the north wall (Fig. 5), as we would expect, since there was no moat across the entranceway at that point. This is yet another small clue suggesting that the depression we have found might well be the almost totally filled (but not quite), moat of Charlesfort.

We will place an excavation trench across the north moat with the gateway location in mind. It should be revealed by a gap near the center of the ditch.

The Well

Although the documents do not mention a well inside the fort, it is entirely reasonable to expect that one was present within its walls. Near the east center of the area enclosed by the depression, is an oval depression that does not align with the linear depression thought to possibly represent the east moat of Charlesfort (Fig. 5). We have speculated that this depression may represent the location of the well for the fort. We have seen similar depressions that have proved to be wells when examined archaeologically and we plan to examine this depression with a trench to address this question. It is interesting to note that it falls mid-way between where the two east bastions of the fort would have been if our depression does represent the Charlesfort moat. This would have given equal access to water by the gun crews in the bastions as well as being easily accessible to the building thought to likely have been located to the northwest of this depression.

Arms

Rouffin told Rojas that there were two brass falcons and six small iron culverins, sizable pieces of artillery, at Charlesfort. Rouffin said that when the fort was abandoned, the cannons were on board the ship. He said that the mutineers also took a forge and other munitions of war with them, but it is possible that they may have buried one or more cannons to keep them from falling into the hands of the Spaniards. The forge should have produced clinkers that would still remain, a different kind of ash than that resulting from the burning of the buildings or from fires used by the Frenchmen to keep warm or for cooking. We will be looking for such by-products of forge in our excavations.

We know there were arquebusiers at Charlesfort, so we might expect discarded or broken parts of these weapons might well be present, as was the case at Santa Elena. Crossbows were not mentioned in the documents relating to Charlesfort, but it will be interesting to see if crossbow bolt points or parts will be found in Charlesfort to compare with those recovered from Santa Elena.

Artillery

When Ribault arrived in Florida he brought with him 35 pieces of artillery on two vessels, far more than needed to arm the vessels. Extra cannon must have been brought for fortifying forts once he reached Florida. Rouffin said that Charlesfort had "two brass falcons and six small iron culverins" in the fort and that as far as he knew they were all

loaded on the ship at departure (Wenhold 1959: 58; Quinn 1979: 314). The mentioned artillery were large pieces with a total weight of at least 8,700 - 13,500 pounds (see Appendix for details). While Rouffin said these cannons were carried off on the mutineers boat, this seems to be a rather large weight to carry aboard such a small vessel, even if we consider that their main function may have been as ballast. If they did not carry all the artillery with them, they may have buried one or more to keep them from falling into the hands of the Spaniards. If they did, and Rouffin was wrong about all of the artillery being placed on board the vessel, perhaps one or more were buried on the Charlesfort site or were thrown into the creek. We will take steps to explore the site with these possibilities in mind.

Plant and Food Remains

When the first storehouse burned with all the corn and other supplies inside, the fire should have converted some of these to charcoal which will still be present and identifiable in some cases. We will use the appropriate flotation techniques when necessary to recover plant and animal remains from the first fire, as well as fragments of broken vessels, etc. The second fire destroyed a building that was said to contain "nothing at all" at the time Rojas burned it, but he would not have noticed the broken sherds of Indian and French pottery and refuse from meals scattered around the floor or other such mundane items not worthy of mention to him. Evidence of Indian/French contact should be found in the buildings since the documents clearly reveal that many supplies were received from the Indians.

At Santa Elena oystershells were a major indication of the subsistence of the Spaniards, since a major source of their food were the creeks and rivers adjacent to the site. The discovery of the oystershell midden deposit in the exploratory trench reveals that someone discarded shells from meals composed of oysters. We are very interested in what artifacts may be found to accompany this deposit inside what is thought to be the fort area. If this deposit is French, it may well be a source of interesting objects and plant or faunal remains as well as artifacts. Floatation of soil from the oystershell deposit as well as sifting for artifacts will hopefully reveal valuable data.

