# Archaeology at La Pointe-Krebs Plantation in Old Spanish Fort Park (22JA526), Pascagoula, Jackson County, Mississippi

Edited by Bonnie L. Gums and Gregory A. Waselkov

with contributions by Kevin S. Gibbons, Cameron Gill, Karen L. Leone, Maran E. Little, and Elizabeth J. Reitz



Archaeological Report No. 35

Mississippi Department of Archives and History Jackson, Mississippi

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Funded by the Mississippi Department of Archives and History with a grant from the US Department of Housing and Urban Development and Mississippi Development Authority

> Archaeological Report 35 Mississippi Department of Archives and History Jackson, Mississippi

> > 2015

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Mississippi Department of Archives and History

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*Cover Illustration*: Historic American Buildings Survey—James Butters, photographer, April 24, 1936. FRONT (SOUTHEAST ELEVATION)—Old French Fort, Pascagoula, Jackson County, MS. Library of Congress Prints and Photographs Division, Washington, D.C.

ISBN-13: 978-0-938896-01-2

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#### Abstract

In 2010 the Center for Archaeological Studies at the University of South Alabama received grant funding from the Mississippi Department of Archives and History for archaeological research at Old Spanish Fort Park (site 22JA526), in Pascagoula, Jackson County, Mississippi. This project involved analysis and write-up of 1995 salvage excavations and new archaeological investigations at Old Spanish Fort Park, as well as an archaeological survey for historic American Indian sites in the Pascagoula River delta.

Among the earliest colonial settlements in the Pascagoula River delta was the ca. 1718 land concession granted to French Canadian Joseph Simon de la Pointe, who with slave labor created a successful plantation within a decade. In 1741 one of his daughters, Marie Josephine La Pointe, married Hugo Ernestus Krebs, under whose management the plantation continued to flourish and was held for nearly two centuries by the Krebs family. The four-acre Old Spanish Fort Park encompasses only a small portion of the large La Pointe-Krebs plantation. Preserved in the park is La Pointe-Krebs House, a French colonial-style structure built in the mid-1770s, and now the oldest standing structure in Mississippi.

Center for Archaeological Studies staff conducted salvage excavations in 1995 adjacent to the La Pointe-Krebs House in response to house restoration activities that were damaging intact archaeological deposits. In 2010 the Mississippi Department of Archives and History funded large-scale excavations in four areas of Old Spanish Fort Park deemed significant based on a 1995 shovel test survey. During the 2010 excavations, 96 features were discovered, including a brick foundation, midden deposits, pits, postholes, and construction trenches. The 1995 and 2010 artifact assemblages from La Pointe-Krebs House and Plantation site are large and diverse, representing nearly 300 years of occupation. The artifacts reflect the wealth and status of the La Pointe-Krebs family and attest to the complexity of this important archaeological site. Well-preserved faunal and plant remains yielded significant information on resource exploitation, domestication, and food consumption at a colonial Gulf Coast plantation. The historic American Indian pottery assemblage is remarkable, with most dating to the colonial period, including an impressive number of decorated potsherds and Colonowares, many of which can be attributed to the Pascagoula and Choctaw Indians.

Another component of the La Pointe-Krebs Plantation project was historical research and archaeological survey for Historic-period Native American village sites in the Pascagoula River delta and along the Mississippi Gulf Coast. Three previously recorded sites were revisited and one newly discovered site was shoveled tested. Several other known sites and potential locations for Historic Indian village sites were identified. This limited survey is presented in a separate report (Gill and Gums 2012).

#### Acknowledgments

The 2010 La Pointe-Krebs Plantation archaeology project at Old Spanish Fort Park (22JA526) was accomplished with the help of many individuals. We thank Pamela Lieb (Chief Archaeologist), Greg Williamson (Archaeologist), and other staff at the Mississippi Department of Archives and History (MDAH) for administering the project grant and providing other support and guidance. Funding was provided through MDAH by the U.S. Department of Housing and Urban Development and the Mississippi Development Authority. Bonnie Gums served as project director and Dr. Greg Waselkov as principal investigator.

Edmond Boudreaux, an expert on colonial settlement along the Mississippi Gulf Coast, freely shared his knowledge and information with us. Others who offered information or helped in the field were Tony Boudreaux (Department of Anthropology, East Carolina University), Kelsey Lowe (archaeologist with Coastal Environments, Inc.), Aaron Vogel and Baxter Mann (archaeologists with the U.S. Department of Homeland Security), Carla Hadden (PhD candidate, University of Georgia), Jack Dickinson (local supporter), Tommy Wixon (local author and history enthusiast), and Walter Mansfield (archaeology enthusiast and dedicated volunteer).

We appreciate the support and interest in our work shown by members of the Jackson County Historical and Genealogical Society. Genealogists Sherry Owens and Renee Hague provided assistance with the Local History and Genealogical Library collections in the Pascagoula Library, Jackson-George Regional Library System.

We thank City of Pascagoula Parks and Recreation personnel Darci Crews, Ann Burgo, and Kevin Hall for assisting with project logistics, as well as those city workers who helped build and maintain the water-screen sump. Bruce Knott (Public Relations, City of Pascagoula) coordinated project publicity with the local news media, and Mike Dumas with the *Mobile Press-Register* wrote an informative news article about the La Pointe-Krebs Plantation excavations.

Dr. and Mrs. Brunt graciously allowed us to survey their property adjacent to Old Spanish Fort Park. Likewise Robert and Betty Oswald, Mimi Holland and Sam St. John, Michael Lee and Fredna Vice, Jack and Catherine Womack, and Richard Womack kindly permitted us to survey their lands to search for Historic Native American village sites and to assess other archaeological resources.

Crew members for the 1995 salvage excavations at La Pointe-Krebs House (discussed in this report) consisted of University of South Alabama, Center for Archaeological Studies (CAS), staff and student assistants Jody Badillo, Amy Carruth, Warren Carruth, Katy Gamble, Bonnie Gums (field supervisor), Catherine Henderson, Ray Keene, Debi Lawrence, Sarah Mattics, David Sanders, Tammy Shaw, and George Shorter.

Field investigations took place at La Pointe-Krebs Plantation from June 1 until September 22, 2010. Field personal consisted primarily of CAS staff and student assistants, including Katies Bates, Brandi Cauley, Raven Christopher, Joe Formichella, Lindsey Gorum, Bonnie Gums (field supervisor) Lindsay LaGrange, Sarah Mattics, Erin Stacey, Chad Waltman, Greg Waselkov, and Chelsey Wilson. CAS archaeologist Cameron Gill (assisted by Erin Stacey, Chad Waltman, and

volunteer Walter Mansfield) conducted research and field survey for Native American sites in the Pascagoula River delta.

Artifact processing and analysis of the 1995 salvage excavation and 2010 excavation collections was accomplished by CAS staff and student assistants. Faunal remains were analyzed by Kevin Gibbons and Maran Little, assisted by Carol Colaninno-Meeks, Sarah Bergh, and Carla Hadden, under the supervision of Dr. Elizabeth J. Reitz, director of the University of Georgia's Zooarchaeology Laboratory. Botanical remains were analyzed by Karen Leone (Leone Consulting, Ltd.), who has analyzed plant remains for us from many prehistoric and historic sites on the Gulf Coast.

Over 50 volunteers from four states (Mississippi, Alabama, Florida, and Georgia) participated in Saturday digs in July and August, despite extremely hot weather. With their hard work we were able to complete more excavations than we expected. We thank them all. In particular we acknowledge the assistance of a group of homeschoolers and their parents who visited us one Saturday: Kaylee Cloninger, Brenan Fitzgerald, Madelaide Fitzgerald, Cheryl Holbrook (mom), Kaleb Holbrook, Kyle Holbrook, Elizabeth Knowles, Kim Wright Knowles (mom), Taylor Lintz, and Amanda Wilson.

Special thanks go to Walter Mansfield, Debbie Parker, and Barb Hester for their intense interest and dedication, and for their generous donation of time and labor to our excavations. They remained steadfast to the end and made a huge contribution to the success of the project.

It has been a pleasure to work with you all.

Bonnie L. Gums and Gregory A. Waselkov Center for Archaeological Studies University of South Alabama



Volunteers excavating Trench 1 in Area 1 at La Pointe-Krebs Plantation.

Volunteers for the 2010 Excavations at La Pointe-Krebs Plantation				
Randy Belinski	Barb Hester	Alexander McNish		
Shelly Boyd	John and Kristi Hicks	Debbie Parker		
Martin Britt	Elizabeth Hoffer	Tim Reidy		
Lynn Chilton	Morgan Horne	Elizabeth Ross		
Jack Dickinson	Thomas Horne	Joe Seward		
Angela Dobson	Gabriel Hull	Dale Speetjens		
James Edwards	Mallory Hull	Amira Speetjens		
Mary Ellen Edwards	Paul Jordan	David Thomer, Jr.		
Joni and Bill Euler	Benjamin Lane	Chad Waltman		
Christine Falls	Ryan Landry	Nick Waselkov		
Hannon Falls	Carson Lane	Aaron Vogel		
Jimmy Fox	Kelsey Lowe	Shilo Wilk		
Jimmie Gentry	Marjorie Mansfield			
Dennis Guy	Walter Mansfield			
Carla Hadden	David McNish, Jr.			

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### **CHAPTER 1:** The La Pointe-Krebs Plantation Archaeology Project

by Bonnie L. Gums and Cameron Gill

In the summer of 2010, the University of South Alabama's Center for Archaeological Studies (CAS) conducted archaeological investigations at Old Spanish Fort Park in the City of Pascagoula, Jackson County, Mississippi. The park, designated archaeological site 22JA526, covers approximately 4 acres overlooking Krebs Lake in the Pascagoula River delta (Figures 1-1 and 1-2). The highlight of Old Spanish Fort Park is the historic La Pointe-Krebs House, a French colonial-style structure believed to have been built in the mid-1770s, the oldest standing structure in Mississippi (Figure 1-3). This structure was once part of a French colonial plantation established around 1718 by Joseph Simon de la Pointe, and occupied for nearly two centuries by the LaPointe-Krebs family. Another component of the La Pointe-Krebs Plantation project was historical research and archaeological survey for Historic-period Native American village sites in the Pascagoula River delta and along the Mississippi Gulf Coast (Gill and Gums 2012).

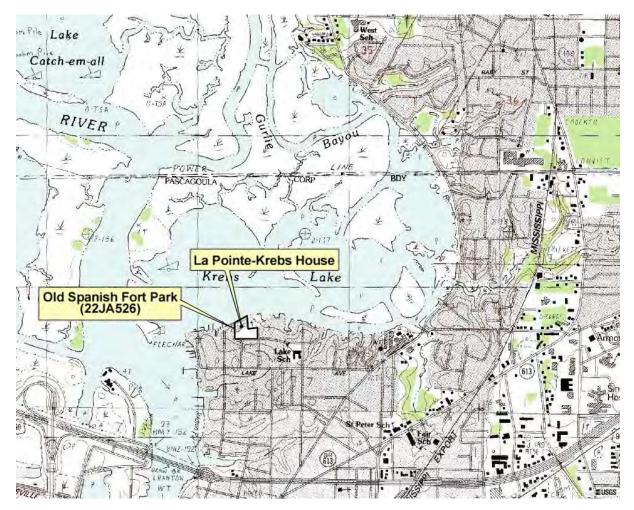


Figure 1-1. The location of La Pointe-Krebs House in Old Spanish Fort Park (archaeological site 22JA526) in Pascagoula, Mississippi (USGS topographic maps, Pascagoula North and Pascagoula South, Mississippi 7.5' series quadrangles).



Figure 1-2. Aerial view of Old Spanish Fort Park (22JA526) with La Pointe-Krebs House, Krebs Cemetery, and museum.



Figure 1-3. La Pointe-Krebs House in 1994 prior to restoration.

The 2010 CAS excavations and archaeological survey were supported by a grant provided by the U.S. Department of Housing and Urban Development administered through the Mississippi Department of Archives and History (MDAH) and the Mississippi Development Authority. MDAH archaeologists provided guidance and oversight throughout the project.

Fieldwork included excavations in four areas of the site selected for their significant archaeological deposits based on results of a 1995 shovel test survey of Old Spanish Fort Park (Gums 1996). The 2010 excavations recovered an extensive array of cultural features, pits, trenches, and postholes dating to the colonial and early American periods, and a large and diverse assemblage of artifacts. This project also included analysis and write-up of previously unfunded 1995 salvage excavations by CAS at La Pointe-Krebs House. Fieldwork and archaeological survey were followed by processing and analysis of recovered artifacts, interpretations of excavations and survey, and preparation of this report on results of the La Pointe-Krebs Plantation project.

#### **Environmental Setting**

La Pointe-Krebs House and Plantation site in Old Spanish Fort Park (22JA526) is situated in south Jackson County, Mississippi, in the present-day town of Pascagoula. The house is located in a scenic area, on a low bluff overlooking the waters and lowlands of the Pascagoula River and its tributaries (Figure 1-4). La Pointe-Krebs House sits on a slight ridge that runs east-west adjacent to an embayment of the Pascagoula River, known locally as Krebs Lake. Very little landscape alteration has occurred within the four-acre bounds of Old Spanish Fort Park. In fact, the landscape probably appears much as it did in the eighteenth century. Areas of the city around the park, with the exception of the north shoreline, have been residential for quite some time.



Figure 1-4. View of the Pascagoula River delta from the property west of Old Spanish Fort Park.

Topography in Jackson County ranges from hilly to moderately hilly in the northwest to flat or gently rolling along the coastline and estuarine environments, with elevations ranging from 200.0 feet in the northwest to sea level along the Mississippi Gulf Coast. Elevations in Old Spanish Fort Park are from 6.0 to 9.0 feet. The expansive Pascagoula River delta runs north-south through the center of Jackson County, with a series of small lakes – Beardslee, Robertson, O'Leary, Bounds, and McInnis lakes – about 2.9 miles north of Old Spanish Fort Park.

Two soil types are located in the immediate area of La Pointe-Krebs House in Old Spanish Fort Park (Johnson 2006:210-212, 247-249). Wadley Loamy Sand (0-5 percent slopes) occupies the ridges within the site, and Harleston Fine Sandy Loam (5-8 percent slopes) is found in the surrounding marine terraces. Wadley Loamy Sand is very deep and somewhat excessively drained and does not experience regular flooding. Wadley Loamy Sand is suitable for cropland (corn and watermelons), as well as pasture and hay land (Bahia grass, improved Bermuda grass). These soils are also well suited for dwellings. Harleston Fine Sandy Loam is very deep and moderately well drained, though at severe hazard for water erosion. Harleston Fine Sandy Loam is mostly used as woodland and wildlife habitat, but is also suited for cropland (corn, cotton, soybeans, wheat, grain sorghum), as well as for pasture and hay land (Bahia grass, improved Bermuda grass). This soil type is also moderately suitable for dwellings.

Jackson County has an average temperature of 52° F during the winter months, with an average daily minimum of 43° F. During the summer the average temperature is 81° F, with an average daily maximum of 89° F. Average annual rainfall is 66 inches, with about 77 percent falling within the period between March and November. Snowfall in coastal Mississippi is extremely rare.

The climate and associated environment surrounding Old Spanish Fort Park supports a wide variety of abundant natural resources for human exploitation and consumption (Eleuterius 1998). Common marine life of economic importance includes menhaden, shrimp, blue crab, oyster, mullet, speckled trout, and red drum. Small mammals would likewise have been important to local economies and include rabbit, otter, skunk, opossum, squirrel, raccoon, and fox. Large animals of most importance to Native Americans included whitetail deer, wild turkey, and black bear. French colonist André Pénicaut described a feast prepared in the early eighteenth century by Pascagoula Indians:

We were perfectly well received by their grand chief and by all the savages of the village: they gave us something to drink and to eat such as buffalo, bear, and deer, and every kind of fruit in abundance, such as peaches, plums, watermelons, pumpkins, and all of an exquisite flavor (McWilliams 1953:18).

Early Europeans in the area observed that the natives were very well adjusted to the climate of coastal Mississippi. During warmer months Pascagoula men and boys "went as naked as one's hand," while women and girls "wore a single hank of moss which passed between their legs and covered their nakedness" (McWilliams 1953:18). During cooler months, deerskins, feather cloaks, pelt robe, or woven mantles were added to the attire of both sexes for warmth.

The architecture of indigenous peoples also demonstrated adaptation to the coastal Mississippi environment and climate. Lightly constructed dome-shaped structures made from cane and palmetto mats were used by coastal Choctaws and other groups during the warm months, while heavier more substantial wattle and daub buildings were constructed as permanent or cold season shelters (Swanton 1946: Plate 61; McWilliams 1953:19).

#### **Colonial-Era American Indians in the Pascagoula River Valley**

The Pascagoula River environs has a fairly well documented history of Native American occupation in the colonial period (Waselkov and Gums 2000:23-26; Goddard et al. 2004:185). One of the first historical descriptions of local native peoples comes from contact made in 1699 while Pierre Le Moyne d'Iberville, leader of the French colonizing expedition, directed construction of Fort Maurepas on Biloxi Bay. There Iberville met

... three Indians who belong to the Annocchy and Moctoby nations. They are  $3\frac{1}{2}$  days journey from their village. They mentioned a village of their neighbors, the Chozetta, located on the banks of a river, which they call the Pascoboula, whose mouth lies 9 leagues to the east (McWilliams1981:45).

The three tribes mentioned in this initial account include the Biloxis (*Annocchy*), Capinans (*Moctoby*), and the Pascagoulas (*Chozetta*). Shortly afterward, Iberville's brother Jean-Baptiste Le Moyne de Bienville explored the Pascagoula River and stopped at the aforementioned Indian towns, which he estimated contained 130 warriors (La Harpe 1971:14). Bienville learned that the Pascagoulas spoke a Choctawan language, not too dissimilar from those spoken by their eastern neighbors, the Mobilians and Tomés; but the Biloxi language – and probably that of the Capinans – is Siouan, a separate language family. Presumably at Bienville's invitation, Chenoua, leader of the Pascagoulas, and seven of his men paid a visit to Commander Sauvole at Fort Maurepas to sing the calumet. Sauvole wrote about the encounter.

I have never seen savages less inhibited. They have embraced us, something I have never seen the other do; they rub their hand tenderly on their breast at their approach, having lifted their arms to the sky. They have brought me, as a present, some deerskins... (Higginbotham 1969:28-32).

In 1700 Iberville visited a deserted Biloxi village about 6 leagues up the Pascagoula River. He noted the nation had been decimated by diseases and described the fortified village and surroundings.

Two leagues below this village one comes to many cleared fields, quite close together, on both banks of the river.... It did not appear to me that in this village there were more than thirty to forty huts, built oblong and roofed with tree bark, as we make ours. They are all of one story, about 8 feet high, made of mud

*daub.... The village was enclosed with pales 8 feet high and about 18 inches thick. There still remain three square lookout boxes...* (McWilliams 1981:139-140).

By 1704 some members of the Biloxi tribe were encouraged by the French to move to the Mississippi River near a fort the French had built (McWilliams 1953:81). The Capinans and Pascagoulas remained in the Pascagoulas River valley for several more decades, living in close proximity to a few French colonists (including Joseph Simon de la Pointe) who established plantations there in the 1710s and 1720s. The ca. 1726 map of the Pascagoula River by French engineer Jean-François-Benjamin Dumont de Montigny shows one Pascagoula village and two Capinan villages far up the river on the west bank, and four French concessions. By 1738 the Capinans had abandoned their villages and settled on Deer Island (Rowland and Sanders 1984:158). In 1763 after the French lost their North American colonies, the Pascagoulas and other small tribes (*petites nations*) from the coast moved to the Mississippi and Red river valleys in Spanish Louisiana, opening the Mississippi Gulf Coast to the Choctaws.

#### Early Colonization of the Northern Gulf Coast

European exploration of the northern coast of the Gulf of Mexico began with sporadic Spanish intrusions in the early and mid-1500s, but the only permanent Spanish settlement occurred at Pensacola Bay at the very end of the seventeenth century. French colonial settlement occurred a few months later, in February 1699, with the arrival of ships at a barrier island (now known as Ship Island) off the coast of what is now Mississippi. After exploring the coastline in search of a strategic location for a fort, Pierre Le Moyne d'Iberville decided upon the eastern shore of Biloxi Bay, where in April 1699 the colonists erected a small wooden fortification named Fort Maurepas (site 22JA534), in honor of the French naval minister (Higginbotham 1968).

Due to poor river connections to the interior from Biloxi Bay, Fort Maurepas was abandoned early in 1702 in favor of a location north of Mobile Bay, 27 miles up the Mobile River, a place now known as Old Mobile (site 1MB94). Unlike the strictly military establishment at Fort Maurepas, Mobile was a town of several hundred people protected by a small fort; the town was relocated in 1711 to the present site at the mouth of the Mobile River (Waselkov 1999).

Intensive colonization of the Mississippi Gulf Coast occurred from 1717 to 1719 with establishment of the Law concession on Biloxi Bay, at a place known as *Vieux Biloxi*, and other commercial settlements. Shortly afterward, the capital of French Louisiana was permanently moved to the newly founded town of New Orleans on the Mississippi River. Other early coastal settlements included a French warehouse on Ship Island (site 22HR638) and a small village and fort on Dauphin Island (site 1MB221). One of the first colonial outposts in the Pascagoula River delta was the ca. 1718 concession of Joseph Simon de la Pointe, which later became known as the La Pointe-Krebs Plantation, partly encompassed by Old Spanish Fort Park (site 22JA526).

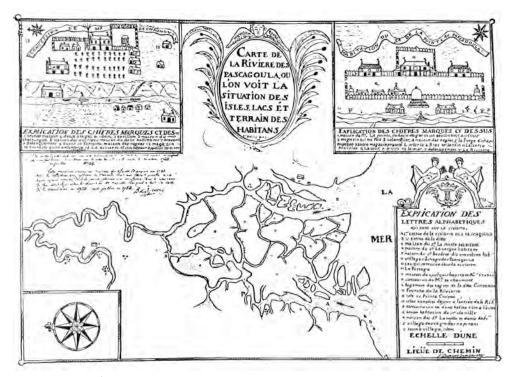


Figure 1-5. *Carte de la Rivière des Pascagoula* by Jean-François-Benjamin Dumont de Montigny, circa 1726 (Wilson 1968:21).

#### Dumont de Montigny's Map of Pascagoula River Environs

Around 1726 French engineer Jean-François-Benjamin Dumont de Montigny drew a map of the Pascagoula River entitled *Carte de la Rivière des Pascagoula, ou l'on Voit la Situation des isles, lacs et terrain des habitans* (Figure 1-5) (Wilson 1968:21). Dumont de Montigny depicted the river delta in detail, with Indian villages, French plantations, and geographical features numbered and described in extended captions. Although some changes in these waterways have occurred over the last 300 years, Dumont's map compares well with modern maps and aerial photos of the delta and his map is helpful in locating early historical sites in the area.

The *Habitation du Sr de la Pointe au Pascagoula* is illustrated in the upper right corner of Dumont's map (Figure 1-6). He sketched a palisaded compound with two-story main house; two storehouses (*magazin*), one built and one projected; a dairy; a forge; a house for African slaves; a dovecote or pigeon house; two sawmills or carpenter shops on the river; and a river landing.

Shown in the upper left corner of the map is the *Concession de Mr. De Chaumont* (Figure 1-7), which was located in the upper reaches of the Pascagoula River delta. It is similarly depicted with a two-story main house and attached wooden palisade, an orchard, a storehouse, houses for indentured and enslaved workers, a surgeon's house, other buildings, and a river landing. As with all historical maps, the accuracy of the sketches of the two plantations must be questioned, particularly in regards to the purpose for which they were drawn. These illustrations may have been embellished to enhance public impressions of the colony, if intended for governmental officials in France. However, they do present impressions of the early French colonial landscape.



Figure 1-6. Detail of Dumont's ca. 1726 map of the Pascagoula River showing the La Pointe plantation (Wilson 1968:21).

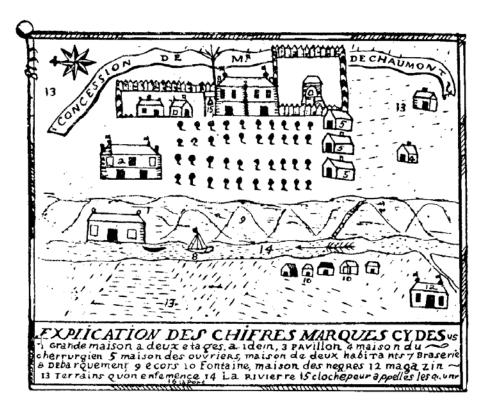


Figure 1-7. Detail of Dumont's ca. 1726 map of the Pascagoula River showing Chaumont's concession (Wilson 1968:21).

#### Native American and Colonial Sites on the Mississippi Gulf Coast

This overview of archaeological sites in Jackson and Harrison counties relevant to the La Pointe-Krebs Plantation project reflects what we know about colonial-era American Indian and French settlement patterns, current condition of sites, and their potential for yielding data through future excavation. Site summaries are derived from the Mississippi state sites files and available archaeological reports. In particular, a post-Hurricane Katrina archaeological survey of recorded sites along the Mississippi Gulf Coast conducted by Coastal Environments, Inc. (CEI) has been most useful (Boudreaux 2009). A few Historic period Native American village sites and French colonial sites have been located. Unfortunately, residential development and coastal erosion have taken a heavy toll. This review highlights the significance of the well-preserved La Pointe-Krebs Plantation site in Old Spanish Fort Park (22JA526).

#### Historic Native American Sites

One particularly significant Native American site is the Singing River site (22JA520), located on the east bank of the East Pascagoula River in the city of Pascagoula (Boudreaux 2009:137-139). The site includes a mound, large shell midden, and burial ground, portions of which have been severely disturbed by urban development and looting. The site was first reported in 1933, and periodic excavations have since occurred by amateurs and professionals (Chambers and Ford 1933; Blitz and Mann 2000:48; Boudreaux 2009:137-139). Primarily occupied during the Mississippi and Protohistoric periods (AD 1200-1699), there is archaeological evidence of Historic Indian occupation, probably by the Pascagoulas.

Another possible Pascagoula Indian village is the Homestead site (22JA645) located on the west bank of West Pascagoula River a few miles north of Mississippi Sound. The Homestead site consisted of small dense clusters of prehistoric and historic artifacts, including eighteenthcentury Historic Indian pottery. The site is thought to be the location of the Pascagoula Indian village shown on Dumont's ca. 1726 map of the Pascagoula River (Blitz and Mann 2000:69-70). Unfortunately, the Homestead site has been heavily disturbed by residential development (Boudreaux 2009:181).

Several other sites may contain Historic American Indian occupations, in addition to more prominent prehistoric components. These include the Rudloff site (22JA521) located on West Pascagoula River, the Lyons Lake site (22JA661) on an oxbow of the Escatawpa River, the Davis site (22JA727) on a tributary of Graveline Bayou, and 22JA710, an oyster shell midden on L'Isle Chaude Bay (Blitz and Mann 2000:69-70, 99-100; Boudreaux 2009:184, 195). The Griffin Point site (22JA552), located just below the confluence of the Pascagoula and Escatawpa rivers, reportedly had occupations dating to the Protohistoric and early Historic periods, but this site has been destroyed by residential development (Boudreaux 2009:146-147).

The Deer Island site (22HR500) was once an expansive oyster shell midden on a barrier island in the Gulf of Mexico. Archaeological evidence suggests continual use from Paleoindian through Historic periods (Boudreaux 2009:79-87; Brown 1926). A 1738 French document relates

that the Capinans had abandoned their Pascagoula River village and moved to Deer Island (Rowland and Sanders 1984:156). The site has suffered severe erosion and what remains is heavily disturbed (Boudreaux 1998; Boudreaux 2009:86-87; Kraus 1985; Wilson and Prentice 2005).

#### French Colonial Sites

Site 22JA534 is the probable location of French colonial Fort Maurepas, built in 1699, as well as *Vieux Biloxi* [Old Biloxi], capital of the *Louisiane* colony from 1719 to 1721 (Blitz et al. 1995; Blitz and Mann 2000). The site is located on Fort Point peninsula on Back Bay Biloxi in the city of Ocean Springs. During the late 1800s and early 1900s, landowner Schuyler Poitevent collected a large quantity of eighteenth-century artifacts from his property and surrounding properties on Fort Point (Blitz et al. 1995; Blitz and Mann 2000). MDAH archaeologists attempted to investigate what was thought to be the precise location of Fort Maurepas in the 1970s, but were denied access by landowners (Boudreaux 2009:141-142). However, investigations on some nearby properties recovered French colonial artifacts. The site of Fort Maurepas may have been impacted by coastal erosion and is certainly disturbed by residential development, but some remains of the fort may still exist.

The Martin's Bluff site (22JA505) is located on a high bluff above the West Pascagoula River (Boudreaux 2009:133-134). A collection from the 1930s includes glass beads, iron spikes, European ceramics, and red-filmed Native American potsherds associated with the Historic period (Chambers 1933). Based on Dumont's ca. 1726 map, the Martin's Bluff site is the location of the Graveline concession, a French colonial plantation (Blitz and Mann (2000:72). Martin's Bluff is now a residential community and much of the archaeological site has been destroyed. The nearby Martin's Bluff II site (22JA548) was described as a "colonial period earth oven", although the basis for this interpretation is unknown. The exact location of this feature is unknown, but it has probably been destroyed by residential development (Boudreaux 2009:146).

The Joe Moran site (22HR511) is a French colonial cemetery located near the beach in the city of Biloxi. Burials date from ca. 1717 to 1730. In 2003 archaeologists from the University of Southern Mississippi (USM) analyzed 13 skeletons exposed by Hurricane Camille in 1969 (Carter et al. 2004). Excavations in 2008 by USM identified at least 17 additional burials (Boudreaux 2009:93-94). The site is highly significant as the only extensive French colonial cemetery south of Canada.

The French Warehouse site (22HR638) is an early to mid-eighteenth-century site located on Ship Island in the Gulf of Mexico. The site was originally thought to be the remains of a French warehouse, but latter research suggested it was a habitation associated with the warehouse (Tesar 1973; Hammersten 1990).

#### The La Pointe-Krebs Family

Joseph Simon de la Pointe was the first family member to arrive in the Gulf Coast colony of *La Louisiane* from French Canada. Upon petitioning the King of France, Joseph Simon de la Pointe was granted a small land concession in the Pascagoula River delta around 1718. He constructed a two-story home, married Marie Foucault, and started a family. His wife died early in their marriage leaving him with two young daughters to raise (Foster and Daw 1991:2). One of the daughters, Marie Josephine Simon de la Pointe (b. ca. 1723), married Hugo Ernestus Krebs (b. 1714) around 1741 in the La Pointe home. Joseph Simon's other daughter, Marie Jeanne Simon de la Pointe, married Augustin Rochon of Mobile and moved to a plantation on Mobile Bay around 1750 (site 1BA337; Gums 2000).

According to a 1991 compilation of La Pointe-Krebs family history, based on 30 years of genealogical research by an eighth-generation descendant of Hugo Ernestus Krebs, he was born in 1714, one of nine children of Johann Krebs and Anna Charitas Fritsch, in the Alsace-Lorraine area of France, on the Moselle River in what is now west-central Germany (Foster and Daw 1991:2, 7-8). Krebs arrived on Mississippi's French colonial Gulf Coast around 1730, at age 16 or 17. After Joseph Simon's death, Hugo took over the plantation and consequently the concession came to be known as the La Pointe-Krebs Plantation. Krebs also acquired land in New Orleans and Mobile, where the family built second homes. The Krebs family became one of the largest on the north-central Gulf Coast, with many modern Mississippi citizens claiming family ties. At one point in its history, the Pascagoula area was known as Krebsville. A 1745 census recorded a population of ten European colonials and 60 enslaved Africans living in the area.

Hugo Krebs and Marie Josephine Simon de la Pointe had seven children: Joseph (born 1742), Marie (1745), Mathias (1747), François (1748), Pierre (1748), Marguerite (1749), and Augustin (1750). Marie died in 1751, a year after giving birth to her last child, and is buried in the parish cemetery in Mobile. By 1753 Hugo remarried Marie Anne Chauvin *dit* Joyeuse, a widow living in New Orleans. They also had seven children: Daniel (1755), Antoine Raphel (1756), Marie Theresa (1759), Ann Charita (1762), Basil (1764), Marie Rose (1766), and Cecile (1767). Nearly all of Hugo's children lived to adulthood, spending some time growing up at Krebs Plantation.

In local histories, Hugo Krebs is best known for his invention of a roller-type cotton gin around 1772, over two decades before Eli Whitney invented his famous gin. In fact, a many kinds of cotton gins were developed by enterprising Gulf Coast colonials in the century before Eli Whitney's successful design revolutionized cotton production in the American South. The first "mill for ginning" cotton in this region appeared on a plantation near New Orleans in 1725, a rollertype model based on a design developed much earlier in India. Several other variations on that style were promoted by colonial inventors throughout the French, British, and Spanish colonial periods (Thomas 1965; Holmes 1969).

British surveyor and naturalist Bernard Romans witnessed Hugo Krebs' own version in operation during his visit to Pascagoula in the 1770s:

The French in Florida have much improved this machine by a large wheel, which turns two of these mills at once, and with so much velocity as by means of a boy, who turns it, to employ two negroes at hard labour to shovel the seed from under the mill: One of these machines I saw at Mr. *Krebs* at *Pasca Oocooloo*, but as it was partly taken down, he claiming the invention was very cautious in answering my questions, I cannot pretend to describe it accurately; I am informed that one of those improving mills will deliver seventy or eighty pounds of clean cotton *per diem* (Romans 1999:173-174).

In late summer 1772, a major hurricane hit the northern Gulf Coast, devastating the Pascagoula area, as naturalist Romans described:

The fatal hurricane of August 30, 31, September 1, 2, 3, anno 1772, was severely felt in West Florida, it destroyed the woods for about 30 miles from the sea coast in a terrible manner.... at Mobile every thing was in confusion, vessels, boats, and loggs were drove up into the streets a great distance.... all the vegitables were burned up by the salt water, which was by the violence of the wind, carried over the town, so as at the distance of a half a mile, it was seen to fall like rain;... but the greatest fury of it was spent on the neighbourhood of the Pasca Oocolo river; the plantation of Mr. Krebs there was almost totally destroyed, of a fine crop of rice, and a large one of corn were scarcely left any remains, the houses were left uncovered, his smith's shop was almost washed away, all his works and out houses blown down.... (Romans 1999:90).

Based on this historical account and on abundant archaeological evidence, the existing La Pointe-Krebs House was built after the 1772 hurricane. Archaeological remains of earlier buildings below the standing structure and elsewhere on site probably relate to the destruction caused by the hurricane (Waselkov and Silvia 1995).

In September 1776, ill and dying, Hugo Krebs wrote his last will in New Orleans, where he was buried. Generations of Krebs lived at the plantation until around 1940, but unfortunately the family history does not divulge the names of all who resided there. The 1850 U.S. census enumerates seven households of Krebs (totaling 33 individuals) in Pascagoula, but not who was living at the old family home (Cain 1962:106). One of the last occupants of La Pointe-Krebs House was Reverend Father B. O'Reilly, who used it as a summer retreat.

On the east side of Old Spanish Fort Park is Krebs Cemetery (Figure 1-8). Exactly how many people are buried at the 1.5-acre cemetery remains a mystery, but historical records and recent surveys suggest at least 250 interments (Cain 1962:126-127). The earliest existing gravestone dates to 1831 and belongs to Catherine Krebs, wife of Basile Krebs. At least 75 members of the Krebs family are buried there with many other families, both French and English. Several gravestones are inscribed in French. Based on a recent ground penetrating radar (GPR) survey, some unmarked graves are present (Marie Danforth, personal communication, July 2011). Although now nearly full, Krebs Cemetery is still active. Krebs family members are also buried in Grant Cemetery, Greenwood Cemetery, and Machpelah Cemetery, all in Pascagoula.



Figure 1-8. Krebs Cemetery on the east side of Old Spanish Fort Park.

#### Historical Background on La Pointe-Krebs House

Historical research on La Pointe-Krebs House conducted during the late 1970s first suggested that this property was part of a concession granted to Joseph Simon de la Pointe in 1715 (Kemper and Emrick 1980). The ca. 1726 sketch of the La Pointe plantation by Dumont de Montigny shows a large two-story house with surrounding balcony, a warehouse, slave quarters, and sawmills or carpentry shops, among other plantation features (see Figure 1-6; Wilson 1968:21). It was long assumed that La Pointe-Krebs House was built during this early colonial period and in fact was one of the carpenter buildings appearing on Dumont's sketch, presumably because the carpentry shops sat on the river's edge, in the same relation to the river as the existing structure. However, Dumont's map location of the La Pointe plantation only very roughly places it in the vicinity of the modern park. In the 1750s with the death of Joseph de la Pointe, the plantation was inherited by Hugo Krebs, husband of Joseph's daughter Marie, and the property, including the house, remained in possession of the Krebs family until 1940. This connection with the La Pointe-Krebs family is the basis for the identification of the historic structure and the surrounding land as part of the La Pointe concession. However, archaeological studies indicate that La Pointe-Krebs House actually dates to the 1770s and sits atop remains of a French colonial structure, part of the earlier La Pointe plantation (Hinks et al. 1993; Waselkov and Silvia 1995; Gums 1996).

By 1940 the 4-acre property was acquired by Jackson County. In 1948 the Jackson County Board of Supervisors granted a 50-year lease of the property to the Jackson County Historical Society to operate Old Spanish Fort Park. In the 1980s a small museum was constructed in the southeast corner of the park to house exhibits and artifacts relating to the prehistory and history of the Mississippi Gulf Coast.

Like many historic sites along the northern Gulf Coast, Old Spanish Fort Park was severely damaged by floodwaters and winds from Hurricane Katrina on August 29, 2005. Several feet of water flooded La Pointe-Krebs House and the park museum, causing structural damage and loss to exhibits and artifacts. Old Spanish Fort Park has been closed since that day. Five years later, FEMA funds were made available to the Mississippi Department of Archives and History for restoration of La Pointe-Krebs House. MDAH also awarded a grant to the Center for Archaeological Studies at the University of South Alabama to conduct additional archaeological investigations of this important historical site in the summer of 2010.

### Previous Research and Archaeological Investigations at La Pointe-Krebs House

The architectural and historical significance of La Pointe-Krebs House was recognized as early as 1936, when it was included in the Historic American Buildings Survey (HABS) (Felder et al. 1940). HABS was part of the Works Progress Administration (WPA), a federal program initiated during the Great Depression by President Franklin Delano Roosevelt's administration to put people to work. HABS employed architects and photographers to document historic buildings across the American landscape. Researchers documented La Pointe-Krebs House, which they referred to as "Old French Fort," with 10 architectural drawings and 25 black-and-white photographs (both interior and exterior), and recorded its condition (Figures 1-9 to 1-11).



Figure 1-9. Historic American Buildings Survey photograph of La Pointe-Krebs House, with a later small wooden frame building on the west end and shed on the east end, 1936 (HABS/HAER, Library of Congress).



Figure 1-10. Interior of La Pointe-Krebs House, 1936 (HABS/HAER, Library of Congress).

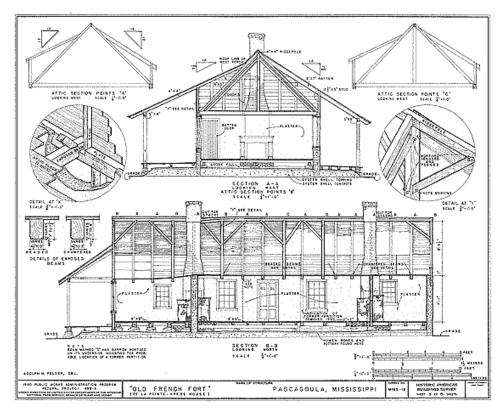


Figure 1-11. HABS architectural drawings of "Old French Fort" (La Pointe-Krebs House), 1936 (HABS/HAER, Library of Congress).

One interior photograph taken in 1936 (Figure 1-10) shows framed pictures above the fireplace and two beds, indicating the house was occupied at that time. HABS photographs from 1940 show the interior without furnishings, indicating it was by then vacant, and accompanying notes state that the house was owned by the Jackson County Board of Trustees.

In 1971 La Pointe-Krebs House was listed as "Old Spanish Fort" on the National Register of Historic Places (NRHP), based on Criteria A and C for the site's historical and architectural significance. In 1979 major restoration plans for La Pointe-Krebs House were accompanied by historical research on property ownership and excavations within and around the structure, and the archaeological significance (NRHP Criterion D) of site 22JA526 was finally recognized (Padgett 1979; Kemper and Emrick 1980). The limited excavations consisted of four units inside the house and three units around the building. Interior units revealed numerous features beneath the structure, including a tabby wall foundation from an earlier building and a pit filled with Indian potsherds.

Over 780 artifacts were reported from the 1979 excavations, most of which were Native American pottery, with examples of colonial-period European ceramics such as French faience and British creamware. The current location of the 1979 field notes and artifact collection is unknown, but a report exists (Padgett 1979). During the 1979 restoration, a historically inaccurate concrete floor was added to the building's porch area, which was removed during the 1995 restoration.

Subsequent archaeological investigations inside and around La Pointe-Krebs House were conducted in 1992 and 1994 to augment plans to restore the structure to its ca. 1820s appearance, (Hinks et al. 1993; Waselkov and Silvia 1995). The 1992 excavations by Goodwin and Associates of New Orleans included six units inside the structure and one unit outside the south wall. Analyses of paint remnants on structure walls and a study of tree rings in structural beams were part of the 1992 investigations (Mosca 1992; Stahle 1992). The tree-ring analysis attempted to establish a construction date for the old house. For several reasons, including the poor condition of the structure's wooden elements, none of the 36 tree ring samples could be accurately dated.

In 1994 the first excavations by the Center for Archaeological Studies at the University of South Alabama (CAS) occurred at La Pointe-Krebs House (Waselkov and Silvia 1995). These excavations expanded on Goodwin and Associates' 1992 work inside La Pointe-Krebs House to include four units around the east fireplace and three units around the west fireplace (Figure 1-12).



Figure 1-12. 1994 excavation unit by the fireplace inside La Pointe-Krebs House.



Figure 1-13. La Pointe-Krebs House just prior to the 1995 restoration.



Figure 1-14. La Pointe-Krebs House after the 1995 restoration.

These archaeological investigations further documented through soil stratigraphy and associated artifacts that construction of La Pointe-Krebs House dates to the mid-1770s (Waselkov and Sylvia 1995:38).

Prior to the 1995 archaeological survey of Old Spanish Fort Park, excavations had focused inside or immediately around La Pointe-Krebs House, with the primary intent of establishing a construction date for the structure and to aid restoration planning. The 1995 shovel test survey project, although associated with the 1995 restoration of La Pointe-Krebs House, represented the first research to evaluate archaeological remains in the surrounding four-acre park and the site as a whole (Gums 1996). After these investigations, La Pointe-Krebs House was restored and once again opened to the public (Figures 1-13 and 1-14).

The 1995 survey by CAS involved digging 510 shovel tests in Old Spanish Fort Park and in Krebs Cemetery, east of the park (Figures 1-15 and 1-16). Thirty-seven cultural features were recorded in 46 (9%) of the 510 shovel tests, including a shell and mortar midden on the shore of Krebs Lake, numerous pits, structural wall or palisade fence trenches, postholes, and other features thought to be middens and structural remains.

Five artifact clusters, designated Areas 1-5, suggested that other plantation structures once stood within Old Spanish Fort Park (see Figure 1-16). The abundance of Native American pottery and the presence of an apparent shell midden suggested that a substantial Native American occupation predated the colonial plantation. Artifacts recovered during the 1995 survey of Old Spanish Fort Park reflected the continuous occupation of the site by Native Americans, European colonists, and Americans from the late seventeenth century into the mid-twentieth century.



Figure 1-15. 1995 shovel test survey in Old Spanish Fort Park (22JA526) around La Pointe-Krebs House.

During the 1995 CAS archaeological survey, construction activities relating to the restoration of La Pointe-Krebs House were initiated by the contracting architectural firm, Koch and Wilson from New Orleans. Earthmoving activities began – including digging trenches with a small backhoe along three sides of the structure – without considering how these activities would destroy unexplored archaeological deposits adjacent to the house. In response to this emergency, the CAS archaeological survey crew spent 14 additional days excavating and recording archaeological deposits and features impacted by restoration work (Figure 1-17). Neither this unanticipated salvage fieldwork nor the analysis of recovered artifacts was funded by the 1995 survey project, so a report was not completed at that time. Field notes, maps, and artifacts from the salvage excavations have been curated by CAS since 1995. Fortunately, the 2010 grant for new archaeological investigations at La Pointe-Krebs Plantation from the Mississippi Department of Archives and History included funds to prepare a report on the 1995 salvage excavations.

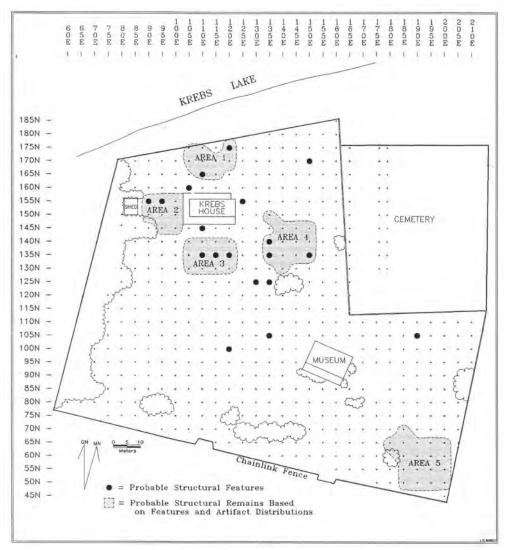


Figure 1-16. Map of the 1995 shovel test survey showing Areas 1-5 in Old Spanish Fort Park (22JA526).



Figure 1-17. Recording archaeological deposits in the 1995 salvage excavations prior to impact by restoration activities for La Pointe-Krebs House.

## **Research Design and Field Methods**

The 2010 archaeology project at La Pointe-Krebs Plantation in Old Spanish Fort Park (22JA526) included analysis and write-up of the 1995 salvage excavations and new excavations in four areas of the park.

# 1995 Salvage Excavations

In November 1995, in conjunction with restoration of La Pointe-Krebs House, CAS staff conducted 14 days of *gratis* salvage excavations prior to extensive earth disturbance around the foundation of the historic structure. Due to the emergency nature of salvage work, those excavations could not be written up and the artifacts were not processed or analyzed in 1995.

Twenty-five units, mostly 1.0 by 2.0 meters in size, designated Units 15 through 40 (following previous excavations at 22JA526), were excavated around the sides of La Pointe-Krebs House in locations proposed for extensive earthmoving to rebuild the structure's foundation and surrounding porch. Twenty-eight features were recorded as Features 60 through 87. Interpretations of the salvage excavations are reported here and are associated with the 2010 excavations in Area 6.

Artifacts from the 1995 salvage excavations filled nineteen storage boxes (17 by 17 by 6 inches). These include one box of Native American pottery, one box of miscellaneous artifacts (i.e., European ceramics, glass beads, white clay pipes, gunflints, and lead, copper, and brass artifacts), one box of glass, one box of faunal remains, two and a half boxes of iron, three boxes of bricks, four and a half boxes of mortar and plaster, and five boxes of molluscan shells. These artifacts were inventoried and included as part of the 2010 La Pointe-Krebs Plantation archaeology project.

#### 2010 Excavations

The 2010 archaeological excavations at La-Pointe-Krebs Plantation were designed to investigate significant areas of the site for interpretations of various occupations, both Native American and colonial. Excavations focused on two areas (Areas 1 and 3) identified by the 1995 shovel test survey at Old Spanish Fort Park (Gums 1996), and two areas (Areas 6 and 7) designated during the 2010 project. Feature numbers were assigned from Features 88 to 183, a total of 96 features, primarily consisting of midden deposits, pits, postholes, and trenches.

Fieldwork included excavation of 22 units (primarily 1.0 by 2.0 meters and 2.0 by 2.0 meters in size) and one backhoe excavation in Area 1 to uncover a large deep pit, Feature 163. Excavation units were dug in arbitrary 10-cm levels into sterile subsoil. Cultural features were excavated according to standard procedures following cultural stratigraphy, and specialized samples, such as flotation and soil samples, were taken when needed. Soils from excavation units and cultural features were water screened through 1/16-inch hardware mesh (Figure 1-18). Stratigraphic profiles of excavation units and features were photographed, mapped, and recorded using *Munsell Soil Color Charts* (1994). A topographic map of Old Spanish Fort Park was prepared using a Total Station.



Figure 1-18. Water-screening operation for 2010 excavations at La Pointe-Krebs Plantation.

**Area 1: Shell and Mortar Midden.** Results of the 1995 Phase I survey led to the interpretation of the presence of a shell midden, designated Area 1, on the shore of Krebs Lake, north of La Pointe-Krebs House. This midden was believed associated with a Pascagoula Indian occupation that predated the ca. 1718 land concession of Joseph Simon de La Pointe. The presumed midden, consisting primarily of oyster shells with some *Rangia* spp. clam shells and mortar made from crushed shell used later in colonial construction, was identified in at least 12 shovel tests and measured about 15.0 by 25.0 meters (49.2 by 82.0 feet) across. Investigations in Area 1 included two excavation trenches, each consisting of three contiguous 1.0 by 2.0 meter units.

**Area 3: Colonial Structure.** A colonial structure site was identified by a concentration of artifacts and structural materials in 12 shovel tests south of La Pointe-Krebs House. This location was designated Area 3 in the 1995 survey report, and is about 15.0 by 20.0 meters (49.2 by 65.6 feet) across, approximately the same size as La Pointe-Krebs House (Gums 1996: Figure 20). Nine units of various sizes were excavated in Area 3 to delineate structural walls, trenches, or other features, such as pits and postholes.

Area 6: Possible Structure beneath La Pointe-Krebs House. The 1995 salvage excavations around the south foundation of La Pointe-Krebs House uncovered evidence of an earlier building, possibly a structure destroyed in the 1772 hurricane. Numerous features, including two possible wall trenches typical of *poteaux-en-terre* (post-in-ground) French colonial construction, were identified in 1995. The 2010 excavations in Area 6 were designed to determine if this initial interpretation was accurate. Three 2.0 by 2.0-meter test units were excavated in Area 6 in an east-west linear configuration adjacent to the 1995 salvage units.

**Area 7: Large Pit.** Shovel Test 326 (155E 155N), located on the northeast corner of Old Spanish Fort Park, yielded 102 sherds of Native American pottery, well-preserved animal and fish bones, and early colonial artifacts in a rich organic fill. Coring around the shovel test defined this feature at about 1.4 by 2.0 meters (4.6 by 6.6 feet) in size. It was interpreted as a large pit or structural depression dating to the occupation of Pascagoula Indians in the late seventeenth or early eighteenth centuries prior to the La Pointe family's ca. 1718 land concession. Excavation of the feature offered the opportunity to examine Pascagoula Indian material cultural of the early colonial period. Four 2.0 by 2.0-meter units were placed around the 1995 shovel test to uncover the entire feature and the surrounding area to determine the function of this pit and any associated features.

As discussed in the following report, some interpretations of the Areas defined in 1995 from the shovel test survey have turned out to be inaccurate. This is not an uncommon result of further study, particularly when the subject as complex as the La Pointe-Krebs Plantation site, which has been intensively occupied for three centuries. In many ways, our findings have proven even more interesting than we anticipated from the 1995 survey results. The La Pointe-Krebs House and archaeological site is one of the most important colonial sites on the U.S. Gulf Coast. The Mississippi Department of Archives and History deserves credit for recognizing the site's outstanding research and educational value and for making the grant available for this largescale, comprehensive investigation.

Fortunately, similar large-scale excavations at other colonial plantations have occurred around Mobile Bay in southwest Alabama, including the Dog River site (1MB161; ca. 1725-1848), the Augustin Rochon Plantation site (1BA337; ca. 1760s-1780), and The Village (1BA608; ca. 1760s-1830s) (Gums 2000, Gums et al. 2009; Waselkov and Gums 2000). The architectural remains and features documented at La Pointe-Krebs Plantation on the Mississippi Gulf Coast can be compared to those found at these other colonial plantation sites.



Figure 1-19. Excavation crew members Erin Stacey, Chelsey Wilson, Joe Formichella, Brandi Cauley, and Lindsey Gorum in Area 3, south of La Pointe-Krebs House.



Figure 1-20. Saturday volunteers working in Area 6, on the south side of La Pointe-Krebs House.

### Field and Laboratory Work and Analyses

Intensive field investigations at La Pointe-Krebs Plantation ran from June 1 to August 26, 2010, with periodic excavations continuing until September 22, and site backfilling completed on October 11, 2010. Field personal consisted of CAS staff and student assistants working at various times over the summer (Figure 1-19). Over 50 volunteers helped out during public digs held on Saturdays in July and August (Figure 1-20). Fieldwork for archaeological survey for historic American Indian village sites was conducted during the spring of 2011 by CAS staff Cameron Gill, Erin Stacey, and Bonnie Gums, CAS student assistant Chad Waltman, and volunteer Walter Mansfield.

Laboratory work involved processing and inventory of artifacts from the 1995 salvage excavations and the 2010 excavations; research regarding site occupations; interpretations of field notes, maps, and photographs; and preparation of this report. Artifacts were taken to the CAS laboratory at the University of South Alabama in Mobile for cleaning, sorting, and analyses by CAS staff and student assistants under the supervision of Ginny Newberry and Bonnie Gums. Artifact processing and inventory were conducted according to standard laboratory procedures and classification systems already in use for prehistoric, protohistoric, and historic period artifacts of the north-central Gulf Coast.

Faunal remains were analyzed at the University of Georgia's Zooarchaeology Laboratory under supervision of Dr. Elizabeth J. Reitz. Flotation samples were sent to Karen Leone, Leone Consulting, Ltd., for botanical analysis. All other analyses were completed by CAS student assistants Katie Bates, Brandi Cauley, Sarah Hill, Chad Waltman, and Chelsey Wilson, and CAS staff members Bonnie Gums, Ginny Newberry, Tara Potts, Erin Stacey, and Greg Waselkov. CAS volunteers Nick Aronson, Traci Cunningham, Brad Eklund, Louis Scott, Alice Vogtner, and Frank Vogtner assisted with artifact processing and inventory.

### CHAPTER 2: Excavations at La Pointe-Krebs Plantation by Bonnie L. Gums

Old Spanish Fort Park (22JA526) encompasses only a small portion of the large colonial land concession that grew into the successful La Pointe-Krebs plantation. Many remains of the plantation undoubtedly still exist in the residential lots surrounding Old Spanish Fort Park. The 1995 salvage excavations around La Pointe-Krebs House and the more extensive 2010 excavations at La Pointe-Krebs Plantation site generated significant archaeological data from the county's portion of the colonial plantation site. But, as extensive as they have been, these investigations do not exhaust the research potential of this remarkable site. Much of site 22JA526 remains untouched and protected in this public park, preserved for the public and available for future archaeological study. And the collections generated by this project will be curated permanently by the Mississippi Department of Archives and History, where they will remain available for study, for public display, and for the education of future generations.

This chapter reviews the research goals that motivated the selection of excavation locations in different areas of the site and determined excavation methods employed. A great many cultural features were found in the process. These are described in detail, and their various functions and their relationships to the overall site history are discussed in terms of the artifact assemblages recovered from each. On a site as complex as this one, some feature assemblages incorporate many artifacts from earlier periods. Such mixed assemblages are less useful for interpretation than those with greater historical integrity, so the latter receive more attention in this chapter.

The 1995 salvage excavations at La Pointe-Krebs House focused on the periphery of the historic structure that was impacted by restoration activities. The 2010 investigations were based on a 1995 shovel test survey of Old Spanish Fort Park (Gums 2006); four areas were chosen for excavation based on that earlier work. Area 1 is a shell and mortar midden on the shore of Krebs Lake, north of La Pointe-Krebs House. Area 3 is a colonial structure site about 10.0 meters (32.8 feet) south of La Pointe-Krebs House. Area 6 consists of archaeological deposits around La Pointe-Krebs House and adjacent to the 1995 salvage excavations. And Area 7, at the northeast corner of Old Spanish Fort Park near Krebs Cemetery, contained a large lime slaking pit. During the 2010 excavations, 96 features were recorded, including a brick foundation, midden deposits, pits, postholes, and construction trenches.

### Area 1

Area 1 encompasses a shell and mortar midden north of La Pointe-Krebs House on the slope down to Krebs Lake (Figure 2-2). This shell midden initially formed from remains of shellfish harvested by Native Americans and later functioned as a processing area for mortar used in plantation building construction by the La Pointe-Krebs family. Two trenches, each consisting of three contiguous 1.0 by 2.0-m units, were excavated in Area 1. Excavation Trench 1 was oriented east-west and Excavation Trench 2 ran north-south. Units were excavated in two to three levels where features were defined. Near the end of field work, a backhoe was used to expand the south end of Trench 2 to uncover a very large and deep pit, Feature 163.



Figure 2-1. Archaeological site map of La Pointe-Krebs Plantation at Old Spanish Fort Park (22JA526) showing 2010 excavations.

# Excavation Trench 1

**Units.** Excavation Trench 1 consisted of three contiguous 1.0 by 2.0-m units designated 118E 170N, 120E 170N, and 122E 170N, oriented east-west paralleling the shoreline of Krebs Lake (Figures 2-2 and 2-3). Deposits in Trench 1 were relatively shallow compared to those in Areas 3 and 6; features were found within 10.0 to 20.0 cm of the surface (Figure 2-4).

**Features.** Features in Excavation Trench 1 included a trench (Feature 158), a shell and mortar midden (Feature 161), and three other features (Features 159, 160, and 164).



Figure 2-2. Excavation of Trench 1 in Area 1 on the north side of La Pointe-Krebs House, with Excavation Trench 2 covered with black plastic in the background.



Figure 2-3. Feature stains in Trench 1 units, Area 1, viewed to the east. In the foreground is Feature 161, the shell and mortar midden; in the background is Feature 158, a linear structural trench.

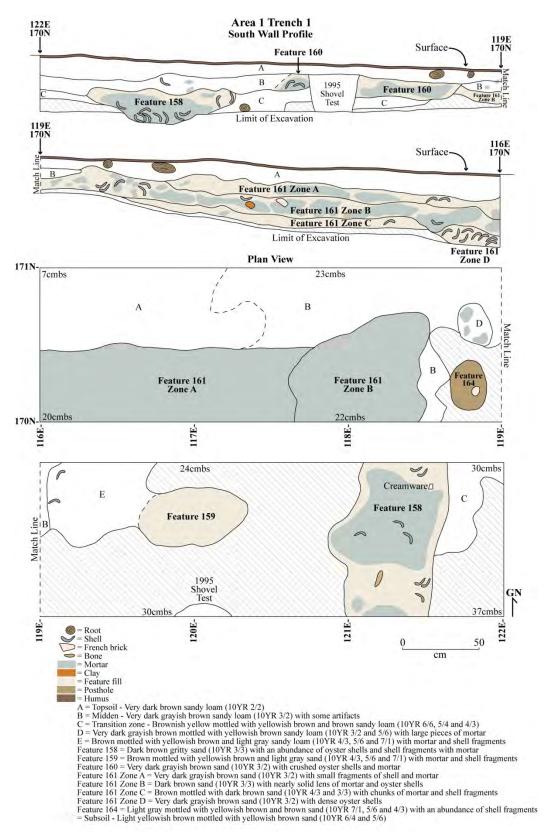


Figure 2-4. Plan view and profile of Excavation Trench 1 in Area 1, showing archaeological deposits and features.

**Feature 158** was a wide shallow trench oriented north-south in Unit 122E 170N, near the east end of Excavation Trench 1 (Figure 2-5). Feature fill consisted of densely packed whole oyster shells in brown and yellowish brown sandy loam (10YR 4/3 and 5/6). The trench measured 95.0 cm wide and 20.0 cm deep. The function of this trench is uncertain. Perhaps it was a drain leading down slope from La Pointe-Krebs House to Krebs Lake.

Artifacts from Feature 158 include two shell-tempered sherds (Bell Plain and Guillory Plain; one from a bowl and the other with construction mortar attached), tan paste from a colonial tin-glazed sherd, three creamware sherds, one pearlware sherd, two fragments of olive green and one aqua bottle glass, 10 Rupert shot, 13 drop shot, eight spent small shot, a corroded square nail, and a small amount of faunal remains (15.04 g). These artifacts suggest a date in the late 1700s, during the Spanish colonial period (1780-1810), for this trench.



Figure 2-5. North profile of Feature 158, a wide shallow trench in Unit 122E 170N, Excavation Trench 1, Area 1.

**Feature 161** was a relatively large midden of lime mortar and shells covering the west half of Excavation Trench 1 for a length of at least 2.5 m (8.2 ft). A 50.0 cm-wide section excavated through Feature 161, for a sample of artifacts, revealed a roughly irregular layer of dense mortar, including large chunks containing oyster shells, originating below the modern humus layer and reaching a depth of 45.0 cm. Midden soil was very dark gray sandy loam (10YR 3/1). Feature 161 appeared to be an area where mortar was processed for building construction, and the midden consists of leftover debris.

Feature 161 contained an abundance of artifacts other than shells and mortar. Sherds of Native American pottery (n=17) include one brown-filmed sherd and three unclassified incised sherds with shell temper, 10 plain shell-tempered sherds (Bell Plain, Mississippi Plain, and Guillory Plain), and three sand-tempered sherds. European ceramics are represented by one yellow painted tin-glazed sherd, four lead-glazed coarse earthenware sherds (including one olive jar), two salt-glazed stoneware sherds, 12 creamware sherds, and nine pearlware sherds (most of which are decorated). Bottle glass fragments include olive green (n=13), clear (n=16), and aqua (n=2). Weaponry is represented by an agate gunflint probably of Native American manufacture, 17 Rupert shot, 13 drop shot, four small spent shot, and one lead sprue fragment. Also recovered

was a black glass seed bead, a white clay pipe stem, a clay marble, 23 corroded square nails, one wire nail (probably intrusive), and abundant faunal remains (291.0 g). Based on artifacts, this mortar and shell midden probably dates to the Spanish colonial period (1780-1810).

**Feature 159** (a shallow stain), **Feature 160** (a small shell layer), and **Feature 164** (a small shallow posthole) were located near the center of Excavation Trench 1. Feature 159 contained one Citronelle gravel flake, one creamware and two pearlware sherds (both with blue and brown bands), one corroded nail, one Rupert shot, one small spent shot, and a tabular piece of lead. The Feature 159 stain probably dates to the Spanish colonial period (1780-1810). Feature 164 contained a Native American sherdlet and a small quantity of faunal remains (8.95 g).

## Excavation Trench 2

**Units**. Excavation Trench 2 consisted of three contiguous 1.0 by 2.0-m units designated 111E 164N, 111E 166N and 122E 168N, oriented north-south in the grassy area between La Pointe-Krebs House and the park's chainlink fence near the shore of Krebs Lake (Figure 2-6). The south half of Trench 2 fell completely within Feature 163, a large deep pit. Deposits in the north half were relatively shallow, like those in Excavation Trench 1.

**Features.** Twelve numbers were assigned to six features in Excavation Trench 2 (Figures 2-7 and 2-8). Deposits at the southern end of Trench 2 were very deep and complex, including a large deep pit and two east-west trenches. The large pit was excavated as Feature 163, with four additional numbers (Features 166, 167, 173, and 182) assigned to various parts of the pit. A backhoe was used to expand this area to 4.15 by 5.0 m (13.6 by 16.4 ft) to uncover the entire pit. Two deep structural trenches cut through the northern edge of Feature 163 pit. The two were first excavated as Features 162 and 178 when they appeared to be one trench at two different levels. The majority of the two trenches in the expanded backhoe excavation were designated as Features 179 and 180. Other features in Excavation Trench 2 included an oyster shell midden (Feature 165) and two postholes (Features 181 and 183).



Figure 2-6. Ground penetrating radar survey around Excavation Trench 2, Area 1, on the north side of La Pointe-Krebs House.



Figure 2-7. View to the north of feature stains in Excavation Trench 2, Area 1. The large stain at the near end is Feature 163, and the dark diagonal linear stain in the middle of the trench is the double trenches excavated as Features 162, 178, 179, and 180.

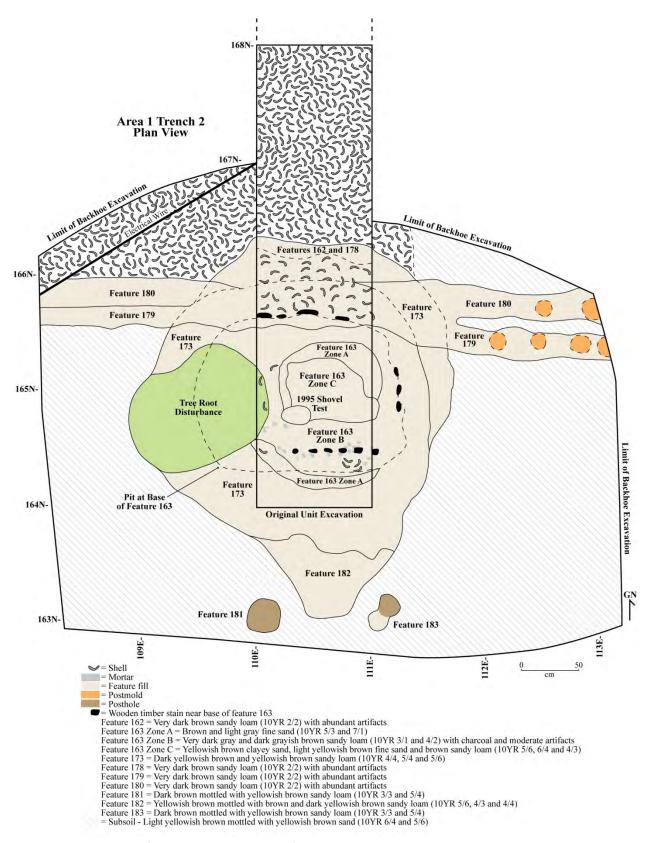


Figure 2-8. Plan view of Feature 163 and other features in Area 1, Trench 2, and expanded backhoe excavation.

## Large Storage Pit

**Feature 163** was a very large deep pit (Figure 2-9). Wood stains near the bottom indicated some type of subterranean storage structure, and varves (fine soil deposition layers) in the lowest levels indicate slow filling over a considerable length of time. This feature was first identified in a shovel test during the 1995 survey (Gums 1996:10). Notes for that shovel test document a large deep feature with an abundance of early colonial artifacts, shells, and mortar. The excavation in 2010 focused on this shovel test and Excavation Trench 2 was designed to intercept the feature. The feature turned out to be much larger than anticipated and extended beyond the limits of our trench, so a backhoe was used to uncover the entire feature for complete excavation.

Feature 163 was defined, at about 30.0 cm below the surface, as a very dark squarish oval stain. At the top it measured about 2.8 by 3.8 m (9.2 by 12.5 ft) across, which includes the builder's pit (Feature 173) and possible entrance (Feature 182), described below. Deeper within the excavation, the pit turned into a basin about 2.0 by 2.4 m (6.6 by 7.9 ft) across, and near the bottom it was roughly square in plan view. Final depth of Feature 163 was 2.0 m (6.6 ft) below the surface (Figures 2-10 to 2-13). Feature 173 is interpreted as a builder's pit for the construction of Feature 163.



Figure 2-9. In progress excavation of Feature 163 at 150.0 cm below the surface. View of the east profile showing zones of dark midden with shells, white beach sand, and lower mottled gray and white sand.

Feature 163 contained complex soil stratigraphy making excavation by different layers somewhat difficult. At least 13 fill zones were identified, many of which were less than 10.0 cm in thickness. Soil zones ranged from sterile beach sand to dark organic midden soils with abundant artifacts and well-preserved faunal remains. Unusual items include nearly half of a Chickachae Combed bowl, a large fragment of a French faience platter, a nearly whole French olive green glass bottle, a broken copper ladle, and an intact box turtle shell (Figures 2-14 and 2-15).

Near the bottom of Feature 163, at about 1.65 m (5.4 ft) below the surface, numerous vertical brownish stains were identified around all edges of the square pit. These stains varied in width, but were relatively equally spaced, as one would expect in wooden construction. These are believed to be remnants of upright wooden posts, part of a subterranean structure built within Feature 163. A few pieces of charred wood were recovered and Zone J contained an abundance of large chunks of mortar, many of which had impressions of small (less than 10.0 cm wide) wooden timbers (Figure 2-16).

We interpret Feature 163 as some type of underground storage facility for goods or foodstuffs. Upon abandonment, the pit was filled with household refuse. Based on artifacts found in it, the feature dates to the late French colonial period (ca. 1732-1763).



Figure 2-10. Bonnie Gums mapping an upper portion of the west profile of Feature 163.

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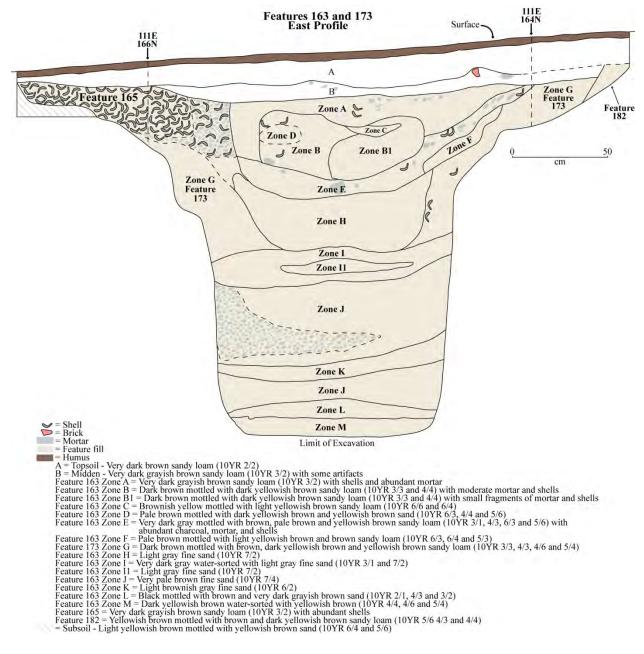


Figure 2-11. East profile of Features 163 and 173.



Figure 2-12. Rectangular structural base near the bottom of Feature 163.



Figure 2-13. Stains of upright wooden timbers around the rectangular pit near the bottom of Feature 163.



Figure 2-14. Provence Blue on White faience platter fragment (left) found in Feature 163; French olive green glass bottle (right) found in the white sand zone near the bottom of Feature 163.



Figure 2-15. Broken copper ladle bowl found in Feature 173, builder's pit for Feature 163.



Figure 2-16. Feature 163 structural materials: (a) charred wooden timbers; (b) mortar chunk with wooden timber impressions (actual size).

A vessel analysis of Native American pottery from Feature 163 identified 57 vessels, based primarily on rim sherds. Identified types include six Chickachae Combed, four Doctor Lake Incised, and four Port Dauphin Incised bowls. Sixteen bowls have red film, two have brown film and one has black film. There are also five jars and three Colonoware vessels. Clay pipes, including two Micmac fragments, one incised pipe bowl fragment, and one incised pipe stem with the mouthpiece, were also found in Feature 163.

European and colonial ceramics are represented by 25 tin-glazed sherds (including six sherds of French faïence and one Spanish colonial Puebla Blue on White majolica sherd), 29 lead-glazed coarse earthenware sherds (including 18 French Saintonge), one lead-glazed and one salt-glazed stoneware sherd, 49 creamware and 14 pearlware sherds (from upper fill zones), and three porcelain sherds. A nearly whole French olive green bottle was found near the bottom of Feature 163 (see Figure 2-14). Bottle glass fragments are quite numerous with 118 olive green, 38 aqua, 19 clear, and six French blue-green; most are non-diagnostic regarding origin.

Beads include 28 glass seed beads (black, blue, white, and green), one black and seven blue tubular glass beads, two clear round glass beads, two Cornaline d'Aleppo glass beads, and six bone rosary beads. Also recovered were 17 fragments of white clay pipes (mostly stems), four fragments of French clasp knives, three iron knife blade fragments, a cast iron kettle fragment, a barrel hoop fragment, seven straight pins, one bone button, one copper/brass button, and one milk glass button (the latter was intrusive into this colonial pit). Feature 163 contained quite a few whole and fragmentary gunflints, including one British spall, two flint fragments, 24 resharpening flakes of French flint, 17 British flint flakes, and seven pieces of flint shatter. Lead is represented by four musketballs, 279 Rupert shot, 119 drop shot, 77 small spent shot, five tabular pieces, and 40 pieces of spillage.

Structural materials from Feature 163 include an iron key, four rosehead nails, 164 corroded square nails, five iron spikes, a strap hinge, and two iron pintles of a style typical of French colonial hardware. Carbonized plant remains (in addition to those reported from Feature 163 flotation samples) include 15 peach pit fragments and five unidentified seed fragments. Faunal remains (apart from the sample chosen for analysis at the University of Georgia Zooarchaeology Laboratory) totaled 238.48 g.

**Feature 173** was identified during excavation of Feature 163, when it became clear that the soil immediately surrounding the dark stain of the large pit also contained early colonial artifacts. Feature 173 soil consisted of very mottled brownish and yellowish sandy loam (10YR 4/3, 5/4, and 5/6). Feature 173 is interpreted as the builder's pit dug for the purpose of constructing the wooden subterranean structure of Feature 163. Once Feature 163 was built, the remaining part of the builder's pit was quickly filled in with subsoil excavated from Features 163 and 173. In the process a few artifacts from the surrounding midden were included in the backfilled soil. Feature 173 extended primarily on the east, south, and west sides of Feature 163, while the north side was disturbed by the two trenches, Features 179 and 180.

Native American pottery from Feature 173 is represented by 16 sand-tempered sherds and 55 shell-tempered sherds of many types (including at least six bowls and one jar, based on

rims). Four sherds have incised designs (one is Doctor Lake Incised), two sherds are brushed or cord-marked, and three sherds are from a red-filmed bowl. One clay pipe in the Micmac style was also recovered. European ceramics are represented by one tin-glazed sherd and six lead-glazed coarse earthenware sherds (four are French Saintonge). Bottle glass includes one aqua and five olive green fragments.

Glass beads from Feature 173 are represented by 13 seed beads (black, white, green, and Cornaline d'Aleppo) and three tubular beads (black and blue). Other artifacts include a bone rosary bead, two French flint flakes, 25 drop shot, eight Rupert shot, five small spent shot, two pieces of lead spillage, an iron buckle, and 13 corroded square nails. Carbonized plant remains not in Feature 173 flotation samples include seven peach pit fragments. A small amount of faunal remains (3.11 g) was also recovered.

**Features 166 and 167.** These were excavated as post-like stains within Feature 163. Feature 166 contained two sherds of fine angular shell-tempered Graveline Plain pottery, one peach pit fragment, and a small amount of faunal remains (12.95 g). Feature 167 contained a white glass seed bead, six Rupert shot, one drop shot, one small spent shot, one piece of lead spillage, and a small amount of faunal remains (8.51 g).

**Feature 182** (Figure 2-17) was an extension off the south edge of Feature 163 that may have been used for access to the subterranean structure. Feature 182 measured 60.0 by 110.0 cm across and 45.0 cm deep. It contained three fill zones of brownish and yellowish sandy loams (10YR 4/3, 4/4, 5/4, 6/4, and 5/6) and an irregular bottom that suggested possible steps. Like Feature 173, there were few artifacts, indicating it was filled quickly. Artifacts include one sand-tempered sherd with an unclassified incised design and five shell-tempered Bell Plain and Mississippi Plain sherds, one clear-glazed earthenware sherd, one piece of olive green bottle glass, one straight pin, three Rupert shot, and a moderate amount of faunal remains (150.77 g).

**Features 181 and 183** were small shallow postholes located on either side of Feature 182 and may have some association with the Feature 163 pit, perhaps posts for a superstructure over the entryway or the entire subterranean structure. Both postholes contained dark brown and yellowish brown sandy loam (10YR 3/3 and 5/4). The postholes contained few artifacts, suggesting an early colonial period date, like the Feature 163 complex as a whole.

### Palisade Trenches

**Features 179 and 180**, two deep trenches, extended east-to-west across the north edge of the Feature 163 pit complex. The two trenches, which ran generally parallel, were separate on the east side of Feature 163 but converged on the west side of the pit. Feature 179 trench (portions of which were excavated as Features 162 and 178) was slightly narrower and shallower than Feature 180, which contained many more oyster shells. Features 179 and 180 extended for a length of at least 4.8 m (15.7 ft) through Excavation Trench 1. The width of each trench was about 25.0 to 30.0 cm, and each contained oyster shells in a rich organic fill of very dark brown sandy loam (10YR 2/2) reaching depths from 35.0 to 40.0 cm.



Figure 2-17. View to the northeast of the large pit, Feature 163 (center), with Feature 182, the possible entranceway, and flanking posthole Features 181 and 183 (in foreground).

These two trenches probably represent sequential palisades built around the central structures of the La Pointe-Krebs plantation. Because the trenches contained similar types and amounts of artifacts dating to the late British (1763-1780) and Spanish (1780-1810) colonial periods, the sequence of construction could not be determined. But one likely replaced the other within a short period of time. Perhaps the initial palisade was destroyed during the 1772 hurricane and rebuilt shortly thereafter.

Feature 179 artifacts include Native American pottery with one sand-tempered red-filmed sherd and six shell-tempered Bell Plain sherds, five tin-glazed sherds (one from an ointment jar), three lead-glazed coarse earthenware sherds, 16 creamware sherds, and 16 pearlware sherds (mostly decorated). Bottle glass fragments include olive green (n=46), French blue-green (n=16), clear (n=2), aqua (n=5), and pinkish (n=5). Glass beads are represented by three black seed beads, one white and one purple seed bead, and a blue tubular bead. Weaponry is represented by three French gunflint flakes, one British gunflint flake, 62 drop shot, 37 Rupert shot, 13 small spent shot, and seven pieces of lead spillage. An iron fork, two copper/brass buttons, a brass

finial, four white clay pipe stems, 18 corroded square nails, and one wire nail (intrusive) were also recovered.

Feature 180 artifacts consist of six sherds of Native American sand-tempered and shelltempered (Bell Plain, Mississippi Plain, and Graveline Plain) pottery, four tin-glazed sherds (one Spanish colonial majolica), eight lead-glazed coarse earthenware sherds, one British white saltglazed stoneware sherd, 25 creamware and four painted pearlware sherds, and one whiteware sherd. Bottle glass fragments from Features 180 consist of olive green (n=11), French blue-green (n=6), and clear (n=16; mostly tumblers). Glass beads are represented by one blue and one white tubular bead, one white oval bead, and a black seed bead. Also found were a bone button, three straight pins, two white clay pipe stems, 28 Rupert shot, 18 drop shot, two pieces of lead spillage, and six corroded square nails.

Artifacts from the excavation of the Feature 162 portion of the trenches consist of 10 sherds of Native American pottery, including sand and shell temper types, and one unclassified incised and punctated sherd, one yellow tin-glazed sherd, and two creamware sherds, eight olive green and two aqua bottle glass, two white clay pipe stems, two corroded square nails, and a moderate amount of faunal remains (67.37 g). Feature 162 artifacts are consistent with a mid-to-late colonial date for the two trenches (Features 179 and 180).

Artifacts from the excavation of the Feature 178 portion of the trenches include 68 sherds of Native American pottery with all shell-tempered types and sand temper present. Based on rims, these include at least seven bowls, one jar, and one Colonoware base. Seven sherds have incised or combed designs. Other Feature 178 artifacts consist of four tin-glazed sherds, five lead-glazed coarse earthenware sherds (including one French Saintonge), one British stoneware sherd (possibly from a Bellarmine jar), 11 creamware sherds (including a teapot lid), two decorated pearlware sherds, two olive green, two aqua, one French blue-green, and one clear bottle glass. Glass beads are represented by two blue and two white seed beads, and two round Cornaline d'Aleppo beads. Weaponry consists of one British gunspall, four pieces of gray gunflint shatter, 17 Rupert shot, four drop shot, and two small spent shots. Three white clay pipe stems, one straight pin, 16 corroded square nails, and abundant faunal remains (575.54 g) were also recovered. These artifacts are consistent with a Spanish colonial date for the two trenches (Features 179 and 180).

#### **Oyster Shell Midden**

**Feature 165** was a thin layer of oyster shells covering the north end of Excavation Trench 2 in Area 1, Unit 111E 168N and part of Unit 111E 166N. The south end of the shell midden was cut through by a modern utility trench that separated it from the Feature 163 large pit. The Feature 165 midden measured at least 1.0 by 2.6 m (3.3 by 8.5 ft) and was about 15.0 cm deep. It consisted primarily of whole and crushed oyster shells within very dark grayish brown sandy loam (10YR 3/2).

Native American pottery from Feature 165 is represented by 20 sherds, including sandtempered and all shell-tempered types, with one Chickachae Combed sherd, one red-filmed sherd, and three open bowls represented by rim sherds. European ceramics include one Rouen Brune faience, seven lead-glazed coarse earthenware, 44 creamware, and five decorated pearlware sherds. Bottle glass fragments include olive green (n=15), clear (n=1), aqua (n=3), and amber (n=2). Other artifacts consist of a blue glass seed bead, a white clay pipe stem, a bone button, one musketball, 12 drop shot, nine Rupert shot, three pieces of lead spillage, a whetstone fragment, and abundant faunal remains (162.72 g). An iron key, 14 corroded square nails, three wire nails, and a bolt were also recovered. The presence of some modern debris, such as a spark plug and plastic, indicates the disturbed nature of the midden. However, based on artifacts, the midden originated in the late British (1763-1780) or Spanish (1780-1810) colonial periods.

### Area 3

**Units.** This location was suspected to contain colonial structural remains based on large amounts of structural materials recovered from 12 shovel tests in the 1995 survey. Area 3 was the largest 2010 excavation consisting of nine units: a 1.0 by 1.0-m unit, three 1.0 by 2.0-m units, and five 2.0 by 2.0-m units. Units extended from 108E to 112E and 126N to 138N, measured 10.0 m (32.8 ft) north-south and 3.0 m (9.8 ft) at its widest, covering 23.0 sq m (75.4 sq ft). Area 3 contained the richest dark earth midden (about 20.0 cm thick), the majority of artifacts, and the most complex array of cultural features.

**Features**. Forty-nine features were recorded in Area 3 (Figures 2-18 to 2-23). Significant features included a smudge pit (Feature 112), a large deep pit (Feature 105), a brick foundation (Feature 89), and numerous trenches (Features 103, 104, 107, 109, 119, 122, 131, 147, 148, 169, and 172). Other features consisted of a few basin-shaped pits, numerous postholes, and concentrations of shells and mortar. Most features were defined in Level 3 (20.0 to 30.0 cm) and Level 4 (30.0 to 40.0 cm), below the dark midden in the transitional zone or subsoil.



Figure 2-18. Area 3 excavation on the south side of La Pointe-Krebs House.

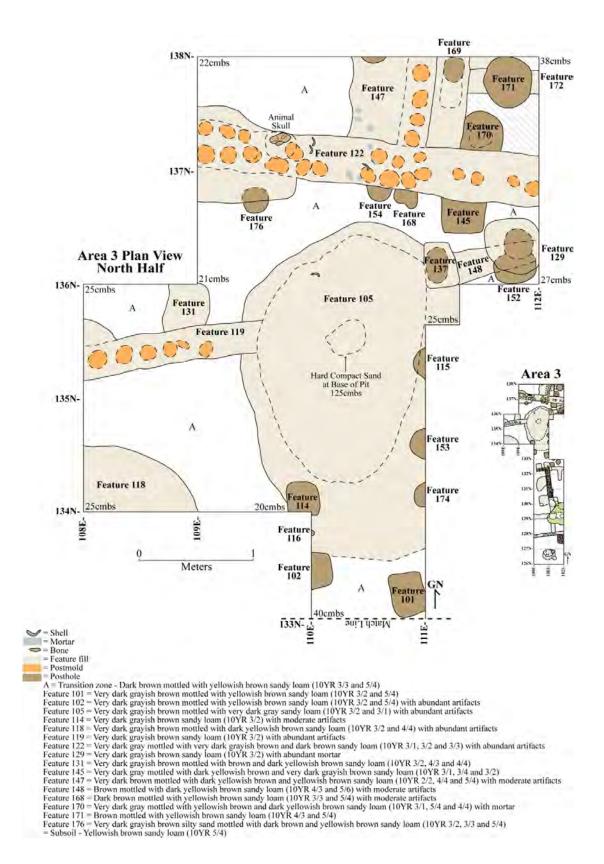


Figure 2-19. Plan view of the north half of Area 3.

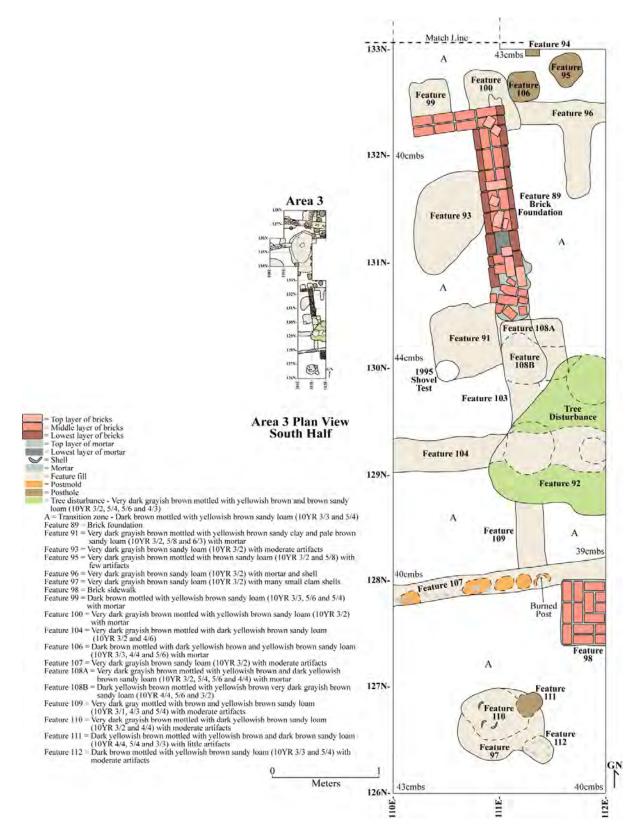


Figure 2-20. Plan view of the south half of Area 3.



Figure 2-21. View of Area 3 excavation (facing south), with Feature 105, the large pit, and other excavated features.



Figure 2-22. Feature stains in Units 110E 136N and 112E 136N, northeast corner of Area 3 (view to the east).



Figure 2-23. The complexity of excavated features in Unit 112E 136N, northeast corner of Area 3 (facing east).

# Smudge Pit

**Feature 112,** a small smudge pit or corncob pit (Figure 2-24) located in Unit 111E 126N at the south end of Area 3, was defined at the base of Level 4 (40.0 cm) and measured 25.0 by 30.0 cm across and 4.0 cm deep. Feature 112 contained carbonized corn cob fragments in very dark grayish brown sandy loam (10YR 3/2). Artifacts from Feature 112 include one French Saintonge lead-glazed sherd, two very small pieces of aqua glass, and a small amount of faunal remains (3.60 g). Smudge pits (an archaeological term) are found on Native American and Colonial sites. They are generally thought to be the residue of small fires kindled with water soaked corncobs to create smoke for hide tanning and to fend off mosquitoes (Binford 1967). Although containing few artifacts, Feature 112 probably dates to the French colonial period (1718-1763).



Figure 2-24. North profile of Feature 112 smudge pit in Unit 112E 126N, near the south end of Area 3.

# Large Deep Pit

**Feature 105** was a large deep pit in the northern part of Area 3 (Figure 2-25 to 2-30). This feature was first identified in a shovel test from the 1995 survey (Gums 1996:18-19). When it became clear that this was a very large and deep feature rich with early colonial artifacts, additional units were placed in this area to uncover the entire pit. Excavation of Feature 105 occurred throughout most of summer 2010. This pit is one of the most significant features found at the site.

Feature 105 was an oval pit measuring approximately 1.75 by 2.60 m (5.7 by 8.5 ft) across. It originated at about 25.0 cm below the surface and reached a depth of 1.25 m (4.1 ft). There were at least nine distinct fill zones, many of which contained rich organic midden soils, well-preserved faunal remains, and an abundance and variety of artifacts.

The original use of this large pit is uncertain. It may have been some type of underground storage facility. Numerous postholes around the perimeter of Feature 105 suggest some type of wooden superstructure above the pit. It last served for disposal of household remains. Based on artifacts listed below, Feature 105 was used and filled over an extended time, from the late French to early Spanish colonial periods (ca. 1750 to 1800).



Figure 2-25. West and north profiles of Feature 105 large pit, prior to excavation of units to uncover the entire feature.



Figure 2-26. Volunteer Barb Hester excavating Feature 105.

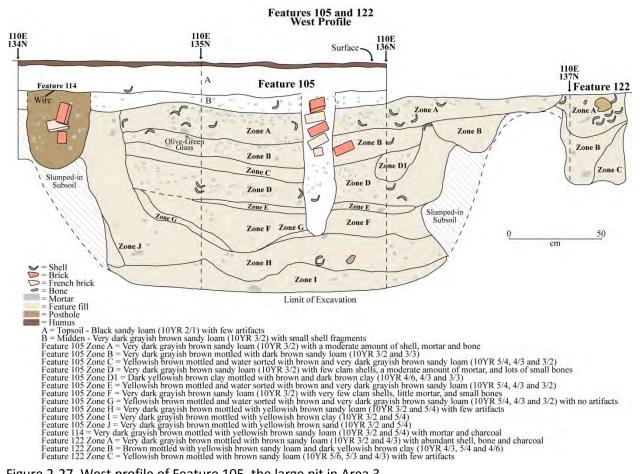


Figure 2-27. West profile of Feature 105, the large pit in Area 3.



Figure 2-28. West profile of Feature 105.



Figure 2-29. Greg Waselkov and Dennis Guy excavating Feature 105, the large pit in Area 3.



Figure 2-30. Feature 105 (the big pit at right), Feature 122 (double trenches at center), and other features in the north half of Area 3 after final excavation.

Artifacts from Feature 105. Native American pottery was very abundant and a vessel analysis identified 80 vessels based on rim or base sherds. Types include 15 Doctor Lake Incised, eight Chickachae Combed, and one Port Dauphin Incised, all bowls. There are also nine jars, three Colonoware vessels, and a nearly unique bowl rim sherd impressed with white glass seed beads. There are 10 bowls with red film, two with black film, and one with brown film. Also recovered were fragments of two Micmac-style clay pipes and one pipe stem. Worked lithics include one piece of ground sandstone, one Citronelle gravel pebble used as a hammerstone, and three chert flakes.

European and colonial ceramics are represented by 70 tin-glazed (including 14 French faience and eight Spanish colonial majolica), 51 lead-glazed coarse earthenware (including 23 French Saintonge), two lead-glazed and three salt-glazed stoneware, 13 British white salt-glazed stoneware, 49 creamware, one pearlware, six whiteware, and two porcelain sherds. French faience types include Brittany Blue on White, Normandy Blue on White, Provence Blue on White, and Rouen Brune. Spanish colonial majolica types include Abó Polychrome and Puebla Blue on White.

Bottle glass from Feature 105 includes 97 fragments of olive green bottles, three French blue-green, 11 clear, 24 aqua, and one cobalt blue (probably intrusive). Glass beads include 32

glass seed beads (black, blue, and white), one black and one blue tubular glass beads, four round Cornaline d'Aleppo glass beads, and one oblong white bead.

Other artifacts include nine fragments of white clay pipes, a straight pin, a French clasp knife blade, and a bone toothbrush fragment. Weaponry from Feature 105 is represented by one British gunspall, one British prismatic blade flint, one gunspall fragment, 13 Rupert shot, one musketball, two drop shot, and three small spent shot. Lead waste includes six pieces of spillage and one tabular fragment. Structural materials consist of 68 corroded square nails and a U-shaped staple. Faunal remains from Feature 105 (that were not part of the sample chosen for analysis at the University of Georgia Zooarchaeology Laboratory) total 748.95 g. Carbonized plant remains not in Feature 105 flotation samples include 17 peach pit fragments and one unidentified seed fragment.

## Other Pits

**Feature 91** was a medium-depth rectangular pit located partially beneath the Feature 89 brick foundation. Feature 91 measured 48.0 cm by at least 72.0 cm and was 32.0 cm deep with two fill zones of dark grayish brown and brown sandy loam (10YR 3/2 and 4/3). American Indian artifacts from this pit include one clay pipe fragment, one sand-tempered sherd, one black-filmed and unclassified incised sherd with shell temper, and two shell-tempered Graveline Plain sherds, one tin-glazed lid fragment, one British white salt-glazed stoneware sherd, two creamware sherds, four small pieces of olive green glass, one decorated white clay pipe bowl fragment, one decorative Bakelite hair comb (intrusive), and a moderate amount of faunal remains (112.38 g). This pit either predates or is associated with the construction of the Feature 89 brick foundation during the mid colonial period, probably the British period (1763-1780).

**Feature 93** was a small shallow oval pit within the Feature 89 brick foundation. The pit measured 70.0 by 80.0 cm across and 15.0 cm deep. It contained mottled very dark gray and dark mottled with dark yellowish brown sandy loam (10YR 3/2 with 4/4). The few artifacts from this shallow pit include 13 sand-tempered or shell-tempered sherds of Native American pottery, one piece of olive green bottle glass, one blue glass oval bead, two bone beads, and a moderate amount of faunal remains (63.60 g). This possible pit may date to the late French colonial period (ca. 1732-1763) and predates the Feature 89 foundation.

**Feature 108** was a deep squarish pit, most of which lay underneath the rubble pile associated with the Feature 89 brick foundation. Feature 108 measured 60.0 by 65.0 cm across and was 35.0 cm deep. The north half of the pit contained very dark grayish brown sandy loam (10YR 3/2) and the south half was dark yellowish brown sandy loam (10YR 4/4), both zones were mottled with yellow sandy subsoil. Feature 108 is very similar in size, shape, and depth to Feature 91, and like Feature 91 either predates or is associated with the construction of the Feature 89 brick foundation. There may also be some association between the two pits, Features 91 and 108. Based on artifacts listed below, this pit probably dates to the late Spanish colonial period (1780-1810) or early American period (1811-1850).

Native American pottery from Feature 108 is represented by three sand-tempered sherds, including one unclassified incised and punctated bowl rim, one unclassified incised bowl rim with shell temper, and 11 shell-tempered Bell Plain, Mississippi Plain, and Graveline Plain sherds. One piece of chert shatter was also found in Feature 108. Ceramics include two tin-glazed and one lead-glazed earthenware sherds, 29 creamware sherds, six pearlware sherds (four decorated), and one transfer-printed porcelain sherd. Seven olive green, three aqua and 10 clear bottle glass fragments, one green glass oval bead, two white clay pipe stems, two drop shot, one carbonized peach pit fragment, and a moderate amount of faunal remains (61.65 g) were also recovered.

**Feature 110,** an oval basin-shaped pit, was defined at 40.0 cm below the surface in Unit 112E 126N at the south end of Area 3. It measured 46.0 by 60.0 cm across and 21.0 cm deep, consisting of very dark grayish brown and dark yellowish brown sandy loam (10YR 3/2 and 4/4). A shallow basin in profile, the east side was cut through by a later posthole, Feature 111.

Artifacts from Feature 110 include one sand-tempered sherd of Native American pottery, five creamware sherds, two pearlware sherds (one decorated), and five whiteware sherds (two decorated), five olive green and three clear bottle glass, three corroded square nails, and a small amount of faunal remains (29.3 g). This small pit dates to the Spanish colonial period (1780-1810).

**Feature 118** was a shallow basin-shaped pit in the northwest portion of Area 3. About one-fourth of this pit, measuring at least 60.0 by 95.0 cm, was excavated in the southwest corner of Unit 110E 134N. The pit was defined at 20.0 cm below the surface and was 22.0 cm deep, with very dark grayish brown sandy loam (10YR 3/2) mottled with yellow sandy subsoil.

Despite its shallowness, Feature 118 contained many artifacts. Native American pottery from this pit consists of one unclassified incised and punctated sherd and one possibly brushed sherds (both with shell temper), one Graveline Plain sherd and two Guillory Plain sherds. Other Feature 118 artifacts include two lead-glazed coarse earthenware sherds, one British white salt-glazed stoneware sherd, two olive green and one clear bottle glass, one white glass seed bead, two white clay pipe stems, one corroded square nail, three carbonized peach pits, and a moderate amount of faunal remains (104.30 g). The last use of the Feature 118 pit was for the disposal of refuse, probably during British colonial period (1763-1780) and the occupation of the structure represented by the Feature 89 brick foundation, located about 2.0 meters south.

#### Brick Foundation

**Feature 89** was a segment of brick structural foundation near the middle of Area 3 (Figures 2-31 to 2-33). Feature 89 first appeared as a concentration of brick and mortar rubble at the base of Level 1. The intact brick foundation was uncovered in Level 2, and extended into Level 3 in a midden of very dark grayish brown sandy loam (10YR 3/2). The main portion of the foundation ran roughly north-south about 2.0 m (6.6 ft) through Units 1112E 130N and 112E 132N.

The north end of Feature 89 brick foundation was relatively intact with a short segment extending at a right angle to the west forming a corner. A shallow linear stain (Feature 96) that extended east from the intact north wall may represent a robbed builder's trench for the foundation, but the bricks are now missing from that segment. Artifacts from Feature 96 include two tin-glazed and one lead-glazed earthenware sherd, one creamware sherd, three decorated pearlware sherds, and one whiteware sherd, four pieces of olive green glass, three clear glass, a piece of chalk, three Rupert shot, and two pieces of lead spillage. The south end of the brick foundation was rubble, disturbed by a large uprooted tree (Feature 92). Other stains in the area suggested where the brick wall may have been, but is now gone.

Based on the configuration of the brick foundation and associated stains, Feature 89 appears to have functioned as an interior wall between two small rooms, with the short east-west segment forming part of an outer wall. Estimated north-south dimension of the interior rooms is 1.75 m (5.7 ft), with the east-west dimensions unknown. A thin layer of yellowish clay within the foundation was noted in unit profiles, and may represent a partially prepared clay floor for the structure. The lack of mortar in this area suggests the walls of this building were made of wood, and the dearth of nails suggests it had a thatched roof.

The Feature 89 foundation was constructed of reused French-style bricks, both whole and half fragments, which are distinctive for their thinness at about 1.0 to 1.5 inch (unlike later standard bricks that are at least 2.0 inches thick). The mortar used between bricks has a relatively hard consistency. The north-south foundation is relatively narrow, consisting of three rows of bricks 30.0 cm in total width, with one to three courses of intact brickwork in the builder's trench. A sample of bricks was collected from Feature 89; the remainder were left in the ground when the area was backfilled.

No datable artifacts were directly associated with the Feature 89 brick foundation and the surrounding midden contained a mixture of colonial and early American-era artifacts. However, the French-style bricks indicate an eighteenth-century date, possibly during the British colonial period (1763-1780). The function and use of this building is uncertain, but due to its apparently small size, it may have been slave quarters or an outbuilding, such as a summer kitchen.



Figure 2-31. Uncovering Feature 89 brick foundation in Area 3.



Figure 2-32. View to the southeast of Feature 89 brick foundation in Area 3.



Figure 2-33. View to the north of the south half of Area 3, with trench and pit features and Feature 89 brick foundation (rear) and Feature 98 brick walkway (right).

## Construction Trenches

Numerous trenches (n=11; Features 103, 104, 107, 109, 119, 122, 131, 147, 148, 169, and 172) were found in Area 3. Most were oriented east-west, most were defined within Level 3 (20.0 to 30.0 cm) and were relatively deep, and most contained fill rich in eighteenth-century colonial artifacts. Within the limited view offered by Area 3 excavations, it was difficult to determine if an individual trench held a structural foundation or a wooden palisade fence. Many trenches were intruded by later features, and, in at least two instances, two segments of the same trench were excavated as separate features.

**Feature 103** was a short shallow north-south trench segment extending south from the intact north-south part of the Feature 89 brick foundation in Unit 112E 128N. Feature 103 was about the width of the Feature 89 brick foundations and may represent the builder's trench for that foundation. The bricks from this part of the foundation were turned into a rubble pile by an uprooted tree root disturbance excavated as Feature 92. The excavated portion of Feature 103 trench was defined at about 40.0 cm below the surface and measured about 40.0 cm long, 30.0 cm wide, and 15.0 cm deep. It was filled with very dark gray sandy loam (10YR 3/1) mottled with yellow sandy subsoil. Feature 103 may also be the part of the same trench excavated as Feature 109 (discussed below), on the south side of the Feature 92 tree root disturbance.

Artifacts from Feature 103 consist of two sand-tempered sherds and one shell-tempered Graveline Plain sherd, one sherd each of lead-glazed earthenware and creamware, one straight pin, three corroded nails, two Rupert shot, five drop shot, and a piece of lead spillage. Feature 103 probably dates to the British colonial period (1763-1780).

**Feature 104** was an east-west trench near the south end of Area 3 in Unit 112E 128N. It paralleled the Feature 107 trench, which is 1.0 m to the south. Feature 104 extended through the unit for 2.0 m (6.6 ft) with the east half of the trench destroyed by the Feature 92 tree root disturbance. Feature 104 originated at 15.0 cm below the surface, was 45.0 cm wide and 50.0 cm deep, with two fill zones of very dark grayish brown and dark yellowish brown sandy loam (10YR 3/2 and 4/6).

Artifacts from Feature 104 include six creamware sherds, one decorated whiteware sherd, four pieces of olive green glass and one aqua glass, and a small amount of faunal remains (36.83 g). Feature 104 probably dates to the late Spanish colonial period (1780-1810) or early American period (1811-1850).

**Feature 107** was the southernmost east-west trench in Area 3 crossing Units 112E 126N and 112E 128N for a length of at least 2.0 m (6.6 ft). Feature 107 originated at 15.0 cm below the surface and was 25.0 cm wide and 45.0 to 55.0 cm deep. It contained mottled gray, brown, and yellow sandy loams (10YR 3/2, 5/4, and 4/4) and a moderate amount of artifacts. This trench had several circular wooden post stains or postmolds, 15.0 to 20.0 cm across, at the bottom.

Artifacts from Feature 107 consist of two sand-tempered and three shell-tempered sherds (including one Chickachae Combed bowl and one unclassified incised rim), one French faience Normandy Blue on White platter rim, four lead-glazed coarse earthenware sherds, 11 creamware sherds, two pearlware sherds, five olive green and one aqua bottle glass fragment, one decorated

white clay pipe bowl fragment, and one corroded square nail. The Feature 107 trench ran at a right angle to the Feature 89 brick foundation, and may have held a palisade fence around the brick structure. Feature 107 probably dates to the British colonial period (1763-1780).

**Feature 109** was a short segment of a north-south trench in Unit 112E 128N, near the south end of Area 3 (Figure 2-34). The north end was disturbed by the Feature 92 tree root disturbance and the south end intersected perpendicularly the Feature 107 east-west trench. Feature 109, which may be part of the same trench excavated as Feature 103 (discussed above), was noticed at about 40.0 cm below the surface beneath the tree root disturbance, but may have originated at a higher level. It was defined primarily by the presence of artifacts, rather than soil color, in brownish and yellowish sandy loam (10YR 3/3, 5/3, and 5/4).

Artifacts recovered from Feature 109 include one sand-tempered sherd of American Indian pottery, one tin-glazed sherd, one creamware bowl base, two olive green and one aqua glass fragments, and a moderate amount of faunal remains (113.23 g). These few artifacts suggest a date in the British colonial period (1763-1780).



Figure 2-34. View to the west of Feature 109 (excavated trench at left) where it met Feature 107 (unexcavated trench at center) perpendicularly in Units 112E 126N and 112E 128N, south end of Area 3.

**Feature 119** was a deep east-west trench in Unit 110E 134N, off the west edge of Feature 105 pit. Like the other colonial trenches, Feature 119 was relatively deep and contained a moderate amount of artifacts in a very dark grayish brown sandy loam (10YR 3/2). It measured 35.0 cm wide and at least 1.25 m in length east-west, and intersected Feature 105 pit at the east end. During excavation of these two features, the Feature 105 pit seemed superimposed upon the Feature 199 trench. Four circular postmolds were found in the bottom in the west half of the Feature 119 trench, each about 15.0 cm in diameter and 5.0 cm apart.

Native American pottery from this trench consists of six incised or combed sherds and 27 plain sherds, with all temper types represented and nearly all sherds burnished. One piece of sandstone shatter was also found in Feature 119. Other artifacts include one sherd each of Spanish colonial majolica (Puebla Blue on White), French faience, British porcelain and whiteware, four lead-glazed coarse earthenware sherds (two are French Saintonge); 16 olive green, three clear, and 16 aqua glass; eight glass seed beads (blue, black, and white); a brass crucifix; two straight pins; four corroded square nails; five Rupert shot and one piece of lead spillage; and six carbonized peach pit fragments. These artifacts indicate the trench dates to the Spanish colonial period (1780-1810).

**Feature 148** was a short deep trench segment in Unit 112E 136N on the east side of Feature 105 pit. Although the soils differ slightly in color, Feature 148 may be a continuation of Feature 119 trench. Feature 148 was heavily impacted by later features, including a large deep posthole that cut through the upper half of the trench. The excavated portion of the trench measured about 75.0 cm long, 30.0 cm wide, and 20.0 cm deep, containing brown sandy loam (10YR 4/3) mottled with yellow sandy subsoil. Feature 148 artifacts include one tin-glazed and one creamware sherd, three white glass seed beads, and a small amount of faunal remains (33.9 g). The few artifacts suggest this trench dates to the British colonial period (1763-1780).

**Feature 131** was partially uncovered in Unit 110N 134N in the northwest portion of Area 3. It was a north-south trench segment extending at roughly right angles to Feature 119 trench, and measuring 35.0 cm wide, at least 35.0 cm long, and 13.0 cm deep, with very dark grayish brown sandy loam (10YR 3/2) mottled with yellow sandy subsoil.

Artifacts from Feature 131 include one red-filmed sherd and one incised or combed sherd (both with shell temper) and two Mississippi Plain sherds, two small sherds of British lead-glazed Jackfield ceramic, one piece of clear and one aqua bottle glass, and a moderate amount of faunal remains (57.6 g). Based on these few artifacts, Feature 131 probably dates to the British colonial period (1763-1780).

**Feature 122** is the northernmost east-west trench in Area 3 extending north through Units 111E 136N and 112E 136 for at least 3.0 m (9.8 ft). Feature 122 initially appeared as one wide trench, but was actually two connected trenches. An attempt was made to excavate the trenches separately, but that proved difficult. They were defined at 20.0 cm below the surface and were 45.0 cm deep, with an abundance of artifacts and well-preserved faunal remains.

Feature 122 probably represents a palisade fence trench (Figures 2-35 and 2-36). It likely originated as one trench. When the original wooden upright posts rotted, a new trench was dug next to the old one for a replacement fence. In general, the south trench had darker fill of very dark grayish brown sandy loam (10YR 3/2), while the north trench contained yellowish brown sandy loam (10YR 6/5 and 5/4), suggesting the north trench was earlier, predating accumulation of dark midden soils in this area. Very distinct wooden post stains or postmolds were found at the bottom of each trench. Postmolds were generally circular in shape, 10.0 to 15.0 cm across,

and about 5.0 cm apart. Based on artifacts listed below, Feature 122 dates to the British colonial period (1763-1780).

A vessel analysis was completed for Native American pottery from Feature 122, and 29 vessels were identified based on rim or base sherds. Identified types include four Chickachae Combed, one Doctor Lake Incised, and two Colonoware vessels. Seven vessels have black film, four have brown film, three have red film, and one has grayish film. Other artifacts include one piece of ground sandstone, one chert flake, one clay pipe in Micmac style, and one plain clay pipe bowl fragment.

European ceramics are represented by one sherd each of tin-glazed French faience and British delft, three other tin-glazed sherds, 11 lead-glazed coarse earthenware sherds (including seven French Saintonge), nine salt-glazed stoneware sherds, and one creamware sherd. Bottle glass from Feature 122 includes 52 olive green, one French blue-green, eight clear, 44 aqua, and one amber fragment. Glass beads are represented by two black, one blue and one white seed beads, one blue tubular, one black oval, and one round Cornaline d'Aleppo. Twelve fragments of white clay pipes, three straight pins, two clothing hooks, a thimble, and two shell buttons were also recovered. Weaponry includes one resharpening flake of French flint, one British flint flake, 13 Rupert shot, three drop shot, and two pieces of lead spillage. Structural materials are represented by 40 corroded square nails, and a wire nail (intrusive). Carbonized plant remains not in Feature 122 flotation samples include 11 peach pit fragments and 25 seeds. Faunal remains not included in the analysis samples for the University of Georgia Zooarchaeology Laboratory total 308.8 g (Figure 2-37).



Figure 2-35. Postholes in the bottom of Feature 122 double trenches in Area 3.

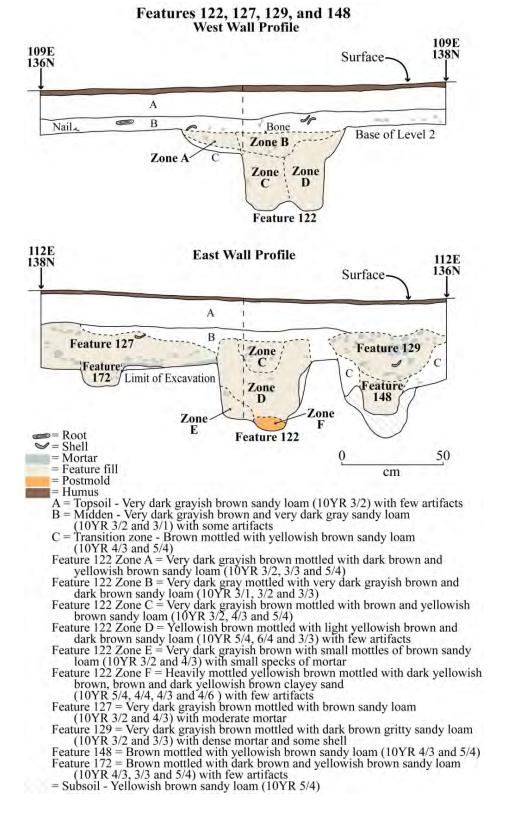


Figure 2-36. Profiles of Feature 122 double trenches and Features 127, 148, and 172 in Area 3 units.



Figure 2-37. Cow (Bos taurus) skull found in Feature 122 double trenches, Area 3.

**Feature 147** was located in two units (111E 136N and 112E 136N) at the north edge of Area 3. It first appeared as a wide linear stain similar to and at right angles with Feature 122, the double trenches. After excavation, Feature 147 consisted of a medium-depth trench with a shallow stain off the west edge and one deep posthole. The trench was oriented north-south and contained four circular postmolds at the bottom, each about 15.0 cm in diameter and 5.0 cm apart. The trench was filled with dark grayish brown sandy loam (10YR 3/2) mottled with yellow sand. Although not as deep as Feature 122 and containing fewer artifacts, Feature 147 may have been part of the same palisade.

Artifacts from Feature 147 include two unclassified incised sherds with shell temper, five Graveline Plain sherds, two Guillory Plain sherds, and one Bell Plain sherd, three tin-glazed sherds (one British delft), three lead-glazed coarse earthenware sherds (one French Saintonge), one white and one blue glass seed beads, one corroded square nail, and a small amount of faunal remains (72.1 g). Similar to Feature 122, the artifacts from Feature 147 suggest a date from the British colonial period (1763-1780) to early Spanish colonial period (1780-1800).

**Feature 169** was located in the northeast corner of Area 3 in Units 111E 136N and 112E 136N, adjacent to the Feature 147 trench. Like Feature 147, Feature 169 was a north-south trench at a right angle to the Feature 122 double trenches. The excavated portion of Feature 169 was 1.05 m long, 30.0 cm wide, with an irregular bottom ranging in depth from 52.0 to 66.0 cm, and one postmold 78.0 cm deep. The trench contained primarily very dark brown sandy loam (10YR 2/2) with lighter soil near the bottom.

Artifacts from Feature 169 include two sand-tempered sherds, one shell-tempered sherd with white film, 11 shell-tempered sherds (Bell Plain, Mississippi Plain, and Graveline Plain), one French Saintonge lead-glazed sherd, three olive green and one clear bottle glass, two blue glass seed beads, and a moderate amount of faunal remains (76.50 g). Similar to Feature 122,

based on artifacts Feature 169 probably dates from the British colonial period (1763-1780) to early Spanish colonial period (1780-1800).

**Feature 172** was a shallow east-west trench segment heavily impacted by later features in Unit 112E 136N, in the northeast corner of Area 3. It was defined at 40.0 cm below the surface underneath the Feature 127 mortar area. Feature 172 was about 60.0 cm long, 20.0 cm wide, and 10.0 cm deep. It contained brownish and yellowish sandy loam (10YR 4/3, 3/3, and 5/4). Artifacts from Feature 172 include one sherdlet each of French Saintonge and lead-glazed coarse earthenware and a small amount of faunal remains (3.9 g). This faintly visible trench with few artifacts probably dates to the French colonial period (1718-1763) and represents an early structural wall trench or palisade trench heavily disturbed by later features.

# Postholes

Nineteen postholes were recorded in Area 3, all but one in the north half of the excavation in the vicinity of the Feature 105 pit. Postholes came in a variety of shapes (circular, oval, square, and rectangular) and ranged in size (small to large; 11.0 to 47.0 cm) and depths (shallow to deep; 7.0 to 50.0 cm). Most posts were filled with midden with few diagnostic artifacts, but many contained structural debris, such as shells and mortar. No distinct pattern or line of posts could be determined, but a few interpretations can be made.

**Features 99, 100, 101, and 102** were within the 1.0-m area between Feature 105 pit and Feature 89 brick foundation in Units 111E 132N and 112E 132N. These rectangular postholes were similar in size, depth, and fills. Features 99 and 100 were partially beneath the Feature 89 brick foundation, suggesting they predate the brick structure or are associated with its construction. Artifacts from these postholes suggest they date to the French colonial period (1718-1763).

Artifacts from Feature 99 include one tan chert flake, two sand-tempered sherds and five shell-tempered sherds (Bell Plain, Graveline Plain, and Guillory Plain), three sherdlets of tinglazed and lead-glazed earthenwares, one white clay pipe bowl fragment, one French gunflint flake, two Rupert shot, one corroded square nail, and a small amount of faunal remains (2.6 g). Feature 100 contained two sand-tempered sherds (including one Doctor Lake Incised bowl rim), two shell-tempered Mississippi Plain sherds, one olive green glass and one clear glass, one blue glass seed bead, one straight pin, one Rupert shot, one corroded square nail, and a small amount of faunal remains (29.5 g). Feature 101 artifacts consist of two shell-tempered Bell Plain sherds, one olive green bottle glass, and a small amount of faunal remains (7.3 g). Feature 102 contained one tin-glazed sherd and a small amount of faunal remains (6.1 g).

**Features 94, 95, and 106** postholes (round or square in shape) and **Feature 116** (remnants of a wood post of more recent origin) were also found between Features 105 and 89, but their functions are unclear. Artifacts from Feature 106 include one sand-tempered sherd, one shell-tempered Mississippi Plain sherd, one corroded square nail, and a small amount of faunal remains (24.1 g).

**Features 114, 115, 137, 145, 153, 154, 168, 174, and 176** were round or square postholes generally around the north and east edges of the Feature 105 pit. No distinct patterning could be discerned, and postholes varied in size, depth, and amount of artifacts. These postholes are difficult to date, since they incorporate artifacts from earlier surrounding midden.

Artifacts from Feature 114 include one tin-glazed and two lead-glazed coarse earthenware and three creamware sherds, seven olive green, three clear, and five aqua bottle glass fragments, one blue and one black glass seed beads, one milk glass button, two straight pins, three drop shot, and a moderate amount of faunal remains (67.5 g).

Artifacts from Feature 115 include a small amount of faunal remains (2.6 g). Feature 137 contained one sand-tempered sherd and one Graveline Plain sherd, one whiteware sherd, three olive green and two aqua glass, one black glass seed bead, three Rupert shot, two drop shot, five corroded square nails, and a small amount of faunal remains (13.7 g).

Artifacts from Feature 145 include one white-filmed sherd with shell temper, one Bell Plain sherd, and one Graveline Plain sherd, one Provence Yellow on White faience, one painted whiteware sherd, eight olive green, four clear, and one aqua bottle glass fragments, two black glass seed beads, one clothing hook, one decorated white clay pipe bowl fragment, six Rupert shot, 11 drop shot, six pieces of lead spillage, eight corroded square nails, and a moderate amount of faunal remains (57.7 g).

Artifacts from Feature 153 include one sand-tempered jar rim of Native American pottery and a small amount of faunal remains (3.4 g). Feature 154 contained one French Saintonge leadglazed sherd, one British Jackfield sherd, and a small amount of faunal remains (1.6 g). Artifacts from Feature 168 consist of one Graveline Plain sherd, one tin-glazed sherdlet, one aqua glass fragment, one corroded square nail, and a small amount of faunal remains (9.1 g). Feature 174 contained only a piece of olive green glass and a corroded square nail. Artifacts from Feature 176 include one creamware sherdlet, one each of French blue-green and cobalt blue bottle glass, one black glass seed bead, and a small amount of faunal remains (2.9 g).

**Features 170 and 171** were large circular postholes in the northeast corner of Area 3 in Unit 112E 136N. Both appeared to be the earliest features in this area. Artifacts from Feature 170 include a small amount of faunal remains (1.9 g). Artifacts from Feature 171 include one Chickachae Combed sherd and one unclassified incised sherd (both with shell temper), two Mississippi Plain sherds, one tin-glazed sherd and one French Saintonge lead-glazed coarse earthenware sherd, and a small amount of faunal remains (24.9 g). The few artifacts from these postholes suggest they date to the French colonial period (1718-1763).

**Feature 111** was a posthole in Unit 112E 126N at the south end of Area 3. Artifacts include one shell-tempered Chickachae Combed sherd, one Mississippi Plain sherd, one piece of olive green bottle glass, and a small amount of faunal remains (7.45 g). Based on its association with Feature 110 pit, Feature 111 may date to the Spanish colonial period (1780-1810).

## Shell and Mortar Concentrations

**Features 127, 128, and 129** were clustered in the northeast corner of Area 3 and may result from the same construction activity. These were first defined as irregular areas of solid shells and mortar rubble at 20.0 cm below the surface. Feature 127 (mostly mortar) and Feature 128 (mostly oyster shells) were connected and probably represent the same deposit. Together these concentrations measured about 75.0 by 115.0 cm across. Feature 129 may have been a large posthole filled with similar materials. Surrounding soils consisted of very dark grayish brown sandy loam (10YR 3/2). These areas may be debris left over from building construction dating to the French colonial period (1718-1763), based on recovered artifacts.

The Feature 127 mortar rubble measured at least 75.0 by 90.0 cm across and 20.0 cm thick, with a 4.0 cm-thick layer of solid mortar at the bottom (Figure 2-38). Artifacts include four shell-tempered sherds (Graveline Plain, Bell Plain, and Mississippi Plain), two fragments of Native American clay pipes, one creamware sherd, two pieces of olive green glass and one clear glass, two straight pins, and a bone bead. A corroded square nail, an iron barrel hoop fragment, one Rupert shot, and a moderate amount of faunal remains (47.5 g) were also recovered.



Figure 2-38. View of the north profile of Feature 127, showing mortar rubble above layer of solid mortar, in Unit 112E 136N, northeast corner of Area 3.

The Feature 128 oyster shells covered an area 70.0 by 80.0 cm across and only 8.0 cm deep, but contained an abundance of artifacts, including three sand-tempered sherds (one unclassified incised with black film), one shell-tempered sherd with white film, eight shell-tempered sherds (Bell Plain, Graveline Plain, and Guillory Plain); one sherd each of Saintonge earthenware, salt-glazed stoneware, and creamware; two whiteware sherds, and two pieces of olive green glass. Three corroded square nails, a fragment of cast iron kettle, two Rupert shot, and an abundance of faunal remains (171.5 g) were also found.

Feature 129 was located less than one meter south of Features 127 and 128. It consisted mostly of mortar rubble 55.0 to 60.0 cm across and 25.0 cm deep, perhaps a posthole filled in with mortar leftover from construction in this area. Feature 129 artifacts include one unclassified incised and punctated sherd with shell temper, three Bell Plain sherds, one Mississippi Plain sherd, and one Graveline Plain sherd, two tin-glazed and one creamware sherdlets, seven olive green, one clear, and one aqua bottle glass fragments, and a moderate amount of faunal remains (78.8 g).

**Feature 120** was an oblong area of mortar rubble with brickbats located a short distance south-southwest of Features 127, 128, and 129, and on top of the Feature 105 pit in Unit 111E 136N. Feature 120 measured 40.0 by 55.0 cm across and 12.0 cm deep. It may also be related to construction activities in this area represented by Features 127, 128, and 129. Artifacts recovered from Feature 120 include one unclassified incised sherd and one white-filmed sherd (both with shell temper), five shell-tempered sherds (Bell Plain, Mississippi Plain, and Guillory Plain; two with mortar attached), one tin-glazed sherd, one lead-glazed French Saintonge sherd, one British white salt-glazed stoneware sherd, three olive green bottle glass fragments, one straight pin, two corroded square nails, two carbonized seed fragments, and a moderate amount of faunal remains (77.5 g). Based on artifacts, Features 120 probably dates to the British colonial period (1763-1780).

#### **Twentieth-Century Features**

**Feature 97** was a shallow circular area with *Rangia* spp. clams of recent origin in Unit 112E 126, at the south end of Area. 3. In addition to the shells were two sand-tempered sherds of Native American pottery (one unclassified incised), one sherd each of lead-glazed coarse earthenware and pearlware, eight whiteware sherds (with red transfer print and painted sherds), 108 pieces of bottle and container glass of nearly every color, most of recent age. A white glass tubular bead, a white clay pipe stem, an iron shoe tack, five Rupert shot, three drop shot, two pieces of lead spillage, an abundance of corroded square nails, two modern roofing nails, and a moderate amount of faunal remains (97.5 g) were also recovered.

**Feature 98** is s small segment of a brick walkway dating to the second half of twentieth century, after Old Spanish Fort Park was established. The walkway was found just below the grass in Unit 112E 126N, at the south end of Area 3 (see Figure 2-33). No artifacts are associated with this brick walkway.

#### **1995** Salvage Excavations

**Units.** The 1995 salvage excavation units were concentrated around the east, south, and north sides of La Pointe-Krebs House, wherever the ground was to be disturbed during building restoration (Figures 2-39 and 2-40). Twenty-five units of various sizes, designated Units 15 through 40, were excavated, mostly in one arbitrary level. This work was completed faster than standard excavation due to severe time constraints. In some instances, the restoration contractors used heavy equipment to remove fill that the archaeological team then screened for artifacts.

Additionally we were only allowed to excavate to the depth of proposed restoration work, which was 30.0 cm maximum. Therefore, with few exceptions, deeper deposits and features were not excavated and sterile subsoil was not reached in these excavation units.



Figure 2-39. Mapping archaeological features at the southeast corner of La Pointe-Krebs House during the 1995 salvage excavations.

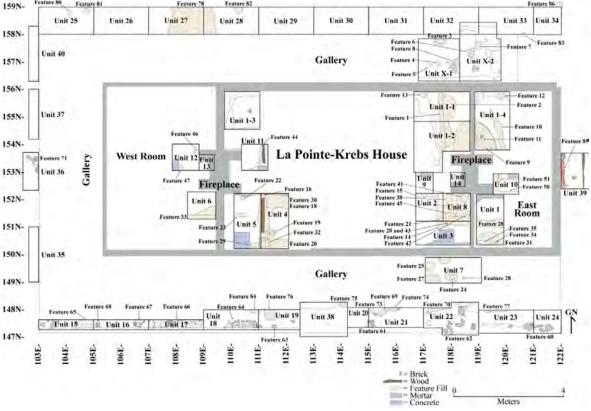


Figure 2-40. Plan view map of previous unit excavations inside La Pointe-Krebs House and the 1995 salvage excavation units and features around the porch or gallery of the house.

**Features**. Twenty-eight features were recorded as Features 60 through 87 (following previous excavations at 22JA526). Unfortunately, many features were cut through by the contractors and were found only in unit profiles, making size determination and interpretation difficult. Most features were structural mortar piers or footings (n=9; Features 63, 68, 72, 74, 75, 76, 82, 84, and 86) or concentrations or layers of shell and mortar rubble (n=7; Features 60, 66, 67, 70, 71, 77, and 78). Other features included two trenches (Features 61 and 62), two postholes (Features 81 and 83), one artifact concentration (Feature 65), three stains (Features 69, 73, and 80), and one layer of brick rubble (Feature 85). The majority of features were located on the south side of La Pointe-Krebs House.

### **Construction Trenches**

**Feature 61** was an incompletely excavated trench-like concentration of mortar slabs oriented north-south. Feature 61 was defined at 22.0 cm below the surface, measured 37.0 cm by at least 30.0 cm across and at least 17.0 cm deep. It was located in Units 20 and 21 on the south side of La Pointe-Krebs House, just east of the entrance. Feature 61 could represent a foundation, large support pier or footing, or a wall trench of an earlier building.

**Features 70 and 62** were a thin layer of mortar and shell rubble above a trench filled with mortar and rich with artifacts (Figure 2-41). Feature 62 trench was defined at 25.0 cm below the concrete porch, and measured 44.0 cm wide. A small excavation through the trench provided a profile and established depth at 62.0 cm, into subsoil. Artifacts recovered from Feature 62 include one Port Dauphin Incised sherd with shell temper, one Bell Plain sherd, one Graveline Plain, and one creamware sherd; one piece each of clear, aqua and amber glass; one bone and one milk glass button; a straight pin; and one Rupert shot. Features 70 and 62 were located in Unit 22 near the southeast corner of La Pointe-Krebs House. Although only a small section of this large and deep trench was uncovered and excavated, it may be a wall trench of a building predating La Pointe-Krebs House. Unfortunately this trench was not found where expected in Area 6 excavations.



Figure 2-41. Feature 70 layer of mortar and shell rubble above Feature 62 trench in Unit 22, on the south side of La Pointe-Krebs House.

# Mortar Piers or Footings

Features 63, 68, 72, 74, 75, 76, and 84 are mortar piers or footings on the south side of La Pointe-Krebs House. Some of these piers may be from an earlier porch, perhaps from the 1979 restoration when a new porch was put on the house, and some may be from an earlier building at this location. Only two mortar piers (Features 82 and 84) were found along the north side of the house. Most of the piers were not excavated, but left in place and reburied.

Feature 63 was a relatively solid round mortar slab, 13.0 by 15.0 cm across and 8.0 cm thick, surrounded with crushed mortar rubble. It was found at 26.0 cm below the surface in Unit 19, on the south side of La Pointe-Krebs House. Feature 68 was an oblong area of mortar rubble, about 15.0 cm wide and at least 20.0 cm long; thickness unknown. It was found at about 30.0 cm below the surface in Unit 16, near the southwest corner of La Pointe-Krebs House. Feature 72 was an oblong mortar pier measuring 20.0 cm across and at least 5.0 cm thick. It was defined at 20.0 cm below the concrete porch in Unit 21, on the south side of La Pointe-Krebs House. Feature 74 was an oblong mortar pier measuring about 70.0 cm by at least 15.0 cm across and 16.0 cm thick. It was defined at 10.0 cm below the concrete porch in Unit 21, on the south side of La Pointe-Krebs House. Feature 75 was a squarish mortar pier at least 20.0 by 30.0 cm across and 10.0 cm thick. It was defined at 12.0 cm below the concrete porch in Unit 38, near the south door of La Pointe-Krebs House. Feature 76 was a squarish solid mortar pier at least 38.0 cm in width and 30.0 cm thick, found directly below the concrete porch floor in Unit 19, near the south door of La Pointe-Krebs House. Feature 82 was a roundish mortar pier, 32.0 cm by at least 21.0 cm across and 18.0 cm thick. It was partially uncovered in Unit 28, on the north side of La Pointe-Krebs House. Feature 84 was a solid squarish mortar pier or footing, 50.0 cm in one dimension and 10.0 cm thick. It was found at 25.0 cm below the surface in Units 18 and 19, on the south side of La Pointe-Krebs House, just west of the south door.

## **Postholes**

Two postholes (Features 81 and 86) on the north side of La Pointe-Krebs House contained few artifacts and appeared to be isolated, unassociated with other features, and therefore functions are uncertain.

**Feature 81** was a large, deep, squarish posthole partially excavated in Unit 25, at the northwest corner of La Pointe-Krebs House. It measured about 25.0 cm across and was 54.0 cm deep. It originated at 10.0 cm below the concrete porch. Artifacts recovered include one Rupert shot, nine drop shot, and one small shot.