Pottery

The Indian pottery contemporary with the French occupation should be like that recovered from Santa Elena, which is indistinguishable from contemporary Indian pottery from the Georgia coast. French faience and lead glazed earthenware may well have been

discarded in the moat or into pits or postholes on the site. The faience may likely reflect Italian influence in form and if decorated pieces are found they may well be polychrome in the Italian manner of decoration. Plain white, undecorated, pinkish, tin ash glazed faience fragments could be present, similar in appearance to the one sherd of faience we have recovered.

Spanish Artifacts

We suspect we will not find many, if any, Spanish artifacts in Charlesfort. If, however, the blockhouse built by Vandera was on the same site as Charlesfort, there may well be a mix of Spanish and French artifacts. Vandera's goods might well reflect high status items. The documents indicate he hoarded the supplies of all types that were sent to Santa Elena. It will be interesting to see how much Spanish material we recover, if any.

Trade Goods

We know there was a great deal of exchange going on between the French and local Indians. We expect to find archaeological evidence of this contact among the French artifacts on the site. From the various accounts, we can compile the following list of trade goods that might have been burned in the store house and perhaps lost on the site (Quinn 1979).

	Ribault	Laudonniere	Voisin	Rojas*
Looking glasses (mirrors)	X	x	x	x
Cutting hooks (bill-hooks)	x	x	x	-
Knives	x	x	x	x
Hatchets or axes	-	X	-	x
Bells	-	•	-	x
"Haberdasherye wares"	X	-	-	-
Robes or clothing	X	X	-	x
Glass beads	x	-	-	-
Tin bracelets	-	X	-	-
Bracelets covered with silver and gilt	-	, X	-	-

^{*}Rojas' list is for things he observed in possession of Indians

Laudonniere mentions "other trifles"
Voisin mentions "other such household goods"
Rojas says "many other things"

Shipbuilding

We know that a ship was built on the Charlesfort site (Quinn 1979: 308). If the depression we have found is indeed the moat of Charlesfort, then one bastion has been

washed away, as well as any other high ground that lay between the fort and the deep water channel of Chenonceau River [Mean's Creek] (Fig. 5). Tools and other evidence of shipbuilding activity may also have washed into the creek. With the entrance on the north side of the fort, we suspect that the shipbuilding operation would likely have been carried out on the edge of the bank of Chenonceau River within easy access to the fort gate.

Graveyard

The body of murdered Captain Albert de la Pierria may well have been buried in or near the fort, as well as the body of the drummer, Guernache, who was hanged by Captain Pierria. It was the hanging of Guernache, and other actions, that eventually led to Pierria's being killed by his own soldiers (Quinn 1979: 305). Two men from Charlesfort were drowned while crossing the river in a canoe (Quinn 1979: 314), but whether the bodies were recovered we do not know. We suspect there should be at least two burials on the site in or adjacent to the fort. We may find these in our search in the area of the Charlesfort site.

Culture Process

Archaeological remains of sites such as Charlesfort and Santa Elena represent broad processes of culture such as attempts by nations to expand their energy-exploiting potential through colonization of new lands and human and non-human resources. Linking the specifics of the archaeological record to these broader goals and questions addressed to them by archaeologists is no easy task, but it must be done through arguments of relevance between ideas and data in order to address social processes responsible for the archaeological record.

We know Ribault was seeking to claim part of what the Spanish considered to be Spanish Florida during a time when Spain was pulling back from its overextended colonization effort (Lyon 1976: 21). South (1989) has pointed out that comparisons of frontier toeholds on the New World such as those represented by the French at Charlesfort, the Spanish at Santa Elena, and the English at Jamestown can profitably be made toward understanding why efforts such as Charlesfort and Santa Elena failed and Jamestown succeeded. He suggests that this hinges on the degree of dependence on support of energy resources from the mother country or on Indians as consumers as opposed to a strategy involving the production of energy resources aimed as self-sufficiency.