**Feature 86** was a round posthole partially excavated in Unit 33, at the northeast corner of La Pointe-Krebs House. It measured about 16.0 cm across and 21.0 cm in depth and originated at 28.0 cm below the surface. No artifacts were recovered.

### Shell and Mortar Middens

Seven layers or concentration of shell and mortar rubble were recorded as Features 60, 64, 66, 67, 70, 71, 77, and 78 in the 1995 salvage excavations. These differed in size and thickness, and most likely represent structural debris from La Pointe-Krebs House and earlier buildings at this location.

**Feature 60** was a concentration of four large mortar slabs in Units 23 and 24, directly at the southeast corner of La Pointe-Krebs House. They were not set in any pattern and were probably displaced by later construction activities. The largest slab is 30.0 by 36.0 cm across and 7.0 cm thick. The other smaller slabs have similar thicknesses. A whiteware sherd and a porcelain sherd were found among the mortar slabs. These slabs could represent displaced foundation piers for this corner of the house.

**Features 64, 66, and 67** represent the same concentration of shell and mortar rubble, extending through Units 16 and 18 for about 3.65 m, and separated by two recent disturbances from large bushes removed prior to the 1995 house restoration (Figure 2-42). The shell and mortar midden was defined at 20.0 cm below the surface and was at least 15.0 cm thick. Some of the mortar fragments had plastered or whitewashed surfaces, indicating they were parts of finished walls. Features 64, 66, and 67 are believed to be part of the same mortar and shell midden excavated as Features 113 and 117 in Area 6 in 2010 (discussed below).

Artifacts from Features 64 and 67 include one whiteware and one blue edge-decorated whiteware sherds, five pieces of clear glass, one piece each of olive green, aqua, and amber glass, one bone and one milk glass button, a straight pin and a clothing hook, two Rupert shot, four drop shot, and two small shot.



Figure 2-42. Undated photograph of the south side of La Pointe-Krebs House with row of bushes that were pulled out prior to the 1995 restoration, damaging archaeological deposits in the process.



Figure 2-43. Feature 71 mortar slabs in Unit 36, on the west side of La Pointe-Krebs House.

**Feature 71** was a concentration of at least six broken slabs of mortar in Unit 36, and was the only feature on the west side of La Pointe-Krebs House (Figure 2-43).

**Feature 77** was a thin layer of shell and mortar rubble partially exposed in Unit 23 near the southwest corner of La Pointe-Krebs House. It measured at least 1.7 m in length and 12.0 cm thick, and originated at about 20.0 cm below the concrete porch.

**Feature 78** was a relatively large scatter of shells, pebbles, and mortar rubble in Units 27 and 28, on the north side of La Pointe-Krebs House. It extended for about 1.7 m and was 29.0 cm thick. One small creamware sherd, four copper/brass shoe lace eyelets or hooks, three milk glass buttons, and one white metal button with "PANAMA MOBILE" were found in the rubble.

# **Other Features**

**Feature 65** was a thin artifact concentration, mostly ceramics and glass, in Unit 15 at the southwest corner of La Pointe-Krebs House within very dark grayish brown sandy loam (10YR 3/2). It measured at least 75.0 cm in length and about 10.0 cm thick. Artifacts recovered include one creamware sherd, three pearlware sherds (one blue transfer print and one brown painted), and three whiteware sherds (one red transfer print), two pieces of olive green bottle glass, 10 clear glass, two aqua glass, and one green milk glass, one white clay pipe bowl fragment, three buttons (one shell, one clear glass, and one milk glass), and a brass washer and ring. This midden dates to the late nineteenth to early twentieth century, based on the green milk glass.

**Feature 85** was a concentration of about a dozen unmortared bricks located along the west edge of Unit 39, on the east wall of La Pointe-Krebs House. Some modern debris was noted within the rubble, suggesting it is of recent origin, possibly materials leftover from the 1979 restoration of La Pointe-Krebs House.

**Features 69 and 73** were irregular stains in Unit 21, on the south side of the house, and **Feature 80** was a small, shallow circular stain in Unit 25, at the northwest corner of the house. These features were mapped in plan view, but not excavated because they were below the allowed excavation limit for the proposed restoration.

# Area 6

**Units:** Area 6 was situated along the porch, on the south side of La Pointe-Krebs House and adjacent to the 1995 salvage excavations at that location (Figures 2-44 to 2-46). Three 2.0 by 2.0-m units were excavated; one unit was isolated at 111E 145N, and two were contiguous at 117E 145N and 119E 145N. Units were excavated in four or five levels into sterile subsoil.



Figure 2-44. Lindsey Gorum and Erin Stacey mapping Area 6 unit profiles on the south side of La Pointe-Krebs House.

**Features:** Twenty-nine features, including postholes, rubble layers, pits, and trenches, were recorded in the three units. The large number of features around La Pointe-Krebs House was expected and reflects over 250 years of plantation occupation. Noteworthy features in Area 6 include a layer of mortar and shell rubble (Features 113 and 117), a shallow pit (Feature 121), and a long trench (Features 132 and 144). Most of the other features were postholes with no evidence of apparent pattern or specific functions.

# Shell and Mortar Midden

**Features 113 and 117** consisted of an uneven mortar and shell rubble layer that extended through all three Area 6 units for a distance of at least 10.0 m (32.8 ft) (Figures 2-47 and 2-48). It was first encountered in Level 2, extended into Level 4, and was up to 30.0 cm thick. Well-preserved faunal remains and artifacts from the early to mid-1800s, such as pearlwares and whitewares, were recovered from the mortar and shell rubble. The origin of this rubble layer is uncertain. It could be debris left over from an earlier building. A hedgerow of large bushes along the south side of La Pointe-Krebs House was removed just prior to the 1995 house restoration. Features 113 and 117 rubble layer was probably disturbed when these bushes were pulled, and

later artifacts and modern debris became mixed with the rubble. However, based on artifacts found in the shell and mortar, this midden post-dates the 1811 beginning of the American period. Features 113 and 117 are thought to be part of the same mortar and shell midden excavated as Features 64, 66, and 67 in the 1995 salvage excavations.

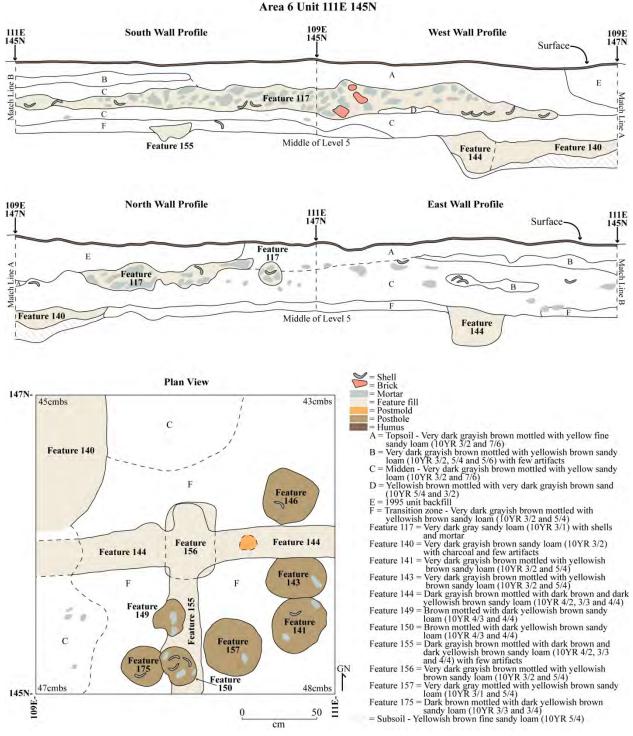


Figure 2-45. Plan view and profiles of Area 6, Unit 111E 145N.

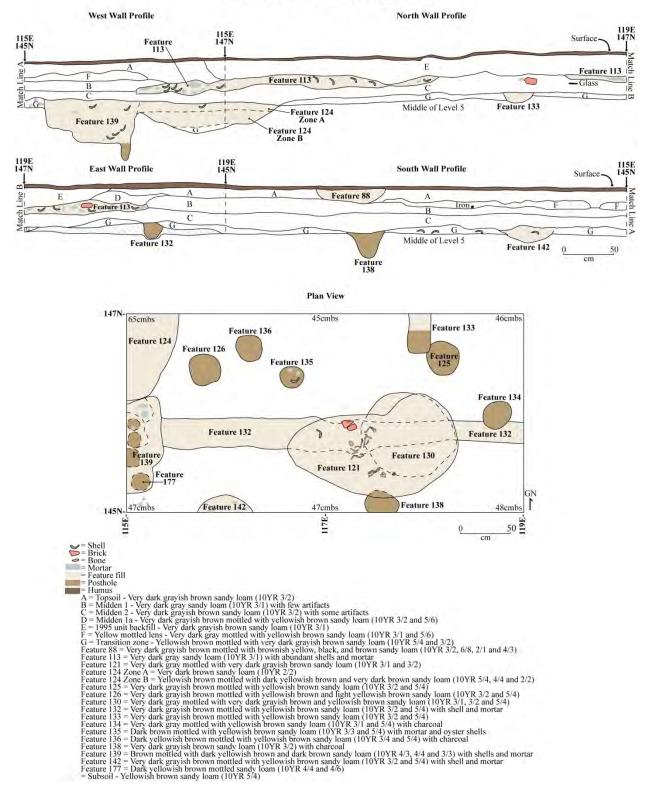


Figure 2-46. Plan view and profiles of Area 6, Units 117E 145N and 119E 145N.



Figure 2-47. View to the west of Feature 113 shell and mortar midden in Area 6, Units 117E 145N and 119E 145N.



Figure 2-48. View to the north of Feature 117 shell and mortar midden in Area 6, Unit 111E 145N.

Native American pottery from Feature 113 includes three red-filmed sherds, one Doctor Lake Incised sherd, one Chickachae Combed sherd, nine plain sand-tempered sherds, one plain grog-tempered sherd, and 19 shell-tempered sherds (Bell Plain, Mississippi Plain, Graveline Plain, and Guillory Plain). Worked lithics are represented by one whetstone fragment, three Citronelle gravel flakes, and seven pieces of pencil graphite.

Ceramics are represented by one plain tin-glazed, two lead-glazed coarse earthenware, two stoneware, 12 creamware, eight pearlware, 12 whiteware, one ironstone, and two porcelain sherds. Glass from Feature 113 is represented by 125 clear, 56 aqua, 41 olive green, two French blue-green fragments of bottles, and 43 pieces of clear lamp globe glass.

Glass beads are represented by 32 seed beads (black, white, blue, green, yellow, red, and orange), five faceted clear or black beads, two round clear beads, and two round Cornaline d'Aleppo beads. Personal artifacts from Feature 113 include one white clay pipe bowl fragment, three clay marbles, one porcelain marble, a porcelain doll arm, two slate pencils, 17 teeth and one fragment of Bakelite hair combs, a 1900 U.S. "Liberty Head" nickel, and three lead fishing weights. Copper/brass artifacts are represented by 158 straight pins, six safety pin fragments, nine shoe lace eyelets, three clothing hooks, one religious medal, a rosary, and many unidentifiable fragments. Weaponry from Feature 113 includes 47 Rupert shot, 34 drop shot, four small spent shot, one buckshot, six spillage, and two tabular fragments of lead. There are 165 corroded nails. Over 20 soda bottle crown caps (post-1892) were also found in Feature 113.

Native American pottery from Feature 117 includes one Doctor Lake Incised sherd, one unclassified incised/combed sherd, and 11 shell-tempered sherds (Bell Plain Mississippi Plain, and Graveline Plain; one sherd has mortar attached). Ceramics are represented by three lead-glazed coarse earthenware sherds, four creamware sherds, and three sherds each of pearlware and whiteware. Glass from Feature 117 is represented by 118 clear, 32 olive green, 26 aqua, four amber, one French blue-green, and 14 pieces of clear lamp globe glass. Glass beads are represented by 13 faceted beads (black and clear), nine seed beads (black, blue, and red), two black tubular beads, one black round bead, and one red square bead. Feature 117 also contained one agate chert flake, one decorated white clay pipe bowl, four teeth from Bakelite hair combs, and 52 corroded nails. Copper/brass artifacts are represented by 96 straight pins, three shoe lace eyelets, two clothing hooks, and one religious medal, and many unidentifiable fragments. Weaponry from Feature 117 includes 21 Rupert shot, 30 drop shot, three small spent shot, five pieces of lead spillage, and four tabular lead fragments.

Buttons were quite numerous in Features 113 and 117 and include 50 milk glass, seven bone, five shell, five iron, two black glass, two blue glass, and one green glass. Carbonized plant remains from Features 113 and 117 include one peach pit fragment and one seed fragment. Faunal remains from Features 113 and 117 total 1,085.0 g.

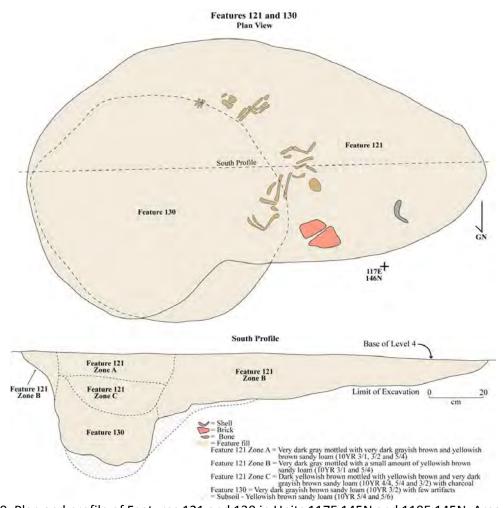


Figure 2-49. Plan and profile of Features 121 and 130 in Units 117E 145N and 119E 145N, Area 6.



Figure 2-50. Articulated partial neonatal pig (Sus scrofa) skeleton in Feature 121 pit, Area 6.

Pits

**Feature 121** was a large oblong pit found below Feature 113 mortar and shell rubble at the base of Level 4 in Units 117E 145N and 119E 145N (Figure 2-49). The pit measured 85.0 cm by 1.75 m across and was a shallow basin, 16.0 cm in depth, containing three zones of yellowish and brownish sandy loams (10YR 3/1, 3/2, 4/4, and 5/4). Within this pit were two clusters of a partially articulated neonatal pig (*Sus scrofa*) skeleton (Figure 2-50).

Native American pottery from Feature 121 includes one Doctor Lake Incised sherd, one unclassified incised sherd, 28 shell-tempered sherds (Bell Plain, Mississippi Plain, and Graveline Plain), and seven sand-tempered sherds (one with black film). European ceramics are represented by two Saintonge lead-glazed, one unglazed coarse earthenware, three creamware, and four decorated whiteware sherds. Container glass includes seven olive green, 10 clear, and two yellowish tumbler fragments, and one piece each of aqua and amber. Also recovered were one chert flake, two black and two blue glass seed beads, one blue glass tubular bead, four fragments of white clay pipes, two teeth from Bakelite hair combs, one slate pencil, two iron shoe tacks, three pieces of clear lamp globe glass, three milk glass buttons, six straight pins, and two shoelace eyelets. Weaponry is represented by 32 Rupert shot, 29 drop shot, 10 spent small shot, 20 pieces of lead spillage, and five tabular fragments. Structural materials are represented by 50 corroded nails. Carbonized plant remains not from Feature 121 flotation samples include 36 seed fragments, five peach pit fragments, three possible walnut fragments, and one possible pumpkin seed. Feature 121 dates to the early American period (1811-1850).

**Feature 124** was a pit partially exposed in the northwest corner of Units 117E 145N at the base of Level 4. The pit measured at least 55.0 by 80.0 cm across and was 30.0 cm deep with dark brown sandy loam (10YR 2/2) mottled with yellow sandy subsoil. Artifacts include one Native American clay pipe fragment, one whiteware sherd (intrusive), one piece each of olive green, French blue-green and brown glass, four white and one blue glass seed beads, one round white glass bead, one straight pin, one clothing hook, one French gunspall, one burned gunspall, 15 Rupert shot, 14 drop shot, four pieces of lead spillage, and a moderate amount of faunal remains (80.4 g). This pit probably dates to the French (1718-1763) or British (1763-1780) colonial periods.

**Feature 130** was a deep circular pit found at 50.0 cm below the surface underneath the Feature 121 trench and Feature 122 pit in Unit 119E 145N. It was about 80.0 by 95.0 cm across and 28.0 cm deep with very dark gray sandy loam (10YR 3/1) mottled with yellow sandy subsoil. Artifacts from Feature 130 include three shell-tempered Bell Plain sherds, one sherdlet each of creamware and stoneware, one piece of olive green bottle glass, three Rupert shot, one drop shot, and a small amount of faunal remains (6.9 g). This pit appears to date to the British colonial period (1763-1780).

**Feature 139** was a large deep posthole or pit partially uncovered in the west wall of Unit 117E 145N (Figure 2-51). It was first defined in Level 5 and reached a depth of 85.0 cm beneath the surface. Feature 39 artifacts consist of one black-filmed sherd and two unclassified incised sherds and with shell temper, five shell-tempered sherds (Bell Plain and Graveline Plain), two



Figure 2-51. View of the west profile of Feature 139 in Unit 117E 145N, Area 6.

whiteware sherds, three olive green bottle glass, one clear glass, one black glass seed bead, one wooden button, eight corroded nails, and a moderate amount of faunal remains (93.5 g). Based on artifacts, Feature 139 dates to the early American period (1811-1850).

**Feature 140** was an oblong stain defined at 45.0 cm below the surface in the northwest corner of Unit 111E 145N. It measured at least 60.0 by 90.0 cm across and contained very dark grayish brown sandy loam (10YR 3/2). In profile it appeared to be a shallow basin-shaped pit, about 20.0 cm in thickness. The only materials in Feature 140 were a piece of lead spillage and a small amount of faunal remains (0.57 g). The lack of artifacts suggests that this may be an early French colonial feature (1718-1732).

# Construction Trenches

**Features 132 and 144** are trench sections extending east-west through Area 6 units and probably represent the same trench (Figures 2-52 and 2-53). The trench was defined in Levels 4 and 5 at depths of 50.0 to 55.0 cm below the surface. It was a relatively shallow trench compared to those in Area 3 excavations. Trench fill consisting of brown sandy loam (10YR 4/3) mottled with yellow sandy subsoil was much lighter in color than other features at the site and the trench contained few artifacts, suggesting that it dates to the early French colonial period (1718-1732), prior to the accumulation of the dark organic midden found in Levels 3 and 4. The trench is 1.0 meter south of and runs parallel with the La Pointe-Krebs House compass orientation. It could represent a *poteaux-en-terre* (post-in-ground) structure or a palisade fence. A shallow north-south trench, Feature 155, runs at a right angle to the Feature 144 trench in Unit 111E 145N and appears to be part of the same structure or palisade.



Figure 2-52. View to the north of trench and posthole feature stains in Area 6, Unit 111E 145N.



Figure 2-53. View to the north of excavated trench and posthole features in Area 6, Unit 111E 145N.

Feature 132 artifacts include one unclassified incised sherd with shell temper, 10 shelltempered sherds (Bell Plain and Mississippi Plain), two sand-tempered sherds, one Agate flake, one Saintonge lead-glazed sherd, one piece each of olive green and aqua bottle glass, one green glass round bead, four Rupert shot, three pieces of lead spillage, and four corroded nails. Feature 144 artifacts include nine shell-tempered sherds (Bell Plain, Mississippi Plain and Graveline Plain), including one Colonoware bowl rim, one aqua glass, and two corroded square nails. Three carbonized peach pit fragments were recovered from Feature 132 and one carbonized nut or seed fragment from Feature 144. A moderate amount of faunal remains (93.58 g) was recovered from both features. **Feature 155** was a short north-south trench extending at a right angle off the south edge of Feature 144 in Unit 111E 145N. It originated at about 45.0 cm below the surface and was at least 1.0 m long, about 25.0 cm wide, and 10.0 cm deep. It also contained brown sandy loam (10YR 4/3) mottled with yellow sandy subsoil like Features 132 and 144 trench, suggesting it is contemporaneous and dates to the early French colonial period (1718-1732). A small amount of faunal remains (1.8 g) was recovered from Feature 155.

**Feature 133** is a short segment of a trench extending off the north wall of Unit 119E 145N. It originated at about 45.0 cm below the surface and was only 7.0 cm deep, similar in depths to Features 132, 144, and 155 trenches. At the south end of the Feature 133 trench was a deeper square posthole, and a round posthole (Feature 125) cut into the east edge. These features contained brown sandy loam (10YR 4/3) mottled with yellow sandy subsoil.

Artifacts from Feature 133 include three sand-tempered sherds and three shell-tempered sherds (Bell Plain and Graveline Plain), two blue and one white glass seed beads, eight Rupert shot, two drop shot, two small spent shot, two pieces of lead spillage, and a small amount of faunal remains (10.6 g). Feature 125 artifacts include one sand-tempered Chickachae Combed sherd and one shell-tempered Graveline Plain sherd, one French Rouen Brune sherd and one plain tin-glazed sherd, one piece of French blue-green bottle glass, two white glass seed beads, one white clay pipe stem, 10 Rupert shot, 12 drop shot, two pieces of lead spillage, and four corroded square nails. Based on artifacts, these features probably date to the British colonial period (1763-1780).



Figure 2-54. View to the west of excavated features in Area 6, Units 117E 145N and 119E 145N.

# Postholes and Other Features

Area 6 Unit 111E 145N contained eight postholes (Features 141, 143, 146, 149, 150 156, 157, and 175) in the southeast quadrant of the unit. Units 117E 145N and 119E 145N also contained seven postholes (Features 125, 126, 134, 135, 136, 138, and 177) (Figure 2-54). Postholes were of varying shapes, sizes, and depths and contained few artifacts. None of the postholes appeared to be in any lines or patterns.

# Area 7

This location was chosen for excavation based on one shovel test (155E 155N) from the 1995 archaeological survey that revealed a feature rich with American Indian pottery, early colonial artifacts, and well-preserved faunal remains. In that shovel test, below 25.0 cm of dark organic soil was a thin layer of decomposed lime mortar lying on top of subsoil. Over 100 sherds of native-made pottery, including many with incised and combed designs, were recovered from this one shovel test. The area around the shovel test was cored to determine the size of the feature based on the presence of the mortar layer. It was estimated that this feature measured about 1.4 by 2.0 m (4.6 by 6.6 ft) in size, suggesting a relatively broad, shallow pit. Other shovel tests in this area contained few artifacts, indicating this feature was isolated from the central portion of the plantation site around La Pointe-Krebs House. At the time, we recognized this feature as potentially one of the most significant in Old Spanish Fort Park, yet 15 years would pass before an opportunity arose to investigate further.

**Units:** The 1995 shovel test at 155E 155N was relocated with the Total Station and four contiguous 2.0 by 2.0-m units (155E 153N, 157E 153N, 155E 155N, and 157E 155N) were placed around the shovel test (Figure 2-55). This excavation, designated Area 7, was about 6.0 m (19.7 ft) west of the fence separating Old Spanish Fort Park and Krebs Cemetery. Units were excavated into Level 2 until the entire feature stain was visible. After the feature was excavated, Level 3 was dug to 25.0 cm below surface, where subsoil was encountered. Few artifacts were recovered from level excavations, indicating that this area of the site was not occupied or used as much as Areas 1, 3, and 6, closer to La Pointe-Krebs House. The soil was also not as dark or organically rich as the midden in the other excavation areas.

Feature: One feature, a lime slaking pit, Feature 90, was found and excavated in Area 7.

## Lime Slaking Pit

**Feature 90.** The Feature 90 pit stain was defined in Level 2 at about 18.0 cm below the surface (Figures 2-55 to 2-58). It measured about 2.25 by 2.6 m (7.4 by 8.5 ft) across and averaged 25.0 cm in thickness, reaching a depth of about 45.0 cm below the surface. The pit was filled with two zones of very dark grayish brown sandy loam overlying very dark gray sandy loam (10YR 3/2 and 3/1), speckled with mortar and wood charcoal, and containing an abundance of artifacts, primarily American Indian pottery sherds (as was expected, based on the 1995 shovel test). Fill was excavated down to an uneven layer of hard mortar covering the bottom of the pit.



Figure 2-55. Unit excavation in Area 7 to uncover the large pit found in the 1995 shovel test survey.



Figure 2-56. Feature 90 with the 1995 shovel test, the small dark stain near the wooden stake.



Figure 2-57. Excavation of Feature 90, the large lime slaking pit in Area 7.

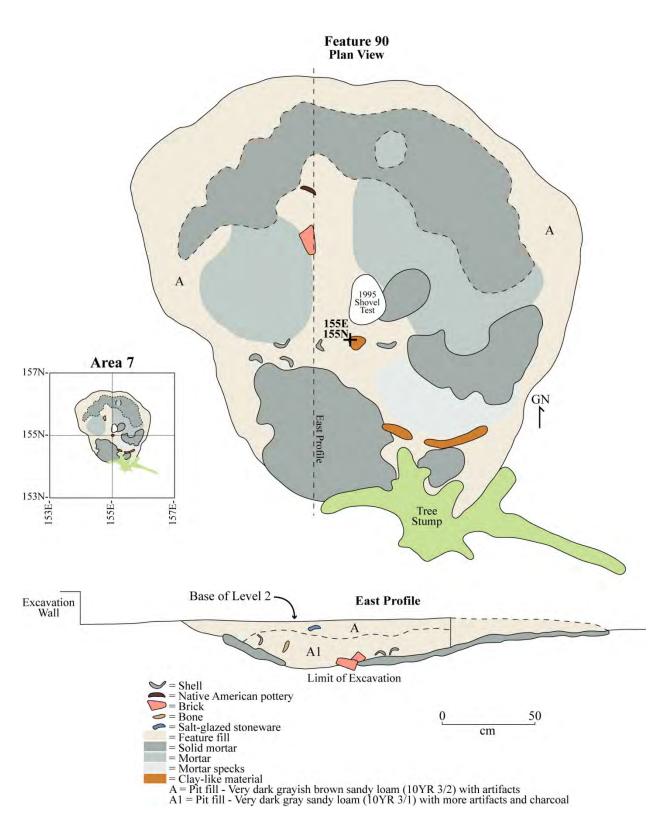


Figure 2-58. Plan view and profile of Feature 90 in Area 7.

The mortar layer in the southeast quarter of the pit was removed to reveal its maximum thickness of 5.0 cm. The Feature 90 pit was initially used for processing mortar from crushed and burned marine shells and afterwards used for the disposal of broken pots and other refuse, including food remains.

Based on recovered artifacts, Features 90 dates to the early French colonial period (1718-1732) and is one of the oldest features excavated during the 2010 project. The amount of American Indian pottery and other artifacts of native manufacture and use, such as pipes and stone tools, suggest the presence of Pascagoula Indians at the site at this time.

Feature 90 was a lime slaking pit, where lime made by burning crushed marine shells was mixed with water to create lime mortar for building construction. Based on artifacts listed below, Feature 90 dates to the early French colonial period (ca. 1718 to 1732). Similar types of features have not been reported for colonial sites along the north-central Gulf Coast, although the use of tabby mortar was relatively common in construction. (Also of note is the absence of brick kilns at colonial Gulf Coast sites, since it is believed that most French colonial bricks were made onsite in temporary above-ground clamps or self-kilns, as needed.)

Native American pottery was quite abundant in Feature 90. A vessel analysis of Indian pottery from Feature 90 identified 81 vessels based on rim or base sherds. Types include 16 Doctor Lake Incised and three Port Dauphin Incised bowls, 26 jars, and seven Colonoware vessels. One vessel is black-filmed. Smoking pipes are represented by a clay face pipe, one clay bowl and three stem fragments, and a catlinite pipe bowl fragment. Worked lithics are represented by one quartzite flake, three pieces of shatter (two Tallahatta sandstone and one gray chert), a ground hematite pebble, a nutting stone, and one piece of ground sandstone.

European ceramics include three French faience sherds, one tin-glazed platter rim, two blue decorated tin-glazed sherds, three French lead-glazed Saintonge sherds, three other leadglazed sherds, and two salt-glazed stoneware sherds (including one fragments of a British Bellarmine jar). Also recovered from this shallow pit were one British white salt-glazed stoneware sherd, one creamware sherd, three pearlware sherds, five whiteware sherds, and one porcelain sherd, all of which are thought to be intrusive, as discussed below.

Feature 90 contained two brass French military buttons, one straight pin, one small brass tack, a brass escutcheon from colonial-era gun, one French gunspall, four flakes of British flint; 22 olive green, two French blue-green, and three clear glass fragments. One of the clear glass fragments was used as a scraper. Structural materials are represented by at least five rosehead nails, 36 corroded nails, and four spikes. Carbonized plant remains not in Feature 90 flotation samples include five peach pit fragments and one seed.

The more recent artifacts, such as the pearlware, whiteware, and some bottle glass, were intrusive into this shallow pit. A large tree root disturbance (visible in Figures 2-56 and 2-57) destroyed the south edge of the pit and introduced later artifacts into the pit from the upper soil zone.

### Summary of Excavations at La Pointe-Krebs House and Plantation

The combined 1995 salvage excavations around La Pointe-Krebs House and the 2010 excavations in Areas 1, 3, 6, and 7 of the La Pointe-Krebs Plantation represent a small fraction of the archaeological site area in Old Spanish Fort Park. Nevertheless, these excavations uncovered an impressive variety of significant cultural features spanning over two centuries of occupation, from 1718 to 1940. Ninety-six features, including midden deposits, many sorts of pits, trenches, postholes, and a brick foundation, were recorded. In all areas except Area 7 the density of features is impressive. Three pits (Features 90, 105, and 163), several structural or palisade fence trenches (Features 104, 107, 119, 122, 179, and 180), and a brick foundation (Feature 89) are considered the most important features. A thick artifact-rich midden was also documented in the immediate vicinity of La Pointe-Krebs House.

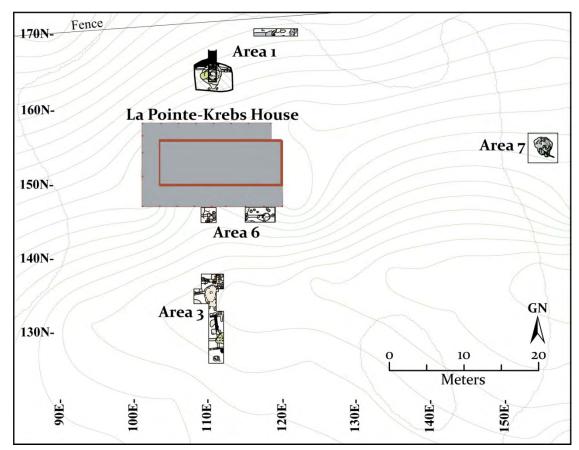


Figure 2-59. Detail of archaeological site map showing 2010 excavations in Areas 1, 3, 6, and 7 at La Pointe-Krebs Plantation in Old Spanish Fort Park (22JA526).

Area 1, on the north side of La Pointe-Krebs House near the shore of Krebs Lake, contains a remnant of a shell midden mixed with an abundance of mortar chunks leftover from colonial construction. A very large and deep pit (Feature 163) interpreted as a subterranean storage facility, two construction trenches (Features 179 and 180), and other features were excavated in Area 1.

Area 3, located about 10.0 m (32.8 ft) south of La Pointe-Krebs House, contained a black earth midden rich with artifacts and a maze of intersecting features. One (Feature 105) was a very large deep pit used from the late French colonial period into the early Spanish period (ca. 1750-1800). Significant trenches from the colonial period (including Features 104, 107, 118, and 122) crisscrossed Area 3. And a brick foundation (Feature 89) of a relatively small structure, built during the French colonial period (1718-1763), probably represents housing for enslaved Africans.

Area 6 and the 1995 salvage excavation units were located around La Pointe-Krebs House, where the upper soil zone had been extensively disturbed by modern activities, such as restoration of the house and removal of large bushes. However, significant features lay below an undisturbed midden, including an early French colonial trench represented by Features 132, 144, and 155.

Area 7, well to the east of La Pointe-Krebs House and the other excavation areas and adjacent to Krebs Cemetery, in the northeast corner of Old Spanish Fort Park, contained only one feature, Feature 90, a large shallow pit lined with mortar and filled with an abundance of artifacts, primarily American Indian potsherds, from the early French colonial period (1718-1732). This pit is interpreted as a lime-slaking facility where lime from crushed and burned marine shells was mixed with water to make mortar for construction, the first feature of this type recorded at a colonial plantation site along the north-central Gulf Coast.

# **CHAPTER 3:** Artifacts from La Pointe-Krebs House and Plantation

by Bonnie L. Gums and Gregory A. Waselkov

An extensive collection of artifacts was recovered from the 1995 salvage excavation around the La Pointe-Krebs House and the 2010 excavations on the La Pointe-Krebs Plantation site in Old Spanish Fort Park (22JA526). Most abundant are Native American pottery, European ceramics, bottle glass, glass trade beads, structural materials, and marine shells. Artifacts in smaller numbers consist of kitchen items, weaponry, and personal artifacts, such as tobacco pipes, jewelry, and clothing items, among others.

Area 3, the largest excavation and richest midden, south of La Pointe-Krebs House, yielded the most artifacts. Area 6 and the 1995 units around the house contained moderate amounts of historic artifacts with intrusive modern debris coming from the long occupation of the historic standing structure. Area 7, the smallest excavation, naturally had fewer artifacts, most of which came from the large lime slaking pit, Feature 90.

Due to the huge volume of the artifact assemblage, all categories are summarized but select categories (particularly eighteenth- and early nineteenth-century artifact types) are described in more detail to provide an overview of material culture through the colonial and early American periods at La Pointe-Krebs Plantation.

#### **Native American Pottery**

This category includes all unglazed ceramics – types that in the Southeast traditionally have been called "aboriginal pottery" and have long been attributed to American Indian potters. While both "Native American" and "aboriginal" seem generally appropriate for this assemblage, it does includes many Colonoware vessels, some of which may have been made by European colonists, by enslaved or free Africans, or by people of mixed ethnicity. This issue of ethnic affiliation and pottery styles is discussed in the final chapter of this report, while the following section simply serves to describe the assemblage.

This assemblage of unglazed pottery, most of which was certainly made by Native Americans during the protohistoric and colonial periods, totals 5,937 sherds. Potsherds were found in abundance in the 1995 units and in Areas 1, 3, 6, and 7 excavated in 2010 (Table 3-1).

Temper Type		1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
Fine Lamellar Shell		58	558	911	224	432	2,183
Fine Angular Shell		119	142	886	131	292	1,570
Coarse Lamellar Shell		33	75	280	127	129	644
Coarse Angular Shell		11	39	110	13	48	221
Sand Temper		30	180	568	93	440	1,311
Grog Temper		-	3	2	2	-	7
Fiber Temper		-	-	1	-	-	1
	Totals	251	997	2,758	590	1,341	5,937

Table 3-1. Pottery sherds by temper type and site area.

After being washed and dried, potsherds were screened through  $\frac{1}{2}$ -inch hardware mesh to separate large sherds for analysis from the fragments classified as "sherdlets," considered too small for typological analysis; the latter are not included in the sherd count. Sherds were inventoried by provenience (Field Specimen or FS number) by count and weight. Most of these sherds (n=2,758 or 46.5 percent) were recovered from Area 3, the largest excavation, with fewer numbers from Area 7 (n=1,341), Area 1 (n=997), Area 6 (n=590), and the 1995 units (n=251).

Vessel analysis was accomplished by sorting sherds thought to belong to the same pot – based on temper, surface treatment, decoration, and vessel form – for a sample of significant features. These include Feature 163 (large storage pit) in Area 1, Feature 105 (large pit) and Feature 122 (double trenches) in Area 3, and Feature 90 (lime slaking pit) in Area 7.

### Pottery Wares

Shell-Tempered Wares (n=4,618). Sherds tempered with crushed clam and oyster shells are most common in the La-Pointe-Krebs Plantation assemblage. All four defined types of shell temper are present: fine lamellar shell (n=2,183); fine angular shell (n=1,570); coarse lamellar shell (n=644); and coarse angular shell (n=221). The differences between these four wares are based on the use of crushed angular clam or lamellar oyster shells and the size (fine or coarse) of the shell particles used as tempering in pots (Fuller 1994). The pottery type Bell Plain includes all undecorated sherds with fine lamellar shell temper. Graveline Plain consists of undecorated sherds with fine angular shell temper. Mississippi Plain sherds have coarse lamellar shell temper and Guillory Plain sherds have coarse angular shell temper. In general, sand is also present in shell-tempered wares. See Blitz and Mann (2000:107-108) for their discussion of Gulf Historic Finewares, characterized by very hard paste with multiple tempering agents.

**Sand-Tempered Wares (n=1,311).** At least 1,311 sherds in the La Pointe-Krebs Plantation assemblage are tempered primarily with sand. These consist of sherds with fine to medium grains of sand and relatively smooth surfaces. A small number of sand-tempered pots have incised decorations, with numerous examples of red-filmed bowls.

**Grog-Tempered Ware (n=7).** Grog temper is defined as crushed pieces of broken pottery resulting from the recycling of old pots into new. In the north-central Gulf Coast region, undecorated grog-tempered wares are typically classified as Baytown Plain. Grog temper was used during both prehistoric and historic periods.



Figure 3-1. Vessel 105-74, possible fiber-tempered bowl rim from Feature 105 in Area 3 (all views actual size); bar with hook emanating from blackened rim profile indicates vessel orifice radius.

**Fiber-Tempered Ware (n=1).** One sherd from Feature 105 in Area 3 is believed to be fiber-tempered (Figure 3-1). Fiber-tempered pottery is the earliest known type of pottery in the Southeast, and on the north-central Gulf Coast it dates to the end of the Late Archaic period, ca. 1000 BC. However, due to the small size of this unique rim from La Pointe-Krebs Plantation, identification remains uncertain.

### Pottery Vessel Forms

Vessels forms can be determined by rim sherd profiles and distinctive body sherds. Two types of bowls (simple and incurved), globular jars, and Colonoware forms have been identified in the La Pointe-Krebs Plantation pottery assemblage (Table 3-2).

Vessel Form	1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
Simple Bowl	25	31	82	6	17	161
Incurved Bowl	11	12	24	4	43	94
Globular Jar	6	6	13	3	24	52
Colonoware	4	1	8	1	-	14
Unidentified	7	8	29	2	31	77
Totals	53	58	156	16	115	398

Table 3-2. Pottery rims by vessel form and site area.

**Bowls (n=255).** These vessels include simple bowls and incurved bowls, most commonly with shell tempering, but also sand tempering. Simple bowls are hemispherical in shape, with straight rims, and orifices equal to or wider than bowl bodies. Red filming on simple bowls is common, with fewer examples of black, brown, and tan filming. Incurved bowls are globular, with restricted orifices smaller than body diameters. Incised and combed designs on the incurved bowl shoulders are common.

Jars (n=52). Jars in the La Pointe-Krebs Plantation assemblage have globular or ovoid bodies, with constricted necks and at least slightly flaring rims. Jars are generally larger than bowls, although a few are small. Some jars in the La Pointe-Krebs Plantation assemblage are pinched or punctated or notched on the rim or lip. Jars are predominantly tempered with coarse angular or lamellar shell temper.

**Colonoware Forms (n=14).** Colonoware vessels generally are styled to replicate European ceramics, and a few different forms are present in the La Pointe-Krebs Plantation assemblage. These include milk pans, brimmed bowls, at least one pitcher, one plate, and a flat-based strainer, a French-style cooking pot called a *marmite*, and several flat basal sherds from unknown vessels. Colonoware milk pans are large shallow basins with bolstered or rounded rims similar to European milk pans, such as French lead-glazed Saintonge forms. Brimmed bowls are made in the style of European deep plates. Simple bowls with red filming may also be considered Colonoware, since these apparently were made primarily for use on colonial plantations.

# Pottery Decoration

A limited number of decorated pottery types were identified in the La Pointe-Krebs Plantation assemblage, predominantly Chickachae Combed, Doctor Lake Incised, and Port Dauphin Incised. Many decorated sherds (mostly incised and punctated) were too small to be classified (Table 3-3). Fingernail punctations and finger-pinched rims are common on globular jars. Two very unusual sherds are decorated with impressed glass trade beads. Prehistoric pottery is represented by a few cord marked and check stamped sherds.

Decoration Type	1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
Chickachae Combed	10	32	57	13	9	121
Doctor Lake Incised	5	8	34	6	42	95
Port Dauphin Incised	1	7	8	8	4	28
Unclassified Incised	24	77	205	34	126	466
Unclassified Punctated	1	1	6	1	5	14
Unclassified Incised/Combed	1	8	4	1	1	15
Unclassified Incised/Punctated	2	1	8	2	32	45
Pinched, Notched, or Punctated	2	-	4	1	12	19
Impressed with Glass Beads	1	-	1	-	-	2
Cord Marked	-	2	-	-	-	2
Check Stamped	-	1	-	-	-	1
Totals	47	137	327	66	231	808

Table 3-3. Pottery decoration types on non-plain sherds by site area.

**Chickachae Combed (n=121; Figure 3-2).** This pottery type was defined as sand tempered and is attributable to Choctaw potters of the mid-eighteenth through early nineteenth centuries (Haag 1953). However, many have noted the presence of multiple tempers in historic finewares of the eastern Mississippi coast, where sand tempered Chickachae Combed also includes fine shell tempering (Blitz 1985; Fuller 1991, 1992, 1998:38; Blitz and Mann 2000:113-114; Waselkov and Gums 2000:128). Although see Blitz and Mann's (2000:114) argument for the type name La Pointe Combed for exclusively shell tempered combed fineware. Waselkov and Silvia (1995) confused the issue by mistakenly applying the type name Kemper Combed, which is grog tempered, to predominantly shell tempered combed sherds from the La Pointe-Krebs site. Chickachae Combed design consists of four to seven closely-spaced parallel lines generally believed to have been incised with tools, such as European trade boxwood combs (Galloway 1984). In practice, it can be difficult to distinguish between combing and very carefully executed free-hand incising. Red filming is common on Chickachae Combed pottery, with a few examples of black and brown filming.

**Doctor Lake Incised (n=95; Figure 3-3).** Examples of Doctor Lake Incised pottery in this assemblage have fine angular shell and sand tempering. Characteristic design elements consist of notches or nicks on the rim or punctates just below the rim, usually with a circumferential incised line above rectilinear and curvilinear incised motifs. Zoned triangles are a common motif in this assemblage. Based on rim profiles, nearly all vessels of this type come

from incurved bowls. Doctor Lake Incised pottery has heretofore been attributed to the Tomé Indians who lived in the Mobile-Tensaw delta from at least the late seventeenth century until 1763 (Fuller 1994; Waselkov and Gums 2000:125).



Figure 3-2. Chickachae Combed incurved bowls: (a-b) 1995 units, FS 227 and 245; (c-d) body sherds, Area 6, FS 1007; (e) Area 6, FS 1068; (f) 1995 unit, FS 266; (g) Area 6, FS 856 (all actual size).



Figure 3-3. Doctor Lake Incised incurved bowls: (a-b) Area 3, FS 1169 and 875; (c-d) 1995 units, FS 299 and 283 (all actual size).

**Port Dauphin Incised (n=28; Figure 3-4).** This pottery in the La Pointe-Krebs Plantation assemblage typically has fine angular shell and sand tempering. Port Dauphin Incised designs occur on incurved bowls. Design elements consist of one or more circumferential incised lines just below the rim and above predominantly curvilinear incised motifs similar to those found on Doctor Lake Incised pottery, but without notched or punctated rims and usually lacking rectilinear incising. Port Dauphin Incised pottery has been attributed to the Mobilian Indians from the Mobile-Tensaw delta in the late seventeenth century through 1763 (Fuller 1994; Waselkov and Gums 2000:125).

**Unclassified Decorations (n=540).** These small sherds have partial and indeterminate designs, including one or a few incised lines or punctations. These include Unclassified Incised (n=466), Unclassified Incised and Punctated (n=45), Unclassified Incised/Combed (n=15), and Unclassified Punctated (n=14). There are also a few relatively complete designs that are unusual or atypical and remain unidentified (Figure 3-5). However, Hester (2012:156-158) has noted the presence of a rare design motif seen at La Pointe-Krebs (Figure 3-5a and b) – a "wavy" or zigzag incised line resembling a worm track between two incised lines – in similarly small numbers at the French Warehouse site on Ship Island, off Biloxi Bay. She suggests the type may be attributable to captive Chitimacha Indian women held in French colonial households.

**Pinched, Notched, or Punctated (n=19).** Several large jars have finger-pinched rims that create a crenellated or pie-crust-like vessel lip. A few rim sherds, mostly from jars, have a series of small notches or nicks on the lip. At least two jar neck sherds have circumferential punctations made by pinching the wet clay with fingernails to create small circular depressions (Figure 3-6).



Figure 3-4. Port Dauphin Incised incurved bowls: (a-b) 1995 units, FS 227 and 245; (c-d) body sherds, Area 6, FS 1007; (e) Area 6, FS 1068); (f) 1995 unit, FS 266; (g) Area 6, FS 856 (all actual size).



Figure 3-5. Other decorated and altered sherds: (a) faintly incised design on incurved bowl with fine angular shell temper, Area 3, FS 1099; (b) faintly incised design on incurved bowl with sand temper, Area 3, FS 896; (c) Colonoware colander/strainer with four holes, sand temper, Area 3, 911 (all actual size).



Figure 3-6. Coarse lamellar shell-tempered jars with fingernail punctations: (a) Area 3, FS 874; (b) Area 6, FS 1007 (two-thirds actual size).

**Glass Bead-Impressed (n=2).** Rim sherds from two incurved bowls have glass seed beads embedded as designs just below the rims. The seed beads were impressed into the clay prior to firing, and exposed bead holes melted and closed during firing. One sherd from a 1995 unit has four impressions where seed beads have fallen out (Figure 3-7a), revealing a raised bit of clay created by the bead hole at the center of each impression. The beads on that vessel were placed in a circumferential line just below the rim. The interior of this bowl rim had been scraped with a tool (of metal?) beneath the lip, a characteristic of many incurved bowls from this site.

Another similar bowl rim (Vessel 105-80) was found in the Feature 105 pit in Area 3. This specimen had seed beads set in a circumferential line close to the rim and four beads forming a diamond shape below (Figure 3-7b). Three of the beads in the rim line have fallen out, leaving impressions with central bead hole molds. One of the detached, partially melted beads was recovered during excavations (see inset in Figure 3-7). The five extant beads are opaque white glass and conform to Kidd & Kidd type IVa13. Both of these bead-impressed vessels have fine angular shell temper. It is quite likely that the two bowls were made by the same potter. Feature 105 dates from the late French colonial to Spanish colonial periods, ca. 1750 to 1780s.

Since other examples of glass bead-impressed Native American pottery are unknown from the northern Gulf Coast, the idea for incorporating glass trade beads into these pottery decorations may have originated with enslaved Africans at the La Pointe-Krebs plantation. Vessel form, however, coincides closely with other American Indian-made bowls, and the design elements of circumferential rim line and suspended diamond resembles a popular Doctor Lake Incised motif employed by native potters until 1764. The implications of these interesting beadimpressed sherds are discussed in the final chapter of this report.

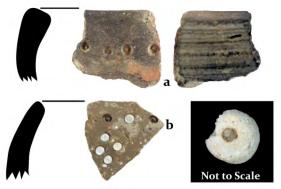


Figure 3-7. Glass bead-impressed pottery: (a) incurved bowl rim with four impressions of glass beads, 1995 unit, FS 286; (b) Vessel 105-80, incurved bowl rim with five white glass seed beads and three bead impressions from Feature 105, Area 3, FS 1081 (all actual size, except detached bead close-up).

**Red-Filmed Pottery (n=315).** Red-filmed sherds come predominantly from simple bowls tempered with sand and fine angular shell (Figure 3-8). This red film is actually a clay slip that occurs in almost every case on bowl interiors and sometimes partially or completely on bowl exteriors. Thirteen red-filmed sherds also have linear or curvilinear bands of off-white clay slip decoration on top of red filming (Figure 3-8a-d). Red-filmed pottery bowls from sites of the northern Gulf Coast are generally considered a type of Colonoware made by Indians for trade to colonists.



Figure 3-8. Red-filmed and white-filmed pottery: (a-c) red-and-white-filmed simple bowls, paired interior (L) and exterior (R) views, Area 3, FS 874, 946, and 867; (d) red-filmed sherd with curvilinear white-filmed interior motif, Area 1, FS 1165; (e) simple bowl with red-filmed interior and exterior, 1995 unit, FS 238 (all actual sizes).

**Other Filmed Pottery** (n=47). These are less vibrant than the red-filmed sherds, with shades of tan to brown to black filming, which are often hard to distinguish on highly burnished vessels. Brown to black films occur usually on simple bowls with sand and fine angular shell.

## Potsherds with Tabby and Mortar

Quite a few potsherds (n=82) from La Pointe-Krebs Plantation assemblage have adhering tabby or mortar (Figure 3-9), indicating these sherds were accidently mixed with shells used to make mortar or tabby for colonial construction, probably because they came from shell middens mined for mortar or tabby raw material. Tempering and designs on a few of these sherds indicate they date to prehistoric periods (Figure 3-9a). For instance, two sherds (Vessel 163-55) have Moundville motifs dating to the Mississippi period. One sherd with mortar has a broken iron nail partially embedded in it, suggesting it was once part of a structural wall (Figure 3-9c). Prior to the 1995 restoration of La Pointe-Krebs House, pottery sherds could be seen embedded in the tabby walls of the structure. Sherds with adhering tabby or mortar were recovered from the 1995

units (n=9), Area 1 (n=31), Area 3 (n=36), and Area 6 (n=6). Oddly, none were recovered from Area 7, location of Feature 90, the lime slaking pit.



Figure 3-9. Potsherds with tabby or mortar attached: (a) Incised sand-tempered sherd, Area 3, FS 924; (b) fine lamellar shell-tempered sherd, Area 1, FS 1200; (c) sand-tempered sherd with embedded handwrought iron nail fragment, Area 3, FS 890; (d) sand-tempered simple bowl rim, Area 3, FS 911; (e) fine angular shell-tempered sherds, Area 1, FS 1115 and 1116 (all actual size).

### Feature Vessel Analysis

**Feature 90 Pottery Vessels**. Eighty-one vessels were identified from 341 of the 975 sherds found in Feature 90, the lime slaking pit in Area 7, dating to the early French colonial period (1718-1732). Over half of the vessels (n=45, or 55.5%) have predominantly fine angular shell temper, followed by 19 vessels with fine lamellar shell, eight with coarse lamellar shell, four with coarse angular shell, and five with sand temper.

Identified vessel forms from Feature 90 include 42 incurved bowls (Figure 3-10b), 26 globular jars, seven Colonoware forms, and five simple bowls (Figure 3-10a and c). Sixteen bowls have Doctor Lake Incised designs (Figure 3-11, Figure 3-12a and c) and three bowls are classified as Port Dauphin Incised (Figure 3-12b and d, Figure 3-13d-g). Eight vessels have Unclassified Incised decorations and one has an Unclassified Incised and Punctated design (Figure 3-13a-c). One bowl is black filmed. Note that no red-filmed vessels were found in Feature 90. Five of the 26 jars have finger-pinched rims and three jars have notched rims (Figure 3-14b-d). Colonowares include two milk pans, one pitcher, a flat-based colander/strainer with holes, and three other vessels with flat bases (Figure 3-15 and 3-16).



Figure 3-10. Bowls with fine angular or lamellar shell temper from Feature 90: (a) Vessel 90-05, simple bowl; (b) Vessel 90-01, incurved bowl; (c-d) Vessel 90-45, simple bowl (all two-thirds actual size).



Figure 3-11. Doctor Lake Incised incurved bowls with fine angular or lamellar shell temper from Feature 90: (a-b) Vessel 90-41; (c) Vessel 90-35; (d) Vessel 90-33; (e-f) Vessel 90-43; (g) Vessel 90-37; (h) Vessel 90-39; (i) Vessel 90-36 (all actual size).



Figure 3-12. Incurved bowls with fine angular shell temper from Feature 90: (a) Vessel 90-22, Doctor Lake Incised; (b) Vessel 90-25, Port Dauphin Incised; (c) Vessel 90-43, Doctor Lake Incised; (d) Vessel 90-81, Port Dauphin Incised (all actual size).



Figure 3-13. Decorated vessels from Feature 90: (a-c) Vessel 90-40, Unclassified Incised and Punctated jar with fine lamellar shell temper; (d-g) Vessel 90-31, Port Dauphin Incised bowl with fine angular shell temper (all actual size).

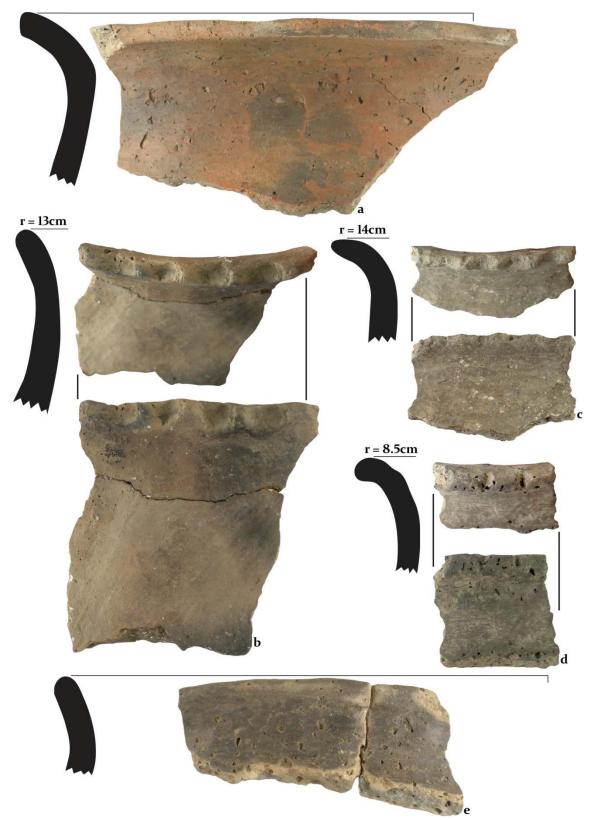


Figure 3-14. Globular jars with coarse angular or lamellar shell temper from Feature 90: (a) Vessel 90-55, plain jar; (b-c) Vessels 90-59 and 90-60, jars with finger-pinched rims; (d) Vessel 90-62, jar with notched rim; (e) Vessel 90-56, plain jar (all actual size).

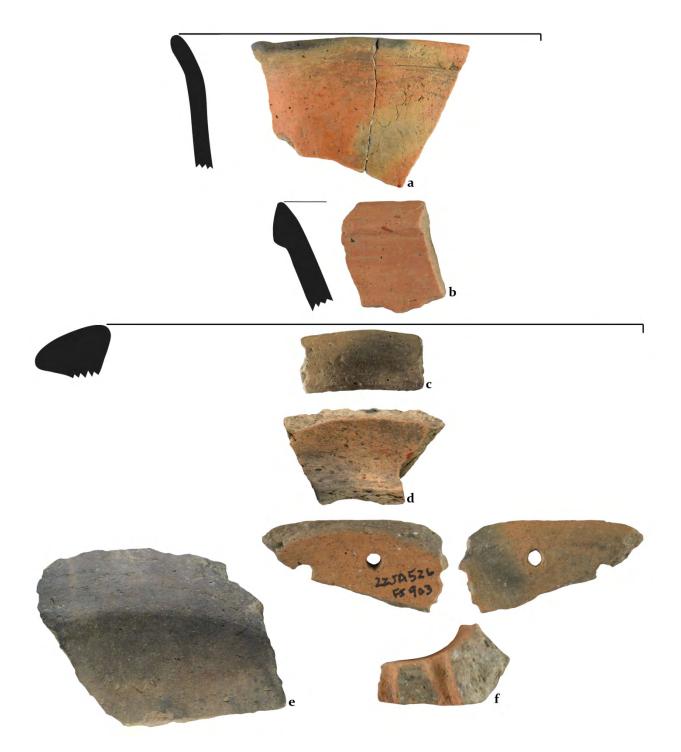


Figure 3-15. Colonowares from Feature 90: (a) Vessel 90-57, pitcher rim with spout, fine angular shell temper; (b) Vessel 90-48, milk pan, sand temper; (c-d) Vessel 90-21, milk pan, fine angular shell temper; (e) Vessel 90-76, flat base, fine lamellar shell temper; (f) Vessel 90-73, flat-based colander/strainer, fine lamellar shell temper (all actual size).

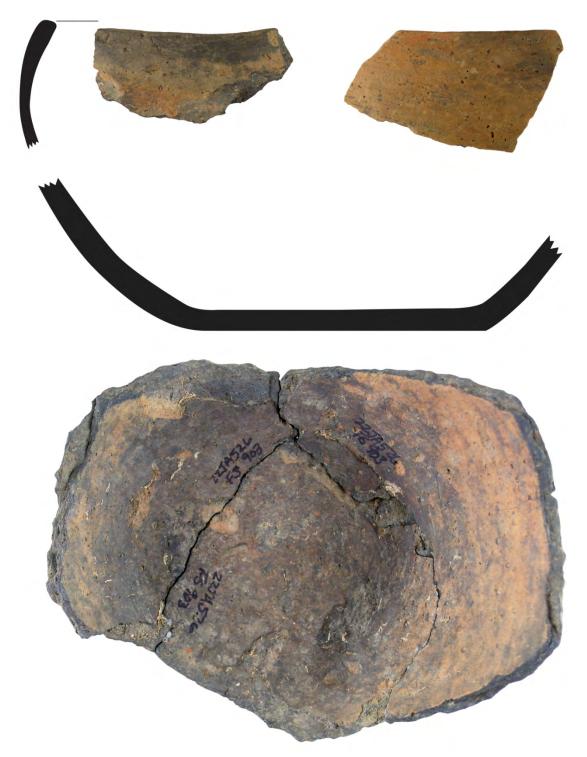


Figure 3-16. Vessel 90-75, incurved Colonoware bowl with flat base and fine angular shell temper from Feature 90 (all actual size).

**Feature 163 Pottery Vessels.** Fifty-seven vessels were identified from 185 of the 204 sherds from Feature 163, the large storage pit in Area 1 dating to the late French colonial period (ca. 1732-1763). Two-thirds of the Feature 163 vessels (n=38, or 66.6%) have fine angular shell

temper, followed by 10 vessels with sand, five with coarse angular shell, two with fine lamellar shell, one with coarse lamellar shell, and one with grog temper.

Vessel forms from Feature 163 include 24 simple bowls (Figure 3-17), 20 incurved bowls, five globular jars, and three Colonowares. Six bowls have Chickachae Combed designs (Figure 3-18 and Figure 3-20d-g), four are Doctor Lake Incised (Figure 3-19), and four are Port Dauphin Incised (Figure 3-20a-c). One other vessel has an Unclassified Incised design. Sixteen bowls have red film, two have brown film, and one has black film. One of the five jars from Feature 163 has a finger-pinched rim (Figure 3-21). Colonoware includes two brimmed bowls and one *marmite*, a French-style cooking pot (Figure 3-22). Prehistoric vessels are represented by two sherds with Moundville motifs from the Mississippi period, a check-stamped sherd, and one corncob roughened sherd. Two Moundville motif sherds (Figure 3-23a-b) are covered with mortar indicating these were mined with shells from a midden to make structural mortar or tabby for colonial construction. Another vessel represented in Feature 163 is a pot with a roughened surface (Figure 3-23c-d).



Figure 3-17. Vessel 163-30, red-filmed and burnished simple bowl, fine angular shell temper, from Feature 163 (three-quarters actual size).



Figure 3-18. Vessel 163-29, Chickachae Combed incurved bowl with brown film, fine angular shell temper, from Feature 163 (all actual size).



Figure 3-19. Doctor Lake Incised bowls with fine angular shell temper from Feature 163: (a) Vessel 163-25; (b) Vessel 163-27 (all actual size).

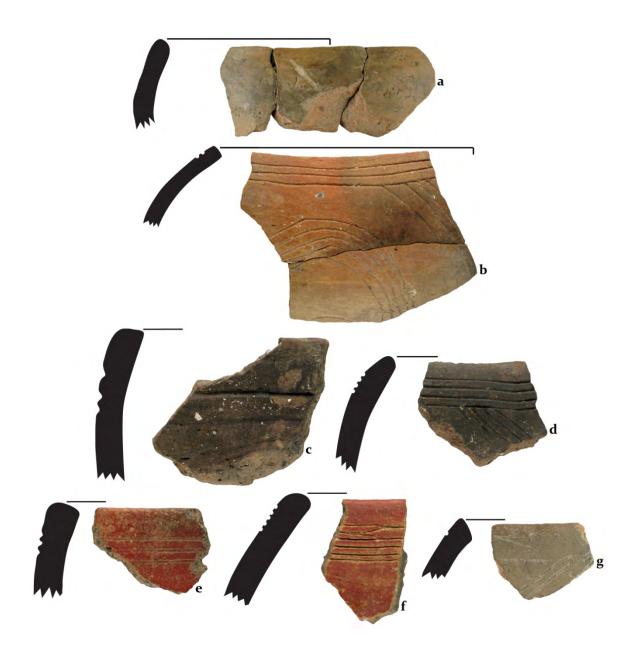


Figure 3-20. Incurved bowls from Feature 163: (a) Vessel 163-40, plain bowl with sand temper; (b-c) Vessels 163-20 and 163-28, Port Dauphin Incised, fine angular shell temper; (d-e) Vessels 163-22 and 163-10, Chickachae Combed, sand temper; (f-g) Vessels 163-11 and 163-21, Chickachae Combed, fine angular shell temper (all actual size).



Figure 3-21. Vessel 163-49, pinched jar rim with fine angular shell temper, from Feature 163 (all actual size).

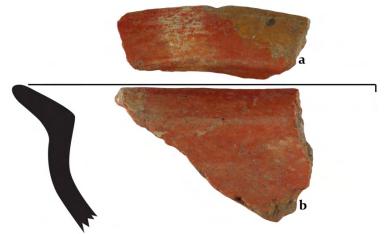


Figure 3-22. Vessel 163-01, Colonoware *marmite* (French-style cooking pot), red-filmed, fine lamellar temper, from Feature 163 (all actual size).

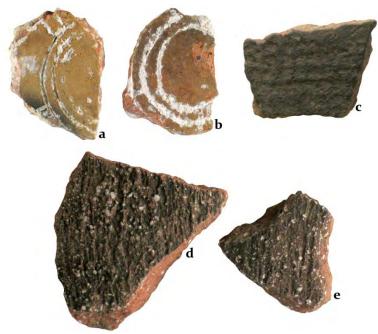


Figure 3-23. Other vessels from Feature 163: (a-b) Vessel 163-55, fine shell-tempered, Moundville motifs, mortar attached; (c) Vessel 163-54, grog-tempered check stamped; (d-e) Vessel 163-56, coarse angular shell-tempered with roughened surface (all actual size).

**Feature 122 Pottery Vessels.** Twenty-nine vessels were identified from 140 of the 266 sherds from Feature 122, double palisade trenches in Area 3 dating to the British colonial period (1763-1780). Two-thirds of the Feature 122 vessels (n=19, or 65.5%) have fine angular shell temper, followed by six vessels with sand, two with fine lamellar shell, one with coarse angular shell, and one with coarse lamellar shell temper.

Vessel forms from Feature 122 include 16 simple bowls, nine incurved bowls, one globular jar, and two Colonowares. Five bowls are Chickachae Combed (Figure 3-24a-b), one is Doctor Lake Incised (Figure 3-24c), and one has an Unclassified Incised design (Figure 3-24d). Seven bowls have black film, four have brown film, two have red-and-white film, one has red film, and one has gray film (Figure 3-25a-e and Figure 3-26). Colonoware forms include a brimmed bowl and a milk pan or large bowl (Figure 3-25f).



Figure 3-24. Decorated incurved bowls from Feature 122: (a) Vessel 122-18, Chickachae Combed, black film, coarse angular shell temper; (b) Vessel 122-08, Chickachae Combed, sand temper; (c) Vessel 122-01, Doctor Lake Incised, fine angular shell temper; (d) Vessel 122-21, Unclassified Incised, sand temper (all actual size).



Figure 3-25. Filmed and Colonoware vessels from Feature 122: (a-b) Vessel 122-14, red-filmed simple bowl, fine angular shell temper, exterior (L) and interior (R); (c) Vessel 122-02, gray-filmed incurved bowl, fine lamellar shell temper; (d-e) Vessel 122-12, red-filmed simple bowl, fine angular shell temper; (f) Vessel 122-19, Colonoware milk pan or large bowl with bolstered rim, coarse angular shell temper (all actual size).



Figure 3-26. Vessel 122-13, red- and white-filmed simple bowl, fine angular shell temper, from Feature 122 (actual size).

**Feature 105 Pottery Vessels.** Eighty vessels were identified from 274 of the 472 sherds from Feature 105, the large pit in Area 3 dating to the late French to early Spanish colonial period (ca. 1750-1780s). Most of these vessels (n=58, or 72.5%) have fine angular shell temper, 11 have fine lamellar shell, six have sand, two have coarse angular shell, and two have coarse

lamellar shell temper. One sherd from Feature 105 may be Late Archaic fiber-tempered (see Figure 3-1).

Vessel forms from Feature 105 include 36 simple bowls, 32 incurved bowls, nine globular jars, and three Colonoware forms. Fifteen bowls have Doctor Lake Incised designs (Figure 3-27), eight are Chickachae Combed (Figure 3-28a), and one is Port Dauphin Incised (Figure 3-28b-c). One incurved bowl rim from Feature 105 is unusual for the presences of glass seed beads impressed into the pot exterior as decoration (see Figure 3-7b). Ten bowls have red film, two have black film, and one has brown film (Figures 3-29 and 3-30). Two of the nine jars from Feature 105 have finger-pinched rims and one jar has a notched rim (Figure 3-31). Colonoware forms include two milk pans and one plate (Figure 3-32).

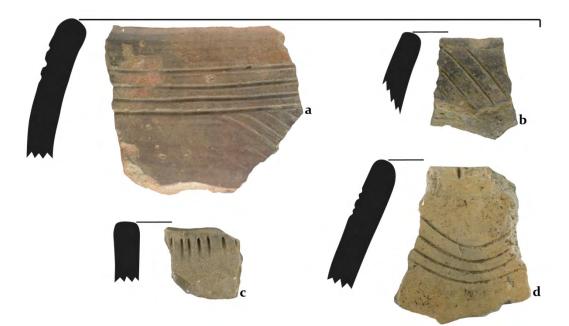


Figure 3-27. Doctor Lake Incised bowls with fine angular shell temper, from Feature 105: (a) Vessel 105-45: (b) Vessel 105-35; (c) Vessel 105-29; (d) Vessel 105-28 (all actual size).

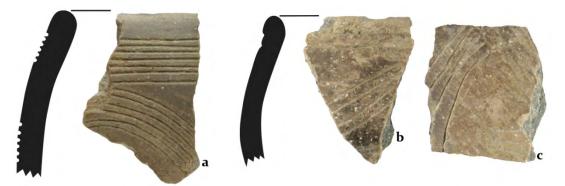


Figure 3-28. Decorated incurved bowls from Feature 105: (a) Vessel 105-19, Chickachae Combed, fine angular shell temper; (b-c) Vessel 105-26, Port Dauphin Incised, fine lamellar shell temper (all actual size).

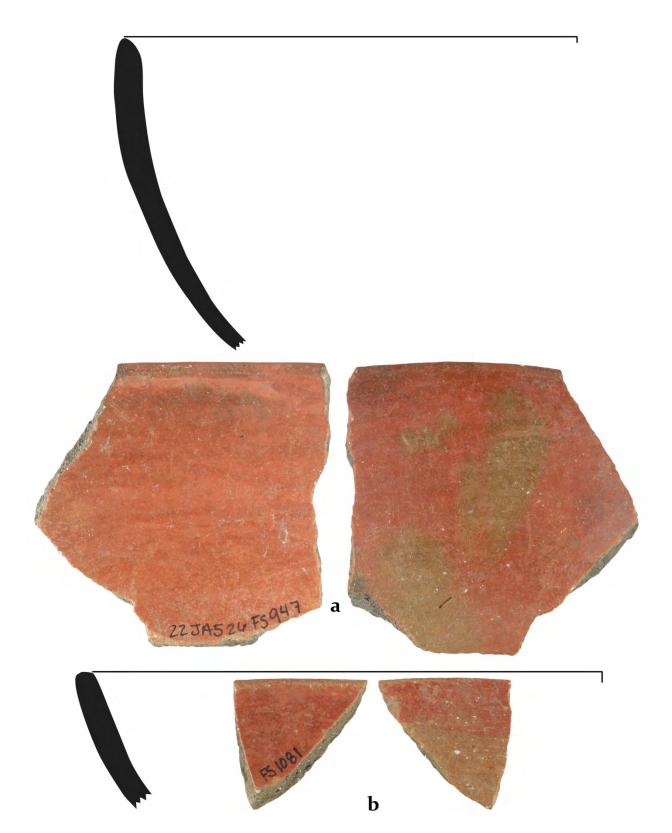


Figure 3-29. Red-filmed simple bowls, fine angular shell temper, from Feature 105, interior (L) and exterior (R): (a) Vessel 105-01; (b) Vessel 105-50 (all actual size).



Figure 3-30. Vessel 105-05, black-filmed and burnished simple bowl, fine angular shell temper, from Feature 105, interior (top) and exterior (bottom) (actual size).



Figure 3-31. Globular jars from Feature 105, exterior (L) and interior (R): (a) Vessel 105-33, small plain jar, fine lamellar shell temper; (b) Vessel 105-32, large jar with notched rim, coarse lamellar shell temper (all actual size).

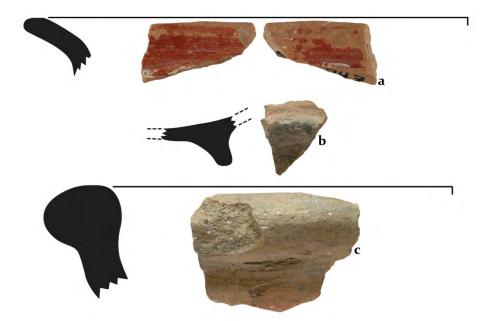


Figure 3-32. Colonowares from Feature 105: (a) Vessel 105-49, red-filmed and burnished simple bowl with everted rim, fine angular shell temper; (b) Vessel 105-79, foot ring base from a plate, fine angular shell temper; (c) Vessel 105-17, bolstered rim from a large bowl or milk pan, coarse angular shell temper (all actual size).

### **Colonial American Clay Smoking Pipes**

A large number of clay smoking pipe fragments (n=45) made by Native Americans or colonists were recovered from La Pointe-Krebs Plantation. As many as 11 fragments come from Micmac-style pipes commonly used in French colonial North America during the eighteenth century. Thirty-four other pipe fragments are plain or decorated with simple incised lines. Nearly half of these pipes (n=20, 44.4%) were recovered from Area 3 units and features, with the remainder from 1995 units (n=10), Area 1 (n=5), Area 6 (n=4), Area 7 (n=5), and general collection (n=1).

Three clay Micmac-style pipe fragments retain stems and bases, but lack bowls (Figure 3-33a-d). One pipe, elaborately decorated with very thin incised lines and ticks (Figure 3-33a), is burnished brown clay and has three small holes at the base for suspension or attachment of decorations such as feathers. The pipe stem is oval in shape, 1.0 by 1.3 cm, and the stem hole measures 0.5 cm in diameter. Another Micmac-style pipe base is undecorated burnished black clay and has three suspension holes on the base with a scalloped edge (Figure 3-33b). The base is 2.7 long and the stem hole has a diameter of 0.5 cm. A third Micmac-style pipe base is undecorated burnished brown clay and has one suspension hole. The base is squarish, measuring 1.6 by 1.8 cm, and the stem hole has a diameter of 0.4 cm (Figure 3-33c). Another small base fragment with one hole is burnished tan clay (Figure 3-33d). The remaining eight pipe fragments believed to be of this style are highly burnished with finely executed incised decorations typical

of Micmac-style pipes. Two similar clay pipes were recovered from the Augustin Rochon Plantation (ca. 1750s to 1780) on the eastern shore of Mobile Bay (Gums 2000: Figure 49a-b).

Pipes of the Micmac-style are characterized by a drum-shaped (the Canadians say "piriform" or pear-shaped) bowl, often decorated with circumferential incised lines at top and bottom, atop a constricted neck connected to a base that is either rectangular and flanged or conical. In either case, the base is often perforated with one or more holes for a suspension cord or for attachment of feathers or other ornaments. The bases are also frequently decorated with incised symbols (Witthoft, Schoff, and Wray 1953; Trubowitz 1992). This type of pipe is found frequently on Native American sites in the St. Lawrence valley, the Great Lakes, and Illinois, but they have also been found at French colonial sites in those northern regions, where they were popular with colonists (von Gernet 1988:278; Morand 1994:48-52; Evans 2001:22-23; Tremblay 2007; Daviau 2009; Mazrim 2011:75, 113-114). They are not commonly found in French colonial sites in the Suth. The assemblage at La Pointe-Krebs Plantation is the largest known from this region.

One unusual clay pipe bowl fragment is crudely shaped into a human face with small punctations for eyes and incised eyebrows; the bottom of the face is missing (Figure 3-33e). The remaining 27 clay pipe fragments are generally unburnished and less well made than the Micmac-style pipes. Many of these have simple incised lines around the circumference of the bowl rim and base. These include 17 pipe bowl fragments and 15 stem fragments (Figure 3-33f).

#### **Catlinite Smoking Pipe**

Catlinite, or red pipestone, is a dark red argillite with origins in Minnesota and Kansas that was favored for the manufacture of pipes, beads and other objects by Native American from late prehistoric to early historic times. Historic catlinite pipes are often referred to as calumets and were used in greeting ceremonies and other rituals. The catlinite pipes from La Pointe-Krebs Plantation probably were made by French colonists. Half of a catlinite pipe bowl was found in Feature 90, the lime slaking pit in Area 7, and a very small catlinite pipe bowl fragment was found in the unit above the pit. The half bowl is faceted (eight-sided) and has circumferential lines incised near the rim and base (Figure 3-33g). The bowl measures 2.1 cm in diameter and 2.1 cm tall. This specimen is very similar to catlinite pipes found at the French colonial townsite of Old Mobile (1702-1711), where catlinite was extensively worked by the colonists (Waselkov 1999:42; Gundersen, Waselkov, and Pollock 2002: Plate 3D).

#### **Hematite Pipe**

One half of a stone Micmac-style pipe bowl is carved of a hard dark reddish-brown hematite, an iron ore mineral that must have originated a good distance north of the Gulf Coast. Hematite, like catlinite, was a common raw material used by Europeans and Native Americans to carve such items as pipes, beads, and plummets. The pipe bowl from La Pointe-Krebs Plantation is piriform with a groove incised around the base (Figure 3-33h). The pipe bowl measures 2.0 cm in diameter and fragment's height measures 1.6 cm. It was found in an Area 6 unit.



Figure 3-33. Clay and stone smoking pipes: (a-d) clay Micmac-style pipe bases (Area 3, FS 868, 1078, and 994; General Collection, FS 1208; Area 1, FS 1121); (e) clay face pipe bowl (Area 7, FS 901); (f) clay pipe stem (Area 3, FS 994); (g) catlinite pipe bowl (Area 7, FS 894); (h) hematite pipe bowl, Micmac-style (Area 6, FS 1051) (all actual size).

# Chipped and Ground Stone, by Tara Potts

## Chipped Stone

A small assemblage of chipped stone includes hafted bifaces, biface fragments, and debitage. At least some of these materials relate to prehistoric occupations of the site, while others date to the colonial plantation era. A majority of the bifaces (n=5) cannot be assigned a cultural historic type because they do not exhibit a haft element (Table 3-4). Of these, four are made of Citronelle gravel and one is Tallahatta sandstone. Four Citronelle gravel hafted bifaces could be typed.

Area	Raw Material	Туре	Length	Width	Thickness
1	Citronelle Gravel	Mud Creek	33.7	15.2	8.5
1	Citronelle Gravel	-	-	-	-
3	Citronelle Gravel	Tombigbee Stemmed	-	24.2	9.1
3	Citronelle Gravel	Tombigbee Stemmed	-	23.4	9.2
6	Citronelle Gravel	Madison	22.8	13.4	2.6
6	Citronelle Gravel	-	-	-	-
6	Citronelle Gravel	-	-	-	-
6	Citronelle Gravel	-	-	-	-
7	Tallahatta Sandstone	-	-	-	-

Table 3-4. Bifaces from La Pointe-Krebs Plantation (measurements in mm).

**Mud Creek Biface (n=1).** According to published summaries (Cambron and Hulse 1975:94; McGahey 2004:171), Mud Creek hafted bifaces are described as small to medium bifaces with a triangular blade; blade edges can be convex or recurvate, and flaking along the blade is described as random, with some specimens exhibiting parallel pressure flaking that

extends to the midline. The Mud Creek biface from Area 1 at La Pointe-Krebs Plantation (Figure 3-34a) fits well within the range of length, thickness, and width described by McGahey (2004:171). Dates for Mud Creek bifaces range from 1550 BC to 550 BC, during the Late Archaic to Early Woodland (or Gulf Formational) periods (McGahey 2004:171).

**Tombigbee Stemmed Bifaces (n=2).** Tombigbee Stemmed hafted bifaces have been described (Ensor 1981:91; McGahey 2004:196) as having straight or contracting stems with sloping shoulders; basal shape is usually convex, although sometimes straight, with basal cortex often present. Neither La Pointe-Krebs Plantation specimen has cortex on the base, but both exhibit some on the lateral faces (Figure 3-34b-c). Tombigbee Stemmed types are similar to Maybons; for both the "quality of workmanship" is considered poor. The two examples from Area 3 at La Pointe-Krebs Plantation fit well within the ranges of thickness and width described by McGahey (2004:196). Length could not be compared, since both have damage from manufacturing failure. Dates for Tombigbee Stemmed bifaces range from 100 BC to AD 600, during the Early and Middle Woodland periods (McGahey 2004:196)

**Madison Biface (n=1).** Madison hafted bifaces are described in the literature as small triangular bifaces with straight or slightly convex bases and blades (Scully 1951:14; McGahey 2004:200). Serrated edges sometimes occur, but this is not common. The one Madison biface from Area 6 at La Pointe-Krebs Plantation (Figure 3-34d) fits well within the range of length, thickness, and width described by McGahey (2004:200). Dates for Madison bifaces range from AD 500 to AD 1700, from the Middle Woodland to early Historic periods (McGahey 2004:200).

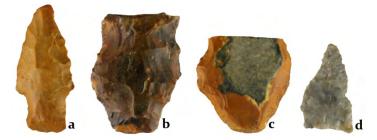


Figure 3-34. Citronelle gravel chipped stone bifaces: (a) Mud Creek biface (Area 1, FS 886); (b-c) Tombigbee stemmed bifaces (Area 3, FS 994 and 1001); (d) Madison biface (Area 6, FS 857) (all actual size).

**Debitage and Other Stone Tools (n=63).** Flakes (n=49), blocky shatter (n=12), and other tools (n=2) were recovered from Area 1 (n=10), Area 3 (n=24), Area 6 (n=21), and Area 7 (n=8). Flakes and shatter are waste products from tool manufacture. Identified raw materials include Citronelle gravel, agate, Tallahatta sandstone, and Fort Payne chert. Tools include one small biface fragment and a small pebble used as a hammerstone.

## Groundstone

Nutting Stone (n=1). One cobble-size piece of fine-grain sandstone is described as a nutting stone. It has one roughly ground surface with a small pecked and ground depression in

the center. Generally these are interpreted as stones used to crack open nuts to get the meat. Repetitive cracking of nuts would eventually create a small "nut-size" depression in the rock. Nutting stones are common artifacts at prehistoric sites, but historic Native Americans or African slaves at the La Pointe-Krebs plantation could have employed this method of cracking nuts. This sandstone nutting stone measures 7.0 by 11.5 cm and 6.0 cm thick. It was recovered from Feature 90, the lime slaking pit in Area 7.

**Groundstone Fragments (n=2).** Broken pieces of ground sandstone were recovered from Features 105 and 122 in Area 3. These may be of Native American manufacture or perhaps are whetstone fragments from the colonial plantation.

### Historic Colonial, European, Asian, and American Ceramics

This section describes all the ceramics not made by American Indians that were recovered from La Pointe-Krebs Plantation (n=4,112; Table 3-5). All are types commonly found at colonial and later historical sites along the northern Gulf Coast. Colonial-era ceramics include tin-glazed and lead-glazed earthenwares from France, Britain, and Spanish colonial Mexico; British and Rhenish stonewares; British creamware and pearlware; and British and Chinese porcelain. Colonial ceramic assemblages from sites in southwest Alabama, such as Old Mobile and the Dog River and Rochon plantations, share many parallels with the La Pointe-Krebs collection. British whiteware and ironstone and American stonewares and yellowware date to the nineteenth-century. These ceramics were recovered primarily from Area 3 (n=2,481), with smaller amounts in Area 1 (n=679), the 1995 units (n=440), Area 6 (n=299), and Area 7 (n=213).

Ware Type	1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
Tin-glazed Earthenware	55	64	213	15	32	379
Lead-glazed Coarse Earthenware	48	89	220	32	14	403
Lead-glazed Stoneware (Jackfield)	1	1	11	1	-	14
White Salt-glazed Stoneware	1	2	30	-	1	34
Brown Salt-glazed Stoneware	1	2	4	1	1	9
Rhenish Salt-glazed Stoneware	1	-	-	-	-	1
Salt-glazed Stoneware	10	3	30	2	9	54
American Salt-glazed Stoneware	-	2	7	3	-	12
American Yellowware	4	5	19	1	7	36
Creamware	101	319	832	63	24	1,339
Pearlware	70	95	250	39	5	459
Whiteware	100	29	620	81	96	926
Ironstone	13	3	29	7	13	65
Porcelain	18	7	96	9	5	135
Other/Unidentified/Burned	17	58	120	45	6	246
Totals	440	679	2,481	299	213	4,112

Table 3-5. Ceramic wares by site area.

**Tin-Glazed Earthenwares (n=379).** Represented in the La Pointe-Krebs Plantation tinglazed earthenware assemblage are French faience, English delft, and Spanish colonial majolica, all dating to the eighteenth century. These ceramics have a thin white, off-white, or bluish-white tin-opacified lead glaze over tan or pinkish soft earthenware paste. Much of the vessel body is typically plain, but decorations are often painted in blue floral or geometric designs. Tin-glazed sherds were recovered primarily from Area 3 (n=213), with smaller amounts from Area 1 (n=64), the 1995 units (n=55), Area 7 (n=32), and Area 6 (n=15).

At least 85 decorated tin-glazed sherds are French faience. Based on plate and platter rim designs (mostly painted blue), faience in the La Pointe-Krebs House collection can be classified as Brittany Blue on White, Normandy Blue on White, Provence Blue on White, Provence Yellow on White, and Rouen Brune (Walthall 1991; Waselkov and Walthall 2002). At least 12 faience sherds are Brittany Blue on White with Rim Variety A, which consists of a single blue painted band just below the plate rim (Figure 3-35a). Normandy Blue on White is represented by four plates or platters with Rim Variety B and two with Rim Variety L. Provence Blue on White faïence consists of three plate sherds with Rim Variety J (Figure 3-35 c-d). At least seven sherds (six from Area 3 and one from Area 1) belong to a St. Cloud Polychrome octagonal plate and a platter; each have nearly identical patterns with a combination of Rim Variety K and L (Figure 3-35e-g). Provence Yellow on White faience is represented by one base sherd with a yellow floral medallion (Figure 3-35h).

Rouen Brune faience is distinctive with brown lead-glazed exteriors and typical white tinglazed interiors. Fourteen sherds are Rouen Brune faïence and one decorated sherd is classified as Rouen Brune Blue on White with Rim Variety G (Figure 3-35b). Twenty-one other sherds with indeterminate blue designs, mostly at the rim, are also French faience, but could not be classified to type or rim variety. French faience sherds were recovered from the 1995 units (n=13), Area 1 (n=16), Area 3 (n=45), Area 6 (n=2), and Area 7 (n=7).

Other tin-glazed sherds could not be identified with certainty. Some are believed to be French faience, including one probable Nevers-style sherd that resembles specimens found at Old Mobile (Figure 3-36b and e). Six plate sherds from Area 3 have a simple yellow banded rim (Figure 3-36c) that may be a form of Spanish colonial majolica. Two sherds (Figure 36a and d) may be Dutch delft.



Figure 3-35. French faience: (a) Brittany Blue on White plate with Rim Variety A (Area 3, FS 898); (b) Rouen Brune Blue on White platter with Rim Variety G (Area 3: FS 898); (c-d) Provence Blue on White plates with Rim Variety J (Area 3, FS 947; Area 1, FS 1155); (e-g) St. Cloud Polychrome octagonal platter rims with Rim Varieties K and L (Area 3, FS 936; Area 1, FS 1088); (h) Provence Yellow on White floral medallion (Area 3, FS 1972) (all 90% actual size).



Figure 3-36. Unidentified tin-glazed earthenwares: (a) probable Dutch delft plate or platter with blue and yellow rim design (Area 1, FS 927); (b) probable Nevers faience, purple and green floral design (Area 1, FS 1001); (c) probable Spanish colonial majolica plate with yellow rim band (Area 3, FS 1106); (d) probable Dutch delft plate with blue and black line design (Area 3, FS 1078); (e) probable French faience platter with blue and yellow floral rim design, burned (Area 7, FS 903) (all actual size).

Thirty sherds are identified as tin-glazed majolica made in the Spanish colonies of Mexico (Goggin 1968). Seven sherds have no decorations, but have the typical off-white or cream-colored cracked glazes, unlike most French and British tin-glazes with their typically white or bluish-white castes. Twenty-three sherds have painted blue and polychrome designs. Seven sherds can be classified as Puebla Blue on White with similar floral patterns (Figure 3-37a-d). Majolica with multicolored decoration includes six Abó Polychrome sherds (Figure 3-37e-f) and one sherd each of Puebla Polychrome and Aranama Polychrome (Figure 3-37g-h). These decorations consist of lines or bands, dots, and floral patterns in brown, green, yellow, orange, and blue on off-white or cream backgrounds. Most of the majolica sherds appear to be from plates or shallow bowls. These majolica types date from ca. 1650 to 1750 and would have reached the northern Gulf Coast by ship (Deagan 1987). Spanish colonial majolica sherds were recovered from the 1995 units (n=4), Area 1 (n=1), Area 3 (n=23), and Area 6 (n=2).

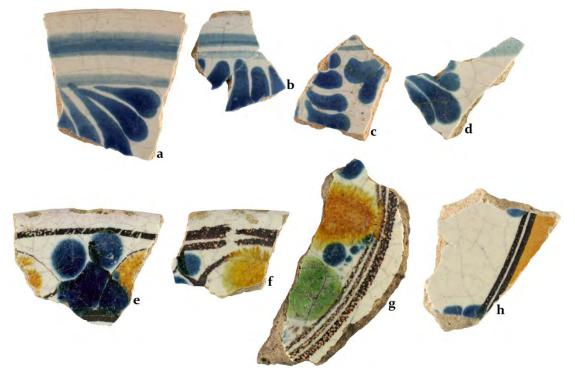


Figure 3-37. Spanish colonial majolica: (a-d) Puebla Blue on White plates (Area 3, FS 947 and 1004; Area 6, FS 963); (e-f) Abó Polychrome plate rims (1995 unit, FS 212); (g) Puebla Polychrome plate ring base (Area 3, FS 922); (h) Aranama Polychrome (Area 3, FS 919) (all actual size).

A few sherds are identified as tin-glazed British delft based on painted – predominantly blue – designs (Figure 3-38).

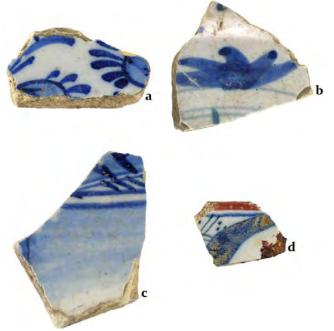


Figure 3-38. British delft: (a) blue floral foot ring base (Area 3, FS 1078); (b) blue floral and banded plate (Area 3, FS 1011); (c) blue scenic platter (Area 3, FS 1024; (d) red banded and blue geometric plate rim (Area 6, FS 1077) (all actual size).

Lead-Glazed Coarse Earthenwares (n=397). These French and British ceramics – mostly large bowls, milk pans, and storage jars – date to the eighteenth century. They have shiny lead glazes, either clear (which brings out the red, orange, or yellow paste color), brown, green, or yellow. The most common French earthenwares (n=156) are called Saintonge, with a medium green lead glaze, and Saintonge Slipped, with a white slip beneath the green lead glaze (Figure 3-39) (Barton 1981). Other examples of French lead-glazed earthenwares have green and yellow glazes in swirled or blotchy patterns with clear-glazed backgrounds (Figure 3-40). Also included in the La Pointe-Krebs Plantation assemblage are a yellow-glazed everted pot rim with a strap handle and a flat-based colander/strainer with holes, both probably of French origin (Figure 3-41a-b). Undecorated sherds with clear glaze over red paste are commonly called redware and are generally associated with English potteries. Lead-glazed coarse earthenwares were primarily found in Area 3 (n=218), followed by Area 1 (n=87), the 1995 units (n=46), Area 6 (n=32), and Area 7 (n=14).



Figure 3-39. French lead-glazed Saintonge coarse earthenwares: (a) bowl or pan rim (Area 3, FS 963); (b) Saintonge Slipped sherd (Area 3, FS 873); (c-f) bowl rims with green and yellow glaze (Area 3, FS 919; 1995 unit, FS 281; Area 3, FS 959 and 911) (all two-thirds actual size).



Figure 3-40. French lead-glazed coarse earthenwares: (a) clear, brown, and green-glazed pitcher (1995 unit, FS 258); (b) yellow-slipped bowl base with repair hole (Surface Collection, FS 256); (c) yellow-slipped marbled footed base (Area 1, FS 1179) (all actual size).

**Iberian Coarse Earthenware (n=6).** These six lead-glazed earthenware sherds with a greenish cast are fragments of storage vessels commonly called Spanish (or Iberian) olive jars. They were produced on the Iberian peninsula of southwestern Europe, that is, in Spain and Portugal, so specialists advocate the less specific name (Figure 3-41c-d). Two sherds each were recovered from the 1995 units and Areas 1 and 3.



Figure 3-41. Lead-glazed coarse earthenwares: (a) yellow lead-glazed everted rim with strap handle, probably French (Area 1, FS 942); (b) yellow or green lead-glazed flat-based colander or strainer sherd, French (Area 7, FS 903); (c-d) light green lead-glazed sherds from an Iberian storage jar (Area 3, FS 994) (all actual size).

**British Lead-Glazed Stoneware (n=14).** British ceramics called Jackfield ware were produced from the 1740s to around 1780 (Noël Hume 1969a:121-122). They have brick red paste with dark brown lead glaze and are usually thin-walled, well-made tea serving set pieces – teapots, cups, and saucers. Eleven Jackfield sherds were recovered from Area 3 and one sherd each from a 1995 unit and Areas 1 and 6.

**British White Salt-Glazed Stoneware (n=34).** White salt-glazed stonewares are molded tablewares mass produced in English potteries from the 1720s to 1770s (Edwards and Hampson 2005:176). Vessels are mostly plain, but some have rim border designs. Five sherds have the barleycorn pattern and five have the mosaic or basketweave pattern (Figure 3-42a-b), all very common from ca. 1750 to 1770 in the North American colonies (Edwards and Hampson 2005:215). These stonewares (mostly plate and platter sherds) were recovered from the 1995 units (n=1), Area 1 (n=2), Area 3 (n=30), and Area 7 (n=1).

**Brown Salt-glazed Stoneware (n=9).** Brown salt-glazed stonewares, usually jugs and storage jars from the colonial period, could have been made at either British or Rhenish potteries. One sherd has the partial modeled beard of the *Bartmaske* or bearded facemask that appears on

Bartmann or Bellarmine jugs or bottles (Figure 3-42c). The *Bartmaske* motif originated with the fifteenth-century stoneware potters of Cologne and Frechen, Germany (Gaimster 1997:209). The motif consists of a grotesque male face with wavy hair and beard, usually found on the shoulder of globular brown salt-glazed stoneware jugs or bottles. The motif continued in use into the early eighteenth century, by which time it was adopted by British potteries (Horne 1985:5-6). The sherd from La Pointe-Krebs Plantation is likely of British manufacture, dating to the early to mid-1700s. Some of the plain brown salt-glazed stoneware sherds may also be from Bartmann or Bellarmine pots. These British stonewares were recovered from the 1995 units (n=1), Area 1 (n=2), Area 3 (n=4), Area 6 (n=1), and Area 7 (n=1).

**Rhenish Westerwald Salt-glazed Stoneware (n=1).** Produced in the Rhine Valley of what is now Germany, Rhenish Westerwald stonewares – usually pitchers, jugs, tankards, and mugs – are gray salt-glazed with incised decorations infilled with cobalt, designs common from the late 1600s to the mid-1700s (Gaimster 1997:267-268). Only one sherd of Westerwald stoneware, from an Area 1 unit, was identified in the La Pointe-Krebs Plantation collection (Figure 3-42d). The sherd has a beaded circular medallion with the letters "GR" in cobalt representing a King of England, either George I (1714-1727) or George II (1727-1760) (Gaimster 1997:268). The thinness and small curvature of this sherd suggests a pint-size mug or tankard, and the medallion design is a near match to a mug excavated at a tavern in colonial Williamsburg (Noël Hume 1969b:29).



Figure 3-42. European stoneware: (a) British white salt-glazed stoneware with barleycorn pattern (Area 3, FS 1078); (b) British white salt-glazed stoneware with mosaic or basketweave pattern (Area 3, FS 897); (c) brown salt-glazed Bellarmine jar (Area 3, FS 1013); (d) Rhenish gray salt-glazed stoneware with "GR" medallion and cobalt highlighting (Area 1: FS 887) (all actual size).

American Salt-glazed Stoneware (n=12). American nineteenth-century stonewares include salt-glazed with brown, tan, or gray surfaces, usually distinguishable from European salt-glazed stonewares. These sherds come from medium to thick utilitarian vessels, such as jugs and

jars. Salt-glazed stonewares probably were made in local potteries along the Gulf Coast, such as in the Biloxi and Mobile Bay regions (Brackner 2006; Gums 2001). American stoneware sherds were recovered from Area 1 (n=2), Area 3 (n=7), and Area 6 (n=3).

**Other Salt-glazed Stonewares (n=54).** Some salt-glazed stoneware sherds could not be indentified to country of origin, including specimens with gray, tan, and brown glazes. These sherds were recovered from the 1995 units (n=10), Area 1 (n=3), Area 3 (n=30), Area 6 (n=2), and Area 7 (n=9).

American Yellowware (n=36). This American-made utilitarian kitchenware was popular from the 1820s to the early 1900s. Generally these are medium- to thick-walled vessels, usually large mixing bowls, with some examples of pitchers and other hollowwares. Although most are plain, decorations can include painted bands and Mochaware patterns. Most of the yellowware from La Pointe-Krebs Plantation is plain, but a few sherds have blue bands and dendritic patterns. Yellowware was recovered from the 1995 units (n=4), Area 1 (n=5), Area 3 (n=19), Area 6 (n=1), and Area 7 (n=7).

**Creamware (n=1,339).** The British produced prodigious quantities of creamware for export from the 1760s until the 1820s. Creamware has a hard white paste with a light creamtined lead glaze. Compared to other tablewares, these are very thin-walled, delicate, and rarely decorated. The few decorations include plate and platter embossed rims, known as the Royal Pattern (Figure 3-43a), Feather Edge, and molded floral designs (Figure 3-43b). Creamware was primarily found in Area 3 (n=832), followed by Area 1 (n=319), the 1995 units (n=101), Area 6 (n=63), and Area 7 (n=24).

**Pearlware (n=459).** British pearlware tablewares date from the 1770s to the 1820s. Pearlware has a hard white paste with a bluish-clear lead glaze. Pearlware is often decorated, sometimes nearly completely covered with designs, including blue or polychrome painted floral, scenic, and geometric patterns (Figure 3-43c-e), blue transfer-printed floral, geometric, and scenic designs (Figure 3-43f-g), and blue and green edge decorations (Figure 3-44). Pearlware was primarily found in Area 3 (n=250), followed by Area 1 (n=95), the 1995 units (n=70), Area 6 (n=39), and Area 7 (n=5).

Whiteware (n=926). Whiteware was first produced in British potteries around 1820 and shortly afterwards replaced creamware and pearlware as the most common tableware. Many pearlware decorations continued to appear on whiteware, including blue and green edge decorations, painted designs (Figure 3-45a), Mochaware patterns (Figure 3-45b), and transfer prints (Figure 3-45c-d). By the 1840s colored transfer prints other than blue – such as red, green brown, and black – became popular. Whiteware sherds were primarily found in Area 3 (n=620), followed by Area 7 (n=96), the 1995 units (n=100), Area 6 (n=81), and Area 1 (n=29).

**Ironstone (n=65).** Ironstone tablewares were introduced in the 1840s by British potteries and were common throughout the second half of the nineteenth century (Wetherbee 1996). Generally ironstone vessels were thick, heavy, and undecorated. Sixty-five sherds of ironstone were identified in the La Pointe-Krebs assemblage, although it is sometimes hard to distinguish from some whitewares. Three sherds have molded floral patterns and the others are undecorated.



Figure 3-43. British creamware and pearlware: (a) creamware platter with Royal Pattern rim (Area 3, FS 946); (b) creamware handle with floral design (Area 3, FS 867); (c) pearlware bowl with scenic design (Area 3, FS 867); (d) pearlware saucer with blue banded and floral design (Area 6, FS 980); (d) pearlware saucer with polychrome banded and floral design (Area 3, FS 916); (f) pearlware plate with blue transfer-printed floral design (Area 6, FS 979); (g) pearlware platter with blue transfer-printed scenic and floral design (Area 3, FS 874) (all actual size).



Figure 3-44. Edge-decorated pearlware: (a) platter with blue straight mars (Area 3, FS 936); (b) platter with blue curved mars and bud motif (Area 6, FS 980); (c) platter with blue straight mars and beaded edge (1995 unit, FS 226); (d) platter with rope and hanging fern motif (Area 6, FS 980); (e) platter with blue hanging fern and beaded edge (Area 3, FS 936); (g) platter with green straight mars (Area 1, FS 1116); (h) platter with green curved mars (1995 unit, FS 282) (all actual size).

At least 14 plates or platters, four cups or bowls, and one pitcher are represented by rims or bases. Ironstone was recovered from the 1995 units (n=13), Area 1 (n=3), Area 3 (n=29), Area 6 (n=7), and Area 7 (n=13).

**Porcelain** (n=135). Porcelain has been produced for centuries and plain porcelain is difficult to date or identify to country of origin. Porcelain has hard white paste with a clear glaze, or in some cases is unglazed. Vessels are often thin-walled and well made, and include mostly tablewares, particularly tea serving sets. Most of the porcelain in the La Pointe-Krebs Plantation assemblage is undecorated (n=86, 62.3 percent). Decorated porcelain includes 16 sherds



Figure 3-45. British whiteware: (a) painted blue and green banded and floral cup (Area 3, FS 1072); (b) Mochaware annular-decorated bowl (1995 unit, FS 223); (c) blue transfer-printed floral plate (Area 7, FS 894; (d) red transfer-printed floral and scenic platter (Area 3, FS 967) (all actual size).

with blue painted designs from the 1700s and 1800s and 14 decal transfer-printed and three painted sherds from the early twentieth century. Porcelain was recovered from the 1995 units (n=18), Area 1 (n=7), Area 3 (n=96), Area 6 (n=9), and Area 7 (n=5).

There are four sherds of eighteenth-century Chinese porcelain (Figure 3-46a-b), each with delicately painted blue flowers similar to porcelain sherds from the French colonial site of Old Mobile (1702-1711) (Shulsky 2002). Two other Chinese porcelain plates or saucers have similar rim border designs (Figure 3-46c, d, and g). At least six blue painted porcelain sherds are of British manufacture (Figure 3-46e-f and h). These are thicker sherds with bluish-white glazes and floral and linear designs, British-made semi-porcelain imitations of Chinese porcelain. Four other porcelain sherds with blue painted floral or linear designs could not be identified to country of origin.

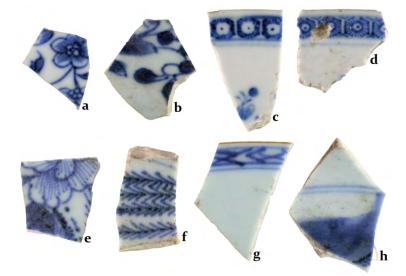


Figure 3-46. Porcelain: (a-b) Chinese porcelain with blue floral designs (Area 1, FS 1192 and FS 1178); (c-d) Chinese porcelain with similar blue rim border designs (Area 3, FS 1078 and 994); (e-f) British porcelain with blue floral designs (Area 3, FS 890; Area 1, FS 1161); (g) Chinese porcelain plate with red rim and blue geometric rim border design (Area 3, FS 994); (h) British porcelain with blue design (Area 3, FS 1004) (all actual size).

At least 18 porcelain sherds are from fluted teacups and saucers from the same set. One cup base has a green-printed circular backmark – "GERMANY 73" – and dates to the late nineteenth or early twentieth centuries. A cup from a different tea service is marked in green, "MADE IN GERMANY." Ten other porcelain cup and saucer sherds have decal transfer-printed floral designs and date to the early twentieth century. All of these later porcelain sherds were found in Area 3.

### **Bottle and Container Glass**

The glass assemblage (n=4,737) from La-Pointe Krebs Plantation is large in quantity; most are plain fragments, although some diagnostic lips and bases are present (Table 3-6). Early historic glass primarily includes olive green bottle fragments, French blue-green bottle fragments, and a few clear glass British stemware pieces from the colonial era. Aqua, amber, and clear glass dates to the nineteenth and twentieth centuries. As expected, the 1995 units and Area 6, the units closest to the La Pointe-Krebs House, yielded large amounts of modern glass.

**Olive Green Glass (n=2,008).** These globular, round, or square bottles would have contained wine, brandy, and other liquids. Country of manufacture can usually be determined by the treatments of the bottle lip and the pontil marks on bottle bases. British bottles have a variety of applied tooled string rims, often more than one (Jones 1986). French bottles usually have a single flat or round string applied near the rim. Pontil marks are left from finishing a bottle base or kick-up (Figure 3-47). A glass-tipped pontil leaves sharp pieces of glass where the blowpipe was detached. Alternatively, sand could be used on the pontil rod to produce a smoother surface

and leaving a sandy texture to the glass in the bottle base. Generally glass-tipped pontil marks are found on French bottles and sand pontils on British bottles. Furthermore, French bottles are usually pale to medium olive green and British bottles are generally dark olive green.

One high-shouldered, round, medium olive bottle was found nearly intact (missing just a small shoulder piece) near the bottom of Feature 163, the large storage pit in Area 1. This is a French bottle with an applied round string rim and glass-tipped pontil mark (Figure 3-48). The bottle measures 24.0 cm (9.5 inches) in height. It has a very heavy swirled brownish patination resulting from its burial in a deep anaerobic environment.

Glass Color	1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
Olive Green	292	449	902	255	110	2,008
French Blue-Green	2	54	44	20	-	120
Aqua	176	98	240	137	12	663
Clear	385	132	266	396	24	1,203
Amber or Brown	103	7	39	16	-	165
Amethyst	17	14	21	8	11	71
Cobalt Blue	14	1	16	6	-	37
Milk Glass	27	4	17	8	-	56
Other Colors/Modern	106	106	132	66	4	414
Totals	1,122	865	1,677	912	161	4,737

Table 3-6. Bottle and container glass by color and site area.

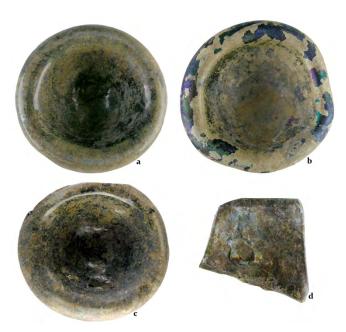


Figure 3-47. Olive green bottle bases: (a- b) kick-ups with sand pontil marks (Area 3, FS 924 and FS 1037); (c) kick-up with glass-tipped and sand pontil marks (Area 3, FS 1014); (d) case bottle base with glass-tipped pontil mark (Area 3, FS 1083) (all half size).



Figure 3-48. French medium olive green bottle from Feature 163, the large storage pit in Area 1 (FS 1188) (half actual size).



Figure 3-49. Olive green bottles from Feature 92 in Area 3 (FS 898): (a) French bottle with applied flat string rim; (b) British bottle made in a Rickett's mold with a downtooled and V-shaped rim (all half size).

Two nearly complete olive green bottles were found together in Feature 92, a large tree disturbance that cut through a colonial trench (Feature 104) in Area 3. One round bottle is smaller than most, has a flat string rim with a diameter of 2.5 cm (1.0 inch), and a rough sand pontil on the kick-up base, which measures 5.5 cm (2.25 inches) in diameter (Figure 3-49a). It is a pale olive green bottle of French manufacture. Three lip fragments with applied flat or round string rims and two round base fragments are of French manufacture. The other nearly complete round bottle from Feature 92 is dark olive green with a downtooled and V-shaped rim measuring 2.5 cm (1.0 inch) in diameter and was made in a three-piece Rickett's mold, introduced in England in the 1820s (Jones 1986:88) (Figure 3-49b). The base fragment is 9.5 cm (3.75 inches) in diameter with the molded letters "BRISTOL H. RIC—".

Also in the British bottle assemblage is another fragmentary Rickett's mold base, three bases with sand pontils, one base with leftover glass as well as a rough sand pontil mark, and one kick-up fragment (see Figure 3-47). British bottle bases measure about 9.0 cm (5.5 inches) in diameter. Four British bottle lips have applied V-shaped string rims, one has a double V-shaped string rim, and one has a round and flat string rim.

Also in the La Pointe-Krebs assemblage is a small fragment of a round bottle seal, which could have identified the contents and makers. Only the letters "du" is visible, suggesting it is

from a French wine bottle. There are also a few fragments of square or case bottle that are medium to dark olive green. One has a glass-tipped pontil mark, suggesting it is of French origin (Figure 3-47d). A few fragments of emerald olive green glass bottles probably also date to the colonial era.

**French Blue-Green Glass (n=120).** This type of French colonial glass is pale turquoise, and most often comes in the form of wide-mouthed bottles or *flacons* (square or round) or small round or square, narrow-mouthed vials called *fioles*. Most are small nondiagnostic fragments. One rim from a small round bottle has an applied round string rim. It was found in Feature 163, the large storage pit in Area 1. One base fragment from a small square bottle was used as a scraper and is discussed below with glass scrapers (see Figure 3-52). It was found in an Area 6 unit.

Aqua Bottle Glass (n=663). These bottle fragments are most likely from the nineteenth and early twentieth centuries, and the few diagnostic pieces are likely rectangular patent medicine bottles. One medicine bottle is embossed "SPOHNS DISTEMPER COMP -SPOHN MEDICAL COMPANY GOSHEN, INDIANA U.S.A." from the late 1800s. Another fragment has the letters "GHAM" that could stand for Birmingham, Alabama.

**Clear Bottle and Container Glass** (n=1,203). Clear glass was found in abundance around La Pointe-Krebs House and much of it is of modern age, but a few colonial era pieces could be identified. Clear glass was examined under short-wave ultraviolet (UV) light to determine the composition. Glass that looks "ice blue" under UV light contains lead, and glass that appears yellow contains soda lime or potash. This "experiment" was an effort to identify the presence of British lead glass from the colonial era. Colonial-era British stemware made of clear glass includes three baluster fragments from goblets or wine glasses (Figure 3-50) and a round base fragment from a compote, a stemmed serving dish. Two balusters and the compote base are of lead glass and the other baluster contains soda lime or potash. The type of glass and baluster style suggests these date from the mid-1700s to early 1800s (Bickerton 1984). Stemware was recovered from Area 1 (n=1), Area 3 (n=2), and Area 6 (n=1).



Figure 3-50. British stemware: (a) six-sided baluster and base fragment (Area 1, FS 930; Area 3, FS 890); (b) rounded baluster and base fragment (Area 3, FS 890); (c) 10-sided baluster fragment (Area 6, FS 1008) (all actual size).

Most of the later glass is from nondiagnostic pieces, although numerous fragments of fluted and plain drinking tumblers were identified. Nineteenth-century glass includes one whole rectangular bottle that probably had a paper label with the manufacturer's name and contents, either medicine or a food sauce (Figure 3-51a). A smaller rectangular bottle is embossed "McCORMICK & CO. BALTIMORE," a company founded in 1889 that produced food sauces and spices (Figure 3-51b). One clear glass rectangular bottle fragment has ounce measurements on the side and may have been for medicine. The assemblage includes two clear glass bottle stoppers. Fragments of clear glass drinking tumblers from the late nineteenth and twentieth centuries are relatively common. Some tumblers are fluted and a few base pieces have a radiating floral-like pattern.

One unique artifact is a nearly complete "barroom" shot glass with a painted stenciled scene of a Yankee, a Rebel, a Carpetbagger, and a boll weevil with the words "Say When You-All!" (Figure 3-51c). The glass is attributed to Gay Fad Studios, a woman-owned company in business from 1945 to 1963 in Lancaster, Ohio. This broken glass was recovered from an Area 7 unit.



Figure 3-51. Clear bottle and container glass: (a) whole sauce or medicine bottle (1995 unit, FS 270); (b) whole sauce bottle from McCORMICK & CO, Baltimore, Maryland (1995 unit, FS 826); (c) clay impression of McCormick mark; (d) two sides of "barroom" shot glass attributed to Gay Fad Studios, 1945-1963 (1995 unit, FS 254) (all half size).

Amber or Brown Bottle Glass (n=165). Fragments of amber or brown bottles date to the late nineteenth and twentieth centuries. Diagnostic pieces include liquor bottles and Clorox bleach bottles.

Amethyst Glass (n=71). Amethyst glass bottles also date from the late nineteenth century until around 1920. Few diagnostic pieces occur in the La Pointe-Krebs Plantation assemblage.

**Milk Glass Jar Lid Liners.** These were found in small numbers, and include one embossed "[GE]NUINE ZINC CAP LINER FOR BALL MASON JARS" and the other "[GEN]UINE BOYD CAP-." These jar liners date to the late nineteenth and early twentieth centuries.

Other Colored Glass and Modern Glass (n=414). These include many others colors, such as various shades of blue and green, yellow, pink or peach, purple, and modern glass, such as soda bottles.

## **Glass Scrapers**

Five pieces of broken bottle glass were intentionally chipped into scraping tools or have chipped edges resulting from use as scrapers. These glass tools were probably used for scraping animal hides or working wood, but may have had other uses. Historic era Native Americans chipped broken pieces of olive green bottle glass into scraping tools, for instance at Old Mobile, 1702-1711. One specimen from La Pointe-Krebs Plantation made from a blue-green glass bottle probably dates to the French colonial period. But the utilized pieces of emerald green and clear glass in the assemblage post-date the colonial era and were used by later plantation occupants. Glass scrapers have been associated with African slaves in archaeological contexts at southern plantation sites (Wilkie 1994:238-243).



Figure 3-52. Glass scrapers: (a) emerald olive green glass scraper (1995 unit, FS 255); (b) French bluegreen square bottle base fragment used as a scraper (Area 6, FS 986); (c-d) clear glass scrapers (1995 Unit, FS 243; Area 7, FS 861) (all actual size). The large fragment of emerald olive green glass has worked edges on the two long sides (Figure 3-52a). It measures 4.5 by 9.3 cm and was recovered from a 1995 unit. The base of a small square bottle from an Area 6 unit, possibly of French blue-green glass, has one broken edge with uniform chipping (Figure 3-52b). The opposite broken edge has minimal chipping showing some utilization. This square base measures 3.7 cm across and at least 3.0 cm tall; the bottle top is missing. Three pieces of clear glass appear to be scraping tools. One somewhat triangular piece, almost shaped like an arrowhead, has worked edges along both sides (Figure 3-52c). It measures 1.5 by 3.0 cm and was found in a 1995 unit. One small rectangular piece of clear glass has some evidence of scraping use wear on all four sides (Figure 3-52d). It measures 2.0 by 2.5 cm and came from Area 7. Another utilized clear glass round base from a much later bottle, probably early twentieth century, was found in Feature 90 pit in Area 7, where it was intrusive into that early French colonial feature.

### **Kitchen Utensils and Household Artifacts**

**Iron Forks (n=2).** Two identical forks from the same set of cutlery were found in the Area 1 midden and Feature 179 trench in Area 1. The forks, which are missing the ends of the tangs, measure 14.5 and 16.0 cm long. Each has a shaped handle and squared shank.

**Knife Blades (n=5).** Three iron knife blade fragments were recovered from Feature 163, the large storage pit in Area 1, and one each from an Area 1 unit and an Area 6 unit.



Figure 3-53. Kitchen utensils: (a) carved bone handle (Area 6, FS 979); (b) carved bone handle with brass posts attaching iron utensil (Area 3, FS 936); (c) carved bone handle fragment for iron fork or spoon (Area 3, FS 911); (d) fragment of a sandstone whetstone (Area 6, FS 979) (all actual size).

**Bone Utensil Handles (n=3).** Utensil handles carved from mammal bone were found in Area 3 (n=2) and Area 6 (n=1). One handle is complete, measuring 9.0 cm long and 1.5 cm wide (Figure 3-53a). The other two handles are fragmentary, but each has the iron handle inset held by brass posts (Figures 3-53b and c). One of these appears to be from a knife.

**Whetstones (n=2).** Whetstones are smoothly ground stones used for sharpening knife blades. Fragments of two sandstone whetstones were recovered from Feature 165 in Area 1 and Feature 113 in Area 6 (Figure 3-53d).

**Cast Iron Kettle Fragments (n=6).** Six fragments of curved cast iron probably come from cooking kettles or Dutch ovens. These were recovered from Area 1 (n=2) and Area 3 (n=4).

**Iron Barrel Hoops (n=16).** Strap iron hoops were used to hold wooden barrels together. One small complete hoop, 16.5 cm in diameter and 2.0 cm wide, was found in an Area 6 unit. Fifteen fragments of strap iron, most from large barrel hoops, were found in Area 1 (n=8), Area 3 (n=7), and Area 6 (n=1).



Figure 3-54. Metal kitchen utensils: (a) copper ladle missing its handle, top and side views (Area 1, FS 1169); (b) iron handle attached to copper kettle (Area 3, FS 919) (all half size).

**Copper Ladle and Kettle (n=2).** A large handleless copper ladle was found in Feature 173, the French colonial builder's trench around Feature 163, the large storage pit in Area 1 (Figure 3-54a). The ladle bowl measures 10.0 cm in diameter and was probably discarded when the handle broke off. A piece of a copper kettle rim with an iron handle was recovered from around Feature 89, the brick foundation in Area 3 (Figure 3-54b). The iron handle is attached by two brass rivets.

**Doorknob** (n=1). A small fragment of a white glazed porcelain doorknob was recovered from Area 6 on the south side of the La Pointe-Krebs House.

**Lamp Globe Glass.** Very thin curved clear glass from oil lamp globes or similar lighting devices is hard to distinguish from some bottle glass, so an exact count is not possible. However numerous fragments were identified, most from the 1995 units and Area 6 units around La Pointe-Krebs House. One piece from Area 3 is from a lamp globe with a scalloped rim.

**Furniture Tacks (n=30).** Small short tacks made of brass probably served as upholstery tacks for furniture or leather-covered storage trunks. The tack heads are less than 1.0 cm across and most have square shanks. These were recovered from all areas, with most found in the 1995 units (n=8) and Area 6 (n=15) around La Pointe-Krebs House.

**Finial (n=1).** A small decorative brass finial may be from a lamp or could be a drawer pull or some other piece of furniture. It measures 4.2 cm in length and has a hole with an iron nail for attachment (Figure 3-55a). It was recovered from Feature 179 trench in Area 1.

**Furniture Latch (n=1).** A small iron latch mechanism may be from a piece of furniture, such as a trunk, cabinet, or desk. It is roughly triangular, measuring 3.0 by 3.2 cm across, and has three short square iron nails for attachment (Figure 3-55b). It was found in the Area 3 midden.



Figure 3-55. Household artifacts: (a) brass finial or pull (Area 1, FS 1175); (b) brass furniture latch with iron nails (Area 3, FS 936); (c) brass clock key (Area 3, FS 870); (d) brass key (Area 3, FS 897); (e) iron key (Area 1, FS 1122) (all actual size).

**Keys (n=5).** Two brass keys were recovered from Area 3 units. One has a moveable decorative handle and round shank, measures 4.0 cm in length, and was probably used to wind a large clock (Figure 3-55c). The other larger key may be for a door, storage trunk, or large padlock. It is 7.5 cm long, has an oval loop handle, and a hollow shank, typical of keys from the nineteenth century (Figure 3-55d). A complete iron key recovered from Feature 165, the shell and mortar midden in Area 1, is nearly identical in shape and size to the whole brass key, measuring 8.5 cm long (Figure 3-55e). A loop handle and stem fragment of a second iron key was found in Feature 163, the large storage pit in Area 1.

### **Food Remains**

Food remains are detailed in Chapters 4 and 5. However, some notable remains were recovered unsystematically during troweling and are not included in the specialized analyses. They are briefly described here.

**Egg Shells.** Numerous small pieces of bird egg shell (34.7 grams), probably from chickens, were recovered from the 1995 units, mostly from the south side of La Pointe-Krebs House. A considerable quantity (12.5 grams, 36.0% by weight) came from Unit 19, adjacent to a door on the south side of the house.

**Carbonized Corn Cobs (n=17).** Seventeen fragments of corn cobs (6.5 grams) were recovered, all from the 1995 units around La Pointe-Krebs House, mostly from Unit 36 (5.0 grams, 76.9% by weight) on the west side of the house. The largest cob fragment measures 22.04 mm in diameter.

**Carbonized Nuts and Seeds (n=218).** Most of these specimens are fragments and were not identified to species. They include 57 nut or seed fragments, 31 seed fragments, and one nut fragment. Identified fragmentary specimens include 122 peach pits, three walnut shells, two pecan shells, one acorn, and one pumpkin seed. Peach pit fragments were concentrated in Area 3 (72, 59.0% by count), with many coming from Feature 105 (n=17, 13.9%), the large pit, and Feature 122 (n=11, 0.09%), the double stockade trenches. Peach pits were also common in Features 163 and 173 (n=22, 18.0%), the large pit in Trench 2, Area 1. One peach pit is nearly whole and measures 15.03 mm thick with an estimated length of 27.00 mm and width of 15.00 mm.

### **Structural Materials**

**Iron Nails.** Iron nails and nail fragments were abundant. Literally tens of thousands were recovered; most are corroded and unidentifiable as to shape and method of manufacture. Nail types include wrought, cut, and wire. The few wrought "rosehead" nails date to the colonial era and are typical of French construction (Figure 56a-c) (Edwards and Wells 1993).

**Spikes (n=18).** Spikes or spike fragments were recovered from Area 1 (n=4), Area 3 (n=10), and Area 7 (=4). Most have square shanks and are handwrought. One complete square spike measures about 14.0 cm long and has an oval head, 3.0 by 3.5 cm across. This was found in the Feature 90 lime slaking pit in Area 7.

**Shutter Pintles (n=3).** Handwrought iron pintles to attach wooden shutters to wooden buildings were typically used in colonial and early American construction. One whole pintle was recovered from the site surface north of Area 1. The hinge pin is 4.0 cm in length and the shank is 10.0 cm long (Figure 3-56d). Another whole pintle and a pintle fragment were found in Feature 163, the large storage pit in Area 1. The whole pintle measures 6.5 by 9.0 cm.



Figure 3-56. Iron hardware: (a-c) wrought rosehead nails (Area 3, FS 1017; Area 7, FS 294 and 892); (d) shutter pintle (Area 1, FS 1205) (all actual size).

**Window Glass.** Flat pale aqua and clear glass thought to be windowpane fragments are abundant, particularly in the 1995 units and Area 6 around La Pointe-Krebs House. Much of the clear glass appears to be of recent age.

**Bricks.** Thousands of bricks and brick fragments were recovered from La Pointe-Krebs Plantation, most in the 1995 units and Area 6 around La Pointe-Krebs House and in Area 3 south of the house. Both soft paste bricks believed to date to the colonial period and hard paste bricks from the nineteenth and twentieth centuries are present. Colors range across various shades of orange, red, gray, and brown. French-style bricks from the colonial era have thicknesses ranging from 0.75 to 1.5 inches, about half that of later standard size bricks that are at least 2.0 inches thick (Figure 3-57a-b). French-style bricks, both whole and half fragments, were very common in Area 3 associated with the Feature 89 brick wall foundation. Many of the French-style bricks



Figure 3-57. Structural materials: (a-b) French-style bricks with drawn profiles (Area 3, FS 1018); (c) tabby mortar with oyster shells (Area 6, FS 980) (all half size).

from La Pointe-Krebs Plantation are poorly made; the clay matrix looks poorly mixed, the surfaces are rough, and uneven firing created multiple colors within a single brick. These colonial-era bricks were probably made on-site by enslaved African workers at La Pointe-Krebs plantation, although no evidence of a brick clamp for on-site production was found during these investigations.

**Tabby and Mortar.** Tabby cement is a structural material that has large pieces of oyster and clam shells in a mortar matrix. It was made of lime created by burning and crushing shells, primarily of oysters and *Rangia* spp. clams, and is typically associated with colonial architecture in the Southeast. The walls of the central and eastern rooms of La Pointe-Krebs House consist of form-poured tabby constructed late in the British colonial period. Colonial mortar resembles tabby, minus the large shell fragments, and was made on site, based on the excavation of the lime slaking pit, Feature 90. Mortar from the nineteenth century and later has a consistently smooth texture with few if any shell pieces. Mortar was recovered in abundance from La Pointe-Krebs Plantation, especially from Feature 90, but few pieces of tabby (Figure 3-57c).

**Roofing Slate.** Small fragments of dark gray roofing slate were recovered from the 1995 units, Area 3, and Area 6. Roof slate was not used here as a construction material in the colonial era, but was employed during the nineteenth and twentieth centuries.

### **Iron Tools**

**Pick (n=1).** One fragmentary blade portion of an iron pickaxe head was recovered from the Area 1 midden. The circular haft portion that held the wooden handle has a diameter of 2.5 cm and the blade was greater than 8.0 cm long.

**Chisel (n=1).** An iron chisel was recovered from Feature 126 posthole in Area 6. It measures 23.4 cm in length, 2.6 cm wide at the top, and 0.8 cm wide at the tapered point end.

**Files (n=3).** These include fragments of a flat file and two 3-sided or triangular files. The flat file is 1.5 cm wide and at least 9.0 cm long. It was recovered from the Area 1 midden. One triangular file fragment is at least 12.7 cm long and is in the general collection. The other triangular file fragment was found in the Area 3 midden.

#### **Glass Beads**

European-made glass beads are relatively abundant with 878 specimens. Most date to the colonial periods of the eighteenth century, although a substantial number date to the early nineteenth century, late in the La Pointe-Krebs Plantation occupation. Beads were classified according to the system established by Kenneth and Martha Kidd (1983) and refined by Karlis Karklins (1985). The La Pointe-Krebs Plantation glass bead assemblage contains 735 drawn, 89 wound, 20 mold-pressed, 10 Prosser-molded, one blown, and 23 unidentified or burned beads (Tables 3-7 and 3-8). Glass beads were concentrated in the 1995 units (n=414) around La Pointe-Krebs House, with fewer examples in Area 3 (n=218), Area 6 (n=131), Area 1 (n=92), and Area 7 (n=23).

The glass beads subdivide into four main groups: (1) small seed beads (often called embroidery beads); (2) tubular beads; (3) oval, round, or donut-shaped necklace beads, and (4) faceted beads. Most of the beads are monochrome, primarily white, blue, and black, with fewer examples of green, red, yellow, or tan. The most common are white seed beads (n=154) and black seed beads (n=112), followed by black faceted beads (n=54).

Туре	Description	1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
la*	Tubular, Dark Ruby Red	2	-	-	-	-	2
la*	Donut, Mint Green	1	1	2	-	-	4
la2	Tubular, Black	8	6	5	3	1	23
la3	Tubular, Light Gray	5	2	2	-	-	9
la5	Tubular, White	1	2	2	-	1	6
la6	Tubular, Light Ivory	1	-	-	-	-	1
la8	Tubular, Citron	1	-	-	-	-	1
la9	Tubular, Brite Mint Green	3	-	1	-	-	4
la12	Tubular, Turquoise	-	-	1	-	-	1
la13	Tubular, Aqua Blue	-	-	1	1	-	2
la14*	Tubular, Robin's Egg Blue	-	10	5	1	-	16
la15	Tubular, Brite Blue	1	-	-	1	-	2
la16	Tubular, Shadow Blue	1	-	-	-	-	1
la19	Tubular, Brite Navy	-	-	1	-	-	1
lc*	Round, 6-Sided, Light Gray	1	-	-	-	-	1
lc2	Square, 4-Sided, Ruby	-	-	-	1	-	1
lc4*	Round, 6-Sided, Purple	-	-	1	-	-	1
lc4*	Round, Tubular, or Oblong, 5- or 6-Sided, Black	32	-	13	9	-	54
lc5*	Tubular, 6-Sided, Clear	-	-	-	2	-	2
lc5	Round, 5-Sided, Clear	1	-	-	1	-	2
lc7*	Oblong, 5-Sided, Citron	-	-	-	1	-	1
lc7*	Round, 5-Sided, Citron	-	-	-	1	-	1
Ic8	Round, 5-Sided, Amber	1	-	-	-	-	1
lc12	Round, 5-Sided, Brite Copan Blue	1	-	-	-	-	1
lc13	Round, 5-Sided, Brite Navy	-	-	-	1	-	1
lf*	Round, Faceted, Other Colors	3	-	-	-	-	3
lf1	Round, 6-Sided, Black	1	-	1	1	-	3
lf2	Round, 6-Sided, Clear	-	-	1	2	-	3
lf5	Round, 5-Sided, Amethyst	1	-	-	-	-	1
lla*	Seed, Other Colors	31	2	-	2	-	35
lla2*	Seed, Purple	-	-	3	-	-	3
lla2	Seed, Redwood	5	-	1	-	-	6
lla4	Round, Redwood	1	-	-	-	-	1
lla5	Round, Ruby Red	-	-	-	1	-	1
lla6	Round, Black	2	-	-	1	-	3
lla7	Seed, Black	47	16	31	15	3	112
lla8	Oval, Black	1	-	-	-	-	1
lla9	Oval, Light Gray	5	-	-	-	-	5
lla12	Seed, Oyster White	42	-	-	2	-	44
lla13	Round, White	4	-	-	1	-	5
lla14	Seed, White	41	1	4	6	1	53
lla15	Oval, White	1	3	4	Ŭ	6	14
lla17*	Seed, Yellow	-	-	-	1	-	14
lla19	Seed, Amber	11	-	1	-	_	12
lla21	Seed, Citron	6	-	-	2	-	8
lla22	Seed, Mustard Tan	4	-	-	-	-	4
lla25	Seed, Brite Mint Green	2	-	-	-	-	2
lla27*	Seed, Brite Green	-	-	-	1	-	1
lla27	Seed, Emerald Green	9	5	7	8	-	29
lla28	Seed, Dark Palm Green	2	1	-	8 1	-	4
lla37	Seed, Aqua Blue	1	-	- 8	-	-	4 9
11037	Jeeu, Aqua blue	1 <u>1</u>	-	0	-	-	9

Table 3-7. Drawn glass beads by type and site area.

144

lla40	Donut, Robin's Egg Blue	1	-	-	-	-	1
lla41	Seed, Robin's Egg Blue	6	10	12	1	-	29
lla43	Round, Brite Blue	-	-	-	-	1	1
lla47	Seed, Shadow Blue	-	1	-	-	-	1
lla51	Seed, Dark Shadow Blue	16	1	-	-	-	17
lla53	Seed, Ultramarine	10	-	-	-	-	10
lla54	Oval, Robin's Egg Blue	-	-	-	-	1	1
lla56	Seed, Brite Navy	-	2	16	15	2	35
lla57	Oval, Brite Navy	-	-	4	3	-	7
lla59	Seed, Rose Wine	3	-	1	2	-	6
llb*	Oval, Other Colors	1	-	-	-	-	1
IIb8*	Oval, White w/Alternating Blue and Yellow Wavy Lines	-	-	-	1	-	1
IIb28	Oval, White on Opal w/Sets of 3 Blue Stripes	-	-	1	-	-	1
llb73*	Oval, Dark Navy w/3 White Stripes	-	-	-	-	1	1
llbb19	Oval, Pale Blue w/3 Redwood on White Stripes	-	1	-	-	-	1
IIbb25	Oblong, Robin's Egg Blue w/3 Redwood on White Stripes	-	-	-	1	-	1
lllf1	Oblong, 5-Sided, Clear	-	1	-	-	-	1
IVa*	Miscellaneous Beads with Cores and Stripes	22	1	-	-	-	23
IVa3*	Seed, Red w/White Core	-	-	-	5	-	5
IVa13	Seed, White	12	11	24	9	1	57
IVa6	Round, Redwood w/Apple Green Core	5	7	11	3	1	27
IVa9	Round, Scarlet w/White Core	1	-	-	-	-	1
IVa13	Round, Oyster White w/Light Gray Core	2	-	-	-	-	2
IVb*	Oblong, White w/Light Aqua Core, 3 Sets of Brite Navy Stripes	-	-	-	-	2	2
IVb16	Round, White w/Light Aqua Core and 4 Brite Navy Stripes	1	-	-	-	-	1
Other	Burned, Unidentifiable, and Modern Glass Beads	16	-	7	-	-	23
	Totals	376	84	171	106	21	758

\*These beads do not precisely fit established types in the Kidd & Kidd classification system.