This would be reflected, in the case of Charlesfort, by artifacts imported from France and the Indians versus those manufactured on the site, such as glassmaking, brickmaking, blacksmithing, pottery making, etc., as was the case at Jamestown. By analyzing the artifacts, features, architecture and associations from frontier sites such as these from this perspective we can address the question of why some colonization efforts failed and others succeeded. In so doing we explore larger issues than are traditionally abstracted from archaeological data. To address such questions we must have data relevant to the issues, such as a frontier fort site from an early period of American history. The Charlesfort site offers such an opportunity.

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Appendix

Notes on the French Artillery at Charlesfort

The only description that we have for artillery left at Charlesfort comes from Rojas' questioning of Guillaume Rouffin. On the question of what artillery; was on Ribault's ships, Rouffin says (Wendhold 1959: 55; Quinn 1979: 313):

...Captain Jean Ribault was a native of Dieppe, France, that he came to these parts with two armed galleasses, one of about 160 tons and the other of sixty...that the large galleass carried a hundred men...fifteen large brass cannon and two of smaller size and eight brass falcons...; that the small galleass, captained by the Frenchman Finqueville, carried fifty men, three large guns, one smaller one and six falcons, all of brass....

It should be noted that Rouffin also gives the number of sailors on each ship: the larger shlip was manned by 25 sailors and 75 arquebusiers, while the smaller ship carried a total of 50 men with no breakdown of sailors and soldiers. It seems clear that this is a lot of cannon for a small crew. If Rouffin was telling the truth about the number of cannon on the ships, then Ribault must have been carrying extra cannon to use in fortifications once he reached Florda. Most of the cannons appear to have been of brass.

When Charlesfort was established, Rouffin (Wenhold 1959: 57; Quinn 1979: 314) says that Ribault left "two brass falcons and six small iron culverins" in the fort; he later says that as far as he knew, all cannon were loaded on the ship at departure (Wenhold 1959: 58; Quinn 1979: 314).

What can we say about these cannons?

1) If Rouffin was correct in his use of the term falcon, he was talking about a cannon of about 800 pounds with a 2.5 inch bore and a 2.5 pound ball according to Hogg (1970: 54) who relied primarily on English guns for his estimates. Rogers (1971: 35-36) says "In 1550 King Henry II approved the following six types of ordnance as the only ones to be used by the French army [he doesn't mention the navy]: Cannon...Culverin...Bastard culverin...Culverin moyane...Falcon [which is described as "7 1/2 feet long, weighing 700 lb., drawn by 3 horses"]. Manucy (1949: 34) provides the following information on Spanish weapons of the 16th century:

Falconette 1 to 2 lb. ball Falcon 3 to 4 lb. ball

Based on this information, it seems likely that the two falcons left at Charlesfort were of brass, about 7-7 1/2 feet long, weighing 700-800 pounds each, with a bore of circa 2.5 inches, and a 2.5-4.0 pound ball.

2) If Rouffin was correct about "small culverins" he was talking about <u>big</u> guns. Hogg (1970: 54) lists three types of culverin:

Culverin	4000 lb.	5.5 in. bore	18 lb. shot
Bastard culverin	3000 lb.	4.0 in. bore	7 lb. shot
Culverin-drake	2000 1ь.	5.5 in. bore	
Demi-culverin-drake	1500 lb.	4.5 in. bore	
Demi-culverin	3000 lb.	4.5 in. bore	

Rogers (1971: 35) lists three types of culverin as approved by the French king. These were as follows:

Culverin	4000 lb.	11 ft. long
Bastard Culverin	2500 lb.	11 ft. long
Culverin moyane	1200 lb.	8' 6" long

Manucy (1949: 34) lists several types of 16th century Spanish culverins as follows:

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Media culebrina
Tercio de culebrina
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Manucy (1949: 35) lists the following 16th century English guns:

Culverin bastard	3000 lb.	4.56 in. bore	8'6" length	11 lb. shot
Demiculverin	3400 lb.	4.0 in. bore		8 lb. shot
Culverin	4840 lb.	5.2 in. bore	10'11" length	18 lb. shot