Туре	Description	1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
Bla	Round, Clear	-	-	-	1	-	1
Mpla	Round, Various Colors	-	1	6	6	-	13
Mplla	Round, Faceted, Various Colors	-	-	3	4	-	7
PM*	Round, Blue or Green	8	-	-	-	-	8
PM*	Round, Faceted, Black	2	-	-	-	-	2
W*	Other, Unidentifiable	4	-	-	-	-	4
Wla	Round, Blue	1	-	-	-	-	1
Wlb*	Round, Other Colors	5	-	1	1	-	7
Wlb*	Seed, Clear	-	3	17	1	-	21
Wlb1	Round, Clear	3	2	5	2	-	12
Wlb4	Round, Pale Blue	-	-	-	-	1	1
Wlb5	Round, Translucent	-	-	-	-	1	1
Wlb9	Round, Dark Palm Green	-	-	-	1	-	1
Wlb15	Donut, Brite Navy	-	-	-	1	-	1
Wlb16	Round, Brite Navy	-	-	1	-	-	1
Wlc*	Round, Other Colors	-	-	2	-	-	2
Wlc1	Oval, White	1	1	3	-	-	5
WIc11	Oval, Ultramarine	2	-	3	-	-	5
Wld*	Donut, Black	1	-	-	3	-	4
Wld3	Donut, Brite Navy	-	-	1	-	-	1
Wle*	Oval, Brite Navy	-	-	1	-	-	1
WIIc*	Faceted, Other Colors	3	1	1	1	-	6
Wllc1	5-Sided, Black	-	-	-	1	-	1
Wllc2	5-Sided, Clear	2	-	1	-	-	3
WIIc5	Round, Amber	6	-	-	-	-	6
Wlld1	Raspberry, Clear	-	-	-	1	-	1
Wllg*	Round, Red w/Dimples	-	-	-	2	-	2
Wllp	Oblong, 4-Sided, Clear	-	-	1	-	-	1
WIIIb*	Round, Black w/7 Inlaid Yellow Stripes	-	-	1	-	-	1
	Totals	38	8	47	25	2	120

\*These beads do not precisely fit established types in the Kidd & Kidd classification system.

Drawn beads (n=758) include 483 seed; 82 oval, round, or donut-shaped; 76 faceted; 71 tubular; 23 miscellaneous beads with cores or stripes that could not be classified; and 23 unidentified, burned, or modern glass beads (Table 3-7). Seed beads include 154 white (IIa12, IIa14, and IVa13), 112 black (IIa7), 101 in various shades of blue (IIa37, IIa41, IIa47, IIa51, IIa53, and IIa56), 36 in shades of green (IIa25, IIa27, and IIa28), 24 yellow or tan (IIa17, IIa19, IIa21, and IIa22), 12 red (IIa2 and IIa59), six red with white cores (IVa3\*), and 38 beads of other colors that did not fit into the classification system. Seed beads were manufactured for centuries, but these fall primarily within the colonial occupation of the La Pointe-Krebs plantation. A few, like the white cored Cornaline d'Aleppo beads (IVa3, "white hearts"), date to the antebellum period of 1830-1860.

Oval or oblong beads of one color (n=33) consist of 14 white (IIa15) (Figure 3-58a), seven brite navy (IIa57) (Figure 3-58b), five light gray (IIa9), four dark palm green (IIa28), one black (IIa8), one robin's egg blue (IIa54) and one other color not in the classification system. Round or donut-shaped beads of one color (n=13) are represented by five white (IIa13), three black (IIa6), two red (IIa4 and IIa5), two blue (IIa40 and IIa43), and one dark palm green (IIa28) (Figure 3-58c).

Thirty-five drawn glass beads are more decorative with different colored cores. Most of these are round redwood beads with green cores (n=27), commonly called Cornaline d'Aleppo (IVa6) (Figure 3-58d). Other drawn glass beads with cores are represented by five redwood seed beads with light gray cores (IVa3), two round oyster white beads with light gray cores (IVa13), and one round scarlet bead with a white core (IVa9). Three oblong round or oblong white glass beads have light aqua cores with inlaid brite navy inlaid stripes (IVb\* n=2; IVb16) (Figure 3-58e).

Faceted drawn beads (n=76) are predominantly black (Ic4\*) with 54 specimens. Faceted beads of other colors (n=22) include blue, red, purple, yellow, amber, and gray. One of the faceted beads is square (Ic2) (Figure 3-58f), but most are round, with a few tubular and oblong examples. The mold faceted If beads postdate the colonial era, ca. 1820 to 1840 (Figure 3-58g-i).

Plain tubular drawn beads (n=69) are small, with diameters of 0.2 to 0.3 cm, and of various lengths, but usually short, 0.4 to 0.5 cm (Figure 3-58j-m). These come in a variety of colors, including 23 black (Ia2), 23 shades of blue (Ia12, Ia13, Ia14, Ia15, Ia16, and Ia19), nine light gray (Ia3), six white (Ia5), four brite mint green (Ia9), two dark ruby (1a\*), and one each of light ivory (Ia6) and citron (Ia8).

Seven drawn glass beads have inlaid stripes or wavy lines of different colored glass. One specimen each of these oval or oblong striped beads was recovered: a white bead with alternating blue and yellow wavy lines (IIb8\*) (Figure 3-58n); a pale blue bead with three redwood on white stripes (IIbb19) (Figure 3-58o); a robin's egg blue bead with three redwood on white stripes (IIbb25) (Figure 3-58p); a dark navy bead with three white stripes (IIb73\*); a white on opal bead with groups of three blue stripes (IIb28); and one round brite navy bead has seven white stripes (IVb32). The remaining 23 beads are unclassifiable, but these also have different colored cores or stripes. The one blown glass bead in the La Pointe-Krebs Plantation assemblage is a round clear bead (Bla) (Figure 3-58q). It was recovered from Area 6. Mold-pressed glass beads are represented by 13 round beads and seven faceted beads of various colors, including clear (n=7), pink (n=5), black (n=3), green (n=2), white (n=2), and red (n=1) (Figure 3-58s-u). These types of beads were found primarily in Area 6 (n=10) and Area 3 (n=9), with one bead from Area 1. Prosser-molded beads (PM\*) include eight round blue or green beads with raised bands (Figure 58v-w) and one black and one black and tan faceted bead, all of which came from the 1995 units. These beads postdate the 1840 patent granted to Richard Prosser who originally invented this molding method for ceramic button manufacture.



Figure 3-58. Drawn (I, II, III, and IV), blown (Bla), and molded (M and PM) glass beads: (a) Ila15, white oval bead (Area 1, FS 1174); (b) Ila57, brite navy oval bead (Area 3, FS 870); (c) Ila28, dark palm green round bead (1995 unit, FS 288); (d) IVa6, Cornaline d'Aleppo seed bead (Area 1, FS 1191); (e) IVb\*, white oblong bead with gray core (Area 7, FS 893); (f) Ic2, ruby square bead (Area 6, FS 991); (g) if\*, ruby faceted bead (1995 unit, FS 260); (h) If1, black faceted bead (Area 6, FS 980); (i) Illf1, clear faceted bead (Area 1, FS 944); (j) Ia2, black tubular bead (Area 3, FS 966); (k) aqua blue tubular bead (Area 6, FS 986); (l) Ia14\*, robin's egg blue tubular bead (Area 3, FS 1024); (m) Ia5, white tubular bead (Area 7, FS 903); (n) Ilb8\*, white oblong bead with alternating blue and yellow wavy stripes (Area 6, FS 1068); (o) Ilbb19, pale blue oval bead with three redwood on white stripes (Area 1, FS 1134); (p) Ilbb25, robin's egg blue oblong bead with three redwood on white stripes (Area 6, FS 858); (q) Bla, clear round bead (Area 6, FS 1008); (r) Mpla, clear round bead (Area 6, FS 1008); (s-t) Mplla, pink and black faceted beads (Area 3, FS 1002); (u) Mpla, white round bead (Area 6, FS 1008); (v-w),PM\*, lime green Prosser-molded beads (1995 units, FS 242 and FS 270) (all twice actual size).

Wound glass beads (n=89) include 70 oval, oblong, round, or donut-shaped; 11 faceted, one raspberry bead, two dimpled, one striped, and four unclassified (Table 3-8). The most common type is clear seed beads (WIb\*) with 21 specimens (Figure 3-59a). Other plain glass beads include 12 clear round beads (WIb1 and WIb5) (Figure 3-59b-c); 11 oval, round, or donut-shaped beads in various shades of blue (WIa, WIb4, WIb15, WIb16, WIc11, WId3, and WIe\*)

(Figure 3-58d-e); six round amber beads (WIIc5) (Figure 3-59f); five oval white beads (WIc1); four black donut-shaped beads (WId\*); and one green round bead (WIb9) (Figure 3-59g).

Faceted wound glass beads are represented by four red, four clear, two black, and one purple (WIIc\*, WIIc1, WIIc2, and WIIIp) (Figure 3-59h-i). Others decorative wound beads include two red beads with dimpled surfaces (WIIIg\*) (Figure 3-58j), one clear raspberry bead (WIId1) (Figure 3-59k), one black round bead with seven inlaid yellow stripes (WIIIb\*) (Figure 3-59l), and one oblong blue bead with three white stripes (WIc11) (Figure 3-59m). The largest wound bead is a faceted clear oblong bead (WIIp) (Figure 3-59n). Four wound beads could not be classified. Wound glass beads were recovered from the 1995 units (n=28), Area 1 (n=7), Area 3 (n=38), Area 6 (n=14), and Area 7 (n=2).



Figure 3-59. Wound (W) glass beads: (a) WIb\*, red round bead (Area 6, FS 858); (b) WIb1, clear round bead (Area 3, FS 994); (c) WIb5, translucent round bead (Area 7, FS 901); (d) WIb15, brite navy donut-shaped bead (Area 6, FS 858); (e) WId3\*, brite navy donut-shaped bead (Area 3:, FS 858); (f) WIIIc5, amber round bead (1995 unit, FS 246); (g) WIb9, dark palm green round bead (Area 6, FS 1051); (h) WIIc2, clear and red faceted beads (Area 3, FS 990 and Area 6, FS 984); (j) WIIIg, red dimpled round bead (Area 6, FS 983); (k) WIId1, clear raspberry bead (Area 6, FS 1045); (l) WIIIb\*, black round bead with seven yellow stripes (Area 3, FS 994); (m) WIc11, ultramarine oval bead with three white stripes (1995 unit, FS 298); (n) WIIp, clear faceted oblong bead (Area 3, FS 867) (all twice actual size).

#### **Personal Items**

**French Clasp Knives (n=5).** Three nearly complete iron knife blades are from French clasp knives (now known as pocketknives) from the colonial era. Nearly whole blade fragments include one 8.0 cm in length and one 12.0 cm long (Figure 3-60a). One blade, including the tang at one end, measures 12.5 cm in length (Figure 3-60b). One clasp knife blade was found in Feature 105, the large pit in Area 3, and two blades and two internal parts were from Feature 163, the big pit in Area 1.

Coins (n=26). Twenty-six coins were recovered from La Pointe-Krebs House and Plantation site excavations. The oldest coins are US "Liberty Head" nickels, including an 1884 specimen found during the 1995 salvage excavations, and two dated 1900. US "Wheat" pennies are dated 1917, 1918, 1939, 1941, and 1944, with three others that have illegible dates. Other old coins include a 1935 US "Buffalo Head" nickel, and 1941 and 1943 US "Jefferson" nickels.



Figure 3-60. French clasp knife blades after conservation: (a) nearly complete blade (Area 3, FS 1019); (b) nearly complete blade with tang fragment at one end (Area 1, FS 1155) (all actual size).

The remaining coins date to the 1950s-1970s, probably lost by visitors to Old Spanish Fort Park. Coins were recovered from the 1995 units (n=11), Area 3 (n=8), Area 6 (n=6), and Area 7 (n=1).

**Tokens (n=3).** One token made of a hard white plastic measures 2.3 cm in diameter; embossed on one face is the legend "MISSISSIPPI SALES TAX TOKEN" surrounding a circle with the number "1" (Figure 3-61a). This token was found in Area 1. A similar token of aluminum, 2.2 cm in diameter, reads "ALABAMA STATE TAX COMMISSION LUXURY TAX TOKEN" with the number "1" (Figure 3-61b). It was found in a 1995 unit. State sales tax tokens were used from 1935 until 1961 to provide change for sales tax that resulted in fractions of a cent.

A large brass specimen is an advertising token for the Pontiac automobile introduced in 1926 by General Motors, although this token dates from the mid-1950s (Figure 3-61c). One side has a profile portrait of American Indian chief Pontiac with his name at the top and "CHIEF OF THE SIXES" at the bottom, a reference to that car's L-head 6-cylinder engine. The other side reads "PRODUCT OF GENERAL MOTORS" surrounded by a leaf pattern. The Pontiac token was found in Area 6 and measures 2.5 cm in diameter.

One silver-plated metal disc is a souvenir from the museum built in the 1980s at Old Spanish Fort Park. The token shows La Pointe-Krebs House with the date 1718, surrounded by the words "OLD SPANISH FORT PASCAGOULA MISS" (Figure 3-61d). The disc has a scalloped edge, is 1.5 cm in diameter, and the back is plain. It was recovered in Area 7.

### **Toys, Games, and Writing Implements**

Some of these artifacts – porcelain dolls and toy tea sets, marbles, game pieces, a mouth harp, pencils, and blackboard chalk – reflect the presence of children living at La Pointe-Krebs House and Plantation.

**Porcelain Dolls (n=26).** Twenty-six fragments of late historic bisque and glazed white porcelain doll fragments include a small fragmentary doll commonly called a Frozen Charlotte bathing baby (Figure 3-62a). Also present is a bisque doll head fragment, three bisque or glazed doll arms, and two bisque or glazed doll legs (Figure 3-62b-f). The parts would have been attached to a stuffed and clothed fabric doll body. The remaining bisque and glazed pieces are small unidentifiable fragments. Doll parts were recovered from the 1995 units (n=2), Area 3

units (n=18), Area 6 units (n=4), one Area 6 feature (n=1), and an Area 7 unit (n=1). Germany was the main producer of porcelain dolls in the nineteenth and twentieth centuries.



Figure 3-61. Tax, advertising, and souvenir tokens: (a) white plastic, "MISSISSIPPI SALES TAX TOKEN" surrounding a circle with the number "1" (Area 1, FS 883); (b) aluminum, "ALABAMA STATE TAX COMMISSION LUXURY TAX TOKEN" and "1" (front and back views) (1995 unit, FS 279); (c) brass, General Motors Pontiac advertising token (front and back views) (Area 6, FS 993); (d) silver-plated metal souvenir for La Pointe-Krebs House with date 1718 and "OLD SPANISH FORT PARK PASCAGOULA MISS" (Area 7, FS 862) (all actual size).



Figure 3-62. Porcelain dolls and toy tea sets: (a) Frozen Charlotte or bathing baby doll torso (1995 unit, FS 291); (b) doll head (Area 3, FS 867); (c-e) doll arms (Area 3, FS 994; Area 6, FS 979); (f) doll leg (Area 7, FS 879); (g-h) tea set saucers (1995 units, FS 288 and 242); (i-j) teapot base and lid (1995 unit, FS 246; Area 3, FS 891) (all actual size).

**Toy Tea Set (n=4).** One whole glazed porcelain toy tea set saucer (diameter 4.7 cm), half a saucer (diameter 4.4 cm), and a teapot base were recovered from 1995 units (Figure 3-62g-i)). A glazed porcelain teapot lid (diameter 2.1 cm) came from an Area 3 unit (Figure 3-62j).

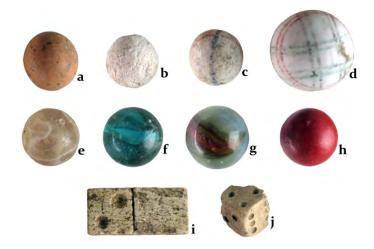


Figure 3-63. Toy marbles and game pieces: (a) clay marble (Area 3, FS 1001); (b) limestone marble (Area 3, FS 1001); (c-d) painted porcelain marbles (Area 6, FS 854; 1995 unit, FS 291); (e-f) clear and turquoise glass swirled marbles (Area 3, FS 936); (g) red and gray glass marble (Area 2, FS 1010); (h) red glass marble (1995 unit, FS 291); (i) bone domino (1995 unit, FS 259); (j) bone die (Area 1, FS 884) (all actual size).

**Toy Marbles (n=39).** Most marbles (n=26, 66.6%) were recovered from the 1995 units (n=9) and Area 6 units (n=17) immediately around La Pointe-Krebs House, with a few from Area 3 (n=9) and Area 1 (n=4). Marble materials include clay (n=13), limestone (n=2), porcelain (n=11), and glass (n=13) (Table 3-9).

The plain clay marbles are white, tan, orange, or yellow in color and range in diameter from 1.3 to 1.7 cm (Figure 3-63a). The two plain limestone marbles are each 1.4 cm in diameter (Figure 3-63b). The plain clay and limestone marbles date to the late eighteenth to the midnineteenth centuries.

Porcelain marbles are commonly called "China" marbles. Two of the ten porcelain marbles have painted line decorations. One has intersecting sets of parallel green, red, and black lines around the circumference, a pattern referred to as a helix design commonly made between 1850 and 1910 (Figure 3-63c) (Carskadden and Gartley 1990:62) The other "China" marble has a similar design, but fewer lines in orange, black, and green (Figure 3-63d). The remaining eight "China" marbles are plain, but may have had similar decorations that have since worn off. These "China" marbles range in diameter from 1.4 to 2.4 cm, the larger size being "shooter" marbles.

Most of the glass marbles are transparent with multicolored interior ribbon cores or swirls (Figure 3-63e-g). The remaining glass marbles include one red (Figure 3-63h), one brownishpurple, and one burned and discolored. Glass marbles range in diameter from 1.4 to 1.7 cm. Porcelain and glass marbles were most common during the second half of the nineteenth century and into the twentieth century. Both porcelain and glass marbles were typically produced in Germany (Baumann 1970:32, 104).

Marble Type and Material	1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
Plain Clay	4	2	1	6	-	13
Plain Limestone	1	-	1	-	-	2
Plain Porcelain or "China"	-	-	4	5	-	9
Decorated Porcelain or "China"	1	-	-	1	-	2
Solid Glass	1	-	-	2	-	3
Glass with Ribbon Core or Swirl	2	2	3	3	-	10
Totals	9	4	9	17	-	39

Table 3-9. Toy marbles by material and site area.

**Bone Game Pieces (n=2).** One bone domino was found in a 1995 unit. It measures 1.2 cm wide and 2.7 cm long (Figure 3-63i). One small fragmentary piece of carved mammal bone may also be a game piece. It has a small round ball on a stem fragment, perhaps the top of a chess pawn. It was recovered from Feature 113, a mortar and shell midden in Area 6.

**Wooden Die (n=1).** A carved wooden die, measuring 1.1 cm square, was recovered from Area 1 (Figure 3-63j).

Mouth Harp (n=1). A nearly complete iron mouth harp frame was recovered from Area 3. It measures 4.0 cm long, but is missing the ends of the two tangs.

Writing Implements (n=131). These include slate pencils (n=24), pencil leads (n=96), copper pencil ferrules (n=5), and blackboard chalk (n=6). Slate pencils are round pieces that were used on handheld slate boards, usually for teaching children at home, whereas round pencil leads would have been used by all members of the household. Most of the slate and pencil lead fragments (n=93, 77.0%) were recovered near La Pointe-Krebs House in the 1995 units and from Area 6. The chalk pieces are small round fragments, three of which have vertical grooves, and may have been used by children. All of the chalk pieces were found in Area 3.

# White Clay Tobacco Pipes

Excavations at La Pointe-Krebs Plantation recovered 240 white clay pipe fragments (Table 3-10). Undecorated plain pipe stem pieces (n=175) are most common, followed by plain pipe bowl fragments (n=45) and decorated pipe bowl fragments (n=20).

Ріре Туре	1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
Plain Bowl	13	1	24	7	-	45
Decorated Bowl	2	1	14	2	1	20
Plain Stem	14	51	96	10	4	175
Totals	29	53	134	19	5	240

Table 3-10. White clay tobacco pipes by site area.

None of the white clay pipe stem fragments have decorations, although four have spurs, small projections at the bowl and stem juncture. Measurable stem bore diameters range from  $\frac{4}{64}$ -inch (n=63) to  $\frac{5}{64}$ -inch (n=87) to  $\frac{6}{64}$ -inch (n=8). Numerous archaeological studies have demonstrated that white clay pipes with  $\frac{4}{64}$ -inch and  $\frac{5}{64}$ -inch bores were most commonly made during the mid-eighteenth century.

Two plain pipe bowl fragments have a spur attachment (Figure 3-64a-b). The other plain pipe bowls are small fragments. Designs on four of the 20 decorated pipe bowl fragments are unidentifiable. Six decorated white clay bowls have a series of small dentate impressions around the bowl rim. One pipe bowl has an incised line around the rim. Two pipe bowls have vertical flutes 0.1 cm wide and 0.2 cm apart, and one has sharp vertical ridges. One pipe bowl and spur have raised floral designs, a beaded medallion with a crowned harp, the symbol of Ireland, on one side of the bowl, and a beaded medallion with ED[W]/AR[DS]/BR[IS]/T[OL] on the other side (Figure 3-64c-e). The style of this pipe bowl dates to ca. 1770-1800 (David Higgins,



Figure 3-64. White clay tobacco pipes: (a) plain bowl and stem with spur (Area 1, FS 945); (b) plain bowl and stem with spur with an unidentifiable mark (Area 6, FS 986); (c-e) three views of decorated bowl with floral designs and shield with lettering (Area 3, FS 942 and 119); (f) bowl with a floral design along the mold seam (Area 3, FS 924); (g) ridged bowl with geometric patterns (Area 3, FS 898) (all actual size).

personal communication to G. Waselkov, May 21, 2012). This pipe can perhaps be attributed to Joseph Edwards I or his son Joseph II of Bristol, England, who exported large quantities of pipes, particularly to Ireland in the 1790s (Jackson and Price 1974:41; Walker 1977:1124-1125). Another pipe bowl has a dentate circle or medallion on the bowl front. One white clay pipe design includes a leaf pattern along the mold seam of the pipe bowl (Figure 3-64f). One small bowl fragment has a geometric and banded design (Figure 3-64g).

One white clay pipe has the "TD" makers' mark within a circle or medallion of small dentates. English pipemaker Thomas Dormer is credited with the original use of this makers' mark, but many other pipemakers used these initials throughout the eighteenth century.

#### **Other Tobacco Pipes**

Three American-made tobacco pipes were found in La Pointe-Krebs Plantation excavations. These pipes date to the mid-to-late nineteenth century. One is a small fragment of an unglazed stoneware anthropomorphic or "face" pipe with one eye and partial nose. It was recovered from Area 1. An unglazed earthenware stub end pipe stem fragment with lines representing human hair is also from a face pipe. That and a Bakelite pipe stem with a copper mouthpiece were recovered from Area 3.

#### **Religious Artifacts**

**Crosses (n=2).** Two small brass crosses were recovered, one each from Area 3 and Area 6. One is in poor condition, but appears to be plain (Figure 3-65a). It measures 1.9 by 2.9 cm in size and has one chain link in the top loop for attachment to a necklace. This cross was found in Feature 119, a colonial palisade trench in Area 3. The other brass cross was silver-plated and has a floral design on one side. It measures 1.0 by 1.7 cm and has a large top loop for attachment (Figure 3-65b).

**Rosary Medal (n=1).** One round brass medal has three loop attachments equidistant around the edge, one of which has six chain links, and was part of a rosary (Figure 3-65c). This medal measures 1.7 cm in diameter. On one side is a portrait of Jesus and the inscription "SACRED HEART" and "JESUS HAVE MERCY ON US." On the other side is Mary's image with the legend "BLESSED VIRGIN MARY PRAY FOR US." This medal was found in Feature 113, a shell and mortar midden in Area 6.

**Gold Medal (n=1).** One small oval medal of sheet gold was recovered from Feature 113, a shell and mortar midden in Area 6, the same context as the rosary medal. This is a type called a Miraculous Medal that typically shows the figure of Virgin Mary on one side, with the words "O Holy Mary Pray for Us" around the figure (Figure 3-65d). This medal is French in origin, so the legend reads "O SAINTE MARIE PRIEZ POUR NOUS." On the other side is a cross on top of the letter "M" above two hearts representing Mary and Jesus, all encircled by stars around the edge. The medal is oval in shape, 0.9 by 1.3 cm, and has a top loop for attachment.

**Silver Medal (n=1).** This small oval silver medal has a detailed figural scene and French legend (Figure 3-65e). One side shows the Lady of Salette with two children and "N.D. DE LA SALETTE PRIEZ SANS CESSE POUR NOUS" [Our Lady of Salette prays ceaselessly for us] around the medal edge surrounding the figures. On the opposite side the Lady of Salette is shown seated and weeping with the inscription "JE SOUFFRE DE PUIS SI LONGTEMPS A CAUSE DE VOUS" [I suffered for so long because of you]. The two children are shepherds who had a vision of the Virgin Mary in the French mountain village of La Salette in 1846. The silver medal measures 0.8 by 1.3 cm and is very thin. It has a small loop at the top with one chain link for attachment. This religious medal was recovered from Area 6.

**Brass Medals (n=2).** One brass medal is a Miraculous Medal with the figure of Virgin Mary on one side and the words "MARY CONCEIVED WITHOUT SIN PRAY FOR US WHO HAVE RECOURSE TO THEE" (Figure 3-65f). On the reverse is a cross on top of the letter "M" above two hearts representing Mary and Jesus, with stars around the edge. The medal measures 1.3 cm by 1.9 cm and has a top loop for attachment. This medal was found in an Area 3 unit. The other is a round medal with some gilding, but the design is worn off (Figure 3-65g). This medal has a diameter of 1.5 cm and a top loop for attachment. It was recovered from Feature 117, a shell and mortar midden in Area 6.



Figure 3-65. Religious artifacts: (a) plain brass cross (Area 3, FS 1004); (b) decorated silver-plated cross (Area 6, FS 1008); (c) brass rosary medal (Area 6, FS 979); (d) sheet gold Miraculous Medal (Area 6, FS 979); (e) silver Lady of Salette medal (Area 6, FS 1007); (f) brass Miraculous Medal (Area 3, FS 867); (g) eroded copper or brass medal (Area 6, FS 991) (all actual size).

**Bone Rosary Beads (n=16).** Round beads carved out of animal bone were recovered from Area 1 (n=10) and Area 3 (n=6) (Figure 3-66). All probably are rosary beads, which are typically made of ivory, bone, or wood. Seven of the beads were recovered from the large pit, Features 163 and 173, in Area 1. Ten of these are the same size as the glass seed or embroidery beads (0.2 to 0.4 cm in diameter), and six are larger (0.6 to 0.7 cm in diameter).



Figure 3-66. Bone rosary beads: (a-c) Area 1, FS 1126; (d-e) Area 1, FS 1121; (f) Area 1, FS 927; (g-h) Area 1, FS 886) (all twice actual size).

### Jewelry and Accessories

**Glass Insets (n=3).** These glass insets are from finger rings, earrings, brooches, or pendants and are difficult to date, but probably are late nineteenth- to early twentieth-century in age. Two identical faceted turquoise glass insets, 0.6 cm in diameter, were found in Area 1 (Figure 3-67a). One faceted clear glass "diamond-like" setting measuring 1.0 cm in diameter is from Area 3 (Figure 3-67b).

**Finger Rings (n=2).** Two metal finger rings are gilded, missing their settings, and small in diameter. One ring has an embossed floral and dot design around the bezel and is 1.2 cm in diameter (0 on ring size chart), and was probably worn by a child (Figure 3-67c). The other is slightly larger, at 1.7 cm in diameter ( $3\frac{1}{2}$  on ring size chart) with an embossed floral design (Figure 3-67d). These rings were found in a 1995 unit and Area 1.

**Brooch or Diaper Pin (n=1).** One small gilded metal brooch or diaper pin is embossed with floral and line patterns surrounding cutout letters spelling "BABY" (Figure 3-67e). It is rectangular in shape, measuring 3.2 cm in length and 0.9 cm in width. It was recovered from Area 3.



Figure 3-67. Jewelry: (a) turquoise glass sets (Area 1, FS 886 and 887; (b) clear glass set (Area 3, FS 1001); (c-d) gilded finger rings (Area 1, FS 933; 1995 unit, FS 255); (e) gilded "BABY" brooch (Area 3, FS 875); (f) pewter brooch with glass sets (Area 3, FS 994); (g) bone pendant (1995 unit, FS 264) (all actual size).

**Pewter Jewelry (n=1).** One small fragment of pewter with eight glass stone insets may be from a piece of jewelry, such as a brooch (Figure 3-67f). It was recovered from Area 3.

Silver Jewelry (n=1). One small fragment of silver may be from a piece of jewelry. It appears to have been a circular object with a scroll, dot, and flower design around the edge with a plain center. It was found in an Area 6 unit.

**Bone Jewelry (n=1).** One small carved decorative piece may be a pendant or earring. It is made of two pieces, held together by a copper wire with a loop at the top (Figure 3-67g). It measures 2.5 cm in length and was found in a 1995 unit.

**Pewter Buckle (n=1).** One small fragment of pewter may be from a buckle. It was recovered from an Area 3 unit.

**Brass Shoe Buckles** (n=2). One brass buckle fragment consists of the tongue with two hinge loops on one side and a half circle prong for attachment on the other (Figure 3-68). It measures 3.1 cm in length and 1.8 cm in width. It was found in an Area 6 unit. Nearly identical shoe buckle tongues have been recovered from colonial sites, such as Old Mobile. A brass shoe buckle frame missing its tongue is rectangular with rounded corners and measures 4.0 by 5.0 cm. It has a simple linear cast design around the frame (Figure 3-68b). This buckle is very similar to one excavated at the French colonial Fort Michilimackinac in upper Michigan (Stone 1974:40).



Figure 3-68. Brass shoe buckles: (a) tongue with hinge loops and half circle prong (Area 6, FS 856); (b) decorated frame (Area 1, FS 929 and 1122) (actual size).

**Silver Key (n=1).** A very small silver key may be from a piece of jewelry, such as a twopiece heart locket. The key is a simple shape with a loop handle and a single bit at the opposite end. The key measures 1.0 cm long. It was recovered from an Area 6 unit.

**Decorative Hair Combs (n=2).** Two fragments of decorative hair combs made of Bakelite were intended to be worn as fashion accessories. These were recovered from a 1995 unit and Feature 91 in Area 3. Bakelite combs date to the second half of the nineteenth century.

### **Clothing-Related Artifacts**

Lead Bale Seals (n=3). Small round lead bale seals were used to secure ends of cloth bolts or finished cloth products to prevent pilfering during shipment. One seal of French origin depicts three *fleurs-de-lis* within a shield surrounded by floral and leaf patterns; on the reverse side is a chicken (Figure 3-69a). This seal, which measures 2.0 cm in diameter, is believed to have been used by cloth guild inspectors or government inspectors (Adams 1989:19-21; Sabatier 1912). An identical seal was recovered from Fort Michilimackinac (1715-1781) in the Upper

Peninsula of Michigan in the Great Lakes region (Adams 1989: Figures 13-14). This French seal, which probably dates to the early to mid 1700s, was found in Feature 121, a shallow oblong pit in Area 6, on the south side of La Pointe-Krebs House.

The other two lead seals are identical and probably date to a later time period (Figure 3-69b-c). One was also found in the Feature 121 pit in Area 6 and the other came from the level around the pit. One side of each seal has a central disc with "670" on a background made to look like woven cloth. These seals measures about 1.8 cm in diameter. The meaning of the number 670 is unknown.



Figure 3-69. Lead bale seals: (a) French seal with *fleurs-de-lys* in shield on one side and a chicken on reverse (Area 6, FS 1023); (b-c) seals stamped "670" (Area 6, FS 1008 and 1023) (all actual size).

**Buttons and Clothing Fasteners (n=562).** This category includes 546 buttons, 12 milk glass collar studs, one brass collar stud, two brass clothing snaps, and one cufflink link. Button and fastener materials includes glass (n=318), bone (n=93), shell (n=81), brass (n=39), iron (n=18), white metal (n=3), wood (n=1) plastic (n=4), and other (n=5) (Table 3-11). Only a few of these artifacts date to the colonial period; most are from the nineteenth and twentieth centuries. Most buttons and fasteners were recovered from 1995 units (n=235, 41.8%) and Area 6 (n=196, 34.9%) around La Pointe-Krebs House. Two buttons were found in Area 7.

<b>Button Material</b>	1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
Glass	122	4	40	153	-	319
Bone	34	9	29	20	-	92
Shell	63	-	12	6	-	81
Copper/Brass	6	5	23	3	2	39
Iron	3	-	5	10	-	18
White Metal	2	-	-	1	-	3
Wood	-	-	-	1	-	1
Plastic	3	1	-	-	-	4
Other	2		1	2	-	5
Totals	235	19	110	196	2	562

*Glass Buttons (n=318).* Glass buttons are primarily opaque white, commonly called milk glass (n=269), with few examples of other colored glass, including black (n=27), blue (n=7),

green (n=5), brown (n=5), grayish brown (n=2), tan (n=1), clear (n=1), and unidentified (n=1) (Figure 3-70). Most of the milk glass buttons have two or four holes for attachments (Figure 3-69a-g). They were very common fasteners for underwear during the mid-to-late nineteenth century. Some milk glass buttons have ridged designs on the button face. Several milk glass buttons have painted or printed designs, indicating they were used for outer clothing. These include designs in brown, blue, green, and yellow, with seven buttons painted dark red. A few examples of milk glass are domed buttons with attached metal eyes (Figure 3-70h).

The other colored glass buttons are more decorative fasteners for outer clothing. These have either holes for attachment or are square, round, or domed pieces of glass with attached metal eyes. A few have faceted button faces or other patterns. One black glass button depicts a stylized chicken, two black glass buttons has rope-like patterns, and two others have floral designs (Figure 3-70j-m). One clear glass button has a swirled pattern on the face and back (Figure 3-70n).

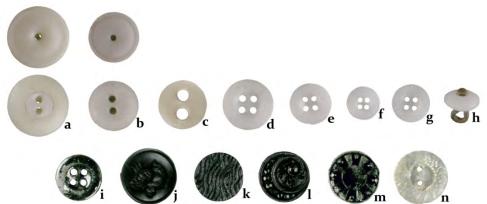


Figure 3-70. Glass buttons: (a-b) milk glass buttons with two holes on one side and one hole on the opposite side (Area 6, FS 1008); (c) two-holed milk glass button (Area 6, FS 1008); (d-f) four-holed milk glass buttons (Area 6, FS 1008); (g) four-holed milk glass button with ridged design (Area 6, FS 1008); (h) milk glass button with brass shank (Area 6, FS 1008); (i) four-holed black glass button (Area 3, FS 873); (j) black glass button with stylized chicken (Area 6, FS 993); (k) black glass button with rope-like pattern (Area 6, FS 993); (l) black glass button with floral and dot design (1995 unit, FS 254); (m) black glass button with geometric design (Area 3, FS 873); (n) clear glass button with swirled pattern (1995 unit, FS 230) (all actual size).

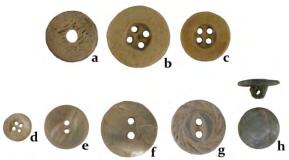


Figure 3-71. Bone and shell buttons: (a) bone button back with one hole (Area 1, FS 887); (b-c) fourholed bone buttons (Area 6, FS 986); (d) four-holed shell button (1995 unit, FS 258); (e-f) two-holed shell buttons (1995 unit, FS 258); (g) decorated two-holed shell button (1995 unit, FS 258); (h) shell button with copper rim and shank (1995 unit, FS 258) (all actual size). **Bone Buttons (n=92).** Most of these are four-holed or two-holed buttons, with a few examples with five holes (Figure 3-71a-c). Many others are bone button backs, each with a central hole for attachment of a metal eye; each would have had a button face cover, probably of copper or brass or cloth. The bone buttons range in diameter from 0.8 to 1.8 cm.

Shell Buttons (n=81). Most of these are four-holed or two-holed buttons (Figures 3-71d-f), with a few examples of flat discs with attached metal eyes. A few have simple designs, such as floral patterns (Figure 3-71g). One shell button has an attached copper rim and shank (Figure 3-71h). Shell buttons range in diameter from 0.8 to 2.0 cm.

**Copper and Brass Buttons (n=39).** This group includes domed and flat discs with attached eyes and two- or four-holed buttons. Four domed disc specimens are similar in shape, with a plain face and a rim along the button edge, and are French colonial military buttons. One is a small vest (*justaucorps*) button, measuring 1.7 cm in diameter (Figure 3-72a). The other three larger buttons from greatcoats measure 2.5 cm in diameter. Two of the large buttons were recovered from Feature 90, the lime slaking pit in Area 7 (Figure 3-72b-c).

The flat disc buttons are similar in construction, with the eye cast in place on the button back; all were gilded at one time. One disc button, diameter 2.0 cm, has "GILT" stamped on the button back. Another depicts a royal crown surrounded by four stars and the letters "RG" and "PARIS," the latter indicating place of manufacture (Figure 3-72d). Another disc button has an intricate design of two figures, possibly children, on a background that looks like a wooden building (Figure 3-72e). Diameters of these two buttons are 1.6 and 1.7 cm.



Figure 3-72. Copper and brass buttons: (a-c) French military uniform buttons (Area 3, FS 924; Area 7, FS 893 and 903); (d) button back with crown surrounded by four stars and the letters "RG" and "PARIS" (Area 3, FS 936); (e) button with two children in front of wooden building (Area 3: FS 936); (f) button with head of wolf (Area 3, FS 994); (g) U.S. Post Office uniform button with "P.O." (1995 unit, FS 267); (h-I) "Eagle" buttons from antebellum U.S. military uniforms (Area 3, FS 936, 896, and 994) (all actual size).

A two-piece copper or brass button has what appears to be the head of a wolf; the back of this button also reads "PARIS" (Figure 3-72f). This type of button is commonly called a sporting button and would have been worn on a nineteenth-century gentleman's hunting jacket. Sporting buttons generally depict hunting scenes or animals, such as hunting dogs, birds, deer, and other game. This one measures 1.5 cm in diameter. One two-piece button has "P.O." on the button

face, indicating its use on a uniform for the U.S. Post Office (Figure 3-72g). It measures 1.5 cm in diameter.

Six nearly identical "Eagle" buttons (Figure 3-72h-l) from military uniforms were collected from Area 3. All are two-piece buttons with attached eyes. Each button face has an eagle spreading its wings and holding arrows in one talon and olive branches in the other, a design typical of U.S. military uniform buttons issued from 1821 through the Civil War (Albert 1976:35-41). On the eagle's chest is a shield. One larger button (diameter 2.0 cm) and four smaller buttons (diameter 1.6 cm) each have an "I" for Infantry on the shield. Another smaller button has a "C" for Calvary. The back of one button reads "QUALITY;" the others have illegible writing.

Two white metal buttons, diameter 1.5 cm, each have four holes and "PANAMA MOBILE" on the button faces. These types of fasteners were used on overalls and similar work clothes.

*Iron Buttons (n=18).* Most of these buttons are corroded, fragmentary, and in poor condition. Three have four holes each for attachment and five are two-piece buttons. Iron buttons range in diameter from 0.9 to 1.8 cm

*Pewter Buttons (n=3).* Two of these buttons have four holes and a faint design on the button face. The other button is a plain disc. The pewter buttons are 1.4 to 1.5 cm in diameter.

*Clothing Hook and Eyes (n=80).* Small copper clothing hooks and eyes were recovered from the 1995 units (n=52), Area 1 (n=1), Area 3 (n=14), and Area 6 (n=13).

*Clothing Clasp (n=1).* On elaborate copper/brass clothing clasp measures 3.5 by 3.5 cm across (Figure 3-73a). It was found in an Area 3 unit.

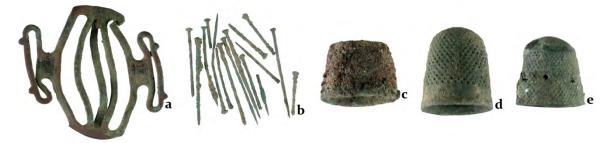


Figure 3-73. Copper and brass clothing and sewing items: (a) clothing clasp (Area 3, FS 1001); (b) straight pins with round and flat heads (1995 unit, FS 242); (c) open or topless thimble (1995 unit, FS 242); (d) thimble (Area 3, FS 888); (e) thimble with intentionally punched holes (Area 3, FS 1024) (all actual size).

Shoe Hooks and Eyelets (n=120). These small copper/brass artifacts were found in 1995 units (n=41), Area 1 (n=5), Area 3 (n=23), and Area 6 (n=51). Many of these are difficult to date, but probably are from the nineteenth and twentieth centuries.

Aglets (n=3). Aglets are small cone-like metal pieces attached to the ends of cord or shoelaces. Three copper/brass aglets were found in Area 3.

*Safety Pins (n=29).* Most safety pins and pin fragments were found around the La Pointe-Krebs House in the 1995 units (n=8) and Area 6 (n=14), with some from Area 3 (n=7).

### **Sewing Artifacts**

**Straight Pins (n=1,347).** Brass straight pins were recovered in abundance in the 1995 units (n=691) and Area 6 (n=539) around La Pointe-Krebs House (Figure 3-73b). The few whole straight pins measure between 1.7 and 3.1 cm in length and have either round or flat heads. Some of the fragments may be from needles.

Sewing Needle (n=1). One brass needle with a T-shaped head was found in Area 3. Sawing Thimbles (n=5). Thimble and thimble fragments were recovered from 1005

Sewing Thimbles (n=5). Thimble and thimble fragments were recovered from 1995 units (n=2), Area 3 (n=2), and Area 1 (n=1). An open or topless thimble measures 1.5 cm in height (Figure 3-73c). One whole thimble measures 2.1 cm in height and 1.7 cm in diameter (Figure 3-73d). A smaller thimble is 1.8 cm in height (Figure 3-73e). It has been bent and eight small holes have been intentionally punched around the center. This thimble was recovered from Feature 122, the double palisade trench in Area 3. These thimbles have the common dimpled surfaces and may date to the colonial period.

## **Hygiene Items**

**Toothbrushes (n=2).** Fragments of toothbrushes carved of mammal bone were recovered from a 1995 unit and Feature 105, the large pit in Area 3. One is a nearly complete head of a toothbrush measuring about 5.5 cm in length and 1.4 cm wide with five rows of small holes that held bristles of animal hair (Figure 3-74a). The other is a small head fragment with four rows of bristle holes.



Figure 3-74. Hygiene items: (a) head of a carved bone toothbrush (1995 unit, FS 229); (b) fragment of a Bakelite hair comb (1995 unit, FS 215) (all actual size).

**Hair Combs (n=66).** Many pieces of Bakelite, a type of black or brownish rubber used in the nineteenth century, are from hair combs, including one lice comb, six comb fragments, and 59 comb teeth. The lice comb, measuring, 5.0 by 7.5 cm in size, has teeth on each side of the comb. It probably dates to the early twentieth century. The other comb fragments are of various sizes (Figure 3-74b). Nearly all of the Bakelite comb fragments (n=64 or 96.9 percent) were found in 1995 units and Area 6 units around La Pointe-Krebs House.

## Weaponry

Weaponry recovered from La Pointe-Krebs Plantation includes one brass gun part, gunflints, lead shot, and lead bullets. Lead spillage represents waste products from on-site production of lead projectiles.

**Brass Escutcheon (n=1).** One well-made piece of cast brass is an escutcheon or thumb plate from the wooden stock of a colonial-era musket (Figure 3-75a). The specimen, which was mounted on the top of a gunstock, has a faceted face and a circular threaded stem for attachment with the triggerguard screw. It measures 4.0 cm long and 2.0 cm wide. It was found in the Feature 90 lime slaking pit in Area 7.

**Gunflints and Debitage (n=120).** The La Pointe-Krebs assemblage includes 29 whole or nearly whole gunflints, 14 gunflint fragments, 13 pieces of shatter, and 64 resharpening flakes Figure 3-75) (Table 3-12). Raw materials include British gray and black flint (n=60, 57.5%), French honey-colored flint (n=52, 43.4%), one piece of local coastal agate, and seven burned



Figure 3-75.Gun part and gunflints: (a) brass escutcheon with threaded stem (Area 7, FS 903); (b-e) French honey-colored gunspalls (Area 1, FS 947; Area 3, FS 912, 995, and 927); (f) British black flint prismatic blade (Area 3, FS 896); (g) British black flint gunspall (Area 3, FS 1013); (h) burned prismatic blade (Area 3, FS 1078); (i) locally-made agate gunflint fragment (Area 1, FS 1115) (all actual size).

unidentifiable specimens. Most of the gunflints and debitage (n=72) were recovered from Area 1 north of La Pointe-Krebs House, on the shore of Krebs Lake, and from Area 3 (n=30) south of the house.

Gunflints include 21 gunspalls, eight prismatic blades, and 14 flint fragments (Figure 74; Table 3-13). Ten gunspalls, two prismatic blade gunflints, three flint fragments are honey-colored flint of French origin (Figure 3-75b-e). Seven gunspalls, six prismatic blades, and eight

flint fragments are of British origin – light, medium, and dark gray, or black (Figure 3-75f-h). One gunflint fragment of local coastal agate is probably Native American made (Figure 3-75g). Some specimens were reused as strike-a-light flints (Figure 3-75c).

Туре	1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
Gunspall-French	-	1	6	2	1	10
Gunspall-British	1	3	3	-	-	7
Gunspall-Burned	-	1	2	1	-	4
Prismatic Blade-French	1	-	1	-	-	2
Prismatic Blade-British	1	2	3	-	-	6
Flint Fragment-French	-	1	-	2	-	3
Flint Fragment-British	-	2	1	5	-	8
Flint Fragment-Native American	-	1	-	-	-	1
Flint Fragment-Burned	-	2	-	-	-	1
Resharpening Flake-French	-	24	8	-	-	32
Resharpening Flake-British	-	22	6	-	4	34
Shatter-French	-	5	-	-	-	5
Shatter-British	-	7	-	-	-	7
Shatter-Burned	-	1	-	-	-	1
Totals	3	72	30	10	5	120

Table 3-12. Gunflints and flakes by type and site area.

Туре	Color and Description	Length	Width	Thickness
Gunspall-French	Honey, Light to Moderate Use Wear, One Bifacial Edge	3.1	2.2	0.7
	Honey, Moderate Use Wear	2.3	1.4	0.6
	Honey, Moderate Use Wear, Bifacial Edges		1.9	0.7
	Honey, Moderate Use Wear, Bifacial Edges	2.5	1.9	0.5
	Honey, Moderate to Heavy Use Wear, Bifacial Edges	2.6	2.0	0.9
	Honey, Heavy Use Wear, Bifacial Edges	2.3	2.4	0.8
	Honey, Moderate to Heavy Use Wear, Bifacial Edges	2.7	1.7	0.7
	Honey, Heavy Use Wear, Bifacial Edges, Strike-a-Light	2.4	1.7	0.9
	Honey, Heavy Use Wear, One Bifacial Edge	2.2	1.6	0.6
	Honey, Heavy Use Wear	1.9	1.6	0.6
Gunspall-British	Black, Moderate Use Wear, One Bifacial Edge	2.5	2.2	0.8
	Dark Gray, Cortex on One Edge, Heavy Use Wear, Two Bifacial Edges	2.8	2.1	0.6
	Dark Gray, Heavy Use Wear, Bifacial Edges Dark Gray with Tan, Light Use Wear, One Bifacial Edge		1.6	0.7
			1.7	0.6
	Medium to Dark Gray, Light Use Wear, One Bifacial Edge	2.8	-	0.7
	Medium Gray, Moderate Use Wear	2.5	2.0	0.6
	Medium Gray, Very Heavy Use Wear	2.0	1.1	0.6
Gunspall-Burned	White to Gray, Moderate Use Wear	2.9	1.9	0.9
	White, Moderate to Heavy Use Wear	2.7	1.7	0.7
Prismatic Blade-French	Honey, Light Use Wear, One Bifacial Edge	2.7	2.1	0.7
	Honey, Very Heavy Use Wear, One Bifacial Edge	1.7	1.3	0.5
Prismatic Blade-British	Black, Light to Moderate Use Wear, Two Bifacial Edges	2.4	1.8	0.5
	Black, Heavy Use Wear, Bifacial Edges	2.0	1.8	0.8
	Dark Gray with White Mottles, Moderate Use Wear, Bifacial Edges	2.6	2.2	0.9
	Medium Gray with White Mottles, Very Heavy Use Wear	1.7	1.7	0.6
	Light Gray with White Mottles, Heavy Use Wear, Bifacial Edges	3.0	2.2	0.7

Lead Shot (n=6,009). These include Rupert shot (n=2,116), drop shot (n=3,205), buckshot (n=37), musket balls (n=18), and unidentifiable or damaged small shot (n=633) (Table 3-14). Lead shot was concentrated around La Pointe-Krebs House in the 1995 units (n=1,811, 30.1%) and Area 6 (n=1,800, 30.0%). In particular, Level 4 (30.0 to 40.0 cm) in Area 6, Units 117E 145N and 119E 145N, contained 18.0 percent of all lead shot, with four buckshot, 403 Rupert shot, 636 drop shot, and 53 small spent shot.

Rupert shot are very small round lead balls with a distinct "dimple" created when molten lead was dropped a few feet from a colander into a bucket of water. Rupert shot was first produced in the 1660s in England (Hamilton 1980:132). Truly round lead shot was achieved by dropping molten lead from a 200-foot high "shot tower," a technique invented in 1769 by William Watt (Hamilton 1980:132). With the mass production of small drop shot, use of the Rupert shot method declined. Drop shot is the most common type in the La Pointe-Krebs Plantation assemblage with 3,198 specimens. Thirty-seven lead buckshot (diameters from 0.18 to 0.35 inches) and 18 musket balls (diameters from 0.47 to 0.59 inches) were also recovered. Several of the musket balls have tooth impressions, evidence that they were chewed.

Туре	1995 Units	Area 1	Area 3	Area 6	Area 7	Totals
Rupert Shot	151	705	475	728	57	2,116
Drop Shot	1,341	375	509	973	7	3,205
Unidentified Small Shot	301	160	80	88	4	633
Buckshot	16	3	8	9	1	37
Musket Ball	2	8	5	2	1	18
Totals	1,811	1,251	1,077	1,800	70	6,009

Table 3-14. Lead shot by type and site area.

**Other Projectiles (n=52).** These include percussion caps and bullet and shotgun casings. Copper or brass percussion caps are small round caps, less than 0.5 cm in size, that date to the Civil War. One each was recovered from Area 3 and Area 6. Copper or brass bullet casings (mostly 0.22 caliber) were recovered from Area 3 (n=9) and Area 6 (n=30). Eleven pieces of modern copper and plastic 12-gauge shotgun casings were also found in Area 3.

Lead Sprues (n=10) and Lead Spillage (wt=229.7 grams). Sprues and spillage are byproducts from the manufacture of lead shot and bullets, indicative of on-site production at La Pointe-Krebs Plantation. Sprues are remnants of strips attached to buckshot and musket balls made in molds. Lead spillage consists of hardened small drops of molten lead leftover from small shot production.

### **Horse Tack**

**Boot Spur (n=1).** An iron boot spur was collected from the shell and mortar midden in Area 1 on the north side of La Pointe-Krebs House. It is U-shaped with neck and yoke intact, but missing the rowel on the end (Figure 3-76). It measures 10.5 cm long and 8.0 cm wide. This spur probably dates to the nineteenth century.



Figure 3-76. Iron boot spur (Area 1, FS 1204) (actual size).

**Harness Buckles (n=2).** One large complete rectangular iron buckle probably was a fastener for horse tack or similar gear. It measures about 4.0 by 7.0 cm in size and has an additional bar to thread the strap. This buckle was recovered from the Area 1 midden. A rectangular buckle, 3.0 by 2.3 cm, missing its bar and tongue was found in Feature 173, the builder's pit for Feature 163.

**Iron Ring** (n=1). Iron rings may be part of horse tack or similar gear. One ring with a diameter of 4.0 cm was found in Feature 163, the large storage pit in Area 1.

## **CHAPTER 4: Animal Remains from La Pointe-Krebs Plantation**

by Elizabeth J. Reitz, Kevin S. Gibbons, and Maran E. Little

The role of human agency in culture contact and change has long been a focus of historical archaeology in the Americas. Some aspects of this role are variously termed *mestizaje* (Deagan 1973), transculturation and ethnogenesis (Deagan 1998), dietary acculturation (Gremillion 2002), and creolization (Hardy 2011). An important distinction among these concepts is whether the outcome is a mixture of several cultural strains, with roots that can be traced in a more or less linear fashion back to an original ancestry, or "a new cultural form with multiple origins and multiple active agents" (Deagan 1998:23, 25). Faunal evidence from colonial-period sites on the Atlantic coastal plain clearly supports the interpretation that the foodway that emerged in each colonial setting was a new cultural form that cannot be traced back to a single ancestral tradition. In colonial settings where multigroup interactions and exchange occurred, this new form was the outcome of dynamic exchanges, reformulations, and inventions (Deagan 1998:27, 35). The faunal record from the southeastern Atlantic coast of North America indicates that transculturation or ethnogenesis in animal use occurred almost immediately; with diverse outcomes depending on factors such as the physical landscape, gender roles, social class, and access to external markets.

Zooarchaeological analysis has contributed substantially to studies of sixteenth- through nineteenth-century Native American, Spanish, English, and American use of animals on the southeastern Atlantic coast. Research elsewhere in the Southeast supports the generalization that colonial and early American strategies combined indigenous wild resources with introduced domestic ones in ways that were unique to coastal and coastal plain settings. Such transformations had a profound influence in Spanish Florida that persisted into the eighteenth century (Reitz and Cumbaa 1983), as well as in English colonies (Zierden and Reitz 2009). It likely also was a significant influence on the northern coast of the Gulf of Mexico (e.g., Gremillion 2002; Hardy 2011; Scott and Dawdy 2011), but, by comparison, less is known about animal use on the Gulf Coast during the colonial and American periods.

The overall pattern was to combine pork and beef with a rich array of local wild resources. Many of the wild resources in assemblages from sites associated with Spaniards, Britons, Americans, Africans, and Native Americans from the 1500s onward were turtles and fishes, especially in coastal settings. Deer are prominent among the wild, terrestrial mammals. This broad pattern, with variations reflecting ethnic affiliation, status, time period, location, site function, and individual choice is characteristic of collections from Spanish St. Augustine (Florida); outlying Spanish missions in both Florida and Georgia; English colonial sites in Florida, Georgia, and South Carolina, with exceptionally rich data available for Charleston; American Indian communities in Florida, Georgia, and Alabama; and rural American plantations in South Carolina and Georgia (e.g., Colaninno-Meeks and Reitz 2010; Orr and Colaninno 2008; Orr and Lucas 2007; Pavao-Zuckerman 2000, 2001; Reitz 1986, 1991, 1992, 1993, 1994; Reitz and Bergh 2012; Reitz and Cumbaa 1983; Reitz et al. 1985; Reitz and Honerkamp 1983; Reitz et al. 2010; Reitz and Scarry 1985; Zierden and Reitz 2009).

Most traditional European modes of agricultural production proved ineffective in early Spanish, English, and French colonies on the southern Atlantic and Gulf coasts. During a period of invention and adjustment early settlers modified traditional husbandry, economic, and dietary practices to include resources better suited to Atlantic coastal plain environments. The newly developed habits came to characterize each colony's use of animals for decades. Some persist in regional cuisines today. It is likely that both ethnogenesis and adaptation occurred in these early multi-ethnic colonial settings, making it difficult to distinguish between these two processes and their consequences.

Periods of experiment and adjustment are predicted for new immigrants to novel environments. These periods appear to follow broad stages similar to those defined by Bökönyi (1975:4). He argued that initial settlers attempt to maintain their original husbandry system in unfamiliar colonial circumstances, perhaps the source of the common association of "starving times" with many initial colonial efforts. People try to maintain their familiar habits even when these are unproductive, making up the resulting shortfalls initially by increasing their use of wild foods and, subsequently, incorporating a different suite of domestic resources into maturing colonial economies. In animal remains from Spanish St. Augustine and English Charles Towne, for example, this can be seen in the rapidity with which traditional indigenous resources and techniques were incorporated into the settlers' subsistence systems (Colaninno-Meeks and Reitz 2010; Reitz and Bergh 2012; Reitz et al. 2010; Reitz and Scarry 1985). Because the initial Spanish experience preceded the English and French ones by many decades, it is probable that by the time these other colonial powers established themselves on the southeastern coast and coastal plain, the Spanish model was already well-known and provided an important example to these later colonial enterprises.

Spanish efforts to survive in the subtropical Atlantic coastal environment conform to Bökönyi's (1975:4) predictions. Initially, attempts were made to introduce domestic livestock in proportions that would maintain the traditional primacy of mutton and pork over other meat sources (Reitz and Scarry 1985:96-97). When this failed, the gap was filled by wild species, especially marine fishes, before beef supplanted both pork and mutton as the major source of animal protein. This transition occurred rapidly. The Spanish settlement of St. Augustine began in 1565 when Pedro Menéndez de Avilés established an outpost in a Timucuan village led by a cacique known as Seloy. In addition to occupying houses in the village, Menéndez fortified one of the houses, constructed a palisade, and dug a well. This original Spanish settlement was attacked and burned by Timucuans in 1566, forcing Spanish colonists to relocate to a more secure location, eventually settling St. Augustine in its present location in 1571. The vertebrate faunal remains from Menéndez's brief settlement among the Timucuans, however, contain most of the characteristics that persisted for centuries throughout coastal Spanish Florida (e.g., Orr and Colaninno 2008; Reitz 1991, 1992, 1993, 1994; Reitz and Cumbaa 1983; Reitz et al. 2010; Reitz and Scarry 1985). Table 4-1 summarizes the Minimum Number of Individuals (MNI) and biomass estimates for the major vertebrate groups from this settlement (these methods and groups are discussed in the Methods section below). Indigenous vertebrates contribute 99 percent of the individuals and 79 percent of the biomass. Chickens, goats and sheep (caprines), and cows are absent. Fish and deer are the dominant sources of non-commensal meat. This strategy persisted into the nineteenth century, with the primary change being the eventual dominance of beef over pork. Although domestic meats never completely replaced fish and other wild resources, by the early eighteenth century meat from domestic mammals contribute 79 percent of the non-commensal biomass in St. Augustine (Reitz et al. 2010:82-83).

Vertebrate Category		INI	Biomass	
	#	%	kg	%
Sharks, rays, and bony fishes	119	83.8	3.806	48.9
Alligator and turtles	5	3.5	0.358	4.6
Wild birds	2	1.4	0.028	0.4
Domestic birds				
Deer	2	1.4	1.703	21.9
Other wild mammals	4	2.8	0.225	2.9
Domestic mammals	1	0.7	1.245	16.0
Commensals	9	6.3	0.416	5.3
Total	142		7.781	

Table 4-1. St. Augustine Fountain of Youth site, Menéndez era, vertebrate remains summary.

Note: Anurans are included in the MNI calculation in summary tables, but are not included in the biomass calculation because allometric values are not currently available for this taxon (data from Orr and Colaninno 2008).

Evidence from sixteenth-century Spanish settlements in Florida attests to a brief period of experimentation. Initial shipments of livestock to the Spanish colony included a large number of sheep, which were important in the Iberian economy but impractical in subtropical Florida. The inability of sheep to flourish and the ability of cattle to be raised under a free-range regime were quickly noted and the proportions of animals shipped shifted accordingly; sheep imports eventually ceased.

This outcome was not unique to Spanish Florida. A similar pattern is found in vertebrate assemblages from two seventeenth-century English sites in South Carolina (Colaninno-Meeks and Reitz 2010; Reitz and Bergh 2012; Zierden and Reitz 2009). These early English data are from two sites associated with Charles Towne, which was founded in 1670. One is the St. Giles Kussoe House/Lord Ashley settlement and trading post (Agha and Philips 2010). Lord Anthony

Ashley Cooper, one of the eight Lord Proprietors of the Carolina settlement, never visited the Carolina colony, but he did establish a settlement on the Ashley River in 1674. Although not the only one bordering the river; Lord Ashley's settlement and trading post was engaged in an active animal skin trade with Native Americans and in cattle ranching. In 1682, there were nearly 600 head of cattle at St. Giles Kussoe (Agha and Philips 2010:13). The second site is known as the Miller site (Jones and Beeby 2010). Occupied between 1670 and 1680, perhaps as a tavern, it lies just outside the town's presumed palisade.

Indigenous animals contribute 68 percent of the individuals and 17 percent of the biomass in the summary table that merges English data from these two sites (Table 4-2; Reitz and Bergh 2012). Data from these early English sites conform to the expectation that local wild vertebrates would be combined with domestic sources of meat into a colonial strategy emphasizing local indigenous animals and introduced animals able to flourish in the colonial environment. Wild vertebrates other than commensal taxa contribute 54 percent of the individuals and 17 percent of the biomass. The low contribution of biomass from wild animals reflects the dominance of pork (22 percent of the biomass) and particularly beef (57 percent of the biomass) in this early English assemblage. A single caprine individual is present. The dominance of beef in the early days of the South Carolina colony is a characteristic that persisted throughout its colonial and antebellum history (Colaninno-Meeks and Reitz 2010; Zierden and Reitz 2009). The fact that most of the cattle specimens recovered from the two early English sites are teeth and skull fragments may indicate that taphonomic processes are largely responsible for this pattern; or it may reflect aspects of the distribution system within the colony related to cattle ranching (e.g., Orr and Lucas 2007).

Vertebrate Categories		ΜΝΙ	Biomass	
	#	%	kg	%
Sharks, rays, and bony fishes	4	14.3	0.032	0.8
Turtles	4	14.3	0.164	4.1
Wild birds	1	3.6	0.019	0.5
Domestic birds	3	10.7	0.086	2.1
Deer	1	3.6	0.088	2.2
Other wild mammals	5	17.9	0.37	9.2
Domestic mammals	5	17.9	3.211	80.1
Commensal taxa	5	17.9	0.041	1.0
Total	28		4.011	

Table 4-2. Early English colonial South Carolina vertebrate remains summary.

Note: Data from Reitz and Bergh (2012).

A similar pattern is found in vertebrate assemblages from French settlements on the northern coast of the Gulf of Mexico. Results from French zooarchaeological studies are difficult to summarize briefly. Nonetheless, data from New Orleans and plantations near New Orleans broadly indicate that pigs and cows were the primary domestic mammals and deer was the primary wild terrestrial animal. These were supplemented by other wild terrestrial animals such as opossums, rabbits, and raccoons; birds, including chickens, turkeys and ducks; and both turtles and fishes (Clute and Waselkov 2002; Hardy 2011; Scott 2001; Scott and Dawdy 2011; Waselkov and Gums 2000). Variations among the reported collections are primarily attributed to ethnicity by the authors of these studies. It is often difficult, however, to directly associate a faunal collection with a discrete time period or a single ethnic affiliation in a region where political dominance changed among French, British, Spanish, and American authority within little more than a century, and the people present at each site may have remained in place despite political changes. The ethnic affiliation of a specific site's occupants at a given point in time did not necessarily correspond with the identity of the prevailing political administration and may not have changed at all. Often this aspect of a site's history is unknown.

Among the earliest of the French deposits are those from Old Mobile (Alabama). Mobile was first established 27 miles up the Mobile River in 1702 and served as the capital of French colonial Louisiana until mid-1711, when the inhabitants relocated their settlement to the river's mouth, the city's modern location (Waselkov 2002). Old Mobile is a clearly French-dominated site, though with major Native American and minor African population components. Colonists at Old Mobile obtained provisions from France, local Indians, and the Spanish colonial ports of Pensacola, Havana, and Veracruz (Clute and Waselkov 2002). Indigenous animals provide 85 percent of the individuals and 83 percent of the biomass in faunal remains from Old Mobile (Table 4-3; Clute and Waselkov 2002). This early deposit contains no remains of either cattle or

		· ·		
Vertebrate Categories		MNI	Biomass	
	#	%	kg	%
Sharks, rays, and bony fishes	1	3.8	0.0002	0.01
Turtles				
Wild birds	5	19.2	0.05	2.3
Domestic birds	1	3.8	0.02	0.9
Deer	7	26.9	1.48	67.0
Other wild mammals	7	26.9	0.26	11.8
Domestic mammals	3	11.5	0.35	15.8
Commensal taxa	2	7.7	0.05	2.3
Total	26		2.2102	

Table 4-3. Old Mobile (1702-1711), vertebrate remains summary.

Note: Data from Clute and Waselkov (2002).

caprines, though chickens and pigs are present. Apparently sheep failed for French colonists on the Gulf Coast in the eighteenth century, just as they did for Spanish colonists in the sixteenth century and English colonists in the seventeenth century. The dominant source of animal protein in the Old Mobile collection is venison, which contributes 67 percent of the biomass.

That this pattern persisted for at least a century is suggested by the faunal assemblage from Dog River (Rivière aux Chiens, Alabama). This Mobile Bay plantation was occupied between ca. 1725 and 1848 by an eclectic group of Native Americans, Africans, French Canadians, and European French (Waselkov and Gums 2000). During the occupation at Dog River, political authority passed from French to British, then Spanish, and, finally, to American hands within a century. Table 4-4 summarizes animal use at this site, with all time periods merged into a single summary. This summary is dissimilar in some respects to that for Old Mobile. Nonetheless, both indigenous and introduced vertebrates were used and indigenous animals provided most of the individuals (71 percent of the MNI). In terms of biomass, the transition from indigenous to introduced sources of animal protein is clear, with 89 percent of the biomass obtained from introduced chickens, pigs, and cows; no caprines are present. Nine of the domestic mammals in the Dog River collection are pigs and nine are cows, though pork provides most of the estimated biomass (84 percent). Evidence for a tannery at the Dog River site reminds us that animals serve functions other than food. Many of the cow remains were associated with two wooden tanning vats. This use of cattle hides may explain the prominence of pork in the biomass estimate if cattle waste was discarded elsewhere as part of the tanning operation.

Vortabrata Catagorias		/NI	Biomass	
Vertebrate Categories	#	%	gm	%
Sharks, rays, and bony fishes	25	29.1	208.4	0.6
Turtles	13	15.1	204.5	0.6
Wild birds	4	4.7	235.7	0.7
Domestic birds	4	4.7	204.6	0.6
Deer	11	12.8	2443.6	7.6
Other wild mammals	4	4.7	437.6	1.4
Domestic mammals	18	20.9	28274.6	87.8
Commensal taxa	7	8.1	183.5	0.6
Total	86		32192.5	

Table 4-4. Dog River (ca. 1725-1848), vertebrate remains summary.

Note: Data from Waselkov and Gums (2000).

Differences among these collections could be evidence of different demographics at early sites, but the similarities are more interesting and could be attributed to a number of stimuli. The

close ties between Native Americans and early immigrants to Spanish, English, and French colonies might be a source of wild foods, either via trade or through social networks. One reason faunal remains at colonial sites are so similar to Native American ones could be that many of the resources were provided by Native Americans. Trade between local indigenous communities and colonists was a widespread and fundamental aspect of all three colonial economies. Many colonists traded for local commodities that would be exported, as well as for food stuffs for local consumption. Other colonists commandeered resources in the form of tithes and tribute, or simply took what they wanted. Some Native Americans were slaves serving as domestic servants and others were married to colonists of Eurasian or African descent (e.g., Reitz 1994). Reciprocity within kin groups is a particularly likely source given the presence of Native American women in some households. It is probable that some colonial deposits include foods that were collected and prepared by native women, acquired through ties of kinship, or obtained via Native American slaves or servants.

Alternatively, colonists faced with the loss of many traditional resources had good examples of successful strategies in their Native American neighbors. Early Eurasian and African colonists resided among indigenous populations whose subsistence economies were based on a set of cultivated plants adapted to local environments and a complex of locally available wild animals. The new colonists could have followed these examples without relying upon local indigenous knowledge.

Some aspects of these new strategies might be inventive adaptations that would have developed even in the absence of the examples offered by local indigenous populations or their contributions to colonial economies. Evidence for this is seen in the similarities in foodways adopted by early Eurasian and African settlers at three very different places along the southeastern Atlantic and Gulf coasts in three different centuries. Some aspects of the resulting early colonial strategies persisted for centuries after native populations were extinct or dispersed (Reitz 1986, 1994; Reitz and Bergh 2012; Reitz and Cumbaa 1983; Reitz and Honerkamp 1983; Reitz et al. 1985; Reitz et al. 2010; Zierden and Reitz 2009).

An additional influence might be the broader economic patterns associated with the transition from sixteenth-century to eighteenth-century global economies; and from colonies of dominant European powers to territories and states in the American antebellum south of the late 1700s. It is not possible to test this explanation at sites where ownership of the site changed as political authority shifted from Spain to England, France, or the new American states. This leaves open the possibility that changes in animal remains at temporally stratified sites represent unknown individual choices or economic influences. The ethnic identity and social standing of occupants at many sites often are unknown as well, sometimes being inferred from the faunal remains in a circular argument.

It is far more likely that all of these factors influenced animal use within each colony, and at each site. A wide variety of stimuli and responses occurred within each colonial setting, reflecting the skills, opportunities, resources, inclinations, and social affiliations of individual colonists. It must also be recognized that many of the colonists at the earliest Spanish, English, and French colonies were not what Spaniards would have considered to be *peninsulares*, native born in the Old World home country. Many colonists originated at outposts in Spanish, English, and French colonies elsewhere in the Americas. At the same time, Africans quickly became part of the colonial mix, often as slaves, but also as free people of color engaged in the colonial enterprise as skilled seamen, soldiers, farmers, and ranchers (e.g., Reitz 1994).

Although it might be anticipated that the characteristic coastal economies of these colonies reflect African influences instead of Native American ones, it must be remembered that Africans were also strangers in a strange land and had to learn productive techniques just as other colonists, including Native American colonists from other parts of the Americas, had to do. Given that many early Africans were skilled in raising commodities such as rice, cotton, indigo, and cattle, it is unlikely much of their valuable labor was spent on tasks that could be performed by others, perhaps more efficiently.

Although much of the new colonial strategy had an indigenous flavor, it remained European in other ways, indicating that both ethnogenesis and adaptation were factors in the development of colonial foodways, conforming to choices predicted by Bökönyi (1975). It is rarely possible to test this possibility because typically ownership of temporally stratified sites changed as colonies changed from one colonial power to another; leaving open the possibility that the animal remains represent individual and ethnic choices of an unspecified nature. Recent work at La Pointe-Krebs Plantation affords the opportunity to expand the study of early colonial economies to compare data from a political and economic environment subject to numerous, rapid, structural changes, but the identity of the lineage that owned the property persisted.

### **Archaeological Context**

The La Pointe-Krebs House and Plantation site (22JA526), located in Old Spanish Fort Park (Jackson County, Mississippi), is a complex historic site with evidence of Native American, French, British, Spanish, African, and American occupations. The original Simon de la Pointe was from French Canada rather than from France. He occupied one of the first colonial outposts in the area, beginning in about 1718. The property came to be known as the Krebs Plantation when Hugo Ernestus Krebs, an Alsatian, married a La Pointe daughter. Members of the La Pointe-Krebs family lived at the plantation until 1940. Thus, despite the political changes that occurred, most residents at the site were African slaves and members of the La Pointe-Krebs household. This continuity in social identity suggests that efforts to associate differences in the use of animals on the property with political events may not be successful. Given the continuity in ownership, it seems likely that animal remains from the site should reflect changes in the economic and political environment experienced by a single family as political authority changed from the early French colonial period into the American period between 1718 and the 1840s. Study of this assemblage is an important step in developing a broader cultural, spatial, and temporal perspective on animal use in the southeastern region over the past 500 years.

The vertebrate remains from La Pointe-Krebs Plantation reported here were excavated in 2010 by Bonnie L. Gums and Gregory A. Waselkov of the Center for Archaeological Studies at the University of South Alabama. Soil was water-screened through 1/16-inch hardware mesh to recover materials during excavation. Additional faunal materials were recovered from heavy flotation fractions. The materials reported here are from four areas. Area 1 is a shell and mortar midden north of La Pointe-Krebs House. It originally was a Native American shellfish midden, but later was used by La Pointe-Krebs Plantation occupants to process mortar. Area 3 is a colonial structure south of the house. Area 6 includes deposits that might be associated with a structure beneath La Pointe-Krebs House. Area 7 is a lime slaking pit east of the house. These four areas represent temporal and social behaviors associated with four political regimes: French colonial (ca. 1718-1763), British colonial (1763-1780), Spanish colonial (1780-1810), and early American (1811-1850). Deposits from these political regimes are difficult to isolate and some features span multiple time periods. A list of the samples studied, their archaeological context, their depositional period, and their analytical period is provided in Appendix B.

For purposes of analysis, vertebrate remains from features in these areas are assigned to one of three separate time periods: Early French (ca. 1718-1732); French/British (1718-1780); or Spanish/early American (1780-1850). Feature 90, a lime slaking or mixing pit in Area 7, contains early French colonial period (ca. 1718-1732) materials. This feature provides the oldest faunal remains studied from the 2010 project and is assigned to a distinct analytical unit for this reason. Feature 105 is part of a large, deep pit of unknown function in Area 3. It contains materials from French, British, Spanish, and American periods. The contents of some levels in Feature 105 are assigned to the French/British analytical unit and others are assigned to the Spanish/early American analytical unit. Feature 107 is a construction trench in Area 3 and its contents are assigned to the French/British analytical unit. The contents of Feature 121, in Area 6, are assigned to the Spanish/early American analytical unit. Feature 122, in Area 3, probably represents a palisade fence trench constructed during the British colonial period and its contents are assigned to the French/British analytical unit. Feature 163 is a large, deep pit in Area 1 and may have been a storage facility. It was constructed ca. 1732-1763 and its final filling occurred between 1780 and 1810. Materials from some levels of this large feature are assigned to the French/British analytical unit and others to the Spanish/early American analytical unit. Feature 173, in Area 1, is interpreted as a builders pit for the construction of Feature 163 and the contents are assigned to the French/British analytical unit. The contents of Features 179 and 180, two deep trenches in Area 1, are assigned to the Spanish/early American analytical unit. A fourth analytical unit consists of vertebrate material recovered in the heavy fraction produced by flotation of samples from Features 90, 105, and 119. These are interpreted as fine-scale evidence of animal use primarily during the French/British period.

Although the contents of some features can be assigned to much shorter time frames, the objective of this study is to consider broad patterns of resource use from 1718 until 1850. Assigning the contents of features (or, in some cases, specific levels within features) to broader time scales enables us to contrast evidence of animal use during the early part of the period with that for animal use during the later part of the period. This reflects, in part, recognition that ownership of the property did not change despite changes in the political realm. It is likely that changes in animal use at this site reflect changes in local conditions and broad, structural changes in the political and economic arena experienced throughout the Southeast as American states emerged from colonial rule more than it does social affiliation.

## **Zooarchaeological Methods**

Vertebrate remains were identified following standard zooarchaeological methods. All identifications were made using the comparative skeletal collection of the Zooarchaeology Laboratory, Georgia Museum of Natural History, University of Georgia by Kevin S. Gibbons and Maran E. Little. Laboratory assistance was provided by Carol E. Colaninno-Meeks, Sarah G. Bergh, and Carla Hadden. A number of primary data classes are recorded as part of every zooarchaeological study. Specimens are identified in terms of elements represented, the portion recovered, and symmetry, and the Number of Identified Specimens (NISP) is determined. The only exception is the indeterminate vertebrate category (Vertebrata), for which specimens are not counted due to their fragmentary condition. Specimens that cross-mend are counted as a single specimen. All specimens are weighed to provide additional information about the relative abundance of the taxa identified. Indicators for age at death, sex, and modifications are noted where observed. Measurements for mammals and birds are recorded following Driesch (1976) and are presented in Appendix C, as are measurements of fish otoliths.

The Minimum Number of Individuals (MNI) is estimated based on paired elements, size, and age. In most cases, MNI is estimated for the lowest taxonomic level. An exception to this rule is made for goats (*Capra hircus*) and sheep (*Ovis aries*). No specimens could be <u>attributed</u> to either of these species, though a number of specimens are identified to subfamily (Caprinae). In some cases, a larger number of individuals is estimated at a higher taxonomic level, though specimens are present at a lower one. In those cases, the number of individuals estimated for the lower taxonomic level is indicated in parentheses, but this estimate is not used in subsequent calculations.

Although MNI is a standard zooarchaeological quantification method, the measure has several well-known biases. For example, MNI emphasizes small species over large ones. This can be demonstrated in a hypothetical sample consisting of eight red drum and one cow. Although eight red drum indicate that acquiring this fish played a substantive role in the subsistence strategy, one cow could supply more meat. As can be seen in this example, the assumption that the entire individual was used at the site is fundamental to the interpretation of MNI. From ethnographic evidence, it is known that this is not always true (Perkins and Daly 1968). This is particularly the case for larger individuals, animals used for special purposes, and where food exchange was an important economic activity (Thomas 1971; White 1953).

In addition to these primary biases, MNI is also subject to secondary bias introduced by the way samples are aggregated during analysis. The aggregation of archaeological samples into analytical units (Grayson 1973) allows for a conservative estimate of MNI, while the "maximum distinction" method, applied when analysis discerns discrete sample units, results in a much larger MNI. In estimating MNI for the four analytical units (Early French, French/British, Spanish/early American, and French/British flotation), all faunal data associated with each analytical unit are merged regardless of the feature from which the materials were recovered.

Biomass estimates compensate for some of the problems encountered with MNI. Biomass refers to the quantity of tissue that a specified taxon might have supplied. Estimates of biomass are based on the allometric principle that the proportions of body mass, skeletal mass, and skeletal dimensions change with increasing body size. This scale effect results from a need to compensate for weakness in the basic structural material, in this case bones and teeth. The relationship between body weight and skeletal weight is described by the allometric equation:

 $Y = aX^b$ 

(Simpson et al. 1960:397). In this equation, X is specimen weight, Y is the biomass, b is the constant of allometry (the slope of the line), and a is the Y-intercept for a log-log plot using the method of least squares regression and the best fit (Reitz and Wing 2008:236-239). Many biological phenomena show allometry described by this formula (Gould 1966, 1971) so that a given quantity of skeletal material or a specific skeletal dimension represents a predictable amount of tissue or body length due to the effects of allometric growth. Values for a and b are derived from calculations based on data at the Florida Museum of Natural History, University of Florida, and the Georgia Museum of Natural History, University of Georgia (Table 4-5).

Taxon	Ν	Slope (b)	Y-intercept (a)	r²
Chondrichthyes	17	0.86	1.68	0.85
Actinopterygii	393	0.81	0.90	0.80
Non-perciformes	119	0.79	0.85	0.88
Lepisosteidae	26	0.87	1.13	0.96
Siluriformes	36	0.95	1.15	0.87
Perciformes	274	0.83	0.93	0.76
Carangidae	17	0.88	1.23	0.86
Sparidae	22	0.92	0.96	0.98
Sciaenidae	99	0.74	0.81	0.73
Pleuronectiformes	21	0.89	1.09	0.95
Alligator	18	1.00	1.16	0.99

Table 4-5. Regression formulae used for the La Pointe-Krebs Plantation vertebrate analysis.

Testudines	26	0.67	0.51	0.55
Aves	307	0.91	1.04	0.97
Mammalia	97	0.90	1.12	0.94

Note:  $Y = aX^{b}$  where Y is biomass or meat weight; X is specimen weight; a is the Y-intercept; and b is the slope. N is the number of observations (Pavao-Zuckerman 2001:183; Reitz and Wing 2008:234-242).

Specimen count, MNI, biomass, and other derived measures are subject to several wellknown biases (Grayson 1979, 1981; Wing and Brown 1979). In general, samples of at least 200 individuals or 1,400 specimens are needed for reliable interpretations. Smaller samples frequently generate a short species list with undue emphasis on one species in relation to others. It is not possible to determine the nature or the extent of this bias, or correct for it, until the sample is made larger through additional work.

Specimen count, MNI, and biomass also reflect identifiability. Some specimens of some animals are more readily identified than are others and the taxa represented by these elements may appear more significant in terms of specimen count than they were in the diet. If these animals are identified largely by unpaired elements, such as scales and cranial fragments, the estimated MNI for these taxa will be low. At the same time, animals with many highly diagnostic, but unpaired elements may yield a high specimen weight and biomass estimate. Hence high specimen count, low MNI, and high biomass are artifacts of analysis for some animals. Gars (*Lepisosteus* spp.) are good examples of this issue because this fish is represented in the La Pointe-Krebs Plantation assemblage primarily by the heavy ganoid scales typical of this genus.

The species identified from La Pointe-Krebs Plantation are summarized into faunal categories based on vertebrate class. This summary contrasts the percentage of various groups of taxa in the collection. These categories are Sharks, rays, and bony fishes; Alligators and turtles; Wild birds; Domestic birds; Deer; Other wild mammals; Domestic mammals; and Commensal taxa. In order to make comparisons of MNI and biomass estimates possible, the summary tables include biomass estimates only for those taxa for which MNI is estimated.

Canada geese and turkeys are placed in the Wild bird category, but may actually be Domestic birds. According to the American Poultry Association (1874), standards of excellence for turkeys were established by the mid-eighteenth century. However, measurements are the primary means of distinguishing between wild and domestic animals and specimens that could distinguish wild from domestic forms are not present in these assemblages. Because wild Canada geese and turkeys were present in Mississippi and the northern coast of the Gulf of Mexico, the more conservative interpretation is to consider the archaeological specimens as pertaining to the wild forms. This is an aspect of colonial economies that would benefit from archaeogenetic analysis. Commensal taxa include frogs and toads (Anura, *Scaphiopus holbrookii*), snakes (Serpentes), moles (*Scalopus aquaticus*), Old World rats (*Rattus* spp.), Hispid cotton rats (*Sigmodon hispidus*), domestic cats (*Felis catus*), and horses (*Equus caballus*). Although commensal animals might be consumed, they are commonly found in close association with humans and their built environment as pets, vermin, or working animals (Reitz and Wing 2008:137-138). Some commensal animals are ones that people either do not encourage or actively discourage. Just as some of the animals included in the commensal category might have been consumed, likewise some animals identified as consumed might have been commensal.

The presence or absence of elements in an archaeological assemblage provides data on animal use such as butchering practices, economic uses, and transportation costs. The artiodactyl elements identified at La Pointe-Krebs Plantation are summarized into categories by body parts. The Head category includes only skull fragments, including antlers and teeth. The atlas and axis, along with other vertebrae and ribs, and sternum, are placed into the Axial category. It is likely the Head and Axial categories are underrepresented because of recovery and identification difficulties. Vertebrae and ribs of mammals cannot be identified beyond class unless distinctive morphological features support such identifications. Usually they do not, and specimens from these elements are classified as Indeterminate mammal. Forequarter includes the scapula, humerus, radius, and ulna. Carpal and metacarpal specimens are presented in the Forefoot category. The Hindfoot category includes tarsal and metatarsal specimens. The Hindquarter category includes the innominate, sacrum, femur, and tibia. Metapodiae and podiae that could not be assigned to one of these other categories, as well as sesamoids and phalanges, are assigned to the Foot category. Specimens from the Axial, Forequarter, and Hindquarter categories are interpreted as portions from the meaty part of the carcass.

The specimens identified as artiodactyls from each analytical unit are summarized visually to illustrate their number and location in a carcass. Although the atlas and axis fragments are accurately depicted, other cervical, thoracic, lumbar, and caudal vertebrae, as well as ribs, are placed approximately on the illustrations. The last lumbar location is used to illustrate vertebrae that could only be identified as vertebrae. The last rib location is used to illustrate ribs for which the specific rib could not be identified. Specimens identified only as sesamoids, metapodiae, podials, or phalanges are illustrated on the right hindfoot.

Pig and cow specimens also are studied by means of a logged ratio diagram, which serves to standardize the relative proportion of identified archaeological specimens with the relative proportion of the represented specimens in a complete, unmodified, reference cow skeleton, which serve as a standard (Reitz and Wing 2008:223-224; Simpson 1941; Simpson et al. 1960:357-358). The formula is:

# $d = \log_e X - \log_e Y$

where d is the logged ratio, X is the percentage of the specimen category in the archaeological collection, and Y is the same percentage of this same category in the unmodified skeleton of the standard animal. In graphic format, the standard is represented by a horizontal line at zero and

the logged ratio (d) is represented on the vertical axis. Values beneath the line are underrepresented compared to the standard and values above the line are overrepresented. Pig and cow skeletons are subdivided into Head, Forequarter, Hindquarter, and Foot categories (which combines Forefoot, Hindfoot, and Foot specimens). Specimens in the Axial category are included in the calculation of X and Y, but d for this category is not presented in the accompanying figures because this category is often rare or absent, perhaps because of the analytical bias identified above. Logged ratio diagrams equate fragmentary specimens representing archaeological specimens with whole specimens, a possible source of analytical bias. The negative aspects of this bias are balanced against the virtue that this method controls for degree of difficulty in identification and relative abundance in the skeleton, whereas bar diagrams and other devices that rank specimens based on relative abundance of archaeological specimens against the relative abundance of archaeological specimens against the relative abundance of archaeological specimens against the relative abundance of the specimens that they represent in the unmodified skeleton, some of the problems associated with bar diagrams are avoided.

Relative ages of the artiodactyls identified are estimated based on observations of the degree of epiphyseal fusion for diagnostic elements (Reitz and Wing 2008:70-73). When animals are immature, a cartilaginous plate separates the shaft (diaphysis) of the bone from the ends of the specimen (epiphyses). As maturity is reached and growth is complete, these cartilaginous plates ossify and the epiphyses and diaphyses fuse. Although environmental factors influence the actual age at which fusion is complete, elements fuse in a regular temporal sequence (Gilbert 1980; Purdue 1983; Reitz and Wing 2008:72, 173-174; Schmid 1972; Watson 1978). During analysis, specimens are recorded as either fused or unfused and placed into one of three categories based on the age in which fusion generally occurs (Reitz and Wing 2008:193-196). Unfused elements in the Early-fusing category are interpreted as evidence for juveniles; unfused elements in the Middle-fusing and Late-fusing categories are usually interpreted as evidence for subadults, though sometimes characteristics of the specimen, such as a high degree of porosity, may suggest a juvenile. Fused specimens in the Late-fusing group provide evidence for adults. Fused specimens in the Early- and Middle-fusing groups are indeterminate. Clearly, fusion is more informative for unfused elements that fuse early in the maturation sequence and for fused elements that complete fusion late in the maturation process than it is for other elements. An early-fusing element that is fused could be from an animal that died immediately after fusion was complete or many years later. The ambiguity inherent in age grouping is somewhat reduced by recording each element under the oldest category possible.

The sex of animals is an important indication of animal use; however, there are few unambiguous indicators of sex. Males are indicated by the presence of spurs on the tarsometatarsus of chickens and turkeys, antlers on deer, large tusk-like canines on pigs, the baculum in those species that have one, pelvic characteristics, and characteristics of horn cores in bovids. Male turtles are indicated by a depression on the plastron to accommodate the female during mating. Females are recognized either by the absence of these features or by different shapes in these features. Some female birds may be identified by the presence of medullary bone and some males by the presence of a spur on the tarsometatarsus (Serjeantson 2009:47-53). Another approach is to compare measurements of identified specimens for dimensions that fall into a male or female range, though rarely are there sufficient numbers of measurements to reliably indicate sex.

Modifications can indicate butchering methods as well as site formation processes. Modifications are classified as hacked, cut, burned, calcined, rodent-gnawed, pathological, and drilled. The latter two categories are described in more detail in the analytical units in which they are found. Although NISP for specimens identified as Indeterminate vertebrate are not included in the species lists, modified Indeterminate vertebrate specimens are included in the modification tables.

Hacked and cut specimens are the product of butchering and food preparation (Reitz and Wing 2008:127-132). Hack marks are evidence that some large instrument, such as a cleaver, was used. Presumably, a cleaver, hatchet, or axe was used to dismember the carcass before, rather than after, the meat was cooked. Cuts are small incisions across the surface of specimens. These marks were probably made by knives as meat was removed before or after the meat was cooked. Cuts may also be left on specimens if attempts are made to disarticulate the carcass at joints. Some marks that appear to be made by human tools may actually be abrasions inflicted after the specimens were discarded, but distinguishing this source of small cuts requires access to higher powered magnification than is currently available (Shipman and Rose 1983).

Burned and calcined specimens are the result of exposure to fire when a cut of meat is roasted or if specimens are burned intentionally or unintentionally after discard (Reitz and Wing 2008:132-134). Burned specimens result from the carbonization of bone collagen and are identified by their charred-black coloration (Lyman 1994:384-385). Calcined specimens are usually indicated by white or blue-gray discoloration (Lyman 1994:385-386). Calcined specimens are the result of two possible processes: burning at extreme temperatures ( $\exists 600 \text{ EC}$ ) and leaching of calcite. Both types of calcination are believed to have occurred in this assemblage, but no attempt was made to distinguish between them. Experimental studies indicate that the color of specimens is a poor indicator of the type of modification because it is difficult to precisely describe color variation and other diagenetic factors may alter color (Lyman 1994:385).

Gnawing by rodents indicates that specimens were not immediately buried after disposal (Reitz and Wing 2008:135-137). While burial would not ensure an absence of gnawing, exposure of specimens for any length of time might result in gnawing. Rodents include such animals as rats and squirrels (*Sciurus* spp.). Gnawing by rodents results in loss of an unknown quantity of discarded material.

### **Results: Early French Analytical Unit, Feature 90 (ca. 1718-1732)**

A total of 944 vertebrate specimens weighing 1,060.406 g were identified in the samples from Feature 90, including the remains of at least 16 individuals estimated for 13 taxa, ten of which are indigenous and three of which are introduced (Table 4-6). This analytical unit contains no Other wild mammals or commensal taxa.

Wild resources contribute 75 percent of the individuals and 78 percent of the biomass in this collection (Table 4-7). The most prominent wild taxa are Sharks, rays, and bony fishes, which contribute 44 percent of individuals and 31 percent of the biomass, and white-tailed deer (*Odocoileus virginianus*), which contribute 13 percent of individuals and 38 percent of the biomass. Although alligators and turtles contribute 13 percent of the individuals as well, they contribute only 8 percent of the biomass. Other than alligators and deer, there is no evidence of animals that could have been part of a hide or fur trade.

Domestic animals contribute 25 percent of the individuals and 22 percent of the biomass. Domestic chickens (*Gallus gallus*) are present, but rare, and pigs (*Sus scrofa*) are absent. Cows (*Bos taurus*) contribute 13 percent of the individuals and beef contributes 14 percent of the estimated biomass compared to goat or mutton's 7 percent.

Deer, cows, and caprines are represented by 43 specimens (Table 4-8). Most of these are deer specimens from all parts of the skeleton, suggesting that remains from entire carcasses were discarded in Feature 90 (Figure 4-1). Fifteen of the deer specimens are teeth, and specimens from the meaty part of the deer carcass (Axial, Forequarter, Hindquarter) comprise 27 percent of the deer specimens. The deer antler is still attached to the skull. The cow is represented by six teeth fragments and two post-cranial specimens (Figure 4-2). The caprine is represented by a single humerus (Figure 4-3).

Epiphyseal fusion data indicate use of individuals of all ages. The deer include one individual that was a juvenile at death and another whose age at death cannot be determined, but which was at least a subadult at death (Table 4-9). The antler fragment indicates that the indeterminate deer could have been an adult male killed during the reproductive season. One cow was a juvenile at death (Table 4-10) and teeth suggest the presence of a second, older individual. The caprine was a subadult (Table 4-11).

The most common modification in the Feature 90 materials is burning (Table 4-12). No specimens are calcined, and few specimens are hacked or cut. The deer antler is burned as wells as hacked. The hack marks at the base of the antler as well as cut marks on the deer astragalus may be evidence of skinning. The other cut marks on deer specimens are in locations more typically associated with butchering (ilium, tibia shaft). The caprine humerus is modified; a hole was drilled into the marrow cavity from the proximal diaphysis directed toward the distal end of the specimen, which is missing. This specimen is in FS 894.

Tavar	NICD		MNI	Weight	Biomass
Taxon	NISP	#	%	g	kg
Actinopterygii, Indeterminate bony fishes	202			98.353	1.214
Atractosteus spatula, Alligator gar	1	1	6.3	3.177	0.091
Lepisosteus spp., Gar	103	1	6.3	54.910	1.08
Ariidae, Sea catfishes	2	2	12.0	2.846	0.054
<i>Mugil</i> spp., Mullet	23	1	6.3	1.165	0.031
Sciaenidae, Drums	32			99.651	1.172

5

2

9

34

3

2

1

3

234

21

34

8

1

944

224

1

1

1

1

1

1

2

2

1

16

6.3

6.3

6.3

6.3

6.3

6.3

12.5

12.5

6.3

30.053

2.191

29.281

8.114

2.917

55.836

2.022

1.415

2.927

8.914

251.125

135.864

44.310

21.910

203.425 **1060.406**  0.483

0.07

0.423

0.129

0.065

0.794

0.039

0.028

0.054

3.801

0.188

2.187

0.798

0.423

13.124

Table 4-6. La Pointe-Krebs Plantation, Early French (Feature 90), vertebrate species.

Table 4-7. La Pointe-Krebs Plantation, Early	v French (Feature 90) vertebrate summarv
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Total

Vertebrate Categories	MNI		Biomass	
	#	%	kg	%
Sharks, rays, and bony fishes	7	43.8	1.809	31.3
Alligator and turtles	2	12.5	0.488	8.4
Wild birds	1	6.3	0.028	0.5
Domestic birds	1	6.3	0.054	0.9
Deer	2	12.5	2.187	37.8
Other wild mammals				
Domestic mammals	3	18.8	1.221	21.1
Commensal taxa				
Total	16		5.787	

Table 4-8. La Pointe-Krebs Plantation, Early French (Feature 90), element distribution.

Pogonias cromis, Black drum

Aves, Indeterminate birds

Gallus gallus, Chicken

Bos taurus, Cow

Sciaenops ocellatus, Red drum

Testudines, Indeterminate turtles

Kinosternidae, Mud and musk turtles

Anatidae, Swans, geese, and ducks

Branta canadensis, Canada goose

Mammalia, Indeterminate mammals

Odocoileus virginianus, White-tailed deer

Vertebrata, Indeterminate vertebrates

Artiodactyla, Even-toed ungulates

Caprinae, Goats and sheep

Alligator mississippiensis, American alligator

Skeletal Part	Deer Cow		Sheep/Goat
Head	17	6	
Axial	4		
Forequarter	1	1	1
Hindquarter	4		
Forefoot	1		
Hindfoot	3		
Foot	4	1	
Total	34	8	1

Table 4-9. La Pointe-Krebs Plantation, Early French (Feature 90), epiphyseal fusion for deer (*Odocoileus virginianus*).

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal			
Scapula, distal			
Radius, proximal			
Acetabulum		1	1
Metapodials, proximal			
1st/2nd phalanx, proximal	1	2	3
Middle Fusing:			
Tibia, distal			
Calcaneus, proximal			
Metapodials, distal			
Late Fusing:			
Humerus, proximal			
Radius, distal			
Ulna, proximal			
Ulna, distal			
Femur, proximal			
Femur, distal			
Tibia, proximal			
Total	1	3	4

184

Table 4-10. La Pointe-Krebs Plantation, Early French (Feature 90), epiphyseal fusion for cow (Bos taurus).

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal	1		1
Scapula, distal			
Radius, proximal			
Acetabulum			
Metapodials, proximal			
1st/2nd phalanx, proximal			
Middle Fusing:			
Tibia, distal			
Calcaneus, proximal			
Metapodials, distal			
Late Fusing:			
Humerus, proximal			
Radius, distal			
Ulna, proximal			
Ulna, distal			
Femur, proximal			
Femur, distal			
Tibia, proximal			
Total	1		1

Table 1 11 La Dainta Kraha Dlantatian		$(\Gamma_{\alpha\alpha}, \dots, \rho_{\alpha})$	aninhungal fusion for conving
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Table 4-11. La Pointe-Krebs Plantation	i, Lui iy i i Ciici	r (i cuture 50)	

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal			
Scapula, distal			
Radius, proximal			
Acetabulum			
Metapodials, proximal			
1st/2nd phalanx, proximal			
Middle Fusing:			
Tibia, distal			
Calcaneus, proximal			
Metapodials, distal			
Late Fusing:			
Humerus, proximal	1		1
Radius, distal			
Ulna, proximal			

Ulna, distal		
Femur, proximal		
Femur, distal		
Tibia, proximal		
Total	1	1

# Table 4-12. La Pointe-Krebs Plantation, Early French (Feature 90), faunal modifications.

Taxon		Hacked	Cut	Burned	Rodent- gnawed	Worked
Indeterminate bony fishes				18		
Gar				4		
Drums			1			
Indeterminate turtles			1	13		
Mud and musk turtles				1		
Indeterminate birds				9	1	
Chicken			2		1	
Indeterminate mammals			5	67		
White-tailed deer		1	5	4		
Cow			1			
Goats and sheep						1
Indeterminate vertebrates				640		
1	Гotal	1	15	756	2	1

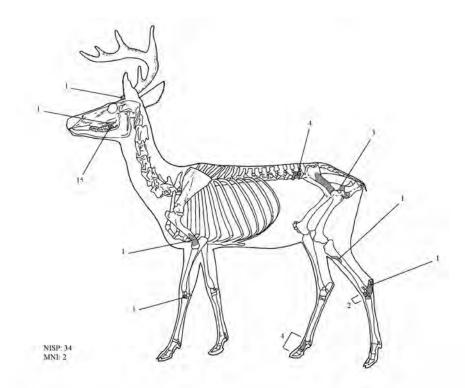


Figure 4-1. La Pointe-Krebs Plantation, Early French (Feature 90), deer elements identified (NISP = 34).

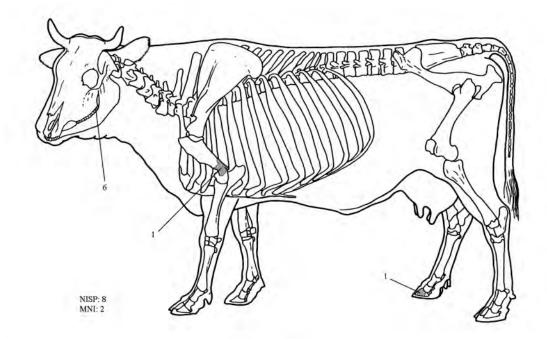


Figure 4-2. La Pointe-Krebs Plantation, Early French (Feature 90), cow elements identified (NISP = 8).

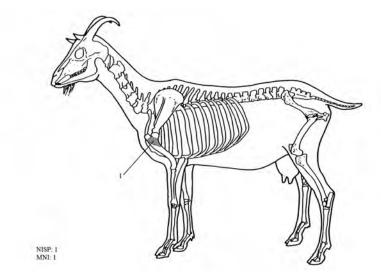


Figure 4-3. La Pointe-Krebs Plantation, Early French (Feature 90), caprine elements identified (NISP = 1).

### **Results: French/British Analytical Unit (1732-1780s)**

A total of 6,720 specimens weighing 6,202.865 g were identified in the French/British analytical unit, including the remains of at least 86 individuals estimated for 51 taxa, 45 of which are indigenous and six of which are introduced (Table 4-13).

Wild resources contribute 84 percent of the individuals and 45 percent of the biomass in this analytical unit (Table 4-14). The most prominent wild taxa are Sharks, rays, and bony fishes, which contribute 43 percent of individuals and 21 percent of the biomass. Wild birds contribute 22 percent of the individuals and white-tailed deer (*Odocoileus virginianus*) contribute 11 percent of the biomass. Given the fondness of Spaniards for gopher tortoise (*Gopherus polyphemus*), the presence of this animal in the French/British analytical unit may indicate some familiarity with that animal among the residents at La Pointe-Krebs Plantation. Three gopher tortoise appendicular specimens are present in Feature 163 (FS 1134, 1152). This may be a unique find for a French context and suggests that more than cattle were obtained from Spanish outposts such as Pensacola, although gopher tortoises are indigenous to the Pascagoula area as well. A tooth from a small toothed whale (Delphinidae) also is present (Feature 173, FS 1142).

Domestic animals contribute 10 percent of the individuals and 55 percent of the biomass. Domestic chickens (*Gallus gallus*) are present, but not abundant. Domestic mammals include pig (*Sus scrofa*), cow (*Bos taurus*), and goats or sheep (Caprinae). Pigs and cows contribute the same number of individuals (2 percent), beef contributes 21 percent of the estimated biomass, and pork contributes 28 percent of the biomass.

Commensal animals are present, contributing 6 percent of the individuals in this analytical unit, but less than 1 percent of the biomass. These include frogs and toads (Anura), Old World rats (*Rattus* spp.), as well as domestic cats (*Felis catus*) and horses (*Equus caballus*).

The rat documents the presence of this Old World pest on the Gulf Coast at an early date. The cat is represented by a maxilla fragment (Feature 105, FS 959) and the horse by a canine or wolf tooth (Feature 163, FS 1179).

Deer and domestic artiodactyls are represented by 84 specimens (Table 4-15). Most of the pig specimens are from the head, including the right half of a skull from Feature 105 (FS 969) and portions of another skull from Feature 122 (FS 1024), and 22 teeth (Figure 4-4). The adult cranium with  $M^3$  fully erupted and in slight wear is from the same context as the only post-cranial specimen (Feature 122, FS 1024). Meaty parts of the pig carcass are largely absent. Most parts of the deer skeleton are present (Figure 4-5). The highest number of deer specimens are from the head, including eight teeth fragments and an antler fragment. The antler fragment is attached to the skull, indicating this was a male killed during the reproductive season (Feature 122, FS 1046). Meaty portions of the deer carcass (Axial, Forequarter, and Hindquarter) comprise 44 percent of the deer specimens. Unlike for pigs, portions of the entire cow skeleton are represented, though teeth (NISP = 5), other skull fragments, and specimens from the Forefoot, Hindfoot, and Foot comprise 73 percent of the cow specimens, compared to 27 percent of the specimens from the meaty portion of the carcass (Figure 4-6). All of the caprine specimens are from the meaty portion of the carcass (Figure 4-7).

Epiphyseal fusion data indicate use of juvenile, subadult, and adult individuals. The pig skull in Feature 105 (FS 969) is that of a large adult and the skull in Feature 105 (FS 959) is that of a small adult. The fused proximal tibia is additional evidence for an adult pig (Table 4-16). A male lower right canine (Feature 105, FS 959) and another canine fragment in Feature 122 (FS 1024) indicate that at least one of these individuals was an adult male. The two deer individuals include one subadult and one adult (Table 4-17). This latter individual could be the adult male represented by the antler. Epiphyseal fusion data are available for four cow specimens (Table 4-18). One of the cow individuals was a juvenile at death and the other was at least a subadult when it died. All of the caprine individuals were at least subadults at death (Table 4-19).

Several of these animals in addition to deer could have been part of a hide or fur trade. These include opossum (*Didelphis virginiana*), rabbit (*Sylvilagus* sp.), fox (*Urocyon cinereoargenteus*), bear (*Ursus americanus*), raccoon (*Procyon lotor*), and bobcat (*Lynx rufus*). The opossum is represented by three cranial fragments and five vertebrae from Feature 105 (FS 959, 1081) and Feature 122 (FS 1024, 1046). The rabbit is represented by a burned humerus from Feature 122 (FS 1025). The fox is represented by three teeth, a mandible, and an atlas from Feature 105 (FS 1081) and Feature 173 (FS 1142). The bear is represented by a single, complete, fused radius of a diseased animal (Feature 105, FS 1087). The raccoon is represented by a single tooth in Feature 107 (FS 958). The bobcat is represented by three carpals (Feature 122, FS 1046).

None of the specimens from possible furbearing animals, except for those attributed to bear and deer, have butchering or skinning marks (Table 4-20). The most common modification in the French/British colonial analytical unit is burning. The hack and cut marks on deer specimens are in locations more commonly associated with butchering than with skinning (axis,

scapula). No marks that might be associated with skinning are found on the antler. In addition to deer, only one of the animals that might represent fur or hide trade shows evidence of skinning or butchering marks. This is the bear radius, which is cut though otherwise intact and unmodified, except for a generalized pathological condition of unknown origin.

Taxon	NISP	Ν	<b>NNI</b>	Weight	Biomass
	NISP	#	%	g	kg
Chondrichthyes, Cartilaginous fishes	11	1	1.2	0.552	0.08
Dasyatidae, Stingrays	1	1	1.2	0.038	0.01
Actinopterygii, Indeterminate bony fishes	2880			436.759	4.06
Atractosteus spatula, Alligator gar	1	1	1.2	15.733	0.36
Lepisosteus spp., Gar	1092	1	1.2	325.764	5.08
Siluriformes, Catfishes	82			7.146	0.13
Ictalurus punctatus, Channel catfish	1	1	1.2	3.338	0.06
Ariidae, Sea catfishes	44			12.563	0.22
Ariopsis felis, Hardhead catfish	56	3	3.5	8.420	0.15
Bagre marinus, Gafftopsail catfish	34	5	5.8	5.366	0.10
Mugil spp., Mullet	186	6	7.0	14.616	0.26
Morone saxatilis, Stripped bass	1	1	1.2	0.195	0.01
Caranx hippos, Crevalle jack	1	1	1.2	2.263	0.08
Archosargus probatocephalus, Sheepshead	88	4	4.7	38.604	0.46
Sciaenidae, Drums	89			100.436	1.18
Micropogonias undulatus, Atlantic croaker	1	1	1.2	0.081	0.01
Pogonias cromis, Black drum	52	2	2.3	130.703	1.43
Sciaenops ocellatus, Red drum	40	8	9.3	32.046	0.51
Paralichthys sp., Southern flounder	1	1	1.2	0.119	0.004
Anura, Frogs and toads	17	2	2.3	1.708	
Alligator mississippiensis, American alligator	2	1	1.2	0.702	0.01
Testudines, Indeterminate turtles	118			55.664	0.47
Kinosternidae, Mud and musk turtles	1	1	1.2	0.099	0.01
Emydidae, Box and water turtles	17			53.880	0.46
Malaclemys terrapin, Diamondback terrapin	2	1	1.2	11.466	0.16
Pseudemys sp., Cooter turtle	1	1	1.2	1.481	0.04
Terrapene carolina, Box turtle	13	1	1.2	72.828	0.56
Gopherus polyphemus, Gopher tortoise	3	1	1.2	3.591	0.07
Aves, Indeterminate birds	1003			238.552	2.98
Ardeidae, Bitterns, egrets, and herons	3			2.560	0.05
Ardea herodias, Great blue heron	2	1	1.2	2.579	0.05

Table 4-13. La Pointe-Krebs Plantation, French/ British period, vertebrate species.

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Тс	otal 6720	86		6202.865	63.593
Vertebrata, Indeterminate vertebrates				1461.273	
Caprinae, Goats and sheep	6	3	3.5	129.097	2.09
Bos taurus, Cow	22	2	2.3	622.426	8.60
Bovidae, Cattle, goats, and sheep	4			3.188	0.07
Odocoileus virginianus, White-tailed deer	27	2	2.3	304.631	4.52
Sus scrofa, Pig	29	2	2.3	848.050	11.37
Artiodactyla, Even-toed ungulates	12			8.862	0.19
<i>Equus caballus,</i> Horse	1	1	1.2	2.778	0.07
Delphinidae, Dolphins and whales	1	1	1.2	46.776	0.84
<i>Lynx rufus,</i> Bobcat	3	1	1.2	1.774	0.04
Felis catus, Domestic cat	1	1	1.2	0.292	0.01
Felidae, Cats	3			1.088	0.03
Procyon lotor, Raccoon	1	1	1.2	0.105	0.003
Ursus americanus, American black bear	1	1	1.2	130.120	2.10
Urocyon cinereoargenteus, Gray fox	5	1	1.2	6.923	0.15
Canidae, Coyotes, dogs, foxes, and wolves	5			3.086	0.07
Rattus spp., Old World rat	2	1	1.2	0.150	0.005
Sciurus niger, Fox squirrel	2	1	1.2	1.169	0.03
Sciurus spp., Squirrel	2			0.375	0.01
<i>Sylvilagus</i> sp., Rabbit	1	1	1.2	0.548	0.02
<i>Didelphis virginiana,</i> Opossum	8	1	1.2	12.240	0.25
Mammalia, Indeterminate mammals	600			951.732	12.61
Agelaius phoeniceus, Red-winged blackbird	4	(1)		0.104	0.003
Passeriformes, Perching birds	5	2	2.3	0.172	0.004
Corvus brachyrhynchos, American crow	19	1	1.2	8.024	0.14
Columbidae, Doves and pigeons	1	1	1.2	0.086	0.002
Laridae, Gulls and terns	4	1	1.2	0.965	0.02
Scolopacidae, Sandpipers	1	1	1.2	0.042	0.001
Grus canadensis, Sandhill crane	5	1	1.2	11.018	0.18
Grus spp., Cranes	3			3.986	0.07
Rallidae, Rails and waterhens	48	6	7.0	5.673	0.10
<i>Meleagris gallopavo,</i> Wild turkey	2	1	1.2	4.620	0.08
Gallus gallus, Chicken	21	2	2.3	14.727	0.24
Phasianidae, Pheasants, quail, and turkeys	3			2.382	0.04
Pandion haliaetus, Osprey	8	1	1.2	3.000	0.06
Accipitridae, Eagles, hawks, and kites	1	1	1.2	0.055	0.001
Anserinae, Geese and swans	5	1	1.2	14.194	0.23
Anas platyrhynchos, Mallard	1	1	1.2	11.584	0.19
Anatidae, Swans, geese, and ducks Anas platyrhynchos, Mallard	10 1	1	1.2		5.698 584

Vertebrate Category	MNI		Biomass	
	#	%	kg	%
Sharks, rays, and bony fishes	37	43.0	8.604	21.1
Alligator and turtles	6	7.0	0.850	2.1
Wild birds	19	22.1	1.058	2.6
Domestic birds	2	2.3	0.240	0.6
Deer	2	2.3	4.520	11.1
Other wild mammals	8	9.3	3.433	8.4
Domestic mammals	7	8.1	22.060	54.0
Commensal taxa	5	5.8	0.085	0.2
Total	86		40.850	

Table 4-14. La Pointe-Krebs Plantation, French/British period, vertebrate summary.

Note: Anurans are included in the MNI calculation, but are not included in the biomass calculation because allometric values are not currently available for this taxon. This table does not include data from Feature 90.

Table 4-15. La Pointe-Krebs Plantation, French/British period, element distribution.

Skeletal Part	Pig	Deer	Cow	Sheep/Goat
Head	28	11	8	
Axial		3	3	
Forequarter		6	1	4
Hindquarter	1	3	2	2
Forefoot			1	
Hindfoot		4	1	
Foot			6	
Total	29	27	22	6

Table 4-16. La Pointe-Krebs Plantation,	French/British period	I. epiphyseal fusior	for pig (Sus scrofa).
		.,	

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal			
Scapula, distal			
Radius, proximal			
Acetabulum			
Metapodials, proximal			
1st/2nd phalanx, proximal			
Middle Fusing:			
Tibia, distal			
Calcaneus, proximal			

Metapodials, distal		
Late Fusing:		
Humerus, proximal		
Radius, distal		
Ulna, proximal		
Ulna, distal		
Femur, proximal		
Femur, distal		
Tibia, proximal	1	1
Total	1	1

Note: This table does not include data from Feature 90.

Table 4-17. La Pointe-Krebs Plantation, French/British period, epiphyseal fusion for deer (*Odocoileus virginianus*).

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal		1	1
Scapula, distal		2	2
Radius, proximal		1	1
Acetabulum			
Metapodials, proximal			
1st/2nd phalanx, proximal			
Middle Fusing:			
Tibia, distal	1		1
Calcaneus, proximal			
Metapodials, distal			
Late Fusing:			
Humerus, proximal			
Radius, distal		1	1
Ulna, proximal			
Ulna, distal			
Femur, proximal			
Femur, distal			
Tibia, proximal	1	1	2
Total	2	6	8

Table 4-18. La Pointe-Krebs Plantation	. French/British period.	. epiphyseal fusion for cov	(Bos taurus).

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal			

Total	1	3	4
Tibia, proximal			
Femur, distal			
Femur, proximal			
Ulna, distal			
Ulna, proximal			
Radius, distal			
Humerus, proximal			
Late Fusing:			
Metapodials, distal		1	1
Calcaneus, proximal			
Tibia, distal			
Middle Fusing:			
1st/2nd phalanx, proximal	1	2	3
Metapodials, proximal			
Acetabulum			
Radius, proximal			
Scapula, distal			

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal		3	3
Scapula, distal			
Radius, proximal			
Acetabulum			
Metapodials, proximal			
1st/2nd phalanx, proximal			
Middle Fusing:			
Tibia, distal			
Calcaneus, proximal			
Metapodials, distal			
Late Fusing:			
Humerus, proximal			
Radius, distal			
Ulna, proximal			
Ulna, distal			
Femur, proximal			

Femur, distal			
Tibia, proximal			
	Total	3	3

Note: This table does not include data from Feature 90.

Table 4-20. La Pointe-Krebs Plantation, French/British period, faunal modifications.

Taxon	Hacked	Cut	Burned	Calcined	Rodent- gnawed	Pathology
Cartilaginous fishes			1			
Indeterminate bony fishes		3	153	19		
Gar			205			
Catfishes			12	1		
Sea catfishes			2			
Hardhead catfish			3			
Gafftopsail catfish			5	3		
Mullet			1	1		
Sheepshead		1				
Drums			10	1		
Black drum			7			
Frogs and toads			1			
Indeterminate turtles		4	19	6		
Gopher tortoise					2	
Box and water turtles			1	1		
Indeterminate birds	1	7	24	5		
Geese and swans		1				
Osprey		4				
Chicken		2				
Sandhill crane		1				
Indeterminate mammals	1	6	79	4		
Rabbit			1			
American black bear		1				1
Even-toed ungulates			1			
Pig			1			
White-tailed deer	1	1		1		
Cow		2				
Goats and sheep		2				
Indeterminate vertebrates		7	3222	47		
Total	3	42	3748	89	2	1

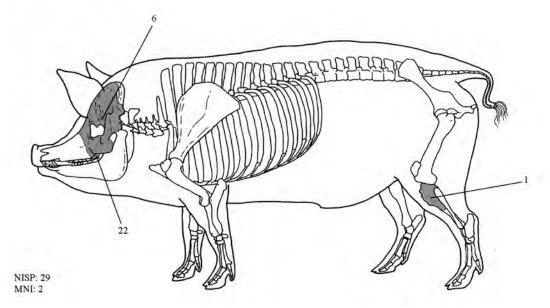


Figure 4-4. La Pointe-Krebs Plantation, French/British period, pig elements identified (NISP = 29).

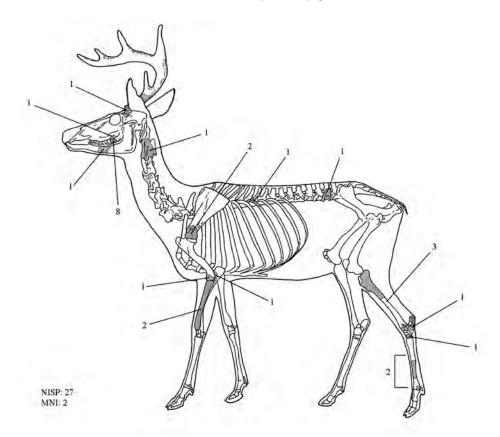


Figure 4-5. La Pointe-Krebs Plantation, French/British period, deer elements identified (NISP = 27).

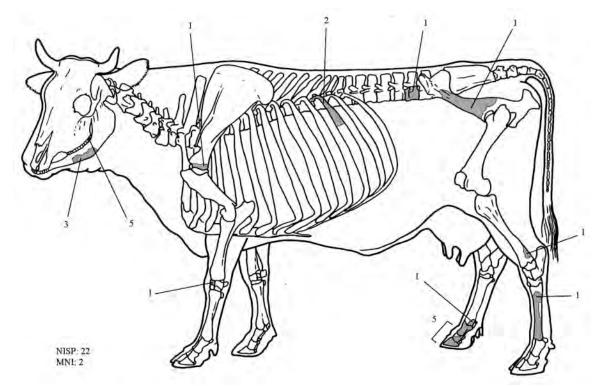


Figure 4-6. La Pointe-Krebs Plantation, French/British period, cow elements identified (NISP = 22).

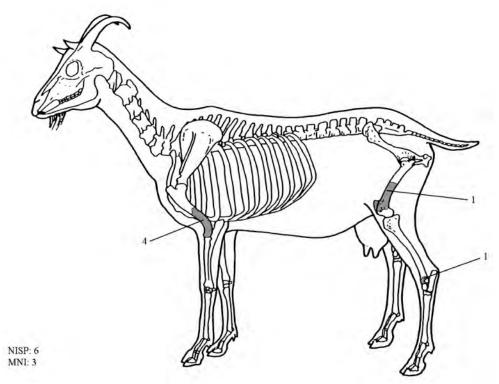


Figure 4-7. La Pointe-Krebs Plantation, French/British period, caprine elements identified (NISP = 6).

#### **Results:** Spanish/Early American Analytical Unit (1780s-1850)

A total of 4,204 specimens weighing 3,180.023 g were identified in the Spanish and early American period analytical unit, including the remains of at least 57 individuals estimated for 47 taxa, 43 of which are indigenous and four of which are introduced (Table 4-21).

Wild vertebrates contribute 79 percent of the individuals and 61 percent of the biomass in this analytical unit (Table 4-22). Sharks, rays, and bony fishes contribute 32 percent of the individuals and 26 percent of the biomass. In contrast to Fishes, Alligators and turtles, Wild birds, and Other wild mammals contribute small percentages of individuals. Deer (*Odocoileus virginianus*) also contributes a small percentage of individuals, but 28 percent of the biomass.

Domestic animals contribute 10 percent of the individuals and 39 percent of the biomass. Domestic chickens (*Gallus gallus*) are present, but not abundant. Both of the chicken individuals are probably females, represented by tarsometatarsii that do not have evidence of spurs. Domestic mammals include pig (*Sus scrofa*) and cow (*Bos taurus*). Caprines are absent. Pigs contribute more individuals than do cows (5 percent compared to 2 percent), on a par with deer individuals. Beef, however, contributes 32 percent of the biomass and pork contributes 5 percent.

Commensal animals contribute 10 percent of the individuals, but less than 1 percent of the biomass. These include frogs and toads (Anura), moles (*Scalopus aquaticus*), Old World rats (*Rattus* sp.), and cats (*Felis catus*). The cat is represented by teeth, cranial fragments, ribs, and caudal vertebrae (Feature 121, FS 1022, 1023; Feature 180, FS 1200).

Deer and domestic artiodactyls are represented by 201 specimens, 146 of which are from pigs (Table 4-23). Half (51 percent) of the pig specimens are teeth (NISP = 42) and cranial fragments (NISP = 32; Figure 4-8). Specimens from meaty portions of the carcass comprise 32 percent of the pig specimens. However, 124 of these pig specimens are from an unusually complete skeleton of a neonatal piglet recovered from Feature 121 (FS 1031, 1032). Specimens from all portions of the deer skeleton are present in this analytical unit, though specimens from the Head, Forefoot, Hindfoot, and Foot represent 54 percent of these specimens compared to 46 percent from meaty portions of the carcass (Figure 4-9). Cow specimens are primarily teeth (NISP = 13; Figure 4-10).

Epiphyseal fusion data indicate use of juvenile, subadult, and adult. Data on epiphyseal fusion was recorded for 49 pig specimens (Table 4-24). The presence of the largely complete neonatal skeleton is evidenced by the unfused pairs of elements recorded in Table 24. A second juvenile is present in Feature 105 (FS 1078) in addition to an adult pig, which is represented by teeth in Feature 105 (FS 947). One of the deer was a juvenile at death, one is a subadult, and the third is an adult (Table 4-25). The age of the cow individual cannot be determined other than to observe it was at least a subadult, and could have been adult (Table 4-26).

In addition to deer, possible hide or furbearing animals include opossum (*Didelphis virginiana*), rabbit (*Sylvilagus* sp.), fox (*Urocyon cinereoargenteus*), bear (*Ursus americanus*),

raccoon (*Procyon lotor*), and bobcat (*Lynx rufus*). The opossum is represented by a tooth, five vertebrae, and four appendicular specimens (Feature 105, FS 947, 1078, 1079 and Feature 180, FS 1176). The rabbit is represented by a femur (Feature 179, FS 1175) and the fox by three skull fragments and an ulna fragment (Feature 105, FS 947, 1079). The bear is represented by a metapodial (Feature 180, FS 1176) and the raccoon by two teeth and a maxilla fragment. (Feature 105, FS 947) The bobcat is represented by a radius and phalanx (Feature 105, FS 1078).

None of the specimens from possible furbearing animals, except for those attributed to deer, have butchering or skinning marks (Table 4-27). The most common modification in the Spanish/early American analytical unit is burning. An additional 13 specimens are calcined. Other modifications recorded from the analytical unit indicate hacking, cutting, and post-discard gnawing by rodents. None of the piglet specimens are modified. The hack and cut marks on deer specimens are in locations more commonly associated with butchering than with skinning (atlas, scapula, radius, acetabulum, tibia shaft), though cut marks on two distal tibiae might be left by skinning.

Taxon			MNI	Weight	Biomass
Taxon	NISP	#	%	g	kg
Chondrichthyes, Cartilaginous fishes	1	1	1.8	0.056	0.01
Dasyatidae, Stingrays	1	1	1.8	0.019	0.004
Actinopterygii, Indeterminate bony fishes	1473			236.363	2.47
Lepisosteus spp., Gar	452	1	1.8	196.289	3.27
Megalops atlanticus, Tarpon	1	1	1.8	8.033	0.16
Siluriformes, Catfishes	37			2.939	0.06
Ictalurus sp., Freshwater catfish	1	1	1.8	1.866	0.04
Ariidae, Sea catfishes	5			2.983	0.06
Ariopsis felis, Hardhead catfish	22	2	3.5	5.652	0.10
Bagre marinus, Gafftopsail catfish	4	1	1.8	1.286	0.03
<i>Mugil</i> spp., Mullet	37	1	1.8	2.088	0.05
Archosargus probatocephalus, Sheepshead	57	4	7.0	28.727	0.35
Sciaenidae, Drums	13			22.208	0.39
Cynoscion nebulosus, Spotted seatrout	1	1	1.8	0.235	0.01
Micropogonias undulatus, Atlantic croaker	1	1	1.8	0.095	0.01
Pogonias cromis, Black drum	9	1	1.8	60.530	0.81
Sciaenops ocellatus, Red drum	3	1	1.8	1.849	0.06
Paralichthys sp., Southern flounder	1	1	1.8	0.014	0.001
Anura, Frogs and toads	18	2	3.5	0.567	
Alligator mississippiensis, American alligator	1	1	1.8	0.491	0.01
Testudines, Indeterminate turtles	116			49.367	0.43
Chelydra serpentina, Common snapping turtle	1	1	1.8	0.736	0.03

Table 4-21. La Pointe-Krebs Plantation, Spanish/Early American period, vertebrate species.

Kinostornidae, Mud and muck turtles	1	1	1.8	0.136	0.01
Kinosternidae, Mud and musk turtles		1	1.8		
Emydidae, Box and water turtles	25	1	1.0	47.736	0.42
Deirochelys reticularia, Chicken turtle	4	1	1.8	9.484	0.14
Pseudemys sp., Cooter turtle	1	4	1.0	44.909	0.4
Pseudemys floridana, Common cooter	1	1	1.8	7.388	0.12
<i>Terrapene carolina</i> , Box turtle	2	1	1.8	17.744	0.22
Aves, Indeterminate birds	1035			233.403	2.92
Phalacrocorax sp., Cormorant	1	1	1.8	0.162	0.004
Ardeidae, Bitterns, egrets, and herons	1	1	1.8	0.261	0.01
Anatidae, Swans, geese, and ducks	6			2.401	0.05
Anas platyrhynchos, Mallard	3	1	1.8	0.975	0.02
Anserinae, Geese and swans	6	1	1.8	12.700	0.21
Pandion haliaetus, Osprey	1	1	1.8	0.528	0.01
Galliformes, Fowls	1			2.280	0.04
<i>Gallus gallus,</i> Chicken	33	2	3.5	28.336	0.43
Rallidae, Rails and waterhens	1	1	1.8	0.044	0.001
Gruidae, Cranes	3	1	1.8	5.739	0.10
Scolopacidae, Sandpipers	3	1	1.8	0.365	0.01
Laridae, Gulls and terns	2	1	1.8	0.895	0.02
Corvus spp., Crow	3	1	1.8	1.162	0.02
Passeriformes, Perching birds	2			0.104	0.003
Turdus migratorius, American robin	1	1	1.8	0.047	0.001
Mammalia, Indeterminate mammals	517			619.938	8.57
Didelphis virginiana, Opossum	10	1	1.8	10.133	0.21
Scalopus aquaticus, Eastern mole	1	1	1.8	0.037	0.001
<i>Sylvilagus</i> sp., Rabbit	1	1	1.8	0.482	0.01
Rodentia, Rodents	2			0.116	0.004
Sciurus spp., Squirrel	3	1	1.8	0.682	0.02
Muridae, Mice, rats, and voles	1			0.004	0.0002
Rattus sp., Old World rat	1	1	1.8	0.042	0.002
Sigmodon hispidus, Hispid cotton rat	1	1	1.8	0.046	0.002
Canidae, Coyotes, dogs, foxes, and wolves	1			0.851	0.02
Urocyon cineroargenteus, Gray fox	4	1	1.8	5.680	0.13
Ursus americanus, American black bear	1	1	1.8	4.866	0.11
Procyon lotor, Raccoon	3	1	1.8	2.211	0.05
Felis catus, Domestic cat	15	1	1.8	1.429	0.04
<i>Lynx rufus</i> , Bobcat	2	1	1.8	1.099	0.03
Artiodactyla, Even-toed ungulates	46			60.834	1.06
Sus scrofa, Pig	146	3	5.3	51.471	0.91

Т	otal	4204	57		3180.023	36.1132
Vertebrata, Indeterminate vertebrates					591.066	
Bos taurus, Cow		18	1	1.8	425.046	6.10
Bovidae, Cattle, goats, and sheep		3			0.705	0.02
Odocoileus virginianus, White-tailed deer		37	3	5.3	364.093	5.31

Table 4-22. La Pointe-Krebs Plantation, Spanish/Early American period, vertebrate summary.

Vertebrate Category	Ν	/INI	Biomas	S
	#	%	kg	%
Sharks, rays, and bony fishes	18	31.6	4.905	25.6
Alligator and turtles	6	10.5	0.530	2.8
Wild birds	11	19.3	0.406	2.1
Domestic birds	2	3.5	0.430	2.2
Deer	3	5.3	5.310	27.7
Other wild mammals	7	12.3	0.560	2.9
Domestic mammals	4	7.0	7.010	36.5
Commensal taxa	6	10.5	0.045	0.2
Total	57		19.196	

Note: Anurans are included in the MNI calculation, but are not included in the biomass calculation because allometric values are not currently available for this taxon.

Skeletal Part	Pig	Deer	Cow
Head	74	5	13
Axial	21	2	
Forequarter	14	5	2
Hindquarter	11	10	1
Forefoot	2	2	
Hindfoot	4	8	2
Foot	20	5	
Total	146	37	18

Table 4-23. La Pointe-Krebs Plantation, Spanish/Early American period, element distribution.

Table 4-24. La Pointe-Krebs Plantation, Spanish/Early American period, epiphyseal fusion for pig (*Sus scrofa*).