Given this information, even the smallest of the culverins would have been on the order of 1200-2000 pounds with a length of 8-10 feet, a bore of 4 inches, and a 7-8 pound shot. Rouffin said those left in Charlesfort were iron (Quinn 1979: 314). Rogers (1971: 33-34) provides a list of guns on the *Mary Rose.*, a warship sunk in 1545

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--many breech-loaders of bar-construction, 9'8" in length, 8" bore
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-- one short-tube type 7'6" long, 5 inch bore

--brass muzzle-loaders most common, of the following types:

 Culverin
 4800 lb.
 16' 11" length
 5.2" bore

 Demi-cannon
 -- 11'
 6.4" bore

 Culverin bastard
 8' 6"
 4.56" bore

 Cannon Royal
 8' 6"
 8.5" bore

(All these last were "bronze guns...very ornamentally emblazoned.")

Rodgers (1971: 33-34) also provides the following:

In the mid-sixteenth century ordnance could be divided into four major classes: cannons, culverins, perriers, and mortars. The cannons had comparatively short range but heavy hitting power, the culverins threw a smaller shot at longer range, the perriers (i.e., stone-throwers) were the predecessors of howitzers, and the mortars fired projectiles at a very high and fixes trajectory. Pieces used in warships of 1559 included a 4,500 lb. 17 1/3-pr culverin with a range of 2,500 paces, a 4,000 lb. 30 1/3-lb. demicannon with a range of 1,700 paces, a 3,400-lb. 9 1/3 -pr demi-culverin with a range of 2,500 paces, and a 3,000-lb. 24 1/4-pr cannon-perrier with a range of 1,600 paces.

Clearly these are large guns that were carried aboard ship.

Manucy (1949: 35) provides the following interesting tidbit on the accuracy of culverins:

...both culverins and demiculverins were highly esteemed on account of their range and the effectiveness of fire. They were used for precision shooting such as building demolition, and an expert gunner could cut out a section of stone wall with these guns in short order.

We think this would be just the type of gun needed to defend a harbor entrance that was 8500 yards distant. This distance was within the range of the largest culverins, but the smaller ones would have reached easily to the area within the harbor entrance.

Using minimum figures, we have the following minimum weights for the Charlesfort cannons:

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Falcons
2 @ 700-800 lb. = 1500 lb.
6 @ 1200-2000 lb. = 7,200 - 12,000 lb.
TOTAL 8,700 - 13,500 lb.
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Would such weight be needed as ballast in a small 20 ton vessel?

APPENDIX II

Provenience Notes

APPENDIX II Provenience Notes

SITE 38BU958

Provenience	
No.	Provenience Notes
1	Surface artifacts
2 3	Iron band 5' north of R.P. A
3	Fill of what appears to be a modern ditch
4	Area of oystershell midden in trench between R.P.A & B
5 - 12	Each 20 foot length of n-s 160 ft. exploratory trench
13	Indistinct ditch? stain at R.P. A
14 - 215	ten foot squares laid out in a 160 by 130 foot area in anticipation of
	excavating what was thought to be the site of Charlesfort. Only parts
	of some of these units were excavated (See Figures 16 and 17).
40	2' by 3' EW trench at NE corner of the square to attempt to find the W side
	of what we think is a bastion moat ditch. The edge was seen at 2' from the
	NE corner of the square. A profile revealed this was a tree stain.
56	2' trench EW along N of square, with edge of dark feature in the W half
	(tree?). A profile proved it to be a tree stain.
66	2' wide trench EW at N edge of square to locate W moat ditch of the fort.
	It was not seen here.
68	2' wide trench across the depression on the west side of the fort area,
	designed to reveal the edges of what we think is the moat of Charlesfort.
	The dark fill of a ditch was located in the E 3' of the square. When a profile
	was cut it proved to be a tree stain.
72	2' wide trench EW along N edge of the square, with a dark ditch feature
	crossing NS at 22.4' and 27.6' from NE corner of square 104. The
	feature is a tree stain.
73	2' wide EW trench at N edge of square to locate possible
	bastion? ditches. None was seen.
82	2' wide trench EW at N edge of square to try to locate W
	moat ditch. None was seen.
84	2' wide trench EW at N edge of square to catch the W moat? ditch headed
	N. It has mottled background subsoil. The ditch fill is seen in W 4'
	of the trench. This proved to be a tree stain.
89	2' wide trench along N side of square. EW to locate bastion? ditches. This
	proved to be a tree stain.
100	EW 2' wide trench along N side of square to attempt to find W fort moat.
	Oystershells in yellow sand in the E 8' are different from the original
	midden with black soil seen in the adjacent square 116. The shell are
	scattered through yellow sand, suggesting a later event intruding into the
	original shell midden seen in sq. 116, possibly a bulldozer disturbance.
104	2' wide trench EW at N edge of square to catch bastion moat. Clay soil
	color appears to be the moat ditch headed north! This is what this trench
	was opened to determine. The E edge of the dark moat fill is 8' from
	NW corner of square 120 and the W edge is 15.2' from it. Is this the
	bastion headed north? When a profile was cut this feature proved to be a
	tree hole stain.
113	2' wide trench NS on west edge of square dark S. edge of ditch at 4.1' on
	W wall from S end of trench 3.2 on wall (to subsoil at S end and ditch fill).

114	2' trench NS on W side of square to level of subsoil and ditch. Dark N edge of ditch 4.2 on west wall and 3.4 on E wall from the S end of the square. The ditch appears to be 10' wide.
115	2' wide trench N-S on west side of square, to oystershell midden in all of trench (it ends at S end of the square).
116	2' wide trench N-S on west side of square, to oystershell midden area over all but the N 2' of the trench. The oystershells are disturbed by bulldozer activity.
117	2' wide trench N-S on W side of square, to light colored subsoil level.
118	2' wide N-S trench along W end of square, dug to subsoil level. Found a number of modern appearing crushed rocks and a shotgun shell casing. Dark posthole row appearing feature at S end of the trench (2 posts?)
119	2' wide trench N-S along west edge of square to white subsoil level. A profile of the discoloration revealed that the feature thought to be a ditch here was caused by the weight of a bulldozer pressing down the upper soil level into the subsoil, giving the impression of a ditch.
120	2' wide section along W edge of square 120 (NS) to whitish subsoil level. At 5.3' from N end a darker brown fill with higher clay content can be seen crossing the slot trench (this correlates well with our predicted N edge of the moat). Two fragments of brick bits and window glass fragments were found in this trench. When this feature was sectioned it proved to be a discoloration we think was caused by the weight of a bulldozer pushing debris over the edge of the creek bank.
216	Trench cut by backhoe, 1.5' wide, on south side of the gut dividing site 38BU958 from 38BU1173 (see Fig. 13).
217	Oystershell midden with Wilmington cordmarked sherd in trench 216 (shell shoveled out).
218	Beach (edge of stream) opposite sharp angle near the north end of provenience 216 trench, SE of R.P. Q (see Fig. 13).
219	Backhoe trench with unidentified Indian sherd from the northernmost EW trench south of the gut near R.P.AA [see Fig. 19]. Ironstone sherds were found in the main NS backhoe trench in this area of R.P. AA.