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal	4		4
Scapula, distal	2		2
Radius, proximal	2		2
Acetabulum			

Tota	l 49	49
Tibia, proximal	4	4
Femur, distal	4	4
Femur, proximal	3	3
Ulna, distal	1	1
Ulna, proximal	3	3
Radius, distal	3	3
Humerus, proximal	4	4
Late Fusing:		
Metapodials, distal	10	10
Calcaneus, proximal	1	1
Tibia, distal	2	2
Middle Fusing:		
1st/2nd phalanx, proximal	6	6
Metapodials, proximal		

Table 4-25. La Pointe-Krebs Plantation, Spanish/Early American period, epiphyseal fusion for deer (*Odocoileus virginianus*).

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal			
Scapula, distal		1	1
Radius, proximal		1	1
Acetabulum		1	1
Metapodials, proximal			
1st/2nd phalanx, proximal	1		1
Middle Fusing:			
Tibia, distal		3	3
Calcaneus, proximal	3	1	4
Metapodials, distal			
Late Fusing:			
Humerus, proximal			
Radius, distal	1		1
Ulna, proximal			
Ulna, distal			
Femur, proximal		1	1
Femur, distal			
Tibia, proximal	1	1	2
Total	6	9	15

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal			
Scapula, distal			
Radius, proximal			
Acetabulum			
Metapodials, proximal			
1st/2nd phalanx, proximal			
Middle Fusing:			
Tibia, distal			
Calcaneus, proximal			
Metapodials, distal		1	1
Late Fusing:			
Humerus, proximal			
Radius, distal			
Ulna, proximal			
Ulna, distal			
Femur, proximal			
Femur, distal			
Tibia, proximal			
Total		1	1

Table 4-26. La Pointe-Krebs Plantation, Spanish/Early American period, epiphyseal fusion for cow (*Bos taurus*).

## Table 4-27. La Pointe-Krebs Plantation, Spanish/Early American period, faunal modifications.

Taxon	Hacked	Cut	Burned	Calcined	Rodent- gnawed
Indeterminate bony fishes			21	3	
Gar			20		
Catfishes			3		
Hardhead catfish		1			
Gafftopsail catfish			1		
Mullet				1	
Indeterminate turtles			30	3	
Box and water turtles			3	1	
Box turtle			1		
Indeterminate birds		9	16		
Chicken		2			1
Indeterminate mammals	2	5	65	2	
Even-toed ungulates		1	1		

Pig		1			
White-tailed deer	2	5			
Cow		3			
Indeterminate vertebrates		2	860	3	
Total	4	29	1021	13	1

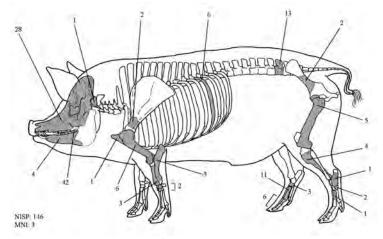


Figure 4-8. La Pointe-Krebs Plantation, Spanish/Early American period, pig elements identified (NISP = 146).

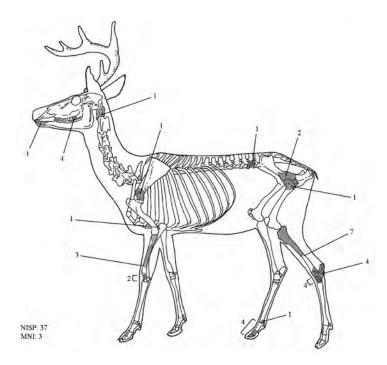


Figure 4-9. La Pointe-Krebs Plantation, Spanish/Early American period, deer elements identified (NISP = 37).

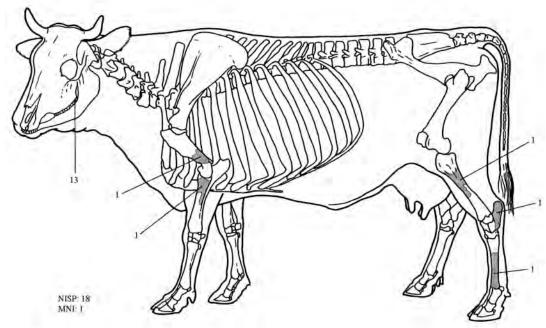


Figure 4-10. La Pointe-Krebs Plantation, Spanish/Early American period, cow elements identified (NISP = 18).

#### **Results: French/British Flotation (ca. 1718-1780s)**

Specimens recovered from heavy fraction in Features 90 (NISP = 54), 105 (NISP = 484), and 119 (NISP = 1,295) attributed to French and British colonial activities are considered as a fourth analytical unit because of the different recovery method used (flotation rather than 1/16-inch mesh). A total of 1,833 specimens weighing 1,154.148 g were identified in the flotation fraction from these features, including the remains of at least 35 individuals estimated for 31 taxa, 27 of which are indigenous and four of which are introduced (Table 4-28).

Wild resources contribute 80 percent of the individuals and 64 percent of the biomass in this analytical unit (Table 4-29). Sharks, rays, and bony fishes contribute 37 percent of the individuals and 28 percent of the biomass. Wild birds contribute 14 percent of the individuals, though little biomass. Although deer (*Odocoileus virginianus*) contribute few individuals, these contribute 34 percent of the biomass.

Domestic animals contribute 11 percent of the individuals and 36 percent of the biomass. A chicken (*Gallus gallus*) is present and is probably a rooster based on the presence of a spur. This individual contributes less than 1 percent of the biomass. Pig (*Sus scrofa*), cow (*Bos taurus*), and caprines contribute an estimated one individual each. Pork contributes 2 percent of the biomass and beef contributes 33 percent.

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Commensal animals contribute 9 percent of the individuals and less than 1 percent of the biomass. These include frogs and toads (Anura), one of which is a spadefoot toad (*Scaphiopus holbrookii*), and snakes (Serpentes).

Deer and domestic artiodactyls are represented by 28 specimens (Table 4-30). Only two pig specimens are present in this analytical unit: a tooth and a metapodial specimen (Figure 4-11). Deer are represented by 21 specimens (Figure 4-12). Half of the deer specimens are teeth (NISP = 10) and cranial fragments (NISP = 1); meaty portions are represented by 33 percent of the deer specimens. Four cow specimens are present, including a tooth and two phalanges (Figure 4-13). Caprines are represented by a single tooth fragment (Figure 4-14).

The limited epiphyseal fusion data indicate use of adult deer and cows, but the age at death for the pig and caprine could not be assessed. One of the deer was likely a subadult at death and the other was an adult (Table 4-31). The age of the cow individual cannot be determined, other than to observe it was at least a subadult when it died and could have been adult (Table 4-32).

Possible furbearing animals in this analytical unit include opossum (*Didelphis virginiana*), rabbit (*Sylvilagus* sp.), woodrat (*Neotoma floridana*), raccoon (*Procyon lotor*), and bobcat (*Lynx rufus*). The opossum is represented by an unfused distal femur epiphysis (Feature 105, FS 1083) and the rabbit by a burned incisor (Feature 105, FS 1093). The woodrat is represented by a calcaneus (Feature 119, FS 1004) and the raccoon by two metapodial specimens (Feature 105, FS 1083; Feature 119, FS 1004). The bobcat is represented by a single tarsal (Feature 119, FS 1004).

None of the specimens from possible furbearing animals, other than those attributed to deer, have butchering or skinning marks (Table 4-33). The most common modification in the flotation analytical unit is burning (NISP = 695). An additional 53 specimens are calcined. Other modifications observed in this analytical unit indicate hacking and cutting. The hack mark and cut marks on the deer radius shaft, innominate, and tibia shaft are not in locations associated with skinning.

	-	М	NI	Weight	Biomass
Taxon	NISP	141		weight	Diomass
		#	%	g	kg
Chondrichthyes, Cartilaginous fishes	3			0.113	0.004
Actinopterygii, Indeterminate bony fishes	1018			83.988	1.068
Atractosteus spatula, Alligator gar	1	1	2.9	2.762	0.080
Lepisosteus spp., Gar	222	1	2.9	82.508	1.539
Siluriformes, Catfishes	14			0.406	0.008
Ariidae, Sea catfishes	6			0.272	0.006
Ariopsis felis, Hardhead catfish	6	1	2.9	1.232	0.024

Table 4-28. La Pointe-Krebs Plantation, French/British period flotation sample, vertebrate species.

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Тс	otal 1833	35		1154.148	13.987
Vertebrata, Indeterminate vertebrate				269.779	
Caprinae, Goats and sheep	1	1	2.9	0.314	0.009
Bos taurus, Cow	4	1	2.9	171.704	2.700
Odocoileus virginianus, White-tailed deer	21	2	5.7	172.165	2.706
Sus scrofa, Pig	2	1	2.9	9.816	0.205
Artiodactyla, Even-toed ungulates	12			4.154	0.095
<i>Lynx rufus,</i> Bobcat	1	1	2.9	0.258	0.008
Procyon lotor, Raccoon	2	1	2.9	0.992	0.026
Neotoma floridana, Eastern woodrat	1	1	2.9	0.052	0.002
Muridae, Mice, rats, and voles	1			0.008	< 0.000
<i>Sciurus</i> sp., Squirrel	1	1	2.9	0.265	0.008
<i>Sylvilagus</i> sp., Rabbit	1	1	2.9	0.066	0.002
<i>Didelphis virginiana,</i> Opossum	1	1	2.9	0.546	0.015
Mammalia, Indeterminate mammals	259			243.350	3.695
Passeriformes, Perching birds	11	2	5.7	0.315	0.007
Meleagris gallopavo, Wild turkey	2	1	2.9	1.119	0.023
Gallus gallus, Chicken	1	1	2.9	0.728	0.015
Anatidae, Swans, geese, and ducks	1	1	2.9	0.129	0.003
Ardeidae, Bitterns, egrets, and herons	2	1	2.9	0.347	0.008
Aves, Indeterminate birds	157			33.899	0.504
Serpentes, Snakes	2	1	2.9	0.325	0.004
Malaclemys terrapin, Diamondback terrapin	2	1	2.9	3.209	0.069
Emydidae, Box and water turtles	6			20.426	0.239
Kinosternidae, Mud and musk turtles	2	1	2.9	0.131	0.008
Testudines, Indeterminate turtles	24			13.485	0.181
Scaphiopus holbrookii, Eastern spadefoot toad	1	(1)	5.7	0.012	
Anura, Frogs and toads	6	2	2.9	0.171	
Paralichthys sp., Southern flounder	1	1	2.9	0.181	0.006
Sciaenops ocellatus, Red drum	5	1	2.9	7.584	0.174
Pogonias cromis, Black drum	4	1	2.9	18.021	0.331
Cynoscion sp., Seatrouts	1	1	2.9	0.007	0.001
Sciaenidae, Drums	1		-	5.079	0.130
Archosargus probatocephalus, Sheepshead	5	1	2.9	1.976	0.030
Carangidae, Jacks and pompanos	1	1	2.9	0.020	0.001
Pomatomus saltatrix, Bluefish	1	1	2.9	0.008	0.001
Mugil spp., Mullet	14	2	5.7	0.672	0.021

## Table 4-29. La Pointe-Krebs Plantation, French/British period flotation sample, vertebrate summary.

	Vertebrate Category	MNI	Biomass
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	#	%	kg	%
Sharks, rays, and bony fishes	13	37.1	2.238	27.8
Turtles	2	5.7	0.077	1.0
Wild birds	5	14.3	0.041	0.5
Domestic birds	1	2.9	0.015	0.2
Deer	2	5.7	2.706	33.6
Other wild mammals	6	17.1	0.061	0.8
Domestic mammals	3	8.6	2.914	36.2
Commensal taxa	3	8.6	0.004	0.02
Total	35		8.056	

Note: Anurans are included in the MNI calculation, but are not included in the biomass calculation because allometric values are not currently available for this taxon.

Skeletal Part	Pig	Deer	Cow	Sheep/Goat
Head	1	11	1	1
Axial		1		
Forequarter		2	1	
Hindquarter		4		
Forefoot				
Hindfoot		3		
Foot	1		2	
Total	2	21	4	1

Table 4-31. La Pointe-Krebs Plantation, French/British period flotation sample, epiphyseal fusion for deer (*Odocoileus virginianus*).

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal		1	1
Scapula, distal			
Radius, proximal			
Acetabulum			
Metapodials, proximal			
1st/2nd phalanx, proximal			
Middle Fusing:			
Tibia, distal			
Calcaneus, proximal			
Metapodials, distal	1		1
Late Fusing:			
Humerus, proximal			

Tibia, proximal	Total	1	2	3
Femur, distal				
Femur, proximal				
Ulna, distal				
Ulna, proximal				
Radius, distal			1	1

Table 4-32. La Pointe-Krebs Plantation, French/British period flotation sample, epiphyseal fusion for cow (*Bos taurus*).

Epiphyseal Fusion	Unfused	Fused	Total
Early Fusing:			
Humerus, distal		1	1
Scapula, distal			
Radius, proximal			
Acetabulum			
Metapodials, proximal			
1st/2nd phalanx, proximal		1	1
Middle Fusing:			
Tibia, distal			
Calcaneus, proximal			
Metapodials, distal			
Late Fusing:			
Humerus, proximal			
Radius, distal			
Ulna, proximal			
Ulna, distal			
Femur, proximal			
Femur, distal			
Tibia, proximal			
Total		2	2

Table 4-33. La Pointe-Krebs Plantation, French/British period flotation sample, faunal modifications.

Taxon	Hacked	Cut	Burned	Calcined
Indeterminate cartilaginous fishes			1	
Indeterminate bony fishes			25	6
Alligator gar		1		
Gar			30	
Catfishes				1
Sea catfishes			1	1
Mullet			1	

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Bluefish				1
Indeterminate turtles			8	1
Indeterminate birds		2	7	6
Indeterminate mammals		1	86	9
Rabbit			1	
Even-toed ungulates			2	
Pig			1	
White-tailed deer	1	3		
Indeterminate vertebrates		2	532	28
Total	1	9	695	53

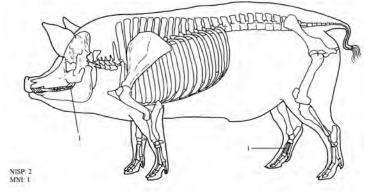


Figure 4-11. La Pointe-Krebs Plantation, French/British period heavy flotation, pig elements identified (NISP = 2).

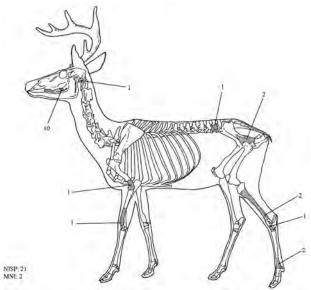


Figure 4-12. La Pointe-Krebs Plantation, French/British period heavy flotation, deer elements Identified (NISP = 21).

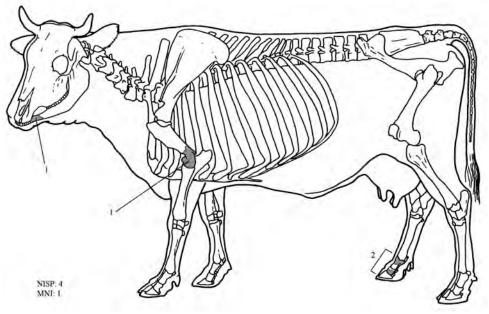


Figure 4-13. La Pointe-Krebs Plantation, French/British period heavy flotation, cow elements Identified (NISP = 4).

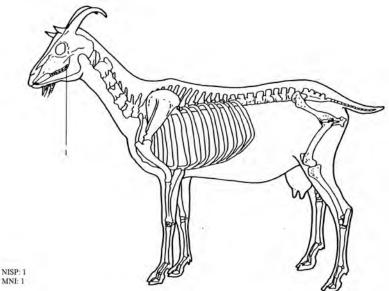


Figure 4-14. La Pointe-Krebs Plantation, French/British period heavy flotation, caprine elements Identified. (NISP = 1).

#### Discussion

The study of vertebrate remains from La Pointe-Krebs Plantation affords a unique opportunity to contribute additional information about animal use on the Gulf Coast during the eighteenth and early nineteenth centuries because of the continuity of ownership within the same family throughout a period of political change. As at colonial, territorial, and American sites

elsewhere in the southeastern United States, the vertebrate remains from La Pointe-Krebs Plantation indicate that residents combined use of local wild animals with domestic ones. Wild individuals dominate the collections from the earliest days of the plantation into the early American component and also contribute much of the biomass (Figures 4-15 and 4-16).

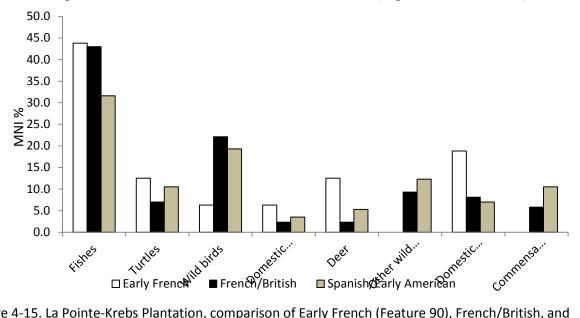


Figure 4-15. La Pointe-Krebs Plantation, comparison of Early French (Feature 90), French/British, and Spanish/Early American summaries based on MNI.

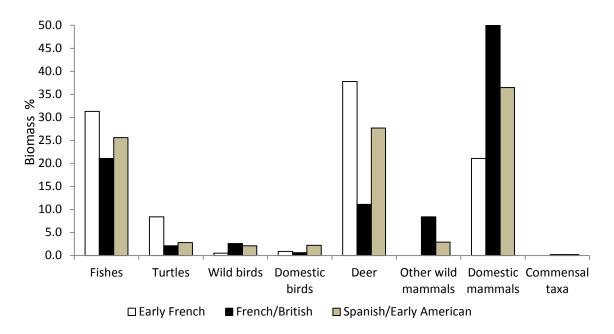
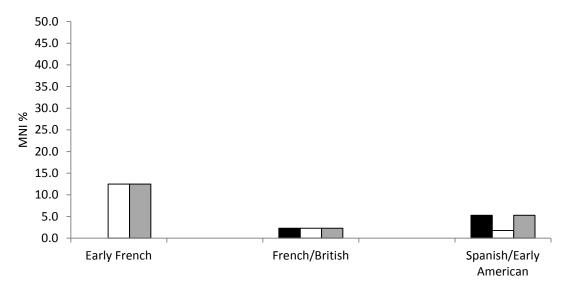


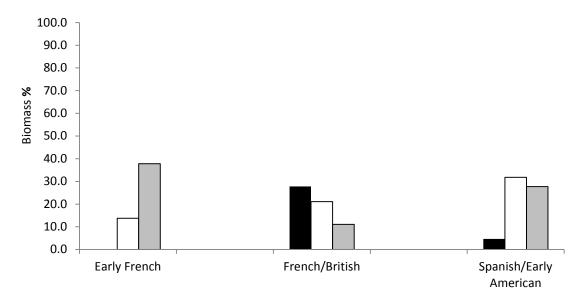
Figure 4-16. La Pointe-Krebs Plantation, comparison of Early French (Feature 90), French/British, and Spanish/Early American summaries based on biomass.

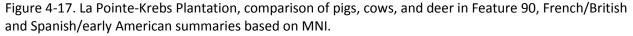
Over time, use of wild animals actually increased slightly, from 75 percent of the individuals to 79 percent of the individuals, though the percentage of wild animal biomass in the assemblage declines from 78 percent of the biomass to 61 percent (see Tables 4-7 and 4-22). Neither of these changes represents a substantial alteration in the overall pattern of animal use established in the early eighteenth century. In part, the apparent use of domestic animals declined over this time span because of an increase in frogs, toads, and rodents, which are absent in Feature 90, but contribute 10 percent of the individuals in the Spanish/early American component. On the other hand, use of Other wild mammals also increases over this time period. Wild mammals other than deer are absent in Feature 90, but comprise 12 percent of the individuals in the Spanish/early American component. In neither time period did Commensal taxa or Other wild mammals contribute substantially to the estimated biomass.

Some changes in relative proportions are seen in specific taxonomic groups, or specific species. The broad generalizations in the previous paragraph overlook a peak in domestic sources of biomass in the French/British analytical unit associated with pork (Figures 4-17 and 4-18). Pigs are absent in the Feature 90 collection, though this could be a function of small sample size or the limited context sampled (see Table 4-7). More interesting is the observation that pork contributed an estimated 24 percent of the biomass in the French/British period and 5 percent in the subsequent Spanish/early American period (see Figure 4-18). This was accompanied by an increase in the amount of biomass estimated for beef. The use of fish and venison in the Spanish/early American component is also lower compared to that in Feature 90, but higher than in the French/British component (see Figure 4-16).

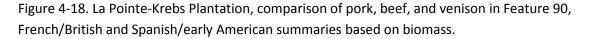


■ Pig □ Cow □ Deer





<sup>■</sup> Pork □ Beef □ Venison



Further work will be necessary to determine whether the changes observed in La Pointe-Krebs Plantation assemblage reflect the specific functions of the deposits examined for this report, analytical biases, or broader economic, environmental, political, and social changes that affected the availability of deer and fish and placed a premium on beef production or use. Clearly, however, both deer and fish continued to be available and commonly used throughout the study period. The increase in commensal taxa may be evidence of a growing clutter in the plantation landscape, with more refuse and stored goods attracting pests as well as more places for pests to live and reproduce. Commensal taxa are also common, however, in the Old Mobile collection (see Table 4-3), suggesting that their absence in Feature 90 at La Pointe-Krebs is atypical.

The presence of so many taxa that might have been furbearing animals, particularly in the French/British period analytical unit, stimulated a closer inspection of elements represented in both analytical units for evidence of furs and modifications that might be associated with skinning. In particular, furs might be indicated by an abundance of elements from the head and the feet, assuming that the rest of the carcass was discarded or reused on the trap line. Neither element representation nor modifications strongly support an interpretation that these animals are

solely the product of the fur trade. Further research into this aspect of at least the French/British period might be productive, but none of the wild animals in the assemblage are unusual components of colonial or American collections from other southeastern coastal locations.

Elements represented by pig, deer, and cow specimens may be indicative of economic influences, ethnic identity, and social standing. It has become common to translate the portions of elements identified into specific cuts of meat with associated value (e.g., Gust 1983; Schulz and Gust 1983). This enables the analyst to classify specimens into high, medium, and low cost cuts of meat, as might be true if these cuts were purchased from a commercial outlet today. This approach does not take into account spatial and temporal changes in the definition of "cuts" of meat, presuming that a carcass portion that is high-valued today would have been high-valued in the past throughout all colonies and territories. This seems unlikely, though this approach may be appropriate once federal standards were imposed on national sales of meat in the 1800s. This approach likewise does not encompass the likelihood that householders butchered their own animals either on site or through an abattoir. It remains to be demonstrated that the assumption of value derived from nineteenth-century newspapers and analogy with modern preferences are appropriate for sites occupied in the sixteenth through early nineteenth centuries, where butchers may have had their own ideas of how best to disassemble a carcass.

Pig, deer, and cow specimens from La Pointe-Krebs Plantation strongly suggest on-site butchery, particularly given the taphonomic and other site formation processes that undoubtedly influenced these collections. Although the recovered specimens are in relatively good condition, teeth were the most abundant single element type present (36 percent of the pig, deer, cow, and caprine NISP) and this suggests a strong taphonomic bias in favor of teeth. This is clearly seen in the logged ratio diagrams of specimens attributed to pigs and cows, in which Head specimens are over-represented in each analytical unit compared to what would be expected in a complete, intact skeleton (Figures 4-19 and 4-20).

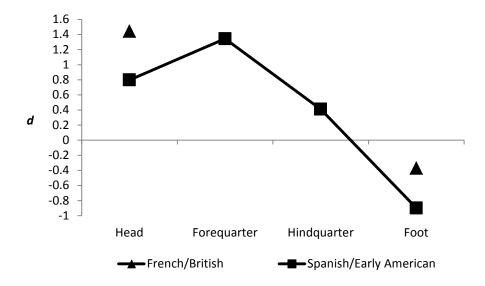


Figure 4-19. La Pointe-Krebs Plantation, pig logged ratio diagram. (French/British period pig NISP = 29; Spanish/early American period pig NISP = 146. Values below the horizontal line are underrepresented compared to the standard pig, and values above the line are overrepresented.)

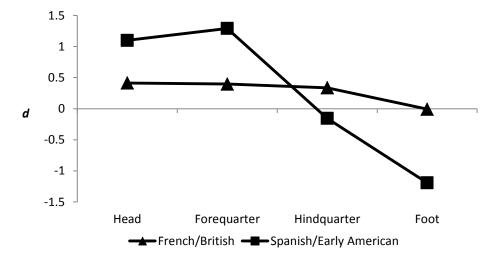


Figure 4-20. La Pointe-Krebs Plantation, cow logged ratio diagram. (French/British period cow NISP = 22; Spanish/early American period cow NISP = 18. Values below the horizontal line are underrepresented compared to the standard pig, and values above the line are overrepresented.)

In the case of pigs, specimens in the French/British analytical unit are too few to evaluate, though if the sample size were larger, the logged ratio pattern would be interpreted as evidence that hogs were slaughtered and the refuse discarded nearby, with the more meaty parts of the carcass transported elsewhere (see Figure 4-19). Interpretation of the pig element distribution in the Spanish/early American analytical unit is skewed by the nearly complete skeleton of a neonatal piglet recovered from Feature 121. The effect of skeletal completeness associated with this single skeleton is visible in Figure 4-19. This pattern could be evidence that the entire carcass was discarded in the excavated area, as we know it was, and further evidence for butchery nearby. The underrepresentation of specimens from the foot is noteworthy. This could be evidence that the small bones of the foot were not collected for the piglet, though this seems unlikely given the use of 1/16-inch mesh screen to recover these materials. Alternatively, this pattern could be interpreted as evidence that the pig skin was removed with the feet still attached for ease of handling. This also seems unlikely because pig skin is often eaten along with the meat. Perhaps the piglet skeleton is the debris of a roast pig served at table but from which the feet were previously removed to be prepared in other ways.

In the case of cows, specimens in both the French/British and Spanish/early American analytical units are too few to evaluate, though if the sample size were larger, these patterns would be interpreted as evidence that cattle were slaughtered and the refuse discarded nearby

(see Figure 4-20). This is particularly the case for the Spanish/early American component. The underrepresentation of specimens from the foot in the French/British component could be interpreted as evidence that the feet were left in the hide when this was removed for ease of handling; or that feet were removed and used elsewhere, perhaps in an edible jelly (gelatin) or in glue.

Information for age at death for the pigs, deer, cows, and caprines is limited by sample sizes (Table 4-34). In most cases, single individuals of each age group are represented in each of the analytical units. In the case of pigs, it appears that the focus was either on juveniles or adults. Deer of all ages are represented in each analytical unit. Cows were either juveniles at death, or their age at death could not be determined, though limited evidence suggests that each of the indeterminate cows were at least subadults at death. The caprines were most likely to be identified from post-cranial specimens that provide little or no evidence for age at death, though they generally appear to have been at least subadults at death.

Compared to Old Mobile, three characteristics are striking (Figures 4-21 and 4-22). One of these is the emphasis on deer and other wild mammals at Old Mobile compared to the subsequent occupations at La Pointe-Krebs Plantation and Dog River. This is associated with a minor use of fishes at Old Mobile compared to these later sites. The second characteristic is the increase in biomass from domestic mammals, notably either pork or beef, over time, associated with a decline in venison, but not fish. The very high use of pork at Dog River (1725-1848) compared to other periods may be evidence of a developing commercial trade in pork products that replaced earlier local sources of meat. The third characteristic is the continued use of alligators, turtles, wild birds, and other wild mammals even at Dog River. Although these other taxonomic groups played a minor role in terms of meat at all three sites, they nonetheless were present, adding variety to the diet and interest to the cuisine.

Analytical Unit		Р	ig			De	er			Co	w			Сар	rine	
	J	S	Α	-	J	S	Α	I	J	S	Α	Т	J	S	Α	I.
Early French (Fea. 90)					1			1	1			1		1		
French/British			2			1	1		1			1				3
Spanish/early American	2		1		1	1	1					1				
Flotation				1		1	1					1				1
Total	2	0	3	1	2	3	3	1	2	0	0	4	0	1	0	4

Table 4-34. La Pointe-Krebs Plantation, large vertebrate ages at death, by MNI.

Note: J = Juvenile; S = Subadult; A = Adult; I = Indeterminate, individuals for which age at death could not be estimated.

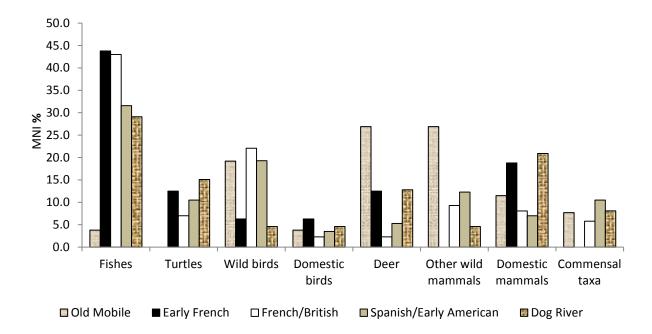


Figure 4-21. Comparison of Old Mobile, La Pointe-Krebs Plantation, and Dog River Plantation vertebrate MNI (data from Clute and Waselkov [2002], Waselkov and Gums [2000], and this report).

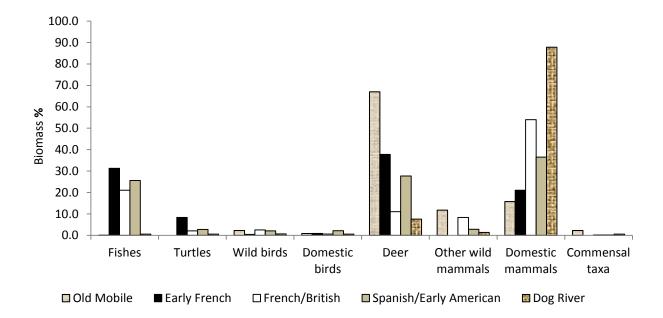


Figure 4-22. Comparison of Old Mobile, La Pointe-Krebs Plantation, and Dog River Plantation vertebrate biomass (data from Clute and Waselkov [2002], Waselkov and Gums [2000], and this report).

Comparing the trends for La Pointe-Krebs Plantation with those found in Spanish and English colonies on the Atlantic coast, it appears that La Pointe-Krebs Plantation data conform to a broader regional trend found elsewhere in the Southeast during the transition from the eighteenth century to the nineteenth century (Reitz 1979; Reitz and Brown 1984; Reitz and Cumbaa 1983; Reitz et al. 2010; Zierden and Reitz 2009). None of the data from the Spanish, English or French sites reviewed here correlate precisely in terms of time period, but faunal data from all three locations provide an overview of animal use from the early days of each colony into the nineteenth century. Most of the Native Americans and Spaniards closely affiliated with the Spanish colony evacuated St. Augustine at the start of the British period; thus the similarities between the late First Spanish period and the British period summary tables cannot be attributed to national origin or colonial power. Likewise, the population of Charleston during the late seventeenth century and into the nineteenth century was much more diverse than its political affiliation implies.

It is clear that people at all three locations made use of both wild and domestic food sources and were plagued by a large number of commensal taxa, many of which were frogs, toads, and rodents. The dominant sources of meat at St. Augustine, Charleston, and La Pointe-Krebs Plantation were generally pigs, cows, deer, and fishes, though animal use at Spanish missions was considerably different (Reitz et al. 2010; Zierden and Reitz 2009). The fishes were almost entirely from inshore, estuarine waters, with no evidence of off-shore fishing or imported fish, such as cod. This is true of both the late First Spanish period in St. Augustine compared to the British period in St. Augustine (Table 4-35), as well as of early and late eighteenth-century data from Charleston (Table 4-36; biomass summaries for Charleston have not been compiled). The pattern at La Pointe-Krebs Plantation is similar to that in the former Spanish and English colonies on the Atlantic coast – continued use of both local wild resources in combination with domestic ones – but a decline in wild resources combined with an increase in domestic ones. This suggests that it is not ethnic affiliations or national origin underlying these patterns, but broader economic events leading into the American antebellum South.

	Late Fi	Late First Spanish Period (1700-1763)British Period (1763-178)						83)	
Vertebrate Categories	М	NI		Bioma	ss	Μ	NI	Bioma	iss
	#	%		kg	%	#	%	kg	%
Sharks, rays, and bony fishes	486	60.7		22.315	6.1	124	64.9	7.788	6.6
Alligators and turtles	53	6.6		8.717	2.4	5	2.6	1.983	1.7
Wild birds	46	5.7		1.825	0.5	15	7.9	0.327	0.3
Domestic birds	39	4.9		3.73	1.0	5	2.6	0.48	0.4
Deer	31	3.9		34.850	9.6	3	1.6	1.571	1.3
Other wild mammals	22	2.7		2.39	0.7	1	0.5	0.029	0.02
Domestic mammals	84	10.5		288.78	79.2	24	12.6	103.169	87.2
Commensal taxa	40	5.0		2.237	0.6	14	7.3	2.962	2.5
Total	801			364.844		191		118.309	

Table 4-35. Eighteenth-century St. Augustine, vertebrate summary.

Note: Data from Reitz (1979:282-287), Reitz and Brown (1984), and Reitz and Cumbaa (1983).

		Charleston						La Pointe-Krebs Plantation					
Vertebrate Categories	1712-	1750s		1750s-	-1820s		171	8-1780s					
	MNI			MNI MNI		Μ	INI	Biomass					
	#	%		#	%	#	%	kg	%				
Sharks, rays, and bony fishes	32	19.0		131	26.5	57	41.6	12.651	23.1				
Alligators and turtles	10	6.0		25	5.1	10	7.3	1.415	2.6				
Wild birds	15	8.9		53	10.7	25	18.2	1.127	2.1				
Domestic birds	19	11.3		60	12.1	4	2.9	0.309	0.6				
Deer	6	3.6		17	3.4	6	4.4	9.413	17.2				
Other wild mammals	5	3.0		11	2.2	14	10.2	3.494	6.4				
Domestic mammals	63	37.5		128	25.9	13	9.5	26.195	47.9				
Commensal taxa	18 10.7			69	14.0	8	5.8	0.089	0.2				
Total	168			494		137		54.693					

Table 4-36. Charleston and La Pointe-Krebs Plantation, eighteenth-century vertebrate summaries.

Note: Charleston data from Reitz and Zierden (2009) and La Pointe-Krebs Plantation data from Tables 4-7, 4-14, and 4-29 in this report.

Within this broad pattern, however, are differences in the details at each location. Perhaps the most obvious, and most inexplicable, is the low use of fish at Charleston compared to St. Augustine and La Pointe-Krebs Plantation. This is a pattern that appears even in the Charles Towne data and persists for decades (Reitz and Bergh 2012). Yet, it cannot be attributed to a British dislike for fish because many Charlestonians took refuge or were incarcerated in St. Augustine during the British period, which coincided with the American Revolution. In St. Augustine, Charlestonians and other Britons ate fish (see Table 4-35). Nor is this a Catholic versus Protestant dietary restriction. Most, if not all, Catholics left St. Augustine at the end of the First Spanish Period.

The economies that emerged in Spanish, English, and French colonial settings on the southeastern Gulf and Atlantic coasts represent eclectic fusions of indigenous and introduced animals used in proportions that were more similar to one another than they were to those of the nation that held political authority. Colonists continued to use the Eurasian suite of domestic animals, but the importance of particular species within that suite shifted from pork and mutton to, primarily, beef. The distinctive aspect of the colonial strategy, however, was the extensive use of indigenous animals. In many respects the colonial strategy was largely a local one with the addition of those introduced domestic taxa that could survive and prosper in the subtropical coastal settings encountered on the southeastern coasts with minimal attention, primarily free-range beef.

Although the subsistence system was molded in part by environmental conditions, it also was shaped by interactions between colonists and Native Americans. The role Native Americans played in supplying colonists or in teaching them appropriate subsistence techniques was probably significant in forming new Spanish, English, and French foodways during the initial years of European settlement. Indians provided foodstuffs to the colonists as trade goods, tithes, and tribute, as well as through reciprocity within kin networks. Some colonists simply commandeered food or relied upon enslaved native peoples to provide it. Although some Native Americans did raise European livestock, this was limited (e.g., Pavao-Zuckerman 2000, 2001; Reitz 1991, 1993, 1994; Reitz et al. 2010). A large part of the foodstuffs available from Native Americans was the typical local fare, primarily fish and venison, and these continued to be used into the nineteenth century at former Spanish, English, and French colonies on the southeastern Atlantic and Gulf of Mexico coasts.

The new cultural forms in each colony developed from the actions of multiple agents and had multiple origins that cannot be traced back to a single ancestral tradition. It was the outcome of dynamic exchanges, reformulations, and inventions among multiple agents, which supports the argument that transculturation or ethnogenesis in animal use had occurred.

#### Conclusions

While much of the strategy developed in each colonial setting had an indigenous flavor, it remained European in other ways, indicating that both ethnogenesis and adaptation were factors in the development of colonial foodways, conforming to a trajectory predicted by Bökönyi (1975) for occasions when people with an animal husbandry tradition immigrate into a region where animal husbandry was unknown. It is rarely possible to test this possibility because typically ownership of temporally stratified sites changed as colonial power shifted from one nation to another, as they did in Spanish Florida and on the northern Gulf of Mexico. The possibility that the national affiliation of site occupants changed as national sovereignty changed, leaves open the possibility that the animal remains represent individual and ethnic choices of an unspecified nature. In other words, we cannot observe broad temporal changes that might be the result of other factors, such as an emerging American commodity trade. The recent work at La Pointe-Krebs Plantation affords the opportunity to expand the study of early colonial economies to compare data from a political and economic environment subject to numerous, rapid, structural changes, as the ethnic identity of the lineage that owned the property persisted.

This study strongly suggests that colonists at La Pointe-Krebs Plantation followed the broad pattern found at other colonials sites in the Southeast: heavy use of wild resources combined with pigs and cattle. Within that broad, overall pattern, however, differences between collections from the earlier part of the sequence and the later part suggest that use of animals did change. Over time, use of wild game, particularly deer, declined somewhat as domestic meats increased. In doing this, colonists followed a long-standing practice characteristic of other colonial populations in the American Southeast transitioning into the nineteenth century.

*Acknowledgments*. We are grateful for the assistance offered by Carol E. Colaninno-Meeks, Sarah G. Bergh, and Carla Hadden; and to Elizabeth M. Scott for providing important references.

### **CHAPTER 5:** Archaeobotanical Remains

by Karen L. Leone

This chapter describes the archaeobotanical assemblage recovered from thirteen colonial plantation features excavated in four areas during the 2010 archaeological investigations at La Pointe-Krebs House and Plantation site in Old Spanish Fort Park (22JA526), Pascagoula, Mississippi. Research questions addressed in this study include:

- (1) What subsistence information can be drawn from the contexts excavated?
- (2) What insights do the botanical remains provide in regard to feature function?
- (3) What can the wood assemblage tell us about the environment surrounding the site?
- (4) How do the results from this site compare to other contemporaneous sites in the area?

The botanical analysis reported within these pages describes plant remains recovered from the feature fill of six trenches, six pits (including one smudge pit), and a midden. All features are located near, but not within, La Pointe-Krebs House itself. Results include a high density of wood charcoal across the site and moderate-to-low frequencies of charred food remains that consist of corn, legumes, nuts, squash, and fleshy fruits. Further, wax myrtle seeds are curiously ubiquitous and perhaps an indicator of economic importance not typically seen at other sites in the north-central Gulf Coast region.

#### Methods

During excavations of Areas 1, 3, 6 and 7, 10-liter soil samples were collected and flotation-processed by the Center for Archaeological Studies at the University of South Alabama. The light, medium, and heavy fractions of fifteen flotation samples from 12 contexts, as well as a hand-collected sample from a smudge pit, were submitted to Karen Leone of Leone Consulting, Ltd., for macrobotanical analysis – for a total of 16 samples from 13 features. The sampled contexts include six construction trenches (Features 107, 119, 122, 132, 158, and 178), two large storage pits (Features 105 and 163), two shallow pits (Features 118 and 121), a lime slaking pit (Feature 90), a smudge pit (Feature 112), and a shell and mortar midden (Feature 161).

Although the flotation process produced light, medium, and heavy fractions for each sample, the counts and weights of all fractions were combined during analysis. The different fractions were first sifted through a series of nested geologic sieves to organize particles by size. Using low magnification (13X to 56X), all charred botanical remains greater than 2.0 mm were sorted into general plant categories. Charred remains less than 2.0 mm in size were scanned for seeds and fragile plant remains such as pecan nutshell and squash rind. All plant material was weighed (to an accuracy level of 0.001 g), counted, and identified to the lowest possible taxonomic level. Corn cob measurements were taken using digital metal calipers (to an accuracy level of 0.01 mm). With each soil sample, a representative selection of wood charcoal specimens was identified; 20 pieces greater than 2.0 mm in size were randomly chosen and noted in the archaeobotanical inventory (Table 5-1). Wood reported as pine (*Pinus* spp.) – the dominant

Provenience	Area 1 Feature 158 Level 5 FS 1112	Area 1 Feature 161 Level 5 FS 1117	Area 1 Feature 163 Zone L FS 1187	Area 1 Feature 163 Zone I FS 1154
Feature Type	Shell-filled Trench	Shell and Mortar Midden	Large Pit	Large Pit
Soil Volume (liters)	10	10	10	10
Wood Total (n / g)	468 / 5.87	534 / 8.04	1,997 / 94.01	3,510 / 67.80
Hickory/Pecan (Carya spp.)	-	-	-	-
Maple (Acer sp.)	-	-	-	-
Oak ( <i>Quercus</i> spp.) Persimmon ( <i>Diospyros virginiana</i> )	-	-	2	-
Pine ( <i>Pinus</i> spp.)	20	20	18	20
River Birch (Betula nigra)	-	-	-	-
Sycamore (Platanus occidentalis)	-	-	-	-
Wax Myrtle (Myrica inodora)	-	-	-	-
Total Identified	20	20	20	20
Total Unidentified / Bark	0	0	0	0
Identifications Attempted	20	20	20	20
Nut Total (n / g)	0	0	0	0
Hickory (Carya sp.)	-	-	-	-
Pecan (Carya illinoensis)	-	-	-	-
Seed Total (n / g)	0	0	0	18 / 1.148
Cultigens				
Cow Pea (Vigna sp.)	-	-	-	-
Legume (Fabaceae)	-	-	-	-
Fleshy Fruits/Berries				
Cherry ( <i>Prunus</i> sp.)	-	-	-	5 / 0.007
Mulberry (Morus rubra)	-	-	-	2 / 0.001
Peach (Prunus persica)	-	-	-	3 / 1.130
Ruderal and Other				
Chokeberry (Aronia sp.)	-	-	-	-
Grass (Poaceae)	-	-	-	-
Nightshade (Solanum sp.)	-	-	-	-
Panicgrass ( <i>Panicum</i> sp.) Tupelo ( <i>Nyssa</i> sp.)		-	-	-
Wax Myrtle ( <i>Myrica inodora</i> )		_	-	8 / 0.010
Seeds Unidentified	-	-	-	-
Squash Rind (n / g)	0	0	0	0
Corn kernels	0	0	0	0
Corn cupules and glumes	0	0	1/0.01	0
Corn cobs	0	0	0	9 / 0.13
Cane (Arundinaria sp.)	0	0	0	0
Grass Stems (Poaceae)	0	0	0	0
Unidentified Plant Material	Ő	0	0	1 / 0.01
GRAND TOTAL (n / g)	468 / 5.87	534 / 8.04	1,998 / 94.02	3,538 / 69.09

# Table 5-1. La Pointe-Krebs Plantation (22JA526) archaeobotanical inventory.

Provenience	Area 1 Feature 178 FS 1150	Area 3 Feature 105 Zone B, Level 3 FS 1089	Area 3 Feature 105 Zone D, Level 3 FS 1091	Area 3 Feature 105 Zone H, Level 3/4 FS 1093
Feature Type Soil Volume (liters)	Construction Trench 10	Large Pit 10	Large Pit 10	Large Pit 10
Wood Total (n / g)	1,326 / 11.99	2,525 / 19.97	2,842 / 26.65	9,574 / 71.58
Hickory/Pecan (Carya spp.)	-	-	-	1
Maple (Acer sp.)	-	- 7	- 5	1 2
Oak ( <i>Quercus</i> spp.) Persimmon ( <i>Diospyros virginiana</i> )	1	/	5	-
Pine (Pinus spp.)	19	13	15	15
River Birch (Betula nigra)	-	-	-	1
Sycamore ( <i>Platanus occidentalis</i> ) Wax Myrtle ( <i>Myrica inodora</i> )	-	-	-	-
Total Identified	20	20	20	20
Total Unidentified / Bark	0	0	0	0
Identifications Attempted	20	20	20	20
Nut Total (n / g)	0	4 / 0.03	0	14/0.23
Hickory (Carya sp.) Pecan (Carya illinoensis)	-	4 / 0.03	-	7 / 0.20 7 / 0.03
Seed Total (n / g)	14 / 0.190	40 / 0.268	30 / 0.259	81 / 0.698
Cultigens				
Cow Pea (Vigna sp.)	-	-	-	4 / 0.082
Legume (Fabaceae)	-	-	-	-
Fleshy Fruits/Berries				
Cherry ( <i>Prunus</i> sp.)	-	-	-	-
Mulberry (Morus rubra) Peach (Prunus persica)	- 11 / 0.180	15 / 0.234	5 / 0.213	43 / 0.526
Ruderal and Other				
Chokeberry (Aronia sp.)	-	-	-	-
Grass (Poaceae)	-	-	-	-
Nightshade (Solanum sp.) Panicgrass (Panicum sp.)	-	-	-	-
Tupelo ( <i>Nyssa</i> sp.)	-	-	-	10/0.065
Wax Myrtle (Myrica inodora)	2 / 0.008	25 / 0.034	25 / 0.046	24 / 0.025
Seeds Unidentified	1 / 0.002	-	-	-
Squash Rind (n / g)	0	0	0	1/<.01
Corn kernels	0	0	1/0.01	3/0.03
Corn cupules and glumes Corn cobs	2 / 0.02 0	0 42 / 0.21	10 / 0.08 0	61 / 0.51 0
C <b>ane</b> (Arundinaria sp.)	0	0	0	0
Grass Stems (Poaceae)	0	0	0	0
Unidentified Plant Material	0	0	0	0
GRAND TOTAL (n / g)	1,342 / 12.20	2,611 / 20.48	2,883 / 26.99	9,734 / 73.05

# Table 5-1. La Pointe-Krebs Plantation (22JA526) archaeobotanical inventory (continued).

Provenience	Area 3 Feature 107 Level 4 FS 965	Area 3 Feature 112 Level 4 FS 976	Area 3 Feature 118 Level 3 FS 1005	Area 3 Feature 119 Level 3 FS 1038	
Feature Type Soil Volume (liters)	Construction Trench 10	Smudge Pit 1	Shallow Pit 10	Construction Trench 10	
Wood Total (n / g)	896 / 8.83	245 / 3.26	1,520 / 11.25	2,160 / 16.36	
Hickory/Pecan ( <i>Carya</i> spp.) Maple ( <i>Acer</i> sp.) Oak ( <i>Quercus</i> spp.)	- 1	-	1 - 3	1 - 6	
Persimmon ( <i>Diospyros virginiana</i> ) Pine ( <i>Pinus</i> spp.) River Birch ( <i>Betula nigra</i> )	2 17	20	- 16 -	- 12 1	
Sycamore ( <i>Platanus occidentalis</i> ) Wax Myrtle ( <i>Myrica inodora</i> )	-	-	-	-	
Total Identified Total Unidentified / Bark Identifications Attempted	20 0 20	20 0 20	20 0 20	20 0 20	
Nut Total (n / g)	0	0	0	0	
Hickory (Carya sp.) Pecan (Carya illinoensis)	-	-		-	
Seed Total (n / g)	53 / 0.438	1 / 0.001	63 / 0.316	55 / 0.509	
Cultigens Cow Pea (Vigna sp.) Legume (Fabaceae)	1 / 0.022		-	-	
Fleshy Fruits/Berries Cherry (Prunus sp.) Mulberry (Morus rubra)	-	-	-	-	
Peach ( <i>Prunus persica</i> )	9 / 0.367	-	21 / 0.279	19 / 0.422	
Ruderal and Other Chokeberry (Aronia sp.) Grass (Poaceae)	-	-		-	
Nightshade (Solanum sp.) Panicgrass (Panicum sp.) Tupelo (Nyssa sp.)	-	-	-	1 / 0.001	
Wax Myrtle ( <i>Myrica inodora</i> ) Seeds Unidentified	43 / 0.049	1 / 0.001	41 / 0.036 1 / 0.001	32 / 0.043 3 / 0.043	
Squash Rind (n / g) Corn kernels	0 0	0 0	0 0	1 / <.01 0	
Corn cupules and glumes Corn cobs	3 / 0.02 0	344 / 3.80 6 / 6.59	17 / 0.15 0	25 / 0.22 0	
Cane (Arundinaria sp.) Grass Stems (Poaceae)	0	0 0	0 0	1/0.04 0	
Unidentified Plant Material GRAND TOTAL (n / g)	0 952 / 9.29	0 596 / 13.65	0 1,600 / 11.71	0	

Table 5-1. La Pointe-Krebs Plantation (22J	26) archaeobotanical inventory (continued).
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Provenience	Area 3 Feature 122 FS 1058	Area 6 Feature 121 Level 4 FS 1029	Area 6 Feature 132 Level 5 FS 1070	Area 7 Feature 90 Level 2 FS 902
Feature Type Soil Volume (liters)	Double Trenches 10	Shallow Pit 10	Construction Trench 10	Lime Slaking Pit 10
Wood Total (n / g)	2,047 / 18.64	1,161 / 10.15	521 / 4.75	1,287 / 11.01
Hickory/Pecan (Carya spp.)	1	-	-	-
Maple (Acer sp.)	-	-	-	-
Oak ( <i>Quercus</i> spp.) Persimmon ( <i>Diospyros virginiana</i> )	2	1	-	-
Pine ( <i>Pinus</i> spp.)	16	14	8	20
River Birch (Betula nigra)	1	4	5	-
Sycamore (Platanus occidentalis)	-	1	1	-
Wax Myrtle (Myrica inodora)	-	-	6	-
Total Identified	20	20	20	20
Total Unidentified / Bark	0	0	0	0
Identifications Attempted	20	20	20	20
Nut Total (n / g)	0	10/0.23	0	0
Hickory (Carya sp.)	_	8 / 0.20	_	_
Pecan ( <i>Carya illinoensis</i> )	-	2 / 0.03	-	-
Seed Total (n / g)	16/0.411	6 / 0.106	1 / 0.001	3 / 0.060
Cultigens				
Cow Pea (Vigna sp.)	-	-	-	-
Legume (Fabaceae)	-	1 / 0.026	-	-
Fleshy Fruits/Berries				
Cherry ( <i>Prunus</i> sp.)	-	-	-	-
Mulberry (Morus rubra)	-	-	-	-
Peach (Prunus persica)	5 / 0.396	2 / 0.075	-	2 / 0.044
Ruderal and Other				
Chokeberry (Aronia sp.)	-	1 / 0.002	-	-
Grass (Poaceae)	-	1 / 0.002	-	-
Nightshade (Solanum sp.)	-	-	-	-
Panicgrass ( <i>Panicum</i> sp.) Tupelo ( <i>Nyssa</i> sp.)	-	-	1 / 0.001	-
Wax Myrtle ( <i>Myrica inodora</i> )	11/0.015	1 / 0.001	-	-
Seeds Unidentified	-	-	-	1 / 0.016
Squash Rind (n / g)	0	0	0	0
Corn kernels	0	0	0	0
Corn cupules and glumes	23 / 0.30	1 / 0.01	3/0.01	5 / 0.04
Corn cobs	0	0	0	0
Cane (Arundinaria sp.)	0	0	0	0
Grass Stems (Poaceae)	0	0	2 / 0.02	0
Unidentified Plant Material	0	0	0	0
GRAND TOTAL (n / g)	2,086 / 19.35	1,178 / 10.49	527 / 4.78	1,295 / 11.11

## Table 5-1. La Pointe-Krebs Plantation (22JA526) archaeobotanical inventory (continued).

wood taxon in the area and a genus with visible resin canals in most, not all, fragments – may include a small proportion of eastern or southern red cedar (*Juniperus* spp.) and/or bald cypress (*Taxodium distichum*). The small size (less than 2.0 to 4.0 mm) of archaeological softwood specimens creates identification limitations, such as determining the *absence* of resin canals (a characteristic of red cedar and cypress), which cannot be done with complete confidence in small wood specimens, where only a portion of the cell structure can be seen.

The carbonized plant material recovered through flotation is a small and inherently biased sample (due to differential conditions of deposition, preservation, and recovery) and, statistically speaking, can only represent a small part of the total spectrum of plant taxa used at a site (Pearsall 2000:66-76; Popper 1988). However, it is likely that the recovered plant remains represent those taxa most used and burned as a result of spillage, intentional thermal activity, or general refuse burning. An underlying assumption of archaeobotanical analysis of samples collected from surface sites in eastern North America is that non-carbonized plant remains are modern, and as such they may be noted in the results but are not part of the final tallies, which only include carbonized remains. There are, however, exceptions. Archaeobotanical remains recovered from historic privies or wells can be preserved in an anaerobic state, and, therefore need not be carbonized. But none of the contexts analyzed at La Pointe- Krebs Plantation were identified as privies or wells and, as such, were exposed to open environmental conditions where food remains would have sprouted, decayed, or been consumed by animals, pests, or microorganisms. Nevertheless, it is possible for wood to be preserved in this environment uncarbonized for about 150 years (Loferski 2001), so wood is the only plant material analyzed in both charred and semi-charred states.

#### Results

Table 5-2 summarizes the results of the archaeobotanical analysis of 16 samples from 13 contexts, which had a combined volume of 151 liters of soil. A total of 33,584 charred plant remains, weighing 407.25 grams, was recovered, yielding a plant density of 222.4 specimens, or 2.7 g, per liter of sediment. Eight basic plant categories were identified, including (1) wood, (2) nutshell, (3) corn, (4) seeds, (5) squash rind, (6) cane, (7) grass stems, and (8) unidentified plant material. Detailed results from each sample are tabulated in Table 5-1.

#### Wood

Wood charcoal (97%) dominates the plant assemblage recovered from 22JA526. A total of 32,613 fragments, weighing 390.2 g, was recovered from the 13 analyzed contexts. Wood density is high at 2.6 g, or 216 specimens, per liter of soil. Wood charcoal is present in all contexts (100% ubiquity).

The wood assemblage consists primarily of pine (*Pinus* spp.; 82%), which was recovered from all features (100% ubiquity). Three other taxa are represented in low frequencies: oak (*Quercus* sp.; 9%), river birch (*Betula negra*; 3%), and hickory/pecan (*Carya* spp.; 1%). However, their relative ubiquity is high (54%, 38%, and 31%, respectively) and would suggest

Plant Class	Count (n)	Weight (g)	Density n/ /	Density g/ I	% of Plant Assemblage (n)	Ubiquity (n=13)
Wood	32,613	390.16	215.98	2.58	97%	100%
Nut	28	0.49	0.19	<.01	<1%	15%
Corn	556	12.14	3.68	0.08	2%	85%
Seeds	381	4.38	2.52	0.03	1%	85%
Squash Rind	2	0.01	0.01	<.01	<1%	15%
Cane	1	0.04	0.01	<.01	<1%	8%
Grass Stems	2	0.02	0.01	<.01	<1%	8%
Unidentified	1	0.01	0.01	<.01	<1%	8%
Total	33,584	407.25	222.41	2.70	100%	

Table 5-2. Archaeobotanical summary of La Pointe-Krebs Plantation (22JA526).

Number of Contexts: 13; Number of Samples: 16; Total Liters of Soil: 151.

their importance to the site occupants, when available. The remaining wood taxa – wax myrtle (*Myrica inodora*), sycamore (*Platanus occidentalis*), maple (*Acer* sp.), and persimmon (*Diospyros virginiana*) – each are characterized by low frequencies of one to two percent, with correspondingly low ubiquities of 15 percent or less.

The wood taxa recovered are consistent with the local forest environment as described by Braun (1950). The site is situated within the Southern Pine Hills division of the Southeastern Evergreen Forest region and includes hardwood hammocks interspersed among a dominant southern pine forest. Hardwoods are often the fuel of choice when available because they offer much higher fuel efficiency than softwoods (Asch and Asch 1985a; Babrauskas 2005), so the fact that hardwoods are minimally represented suggests that hardwood stands were not directly adjacent to the site. Pine was likely the fuel source most easily accessible to site inhabitants during protohistoric and historic occupations. La Pointe-Krebs House is made of red cedar and cypress wood (Waselkov 1989a) and, as stated in the Methods section, some representation of these taxa may be present in the wood assemblage, but given the small size of the charcoal fragments they are indistinguishable from pine.

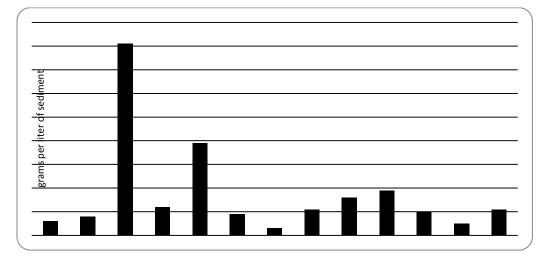


Figure 5-1. Wood density (g/l) by context at La Pointe-Krebs Plantation (22JA526).

Figure 5-1 illustrates wood density by context; note very high densities in pit Features 163 (8.1 g/l) and 105 (3.9 g/l). The remaining features demonstrate fairly similar densities, ranging from 0.3 - 1.9 g/l, the lowest being from the smudge pit (Feature 112) where corn cobs were mostly used for fuel.

#### Nuts

There are just 28 fragments of nutshell, weighing 0.5 g that account for less than one percent of the plant assemblage. Nut density is extremely low at 0.2 specimens per liter of soil; ubiquity is 15 percent. Hickory (*Carya* sp.; 68%) and pecan (*Carya illinoensis*; 32%) were both recovered from two pit features: Feature 105 (Area 3) and Feature 121 (Area 6). The low quantities of nutshell in the plant assemblage fit with the likelihood that the site was surrounded by a southern pine forest with interspersed, perhaps somewhat distant, hardwood stands (hickory was also minimally identified in the wood assemblage).

Fall-ripening nuts are a nutritious, high-fat food source that contains protein, fat, and carbohydrates as well as a complement of vitamins and minerals (USDA 2009). Many factors could have influenced the low frequency and ubiquity of the nut assemblage recovered from the site. Charred nutshell may become part of the assemblage when discarded shell, a byproduct of nut processing or consumption, is used as fuel or burned as trash. However, a *combination* of availability, cost, cultural beliefs, intended use (requiring differing processing methods – some of which may not have been near fire), and preservation bias (robust thick-shelled hickory vs. friable thin-shelled pecan, for example), leaves us with the impression that nuts were a minor supplemental food source for site occupants.

#### Corn

While corn (*Zea mays*) is a cultivated seed, and seeds are discussed in the section below, the corn remains in this assemblage consist mostly of cob, cupule, and glume fragments. Therefore, all corn results are presented here. The corn assemblage consists of 556 specimens, weighing 12.1 g, accounting for two percent of the plant assemblage (see Table 5-1). Specimens quantified as corn remains include kernels (n=4), cupules and glumes (n=495), and cob/rachis fragments (n=57). The Feature 112 smudge pit (Area 3) yielded 63 percent of the corn assemblage (by count); however, the presence of corn in 10 of the remaining 12 features (only Features 158 and 161, Area 1, contained no corn) is a clear indication that corn was a staple food source during the occupations of the site. Corn density is 3.7 fragments, or 0.1 g, per liter of soil. Density was understandably high (350 n/l) in the smudge pit, where it was the main fuel source, while all other features containing corn had densities of 0.1-3.9 n/l (Figure 5-2). Feature 105 (Area 3) was the only context in which corn *kernels* were recovered.

Corn ripens in the late summer to early fall and can be eaten fresh or dried for later use. Although the quantitative data do not indicate that intensive corn agriculture was practiced at the site, other indicators suggest that less intensive subsistence farming was being practiced. For example, while corn kernels are consumable, corn cupules (into which the kernels sit on the cob) are not, and hence are considered a byproduct of processing, such as when they become dislodged from the cob during kernel removal. Therefore, kernel presence alone at a site could simply be evidence of a transportable food source. However, kernel *and* cupule presence at La Pointe-Krebs Plantation is a likely indication of harvesting/processing activity (Scarry 1993). Corn byproducts account for 99 percent of the corn assemblage, while kernels make up just one percent. At sites where archaeologists hypothesize that corn was raised in nearby fields, Scarry (1993) reports 70 percent kernels and 30 percent cupules for the Mississippian West Jefferson site and 60 percent kernels and 40 percent cupules for the Mississippian Moundville I site. In contrast, this author (2009c) reports 94 percent kernels and 6 percent cupules and glumes (no cob fragments) at the Late Prehistoric Bryan site (460h65), West Virginia, where it is suspected that maize agriculture did not take place near the site, but instead the shelled kernels were likely transported to the site (probably a short-term occupation or camp site) by its residents. Further indication of corn subsistence farming taking place near the site is the quantity of corn cob remains recovered from the smudge pit.

Characteristics of the smudge pit (Feature 112) are consistent with those described by Binford (1967): a small single-use pit typically containing evidence of fuel-wood topped with a large quantity of corn cobs. Ihe dense smoke created by the burning cobs was used to finish the hide-tanning process and to impart a yellow color to the hides. Binford (1967:6-8) also mentions that the pits are usually distributed peripherally around sites and begin to consistently show up in the archaeological record late in prehistory and into the historic era. In this case, feature volume was approximately 3.0 l, and kernels are noticeably absent. The Feature 112 smudge pit contains a low density of wood and a very high density (350 n/*l*) of corn cob fragments that also include cupules and glumes, but no kernels.

The recovery of corn cobs allows for some study of maize cultivar characteristics (Blake and Cutler 2001:40-45; King 1985; Nickerson 1953). Unfortunately, no complete *kernels* were recovered, so no diagnostic kernel measurements could be taken. Table 5-3 provides a summary of four diagnostic measurements taken from three cob sections that were complete enough to determine row number, cupule width, kernel thickness, and cob diameter. The length of the cob fragment from which measurements were taken is also noted. Measurements have not been corrected for shrinkage due to carbonization. Further, it must be noted that cob diameters of most specimens are distorted (flattened to a square shape rather than round) and this may slightly affect the accuracy of the measurements. Additional diagnostic measurements suggested by King (1987), such as cupule depth and glume height and width, to name a few, are not systematically recorded in archaeological specimens due to poor preservation of carbonized remains from open sites. No complete cobs were present in the assemblage, so characteristics on cob shape cannot be commented on.

Cob Type	Cupule Width	Kernel Thickness	Cob Diameter Le	ength of Cob Fragment
	(mm)	(mm)	(mm)	(mm)
12-row	6.78	3.26	incomplete	17.94
	6.53	3.67	14.35	27.02
	7.06	3.86	15.96	56.95

Table 5-3. Corn cob measurements\* from La Pointe-Krebs Plantation (22JA526).

\*Not corrected for shrinkage due to carbonization.

The cob assemblage contains three 12-row measurable specimens that were likely similar in size (cupule width, kernel thickness, and cob diameter) when harvested. However, the sample size is not large enough to suggest these frequencies are an accurate representation of the maize varieties raised by site occupants. The median cupule width is 6.78 mm and median kernel thickness is 3.67 mm. These data suggest that the maize kernels were wide and flat on the cob, consistent with what has been described as a southern variant of Northern Flint (Eastern Eight Row) corn (Blake and Cutler 2001:40-45; Brown and Anderson 1947). Average cob diameter is 15.2 mm. However, it is unknown if the cob diameters are measured securely at the shaft midpoint (due to incomplete cob specimens). This, coupled with small sample size, prevents definitive interpretations about cob diameter except to say that average cob diameter is likely close to the reported 15.2 mm.

#### Seeds

There are 381 seeds, weighing 4.4 g, recovered from 11 of the 13 features (85% ubiquity). There were no seeds recovered from Features 158 and 161 (Area 1). Seeds comprise one percent of the floral assemblage at a density of 2.5 fragments (0.03 g) per liter of sediment (Table 5-4).