SITE 38BU1173

Provenience No.	Provenience Notes
	A wife at a from much ad up (with hulldogan) mound along Magnet Create at
1	Artifacts from pushed up (with bulldozer) mound along Means' Creek at edge of bank in E area of the high ground (10' contour). Early 19th century ceramics, pearlware, Irene sherd, disc, etc., and an Irish halfpenny of Geo.
	II, dated 1763.
2	Artifacts from westernmost piles of bulldozed soil along N edge of Means'
2	Creek at 10' contour area E of end of Page Field airstrip #27. Fired
	clay daub is found here with asphalt lumps, etc. This area is of interest in
	that the daub may be from 16th century building (or associated with a clay
	chimney liner from the early 19th century (Habersham from Mills Atlas)
	period of occupation on the site. We plan to trench N of this edge of
	Means' Creek to try to cross Charlesfort moats.
3A	Trench 2' wide, 50' W of R.P. B., laid out to N of base line, 20' long
	(from 50-70' from R.P. A). Topsoil zone above B layer of oystershell
	filled black midden zone with historic period artifacts. This topsoil zone
	was apparently bulldozer-pushed onto the area.
3B	Oystershell midden level, black soil with historic period artifacts from early
•	19th century. Lies above a brown layer with no shell (3C).
3C	Brown soil level below darker level B with little to no oystershell. Marine
	Corps bullets found in a disturbed area intruding into this level. This C
	level has more Indian pottery and fewer historic (plantation period) artifacts.
	Subsoil beneath is bright yellow. A few features were recorded intruding
4	into the subsoil. 20 foot trench (2' wide N of base line) from 70-90' from R.P.A. toward
4	R.P. B. Taken to subsoil in one unit since no B level could be seen here.
	(Bulldozing has lowered the ground surface here). Topo and elevations etc.
	were shot, as well as stadia. Some features seen in subsoil.
5	2' wide trench 178.5 ft. E of R.P. A., running for 10' to E in line with base
_	line. Cut to examine the depth of topsoil etc. in this part of the site,
	where the elevation is lower than it is toward the west (probably from deeper
	bulldozing). Early 19th century artifacts (trench is N of base line) not
_	screened - some Indian pottery. Less than a foot deep here.
6	40' long, 18" wide backhoe trench, 10' E of R.P.A. Cut to subsoil by
_	backhoe. Some features seen.
7	50' long, 18" wide, backhoe cut trench 10' N of R.P.A, containing some
8	features.
0	365' long backhoe trench cut along bank of Means' Creek to attempt to
	locate moats of Charlesfort. Sherds of pearlware, annular ware, etc., reveal an occupation period in the area ca. 1790-1830s.
9	Dark tree root feature with burnished Indian? Colonoware? pottery. The
	feature is in trench #8.
10	Dark ditch fill, with white tobacco pipestem, creamware sherd, and
-0	oystershell mortar. Plantation period artifacts.
11	A tree-appearing, oystershell feature in trench #8, containing a cordmarked
	Wilmington sherd.
12	Backhoe trench 2' wide from R.P. E to a shovel-cut trench.
13	West 20' of shovel-dug trench 80' long.
14	20' section of 2' wide shovel-dug trench, E of 13.
15	20' section of 2' wide shovel-dug trench, E of 14.
	110

16	20' section of shovel-dug 2' wide trench east of 15.
17	Backhoe dug 2' wide trench at east end of point of the
	site. Dug to the edge of marsh. Practice bomb from WWII period found in fragments here.
18	Shallow feature with cordmarked sherd.
19	Palisader line of postmolds with Wilmington sherd in posthole. Also a cut nail.
20	Second backhoe trench on high point of land cut to be sure the fort was not hiding in this corner of the site.
21	Oystershell filled feature with Wilmington sherd.
22	From fill of small nineteenth century ditch in backhoe
	trench 23. Trench has dark brown fill with clay flecks, charcoal, shell fragments, etc.
23	Backhoe trench along shoreline from 38BU1173 R.P. A to S parallel to end of runway 27 of Page Field.

SITE 38BU1193

Provenience No.	Provenience Notes
1	General surface collection
2	Surface collection on the east half of the site
3	Surface collection on the west half of the site
4	A dark brown shell filled area, possibly a pit, though having the appearance of a midden-filled tree hole, with Wilmington cordmarked and a fabric impressed ware, with deer bone, etc. in the backhoe trench (see Fig. 39).
5	Oystershell filled area with dark brown midden with basal fragments of Wilmington cordmarked pottery. There is more shell in trench fill above the subsoil toward the South of this feature (see Fig. 43).
6	Clam and oystershell feature with Indian pottery with a scatter of shell midden around it toward Feature 5 [see Fig. 44].
7	Oystershell feature with Wilmington pottery [see Fig. 46].