Of the 381 seeds recovered, 375 were identified and they represent 11 plant taxa (see Table 5-1). Paleoethnobotanists generally place seed taxa from plant assemblages into four categories: (1) cultivated species; (2) fleshy fruits and berries; (3) seed rain, which includes ruderal and other taxa from the surrounding environment; and (4) other. These designations have been selected using evidence from ethnographic sources and archaeological patterns of ubiquity and frequency. Cultigens, fruits, and some of the "other" seeds (such as bedstraw, which in some cases was used as a dye plant) are assumed to represent economically and commonly utilized taxa. Seed rain taxa, on the other hand, usually occur in low frequencies, and because of seed dispersal mechanisms (wind, animal droppings, and attachment to clothing and hair) are believed to be part of the archaeobotanical assemblage due to accidental inclusion (Asch and Asch 1985a). New research continues to expand the "other" seed category to include medicinal, dye, and fiber plants (Jakes and Ericksen 2001). The seed assemblage from La Pointe-Krebs Plantation includes taxa from all four categories. Since corn has previously been discussed, presentation of the Category 1 results will include only beans, the only other cultigen recovered.

		Percentage of	Context
	Count (n)	Identified Seeds	Ubiquity (n=13)
Cultigens			
Cow pea	5	1%	15%
nidentified Legume	1	<1%	8%
eshy Fruits			
herry	5	1%	8%
ulberry	2	1%	8%
each	135	36%	69%
ed Rain			
okeberry	1	<1%	8%
ass	1	<1%	8%
ghtshade	1	<1%	8%
nicgrass	1	<1%	8%
pelo	10	3%	8%
her			
ax Myrtle	213	57%	69%
entified Seed Total	375	100%	
nidentified Seeds	6		

Table 5-4. Seed summary from La Pointe-Krebs Plantation (22JA526).

Table 5-4 summarizes the seeds recovered. Groupings are presented according to Categories 1-4 defined above. Contextual recovery, as well as growth habit and known uses, are discussed in the sections below. Six seeds were unidentified due to poor preservation of seed shape and pericarp markings.

#### Category 1: Cultigens

Six legume seeds were recovered from three features and together comprise one percent (by count) of identified seeds. Of the six legume seeds, five are identified as cowpea (*Vigna* sp.). Four cowpea seeds were recovered from pit Feature 105 (Area 3), and the fifth was recovered from trench Feature 107 (Area 3). The sixth legume seed recovered from pit Feature 121 (Area 6) is too fragmented to assign to genus, although it is likely a cowpea as well. All specimens are fragmented and, as a result, no measurements were taken.

The cowpea is an Old World crop native to Africa and likely introduced into the Southeast by Spanish colonists (Gremillion 1993a; Waselkov 1989b), given that the establishment of the African slave trade in the Southeast post-dates initial adoption of cowpeas by southeastern populations (Wright 1981, 231). Beans are typically recovered from archaeological contexts in small quantities and Fritz (2009) suggests that this low occurrence may be a product of carbonization bias rather than utilization. She has found that, when carbonized, beans typically shrink approximately nine percent, the seed coat becomes very brittle and flakes off, and the cotyledons split easily in two, causing the hilum to fall off. This speaks to the fragile nature of these seeds, in particular, and if seed fragments do survive (without seed coat or hilum markings), they can be difficult to identify. Beans are a protein-rich food source (USDA 2009) that can be cooked, mashed, or dried for later use. The plant's nitrogen-fixing properties make it an effective companion crop for corn. Cowpeas become available for consumption during the fall months, but because of their storability, their presence cannot be used to determine seasonality.

#### Category 2: Fleshy Fruits/Berries

There are three taxa of edible fruits/berries that were consumed/used at the site, including peach (*Prunus persica*), cherry (*Prunus* sp.), and mulberry (*Morus rubra*). This category of plant food accounts for 38 percent of identified seeds and they were recovered from nine of 13 features (69% ubiquity).

There are 135 peach (*Prunus persica*) pit fragments representing 36 percent of identified seeds and they were recovered from nine features. Peach was absent from the smudge pit Feature 112 (Area 3), trench Feature 132 (Area 6), and Features 158 and 161 (Area 1) that contained no seeds whatsoever. Peach is an Old World tree crop native to western Asia and introduced to the Southeast by the Spanish in the seventeenth century (Gremillion 1993a; Sheldon 1978). The pits are extremely durable and commonly recovered in the archaeological record of the Historic era. Peaches are a good source of vitamins (especially Vitamin A) and minerals (USDA 2009) and, as such, help create a nutritionally balanced diet.

Five wild cherry (*Prunus* sp.) seeds were recovered exclusively from Zone I of pit Feature 163 (Area 1). Cherry is a small secondary-growth tree species that thrives in disturbed areas or on forest edges and the fleshy fruits ripen in the summer months of July and August (Forest Service 1974). Ethnographic records show that the tree was used extensively (Erichsen-Brown 1979:159-162); bark and root were used for medicinal purposes and fruits were a food source that could be dried for later consumption.

Two mulberry (*Morus rubra*) seeds were also recovered exclusively from Zone I of pit Feature 163 (Area 1). Mulberry is an edible fleshy fruit that thrives in moist bottomland soils and ripens during the summer months. Ethnographic sources report that berries can be used for food and beverages (Yarnell 1964:152), while roots are used for medicinal purposes (Moerman 2009: 316).

#### Category 3: Seed Rain

Five plant taxa (14 seeds) were recovered from three features and likely ended up there as a result of "seed rain." Although most of these seeds are likely accidental inclusions in feature fill, intentional use (for purposes that are not commonly recognized in the archaeological record) cannot be ruled out. Ten tupelo (*Nyssa* sp.) seeds were recovered exclusively from Zone H of pit Feature 105 (Area 3). The tupelo/blackgum tree thrives in a variety of climates in the eastern United States and grows best in well-drained, light-textured soils. Fruits of the tupelo tree ripen in the fall (September – October). Although the fruits are eaten by wildlife, they are not typically consumed by humans (Forest Service 1974). Yarnell (1964:190) noted that tupelo wood was used by indigenous populations for technological purposes, such as for awl handles, mauls, and clubs, while Moerman (2009, 323) reports the use of root or bark infusions for medicinal purposes. Given the above information, it is curious that ten seeds were recovered from one provenience; perhaps they were incidental to the use of the wood or bark, or perhaps the fruits had some other intended use that has not been previously recorded.

One unidentified grass seed was recovered from pit Feature 121 (Area 6), and one panic grass (*Panicum* sp.) seed was recovered nearby in trench Feature 132 (Area 6). The unidentified seed could only be identified to the family (Poaceae) level due to seed fragmentation and deterioration. Most kinds of grass have seeds that ripen during the summer and fall months, so the presence of these seeds could be an indication of the season of use for the feature. Grass stems, with seeds attached, could have been brought to the site to be used in making mats and containers or as roofing or pit liner, for example, and once at the site, some of the seeds on the stems could have fallen off and become charred accidentally. Dead grass also comes in handy as a good fire-starter material.

A single chokeberry (*Aronia* sp.) seed was also recovered from pit Feature 121 (Area 6). The shrub thrives in wet thickets and pine barrens (Fernald 1950:759), and its bitter berries can be used as a cold remedy (Erichsen-Brown 1979:162; Moerman 2009:83). However, the single find may simply be an incidental inclusion.

One nightshade (*Solanum* sp.) seed was recovered from trench Feature 119 (Area 3). Nightshade is widely distributed in open and disturbed habitats (Fernald 1950, 1253; Ogg et al. 1981) and while the green berries are considered poisonous, ethnographic records report use of the fruit for a variety of medicinal purposes (Moerman 2009:460). Asch and Asch (1985) consider black nightshade to be a fruit of uncertain economic status. It has been identified in Middle Woodland, Late Woodland, and Late Prehistoric/Mississippian contexts with low frequency and it is unknown whether it is present as a result of seed rain or perhaps as evidence for medicinal use.

#### Category 4: Other

The seeds that fall into this category are those ruderal or weedy environmental seeds that appear in the seed assemblage in large enough quantities to suggest that their presence is likely intentional rather than accidental.

A substantial number of odorless wax myrtle/scentless bayberry (*Myrica inodora*) seeds (n=213) were recovered from nine features (69% ubiquity) and they account for 57 percent of all identified seeds. This summer-fall ripening shrub thrives in open, wet environments and in pine forests (Britton and Brown 1936:I, 585). Ethnographic sources report that boiled extracts from

the fruits produce wax used for candles, soap, and plasters by early settlers and boiled seeds were used to make yellow dye (Erichsen-Brown 1979:192-93). Berries, leaves, roots, and bark were used for a wide array of medicinal decoctions by native populations (Moerman 2009:316). Gremillion (2000) also reported the presence of these seeds (n=15) in a single feature at the colonial Dog River Plantation site (1MB161) on Mobile Bay.

Figure 5-2 illustrates densities of plant food categories recovered from the analyzed features, excluding the smudge pit, in which fuel was the only botanical component. There appears to be no trend by context; in other words, not *all* trenches nor *all* pits or Areas contain similar food categories and/or densities of food remains. However, having said that, the only two contexts to contain all four food categories are pit Features 105 (Area 3) and 121 (Area 6). Further, the contents of the two pits demonstrate that wherever nutshell was recovered, so were all other food categories. Features 105 and 121 clearly exhibit signs of nearby food processing activity – as do several other features including Features 118, 119, and 122. Given the complete absence of food remains from Feature 158, this suggests that the trench was not near an area where daily domestic activity was taking place. Lastly, there appears to be a general pattern of domestic activity across the site. All features into which trash was intentionally dumped contain food debris. Corn and peach appear to be dietary staples; however, nuts and beans also may have been commonly utilized, but could be underrepresented because of preservation bias.

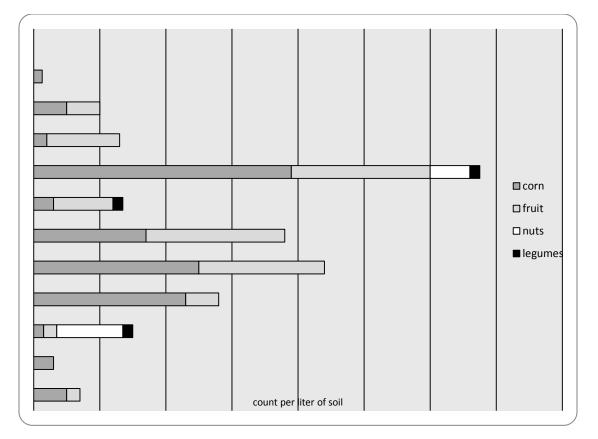


Figure 5-2. Density of plant food remains from La Pointe-Krebs Plantation (22JA526).

### Squash Rind

There were two squash (*Cucurbita pepo*) rind fragments, weighing 0.01 g, recovered from pit Feature 105 and trench Feature 119 (Area 3) (see Table 5-1). Squash plants thrive in sunny, moist, well-drained areas and ripen in early fall. Although squash seeds and flesh are edible and nutritionally rich in oils and protein, these small fruits may also have been hollowed out and used as containers or fishing-net floats (Fritz 1999).

Wild species of *Cucurbita* are native to North and South America and the variety *C. pepo* ssp. *ovifera* var. *texana* is dated from archaeological contexts in the Eastern Woodlands as early as 6000 B.C. (King 1985; Smith 1992). The squash variety *C. pepo* ssp. *ovifera* var. *ovifera* was widely cultivated by 2700 B.C. and domesticated by 1000-500 B.C. (Decker 1988; Smith 1992), but it is not until the Middle Woodland period that squash rind is frequently recovered in Midwestern archaeobotanical sites (Asch and Asch 1985b). Archaeological and genetic sources indicate that it is difficult to determine, macroscopically, if a tiny charred archaeological specimen (typically no greater than 2.0 mm in size) is of the widely cultivated domesticated variety or the wild variety.

### Cane

Cane (*Arundinaria gigantea*) is the only bamboo species found on the North American continent and it thrives in thickets or canebrakes in wetland and bottomland areas (Bell 2003; Braun 1989). Ethnographic sources report the utilization of seeds and young shoots/rhizomes as food, and stems have been used for baskets, mats, fishing poles, spears, arrow, pipe stems, torches, building material, and as animal forage (USDA 2010).

#### Grass Stems

A small quantity of grass (Poaceae) stems (n=2), weighing 0.02 g, was recovered from trench Feature 132 (Area 6). Grass has a multitude of uses, a few of which include storage pit insulation/lining, thatch, matting, and fire-starter material. The low frequency of grass recovered from the site makes it impossible to speculate on what the grass in this trench was used for.

### Unidentified Plant Remains

There was a single unidentified plant bud (0.01 g) recovered from Zone I in pit Feature 163 (Area 1).

#### Discussion

The following discussion considers the results of the archaeobotanical analysis of 16 samples from 13 contexts excavated within four areas. This discussion will focus on summarizing the results from features analyzed within Areas 1, 3, 6, and 7, including strata comparisons within features. Then the La Pointe-Krebs Plantation archaeobotanical assemblage is compared to other contemporaneous sites in the region.

Area 1, north of the house, may have been a Native American shell midden that was later used by the French to make mortar. Two separate trenches were excavated as part of Area 1. Archaeobotanical analysis from Excavation Trench 1 included Feature 158 (shell-filled trench) and Feature 161 (shell and mortar midden), while Excavation Trench 2 included Feature 163 (large pit storage facility) and Feature 178 (a palisade fence trench across the north edge of Feature 163). Features 158 and 161 contained only pine charcoal; no plant food remains were recovered. As such, it is highly likely that these features were not located in an area where domestic activity was taking place. Feature 163 contained multiple fill zones, of which two were analyzed. Zone I contained wood (very high density), seeds from all three fruit taxa present at the site, wax myrtle seeds, and some corn cob fragments. This fill is representative of food remains, in general, found in features across the site. Zone L, on the other hand, contained a very high density of charred wood and a single corn cupule. The difference in fill zone contents reported here would suggest that the pit fill represents different dumping episodes; in other words, the botanical remains are secondary deposits and likely not representative of the original feature use. Of note is the fact that Feature 163 reports, by far, the highest density of wood across the site (Figure 5-1). This may speak to the intensity of domestic activity taking place in proximity to this feature or there may have been some other intense thermal activity taking place near the feature (such as the making of mortar) that also included some food consumption. Feature 178 trench contained wood (moderate density), peach pits, wax myrtle seeds and two corn cupules. The difference in wood density and slight difference in frequency of food remains suggests that this trench was not open at the same time as Feature 163, which it cross-cut.

Area 3, south of the house, contained the remains of a colonial-era structure represented by the Feature 89 brick foundation. High density and ubiquity of food remains recovered from all of the sampled features in this area (excluding the smudge pit) supports such a claim, suggesting it may have been a summer kitchen. Six features analyzed in Area 3 include Feature 105 (large pit), Feature 107 (palisade fence trench), Feature 112 (smudge pit), Feature 118 (shallow pit), Feature 119 (palisade fence trench), and Feature 122 (double trenches). Feature 105 contained multiple fill zones, of which three were analyzed. Zones B and D are somewhat comparable, in that (1) the wood assemblages consist of almost equal densities of pine and oak, and (2) corn, peach, and wax myrtle were recovered from both zones. The only difference is that hickory nutshell was recovered from Zone B and not Zone D. Zone H, on the other hand, is different: (1) it has a wood assemblage consisting of five different taxa and reports three times the wood density as Zones B and D, (2) both pecan and hickory nutshell are present, (3) while corn, peach, and wax myrtle are present; additionally there is cowpea, squash rind, and tupelo (likely environmental seed rain). The zones represent different trash dumping episodes, with Zones B and D likely deposited within a short time span of each other, while Zone H was somewhat earlier. How far apart these dumping episodes were cannot be determined with the available botanical data. Of note is the fact that Feature 105 contained the highest density and diversity of plant food remains from La Pointe-Krebs Plantation. Feature 119 was a trench that came off the edge of pit Feature 105 and is believed to have originated at a later date than Feature 105. The

wood density in Feature 119 is moderate and includes four different taxa. Plant remains include corn, peach, wax myrtle, squash rind, nightshade, and cane. No nutshell or cowpeas were recovered from this feature. Features 118 and 122 have similar botanical assemblages that include moderate wood densities, four identical taxa in the wood assemblages, corn, peach, and wax myrtle; the two features are likely contemporaneous. Feature 107 reports different wood taxa than those used in Features 118 and 122, but all other botanical data are similar, with the exception that a cowpea was also recovered from this feature. And lastly, Feature 112, the smudge pit, contained wood, corn, and an incidental wax myrtle seed.

Area 6 included two features excavated along the south porch of La Pointe-Krebs House. Artifacts from trench Feature 132 suggest it may represent an early colonial plantation occupation. Plant remains are sparse, but include a low density of wood (four different taxa), three corn cupules, grass stems, and a grass seed. Feature 121 is dated much later; it was a shallow pit that contained a variety of food remains but in low quantities. Hickory and pecan nutshell were recovered from this feature, while the only other nutshell recovery occurred in Feature 105 (Area 3). Two peach pit fragments, one corn cupule, and a legume seed were the other food remains recovered. Environmental seed rain includes wax myrtle, chokeberry, and a grass seed.

Area 7 consisted of an isolated large lime slaking pit (Feature 90) on the northeastern edge of Old Spanish Fort Park. The wood assemblage has a moderate density and consists entirely of pine. Plant remains include low counts of corn and peach.

In sum, a ubiquitous presence of plant food remains exists across the site, but most notably in Area 3. The exceptions to this statement of ubiquity include Excavation Trench 1 in Area 1 and the smudge pit in Area 3, which produced no food remains. The plant foods recovered are consistent with cultigens (corn and beans) and gathered resources (fruit and nuts) used prehistorically, that continued to be used by early colonial populations. Further, the La Pointe-Krebs Plantation site offers early evidence of the introduction of Old World cultigens (peach and cowpea). The frequency and diversity of plant food remains are somewhat lower than those found in regions further north; however, these data are consistent with, and somewhat more abundant than, those typically reported for the north-central Gulf Coast region. The data in the comparative analysis below emphasizes this point.

# Comparative Analysis

Table 5-5 offers a comparative look at plant food remains from select prehistoric and historic sites of the north-central Gulf Coast region. The table offers information from sites dating from the Mississippi through Historic French colonial periods to demonstrate dietary changes, or lack thereof, over time and amid cultural change. The reporting of food remains from some sites varies between counts and weights, but those sites that offer both quantitative measures can be used for estimating the others – and thus, comparing them. Archaeobotanical analyses can be difficult to come by in historic archaeological investigations where faunal

Site	Time Period	Food Remains
Bottle Creek (1BA2) (Gremillion 1993b)	Mississippi	corn (15.6 g), nutshell (0.4g), 2 maygrass, 1 knotweed, 2 grape
1BA196 (Bizzoco 1977)	Protohistoric	1 corn kernel, 54 nutshell 1 peach, 4 persimmon, 2 mulberry
The Village (1BA608) (Leone 2009)	French/British/Spanish Colonial	13 nutshell (0.32 g)
Rochon Plantation (1BA337) (Gums 2000)	French/British Colonial	1 corn kernel, 130 peach, 1 pumpkin seed
Dog River Plantation (1MB161) Gremillion (2000)	French/British/Spanish Colonial	1 corn kernel, nutshell, 1 cow pea, abundant peach, 1 squash seed
La Pointe-Krebs Plantation (22JA526)	French/British/Spanish Colonial	556 corn (12 g), 28 nutshell (0.5 g), 6 cow pea/legume (0.1 g), 135 peach (3.9 g), 5 cherry (0.01 g), 2 mulberry (<.01 g)

Table 5-5. Plant food remains from select sites of the north-central Gulf Coast region.

remains are more typically used to reconstruct diet. However, the archaeobotanical database in the region is growing and the La Pointe-Krebs Plantation data are an important addition for several reasons. (1) Corn remains have not been recovered in abundance from sites dating after the Mississippi period, raising questions about its status as a dietary staple in historic times, but the frequency of corn recovered at 22JA526 helps to quell that uncertainty. (2) The significance of legumes in the diet beginning in the Late Prehistoric/Mississippi period has been in question due to scarce evidence, but this food group is well-represented here. (3) Peach, an introduced Old World tree crop, is consistently recovered in abundance from all historic sites, speaking to its importance in the diet and to the plant's vigorous growth habit even in the early Historic period at 22JA526. (4) Wild fruit and nut resources maintain a low frequency of recovery in the Late Prehistoric through the Historic period, but offer important nutritional balance and variety to the diet.

# Conclusions

Results of the macrobotanical analysis of 16 samples from 13 features excavated around La Pointe-Krebs House and Plantation site in Old Spanish Fort Park (22JA526) offers significant insights into the diet and subsistence practices of its Historic Native American and ethnic French colonial occupants.

Pine dominates the wood assemblage, and though hardwoods were recovered in low quantities, their proportionately high ubiquity would suggest that they were a valued source of fuel and/or construction material when available. All wood taxa identified are consistent with what would have been available in the surrounding forest.

Corn was the agricultural staple of the site occupants, and the diet was supplemented with peaches, cowpeas, nuts, and wild fruits. Given the available data, it is difficult to speculate on whether the squash rind recovered represents food or utensil remains. Scentless bayberry/wax myrtle was curiously ubiquitous and may represent intended use, such as for candlemaking.

With the exception of two features (Features 158 and 161) from Excavation Trench 1, Area 1, and the smudge pit (Feature 112) in Area 3, all other features investigated had enough plant food remains to suggest that (1) they were near areas of domestic activity, or (2) they were near areas of other fire-related activity that also included some food consumption. Area 3 in particular, with its high frequency and ubiquity of plant food remains recovered throughout, was very likely an area of domestic activity, perhaps a summer kitchen.

A comparative analysis of sites from within the region demonstrates that the La Pointe-Krebs Plantation ethnobotanical data set is more robust than other Historic-era sites, despite the fact that no hearths, wells, or privies were encountered during excavations; contexts that typically contain high densities of food remains.

The macrobotanical findings at this ethnic French colonial plantation site indicate shared traditional (New World) and introduced (Old World) cultigens and plant food utilization. Corn, beans, and squash agriculture supplemented with wild nuts and fruits represent indigenous Late Prehistoric dietary traditions of the Southern Mississippi Valley region, while cowpeas and peaches represent foods introduced by early explorers, missionaries, colonists, and enslaved peoples that appear to have been easily incorporated into existing subsistence patterns throughout the Southeast.

# **CHAPTER 6:** Summary of La Pointe-Krebs Plantations Excavation

by Bonnie L. Gums

The French colonial-style La Pointe-Krebs House built in the mid-1770s is the oldest standing building in Mississippi. The structure was once part of a large colonial plantation established around 1718 by French Canadian Joseph Simon de la Pointe, and after the 1740s occupied by the Krebs family for nearly two centuries. The historical significance of La Pointe-Krebs House was recognized over 75 years ago and it remains a very important example of Gulf Coast colonial architecture. La Pointe-Krebs House was documented by the Historic American Buildings Survey (HABS) in 1936 and 1940 and listed on the National Register of Historic Places (NRHP) in 1971 (Figure 6-1). Since its acquisition by Jackson County around 1940, several restoration projects have endeavored to maintain this unique building's architectural integrity. Unfortunately La Pointe-Krebs House was one of thousands of buildings damaged by Hurricane Katrina in 2005, yet it still stands, relatively intact, with another restoration planned (Figure 6-2).



Figure 6-1. East side of La Pointe-Krebs House in 1936 (Historic American Buildings Survey, National Park Service).

Figure 6-2. East side of La Pointe-Krebs House in 2010.

# Founding of the La Pointe Concession

Based on historical documents and written histories, the date of the La Pointe concession and the establishment of the plantation in the Pascagoula River delta is unclear (Figure 6-3). French Canadian Joseph Simon de la Pointe first arrived on the Gulf Coast in 1699, and he and his older brother Jacques were residents of Mobile (now known as Old Mobile) on the Mobile River, capital of colonial *Louisiane* from 1702-1711 (Higginbotham 1977:73).

Published dates for La Pointe's Pascagoula concession range from 1715 to 1717, 1718, and 1721. One La Pointe land grant dated November 12, 1715, and signed by Governor Antoine Laumet de la Mothe, sieur de Cadillac, refers to lands on "Fish River" and "Grand Bay." La Pointe cultivated that concession for two years. Historian Peter Hamilton (1910:156-157) maintained that the "Grand Bay" of that era referred to modern-day Weeks Bay, at the mouth of Fish River on the eastern shore of Mobile Bay.

More recently, however, historian Jay Higginbotham challenged that interpretation by citing Charles Le Gac's memoir entry for August 25, 1718, which documents Jean-Baptiste Baudreau *dit* Graveline's Chaumont Plantation in operation on the Pascagoula River, with no mention of Joseph Simon de la Pointe's presence in the area (Conrad 1970: 2; Higginbotham 1974:354). Furthermore, Higginbotham argues (perhaps circularly) the Pascagoula River was first called Fish River, which would place the 1715 La Pointe land grant in the Pascagoula River delta. Other early histories, including research for the Historic American Building Survey, claim La Pointe was commissioned to build a fort at his Pascagoula concession to protect the Chaumont plantation, which is erroneously dated to 1721. In more recent years, the year 1718 has been considered a reasonable approximation of the founding of the La Pointe plantation, but a reexamination of primary historical documents seems necessary to resolve this matter.

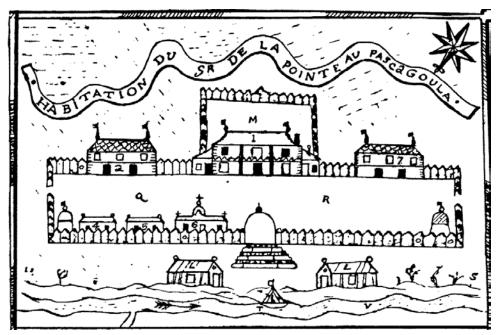


Figure 6-3. The La Pointe plantation as shown on Dumont de Montigny's ca. 1726 map of the Pascagoula River.

# **Colonial Gulf Coast Architecture**

A distinctive architectural tradition developed along the north-central Gulf Coast in the colonial period that still informs and inspires modern construction. Gulf Coast plantation homes and Creole cottages of the eighteenth century were usually two- to four-room buildings built of upright wooden posts placed in trenches or on wooden sills. They usually displayed broad hipped roofs, had a central fireplace, and full surrounding porches or galleries that helped protect the building's walls from the elements. La Pointe-Krebs House is Mississippi's finest example of colonial vernacular architecture, although overshadowed by the many colonial structures in Louisiana, and particularly those of New Orleans (e.g., Katz 2004).

Origins of this Creole cottage architectural style of the Gulf Coast have been intensely debated for decades by architectural historians (Daspit 1996; Edwards 1988; Oszuscik1983,

1988, 1991; Peterson 1993; Wilson 1971, 1977). Certainly elements derive from a wide variety of sources (including French Canadian, African influence via the Caribbean, and Southeastern American Indian) and were combined with local materials to enable colonists to cope with the harsh climatic conditions of the north-central Gulf Coast. Later colonial Creole cottages and plantation homes, particularly those located in flood-prone areas, were raised on stilts or piers, which probably explains why this style is still popular for residential and vacation homes along the coast.

# **Colonial Plantation Archaeology**

Few colonial plantation sites have been identified and investigated along the Mississippi Gulf Coast, simply because colonial settlements were concentrated to the west around New Orleans (Louisiana) and the lower Mississippi River and to the east around Mobile Bay (Alabama). Colonial settlements in coastal Mississippi included Fort Maurepas, the colonial site of Biloxi, and plantations in the Pascagoula River delta, including La Pointe-Krebs, Graveline, Chaumont, and La Vernge. Archaeological studies of colonial sites on the Mississippi coast include a search for Fort Maurepas (22JA534); burial excavations at the Moran site, a French colonial cemetery (22HR511) associated with New Biloxi; and a French warehouse on Ship Island (22HR638). But little is known of plantation sites other than La Pointe-Krebs Plantation (22JA526).

Excavations have occurred at several eighteenth- to early nineteenth-century plantation sites, around Mobile Bay in Alabama, 30.0 miles (48.0 km) east of the Pascagoula River. Many of these plantation sites contained construction trench features from *pieux en terre* (post in ground) and *poteaux sur sole* (post on sill) buildings and palisades similar to those found at La Pointe-Krebs Plantation. Other features found at these plantation sites include wells and cisterns; trash pits; clay pits; facilities for making bricks, mortar, and naval stores; and fence or palisade trenches. These plantation sites are briefly summarized for comparison to La Pointe-Krebs Plantation.

# Archaeological Structural Remains

Several colonial period archaeological structures have been excavated in the Mobile Bay area (Figure 6-4). *Pieux en terre* (post in ground) and *poteaux sur sole* (post on sill) buildings have



Figure 6-4. Drawing of a *poteaux sur sole* (post on sill) structure at Old Mobile (1MB94) by Philippe Oszuscik, based in part on archaeological remains.

been found at Old Mobile (1702-1711, 1MB94) and the French village of Port Dauphin on Dauphin Island (ca. 1710s-1730s, 1MB221) (Shorter 1995; Waselkov 1991, 1999, 2002). These were the earliest colonial villages in the Mobile Bay area, and each was supported and protected by a fortification.

After the first decade of colonization and cultural adaptation to the unfamiliar environment, a few French families ventured away from the communal settlements to establish plantations around Mobile Bay and its tributaries, similar to the La Pointe, Graveline, Chaumont, and La Vernge concessions in the Pascagoula River delta. The sites of several Mobile Bay plantations provide archaeological examples of French colonial-style houses similar to and, in some cases, contemporaneous with the La Pointe- Krebs House.

Four *pieux en terre* buildings were excavated at the Rochon-Demuy-Hollinger plantation site (ca. 1725-1848, 1MB161) at the mouth of Dog River on Mobile Bay (Waselkov and Gums 2000:189-190) (Figure 6-5). Structure 7 was a small one-room building (3.5 by 3.0+ m, or 14.5 by 9.8+ ft) believed to be occupied by enslaved Native Americans or Africans in the 1720s to1730s. Dating to the 1760s, Structure 2 was larger (5.0 by 10.0 m, or 16.4 by 32.8 ft) with two rooms and fenced enclosures. Two other *pieux en terre* structures at the Dog River plantation site were partially excavated.

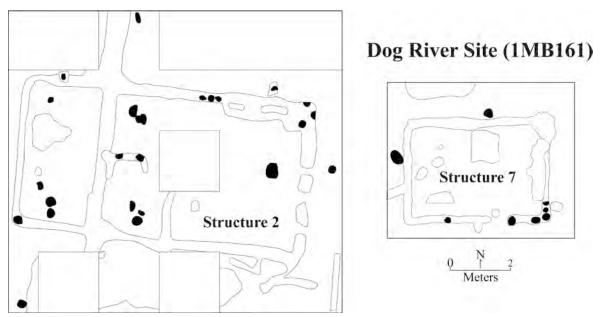


Figure 6-5. Pieux en terre (post in ground) Structures 2 and 7 at the Dog River Plantation site (1MB161).

Three *pieux en terre* buildings were excavated at the Augustin Rochon plantation site (ca. 1750s-1780, 1BA337), overlooking the lower delta at the northeast corner of Mobile Bay (Gums 2000) (Figure 6-6). Structure 1, the plantation family home (4.8 by 9.85 m, or 15.7 by 32.3 ft), had an interior fireplace and exterior gallery on one side. Structure 2 was a summer kitchen or storage building (2.5 m by at least 4.5 m, or 8.2 by 14.8 ft). A palisade-style fence connected these two

structures. Structure 4 perhaps served as a slave quarters (7.25 by 8.0 m, or 23.8 by 26.2 ft). It had *bousillage* infilled walls and a palisade along one side of the building.

Two large fenced compounds were excavated at the site of The Village (ca. 1760s-1820s, 1BA608) on the eastern shore of Mobile Bay (Gums et al. 2009) (Figure 6-7). Structural Complex 1 consisted of 36 trenches (in an area of at least 23.0 by 44.0 m, or 75.0 by 144.0 ft) that enclosed a *pieux en terre* plantation house (at least 4.5 by 8.0 m, or 14.8 by 26.2 ft) surrounded by palisades

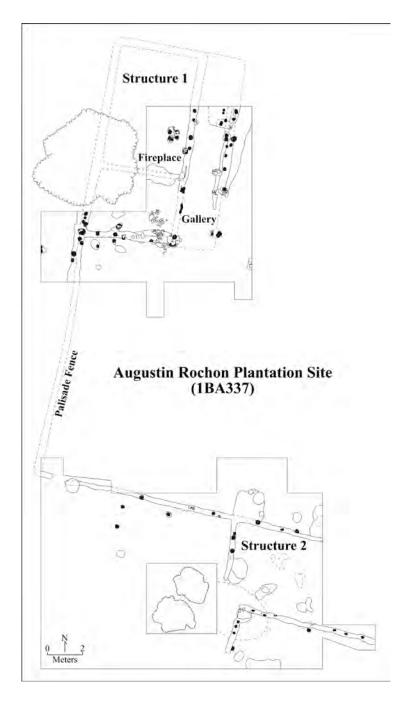


Figure 6-6. Structures 1 and 2 at the Augustin Rochon Plantation site (1BA337).

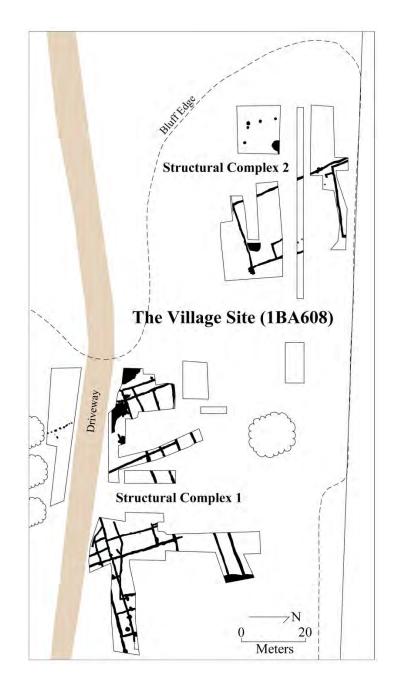


Figure 6-7. Structural Complexes 1 and 2 at The Village (1BA608).

and fenced enclosures. Structural Complex 2 consisted of a wooden palisade (11.0 by at least 20.5 m, or 36.0 by 67.0 ft) surrounding another dwelling (11.0 by at least 2.75 m, or 36.1 by at least 9.0 ft). These types of palisaded compounds were also present at La Pointe-Krebs Plantation, based on the number of construction trenches found during the 2010 excavations.

Other limited archaeological examples include a construction trench with tabby mortar found in test excavations at the British colonial Lisloy Plantation site (1757-1767, 1MB313) at the mouth of Fowl River on the western shore of Mobile Bay; tabby structural remains on a Spanish colonial plantation site (1780-1813, 1BA53) on Bon Secour River, above Weeks Bay on the eastern shore of Mobile Bay; and an 1800-era Spanish colonial *pieux en terre* structure in downtown Mobile (1MB189) (Gums 2002; Gums and Shorter 1998; Shorter 1998; White 1965).

### La Pointe-Krebs House

The construction date of La Pointe-Krebs House has been the subject of much debate for decades and may never be resolved. Early histories claim it is an original building of the La Pointe concession, and specifically one of the carpenter's shops illustrated in Dumont de Montigny's ca. 1726 drawing of the La Pointe Concession, which would make the house nearly 300 years old. The preponderance of evidence, however, points to a construction date for the La Pointe-Krebs House shortly after the devastating hurricane of 1772 that destroyed many Krebs plantation buildings (Romans 1999:90). Furthermore, the long-time claim that La Pointe-Krebs House was once a Spanish Fort can finally been dismissed.

La Pointe-Krebs House has *poteaux sur sole* (post on sill) walls of cypress and juniper timbers filled in with *bousillage* (a French-style mud and Spanish Moss mixture) for the western room and tabby (crushed shell mortar) in-fill for the eastern rooms, with a gallery on three sides (Figures 6-8 to 6-10). The overall appearance of La Pointe-Krebs House is a classic Gulf Coast colonial structure, although not raised on piers like the Gulf Coast Creole cottage.

Based on architectural studies, La Pointe-Krebs House was originally built as a two-room tabby structure with a bousillage side room added later. The entire La Pointe-Krebs House (minus the gallery, which is not original) measures approximately 6.3 by 16.8 m (20.7 by 55.1 ft). The original two-room portion of the structure measures 6.3 by 12.5 m (20.7 by 41.0 ft), with the one room at 6.3 by 9.2 (20.7 by 30.2 ft) in size and the east room at 6.3 by 3.3 m (20.7 by 10.8 ft). These tabby-walled rooms probably had a dirt floor. When the western bousillage room, which measures roughly 6.3 by 4.3 m (14.1 by 20.7 ft), was added, probably around 1820, a prepared floor of tabby mortar was built for the entire building, with brick fireplaces centrally placed within the two interior walls. Around 1870 a raised wooden floor was added. Twentieth-century renovation projects have altered the historical appearance of La Pointe-Krebs House in some aspects.

The archaeological floor plan of a French colonial-style *pieux en terre* (post in ground) structure at the Augustin Rochon Plantation site (1BA337) is most comparable to La Pointe-Krebs House (see Figure 6-6) (Gums 2000). Structure 1, the Rochon family home, consisted of a main room that measured about 4.8 by 6.6 m (15.7 by 21.6 ft), with a side room of about 3.25 by 4.8 m (9.2 by 15.7 ft). Its overall size of 4.8 by 9.85 m (15.7 by 32.3 ft) is slightly smaller than the original La Pointe-Krebs House. There was also archaeological evidence of a brick fireplace within the interior wall and a gallery on one side of the Rochon plantation home. *Bousillage* was the predominant wall in-fill at the Rochon plantation, with tabby used to support gallery piers.

There was also evidence that the exterior walls of the Rochon home were thinly plastered or whitewashed. This plantation was established in the 1750s and destroyed in 1780, overlapping the mid-1770s construction date for La Pointe-Krebs House. Ironically, one of Joseph Simon de la Pointe's daughters, Marie Jeanne, lived at this plantation as the first wife of Augustin Rochon until her death in 1764 (Gums 2000:2).

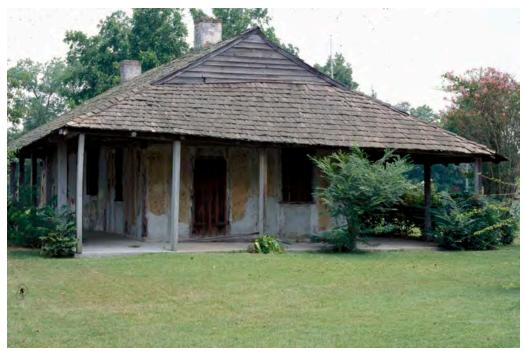


Figure 6-8. West room of La Pointe-Krebs House showing plaster-covered *bousillage* in-filled walls, prior to the 1995 restoration.



Figure 6-9. Detail of a plaster-covered *bousillage* in-filled wall of the west room of La Pointe-Krebs House, prior to the 1995 restoration.



Figure 6-10. Detail of a tabby in-filled wall of the east room of La Pointe-Krebs House, prior to the 1995 restoration.

# Archaeology at La Pointe-Krebs House and Plantation Site

In 1995 the University of South Alabama's Center for Archaeological Studies (CAS) conducted a shovel test survey of La Pointe Plantation site in Old Spanish Fort Park (22JA526) and salvage excavations around La Pointe-Krebs House, revealing significant archaeological deposits and cultural features. The 2010 CAS excavations at La Pointe-Krebs Plantation site around the historic structure focused on four areas based on the 1995 shovel test survey (Figure 6-11). The numerous features and rich artifact assemblage reflect the significance and integrity of the archaeological record preserved in Old Spanish Fort Park.

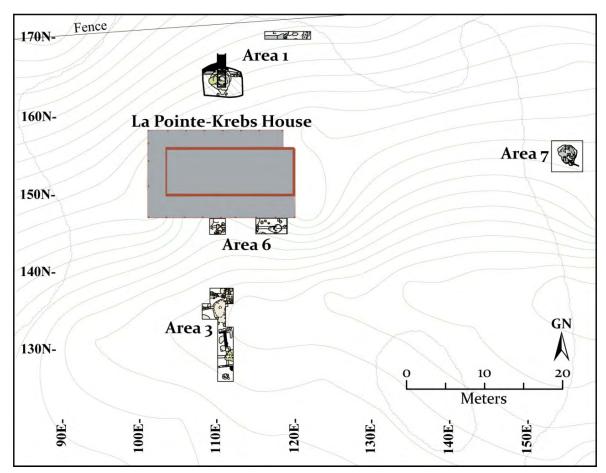


Figure 6-11. Detail of the archaeological site map showing 2010 excavations and features at La Pointe-Krebs Plantation in Old Spanish Fort Park (22JA526).

# Archaeological Features

During the 2010 excavations, 96 features were recorded, including a brick foundation, midden deposits, pits, postholes, and trenches. Excavations included Area 1, a shell and mortar midden on the shore of Krebs Lake, north of La Pointe-Krebs House; Area 3, a colonial structure site south of La Pointe-Krebs House; Area 6, archaeological deposits around La Pointe-Krebs House; and Area 7, a lime slaking pit in the northeast corner of Old Spanish Fort Park. Features found during the 1995 salvage excavation around La Pointe-Krebs House were primarily structural support piers and mortar slabs.

When possible, based on recovered artifacts, features recorded in 2010 were assigned to a historic time period reflecting governmental powers for this area of the north-central Gulf Coast, and include French colonial (1699-1763), British colonial (1763-1780); Spanish colonial (1780-1810), and early American (1811-1850) (Figures 6-12 to 6-16). Other features (mostly small

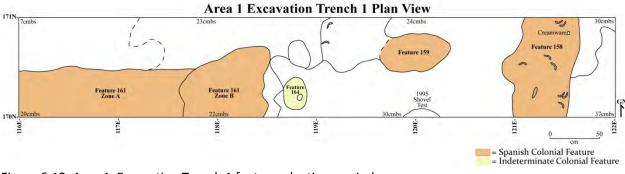


Figure 6-12. Area 1, Excavation Trench 1 features, by time period.

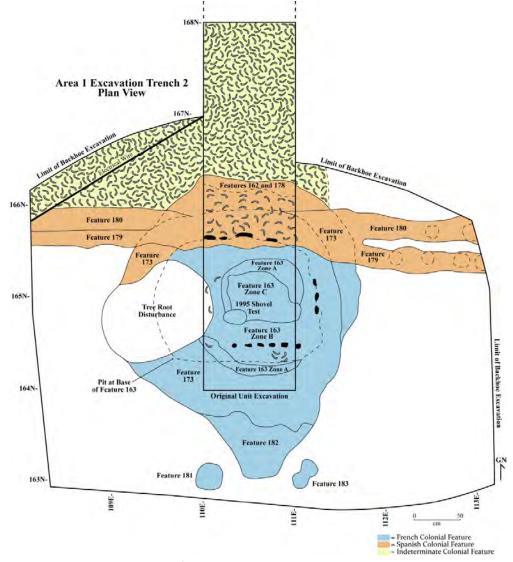


Figure 6-13. Area 1, Excavation Trench 2 features, by time period.

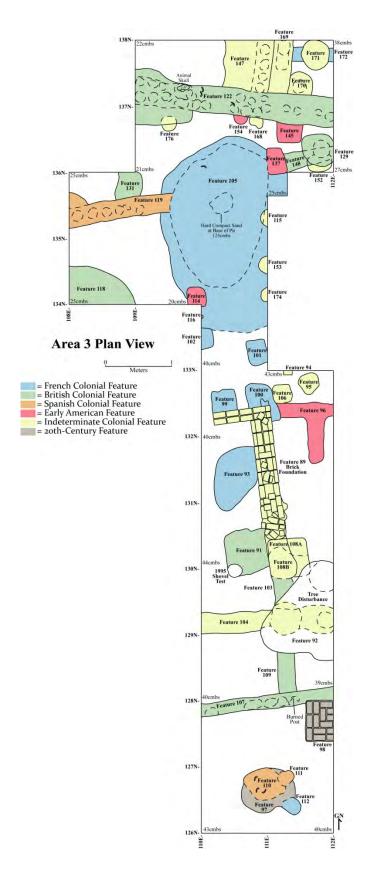


Figure 6-14. Area 3 features, by time period.



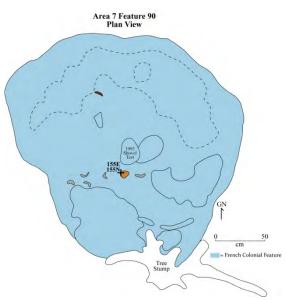


Figure 6-16. Area 7, Feature 90, by time period.

features such as postholes with few datable artifacts) could not be assigned to a specific time period, and others with a variety of diagnostic artifacts span more than one time period. For instance, both Feature 105, the large pit in Area 3, and Feature 163, the large storage pit in Area 1, do not fit into one time period, but overlap colonial periods.

Of note, there are few features from the later American period (post-1850) of the second half of the nineteenth century, and two features (a brick sidewalk and a hole filled in small clam shells, both in Area 3) date to the twentieth-century park period. This suggests that after the mid-1800s, fewer activities such as new construction occurred in the area of the 2010 excavations. Discussions and summaries of features by periods are presented to provide an overall view of the archaeological site through time.

### French Colonial Features (ca. 1718-1763)

Lime Slaking Pit. The most significant early French colonial feature (ca. 1718-1732) at La Pointe-Krebs Plantation is Feature 90, a lime slaking or mixing pit in Area 7 (see Figure 6-16). Its location away from La Pointe-Krebs House and near Krebs Cemetery (established in the 1830s) probably saved it from later human disturbance, such as building construction. The pit stain was defined at just 20.0 cm below the ground surface and, apart from tree root disturbances, its contents remained intact for over 250 years. At least 81 pottery vessels were identified from 341 of the 975 Indian potsherds found in Feature 90. Pascagoula Indian pottery found in this feature includes jars, incurved bowls, and some interesting Colonoware forms, including a pitcher, a strainer, a plate, and several milk pans and flat-bottomed bowls. European ceramics are not very numerous in Feature 90 (which is noteworthy, since they usually are common in French domestic contexts) and include sherds of early plain and Nevers-style French faience, salt-glazed stoneware, French lead-glazed coarse earthenwares, an Iberian olive jar, and a Bellarmine bottle. The glass beads found in Feature 90 include a few typically early French necklace forms. The early French colonial period artifact assemblage from Feature 90 differs from all others at the La Pointe-Krebs Plantation site.

Facilities used in the processing of construction mortar, such as lime kilns and lime slaking pits similar to Feature 90, have not been reported elsewhere along the north-central Gulf Coast, although the use of tabby mortar and bricks was common in colonial and later construction. Possibly the earliest New World example of a lime-processing pit dates to the 1565-1566 Spanish colonial settlement site located in Fountain of Youth Park in St. Augustine, Florida (Deagan 2008:14-15, 2009). This lime-burning pit was 4.0 m (13.1 ft) in diameter and 1.5 m (4.9 ft) deep and contained incompletely burned limestone on top of charred pine logs and a layer of charcoal.

A lime slaking pit similar to Feature 90 at La Pointe-Krebs Plantation was partially excavated at the Jarrot Mansion in Cahokia, one of the earliest (1699) French colonial settlements in the Illinois country (Sangamo Archaeological Center 2012). Nicholas Jarrot, a wealthy Frenchman, built a two-story Federal-style brick house in 1807, which stands today as a museum. A large shallow basin-shaped pit filled with lime was found in the rear yard of the house, and interpreted as a lime slaking pit used during the construction of the Jarrot Mansion. Another lime slaking pit was excavated at the early 1800s African-American settlement of New Philadelphia on the Illinois frontier (Shackel 2006). This pit was rectangular, 0.5 by 1.3 m (2.8 by 4.4 ft), and less than 15.0 cm deep (0.4 ft). Another lime slaking pit, similar in size and shape and containing leftover mortar like Feature 90, was excavated at a ca. 1840 homestead site on the Mississippi River in Illinois (Mazrim 2004). It is surprising that more of these types of features, as well as brick kilns and clamps, have not been found on colonial and later historic sites on the north-central Gulf Coast.

**Construction Trenches and Postholes.** In Area 6 units, a few late French colonial (ca. 1732-1763) features were defined in Level 5 (40.0 to 50.0 cm), well below the accumulated midden around La Pointe-Krebs House (see Figure 6-12). Trench Features 132, 144, and 155, interpreted as part of the same construction, most likely represent an early palisade around the La Pointe-Krebs plantation. Several postholes found at the same level may also date to the French colonial period, but few contained diagnostic artifacts.

**Large Deep Pit.** Feature 105, the large deep pit in Area 3, dates from the late French colonial period, through the British colonial period, and into the Spanish colonial period (ca. 1750 to 1780s) (see Figure 6-14). The original function of Feature 105 is unknown. No other features in the vicinity could be interpreted as part of or associated with Feature 105. Its last served as a refuse pit.

Feature 105 had numerous zones, most of which were rich with artifacts. Eighty pottery vessels were identified from 274 of the 472 Indian potsherds found in Feature 105. There are examples of Pascagoula Indian pottery, including scraped jars and incised bowls, Choctaw Chickachae Combed pottery, and quite a few red-filmed bowls, which probably were made by the Choctaws for the Europeans. (The Pascagoulas left with some of the French colonists in 1763-1764 and were replaced soon afterwards by Choctaws moving to the Gulf Coast). There is much more European pottery in Feature 105 than in Features 90 and 163, including late French faience types, like Faience Brune, Brittany Blue-on-White, and Provence designs. British pottery includes delft, white salt-glazed stoneware, and creamware. Spanish colonial types include Abó Polychrome and Puebla Blue-on-White, as well as a yellow banded style. These later ceramics could have been obtained by Krebs plantation occupants from nearby Spanish New Orleans during the British period of control on the Mississippi coast, or during the Spanish colonial period after 1780. The absence of pearlware in Feature 105 suggests the pit was filled by the mid-1780s. Bottle glass, gunflints, a 0.58 caliber lead ball, and white clay pipes all appear to be of British origin. One of the wound glass bead types from Feature 105 was typically traded by the British.

**Large Deep Storage Pit.** Feature 163, the very large and deep pit (ca. 2.0 m, or 6.5 ft) in Area 1, is interpreted as some sort of underground storage facility for goods or foodstuffs (see Figure 6-13). Stains of wooden timbers and large pieces of mortar found near the bottom of the pit indicate it contained a small wooden structure. Upon abandonment, the pit was filled with household refuse. Based on artifacts found in the builder's pit, this feature was constructed in the late French colonial period (ca. 1732-1763). Feature 163 had many fill zones that accumulated over a long time period or (maybe more precisely) at two widely separated periods. The lower zones contain artifacts from the late French colonial period (ca. 1770s-1800).

Fifty-seven native-made vessels were identified from 185 of the 204 sherds from Feature 163. There are potsherds from several Pascagoula Indian jars and bowls from the lower zones, mixed with potsherds with Choctaw designs. The upper zones in Feature 163 contain only Choctaw pottery types. European ceramics are mostly French lead-glazed earthenwares and faience in lower zones, with Spanish colonial majolica and British creamware, pearlware, and stoneware in the upper zones. Glass beads from the lower zones are mostly seed types, with a few tubular and one French necklace bead. Other French artifacts include bone rosary beads, olive green glass from string rim bottles, fragments of copper kettles, four clasp knives, and lead balls that are mainly 0.50 caliber, typically used in small hunting fusils. Gunflints recovered in the lower zones are French spalls.

### British Colonial Features (1763-1780)

**Construction Trenches.** Some of the most interesting British colonial features are the eastwest double trenches, Feature 122, at the north end of Area 3 (see Figure 6-14), interpreted as two sequential palisade fence trenches. When the original wooden upright palisade posts rotted, a new trench was dug next to the old one for a replacement palisade. The artifacts from these trenches are similar to those from Feature 105 (immediately to the south), except they are fewer with little French and no Spanish materials. Twenty-nine pottery vessels were identified from 140 of the 266 Indian potsherds from Feature 122. The pottery is almost entirely Choctaw, including a brimmed bowl and two milk pans. European ceramics are represented by French faience and Saintonge leadglazed coarse earthenwares, British delft, salt-glazed stoneware, and creamware. The olive green glass bottles are typical British forms. Glass beads, white clay pipes, straight pins, clothing hooks, a thimble, and shell buttons were also recovered.

Feature 107, a deep east-west construction trench near the south end of Area 3, is also from the British colonial period (see Figure 6-14). Artifacts recovered include Choctaw Chickachae Combed pottery, French faience, lead-glazed coarse earthenware, creamware, pearlware, olive green and aqua bottle glass, and a decorated white clay pipe bowl. Unfortunately much of Feature 107 was disturbed by a large tree root disturbance (Feature 92), but it is likely that the British olive green bottle fragments and other artifacts found in Feature 92 originally came from Feature 107 fill.

Four short trench segments (Features 103, 109, 131, and 148) in Area 3 also date to the British colonial period (see Figure 6-14).

**Pits and Postholes.** Two pits (Features 91 and 118) and one posthole (Feature 129) in Area 3, and five postholes (Features 125, 134, 135, 136, and 150), a pit (Feature 130), and a short trench (Feature 133) in Area 6 are considered British colonial features (see Figures 6-14 and 6-15).

Feature 91 was a medium-deep basin-shaped pit partially beneath the Feature 89 brick foundation. Artifacts from this pit include a Native American clay pipe fragment and a few potsherds (including one black-filmed), a tin-glazed lid, British white salt-glazed stoneware, creamware, olive green glass, and a decorated white clay pipe bowl.

Feature 118 was a shallow basin-shaped pit partially excavated in Area 3 and may be related to the occupation of the nearby Feature 89 brick foundation. This pit contained Native American incised and brushed potsherds, lead-glazed coarse earthenware, British white salt-glazed stoneware, olive green and clear bottle glass, a white glass seed bead, and white clay pipe stems.

Feature 130 was a deep circular pit beneath Feature 121, an early American pit in Area 6. Feature 130 contained a few Native American potsherds, creamware, salt-glazed stoneware, olive green bottle glass, and lead shot.

# Spanish Colonial Features (1780-1810)

**Construction Trenches**. Three construction trenches date to the Spanish Colonial period, all relatively deep and containing midden rich with artifacts and oyster shells. These include Features 158, 179, and 180 in Area 1 and Feature 119 in Area 3 (see Figures 6-13 and 6-14).

Feature 158 was a wide shallow north-south trench in Area 1 that may have served as a drain leading down slope from La Pointe-Krebs House to Krebs Lake (see Figure 6-12). The artifacts from Feature 158 include a few Indian potsherds, tin-glazed earthenware, creamware, pearlware, olive green and one aqua bottle glass, and lead shot.

Features 179 and 180 (portions of which were also excavated as Features 162 and 178) are east-west trenches cutting through the north edge of Feature 163, the large deep storage pit in Area 1. The two trenches converge and likely one replaced the other as a palisade around La Pointe-Krebs plantation. The trenches contained Native American potsherds (some red-filmed), tin-glazed and lead glazed earthenwares, Spanish colonial majolica, British white salt-glazed stoneware, creamware, pearlware, and whiteware. Olive green and French blue-green glass, numerous glass seed and necklace beads, white clay pipes, a bone button, French and British gunflints, and lead shot were also recovered.

Feature 119 was a deep east-west construction trench near the north end of Area 3 that appeared to cut through Feature 105, the large deep pit. Feature 119 contained many artifacts, including incised and Chickachae Combed potsherds, French faience and Saintonge lead-glazed coarse earthenware, Spanish colonial majolica, British porcelain and whiteware, glass seed beads, a crucifix, straight pins, and lead shot.

**Pits and Middens.** Spanish colonial features in Area 1 north of La Pointe-Krebs House include Feature 159 pit and Feature 165 shell and mortar midden (see Figure 6-12). Feature 110 pit and Feature 112 smudge pit located at the south end of Area 3 also date to the Spanish colonial period (see Figure 6-14).

# Early American Features (1811-1850)

**Pits and Postholes.** Early American period features include five postholes in the north half of Area 3 (Features 114, 116, 137, 145, and 154) and Feature 121 and Feature 139 pits in Area 6 (see Figures 6-14 and 6-15).

Feature 121 was a large oblong pit that contained two partially articulated portions of a neonatal pig (*Sus scrofa*) skeleton. Artifacts from Feature 121 fill, including whiteware, clear and amber bottle glass, milk glass buttons, a Bakelite comb teeth, and a slate pencil, date this pit to the early American period.

Feature 139 was a large deep posthole or pit, partially uncovered in Area 1, that contained plain and incised Indian potsherds, whiteware, olive green and clear bottle glass, a black glass seed bead, and a wooden button.

### Unattributed Colonial Features

Numerous colonial-era features could not be assigned a time period for various reasons. These include one posthole (Feature 164) in Area 1, two construction trenches (Features 147 and 169) and seven postholes (Features 115, 152, 153, 168, 170, 171, and 174) in Area 3, and seven postholes (Features 138, 141, 143, 146, 149, 157, and 175) and two partially excavated pits (Features 124 and 142) in Area 6 (see Figures 6-12 to 6-15).

Also included in this grouping is Feature 89, the brick foundation in Area 3 (see Figure 6-14). Feature 89 is interpreted as an interior wall between two small rooms, with a prepared clay floor. The foundation was constructed of reused French-style bricks, both whole and half fragments, held together with mortar. Based on the abundance of nails, the walls were probably of wood and the roof may have been thatched. The use of this building is uncertain, but it may have been slave quarters or a summer kitchen. Datable artifacts were not directly associated with Feature 89, but the surrounding midden contained a mixture of late colonial and early American artifacts, suggesting construction during the British colonial period (1763-1780) and use into the early American period (ca. 1811-1850).

# **Twentieth-Century Features**

A shallow pit filled with small clam shells (Feature 97) and a portion of a brick sidewalk (Feature 98) date to the twentieth century, probably after the 1940 purchase of La Pointe-Krebs House and surrounding property by Jackson County. Both are located at the south end of Area 3.

In summary, the La Pointe-Krebs Plantation archaeology project has in many respects added significantly to archaeological and historical knowledge of the colonial and early American occupations of the north-central Gulf Coast. We hope the data and contextual information presented in this report will prove particularly useful for interpretations of colonial-era life on the north-central Gulf Coast. A few such interpretations are offered in Chapter 7, as suggestions for the directions such inquiries might lead.

# **CHAPTER 7:** Some Interpretations of La Pointe-Krebs Artifacts

by Gregory A. Waselkov

The artifact assemblage from La Pointe-Krebs Plantation in Old Spanish Fort Park (22JA526) is quite large and diverse, representing nearly 300 years of occupations. The abundance and types of artifacts reflect the wealth and status of the La Pointe-Krebs family and attest to the complexity of this significant archaeological site. As a whole, the artifact assemblage is comparable to other major colonial plantation sites investigated along the north-central Gulf Coast.

Most impressive perhaps is the Native American pottery assemblage of nearly 6,000 sherds, most of which date to the Historic period. A good number of potsherds are decorated, most with Doctor Lake Incised and Chickachae Combed motifs. Red-filming is also common. The assemblage of Colonoware pots is also remarkable, including a French-style cooking pot, brimmed bowls, plates, strainers, pitchers, and flat-bottomed bowls.

The La Pointe-Krebs Plantation assemblage of colonial and early American ceramics is impressive with over 4,000 sherds. Tin-glazed ceramics include French faience and British delft produced in Europe, and Spanish colonial majolicas made in Mexico. Fine English tablewares include creamware, white salt-glazed stoneware, and lead-glazed stoneware tea services. Leadglazed coarse earthenwares are dominated by French green-glazed Saintonge vessels, mostly large bowls and milk pans.

Other artifacts include weaponry, white clay pipe fragments, buttons, glass beads, toys, and religious medals that reflect lifeways and beliefs. The large amount of structural materials (mostly brick, mortar, and nails) relates to intensive construction activities at the site. The analyzed faunal and plant remains from La Pointe-Krebs Plantation yielded significant information on resource exploitation, domestication, and consumption at a colonial Gulf Coast plantation. Three specific discoveries are highlighted here.

# Wax Myrtle Seeds

The recovery and identification of 231 seeds of wax myrtle (*Myrica inodora*), also known as southern scentless bayberry, is an important result of the La Pointe-Krebs Plantation project (see Chapter 5 of this report). Seeds were recovered from many colonial contexts (including Feature 105, Zones B, D, and H; Feature 107; Feature 118; Feature 119; Feature 122; and Feature 163, Zone I). An earlier identification of fifteen seeds of *M. cerifera* or *M. inodora* by Gremillion (2000:177) from colonial contexts at the Pierre Rochon's plantation at the Dog River site (1MB161) on Mobile Bay suggested an economic use for the waxy seeds of these species, which is more than confirmed by recoveries from La Pointe-Krebs Plantation. Numerous historical writers refer to colonial efforts to exploit these local sources of high-quality wax, which were important for local candlemaking in the absence of honeybees and beeswax, until introduction of honeybees to the Gulf Coast during the British colonial period. In fact, William Bartram, a noted colonial botanist who visited the Gulf Coast in 1775, thought the wax from *M*.

*inodora* was preferable to beeswax because "it is harder and more lasting in burning" (Bartram 1791:405-406; also see Romans 1999:200).

Bartram noted that ethnic French colonists along the Gulf Coast called this shrub the "Wax tree." By the time of his visit, they mainly relied on the waxy berries to meet their own household needs for candles. But earlier, during the French colonial period, colonists made a major effort to produce wax commercially for export to France. Le Page du Pratz (1758 II:36-40) and Dumont de Montigny (2006), two long-time occupants of French colonial Louisiana (which included the Mississippi and Alabama Gulf Coasts), both promoted production for export and created crude images of the wax myrtle bush (Figure 7-1). Both authors, and Bartram some years later, agreed that the colonists managed to cultivate wax myrtle bushes on their plantations.

The earliest French colonists made candles from tallow rendered from animal fat when imported wax candles were unavailable or too expensive. Botanist Jean Prat wrote the first scientific treatise on wax production from southern bayberry seeds and submitted his document in January 1745 to colonial minister Maurepas for official backing (LaMontagne 1996). By 1752 a substantial industry had developed along the Gulf Coast where many plantations devoted some acreage to wax myrtle cultivation. A few years later the export value of myrtle wax was estimated at 25,000 livres, almost as high as the well-established trade in pitch and tar. Most of the exported bayberry wax went to Haiti and the other French islands in the Caribbean (Surrey 2006:217-218, 261, 386).



Figure 7-1. French colonial images of wax myrtle bushes, the Wax tree, from Dumont de Montigny, ca. 1742 (left), and Le Page du Pratz (courtesy, Bibliothèque nationale de France, Arsenal, ms. 3459, p. 164; Le Page du Pratz 1758, opposite page 37).

Now that the significance of bayberry seeds at French colonial sites on the Gulf Coast has been recognized at two plantation sites, the extent and scale of this "cottage industry" can be assessed archaeologically at other colonial plantation sites in the region.

#### **Pascagoula Indian Pottery**

To begin this discussion of pottery made by Native Americans living in the area colonized by the French in the early eighteenth century, consider this first-hand description of pottery making published by Dumont de Montigny in 1752. Dumont lived in French Louisiana in the 1720s, and his ca. 1726 sketch of the La Pointe Concession is our only visual depiction of the La Pointe-Krebs plantation throughout its long existence. While clearly not a skilled artist, Dumont left many invaluable historical documents. His description of native pottery-making is a rare first-hand account (see Appendix D for the original French text).

# Pottery of the Peoples of Louisiana, by M.D.M

Though nothing is as common in France as the art of making unglazed & glazed earthenware, maybe you will not be sorry to learn how the natives of Louisiana come to provide all the vessels they need, without the aid of the wheel or any instrument; perhaps there will be someone with a need, far from factories, unable to furnish themselves with stoneware, and totally unaware of how to make earthen pots capable of holding all liquors even before the fire: women without any education; for it is they who, in the countries we are talking about, are responsible for this work, as well as almost all the others; I think it will not be difficult to do this here, I think on the contrary that we will soon be better than they, by the natural talent the French have of perfecting all things.

When these women have accumulated the clay suitable for pottery, and they have cleaned it well, they take shells, pounded & reduced to fine powder, which they pass through their finest sieves. They mix this powder with the clay, and throw in water, feeding all with hands and feet as one makes dough. The material thus prepared, they put it into long rolls of six to seven feet, and large, according to the use they want to do. To fashion a dish or cup, they take one of these rolls, and at one of its ends with the thumb of the left hand, they establish the center of the vessel, and rotating around this center with an admirable dexterity and accuracy, they delineate a spiral, and thus form a plate, a dish, a bowl, a pitcher or any other utensil. From time to time they dip their fingers in the water which they take care to have with them, and with the right hand they flatten the inside & the outside of their work, which without all this attention would be wavy as can easily be imagined. Thus they make pitchers narrow at the base, wider by the neck and mouth, and very swollen at the belly, that hold up to forty pints & more.

There is nothing more to do than fire this pottery after it has dried in the shade. To this end they make a great fire, and when they have embers enough for the vessels they have, they make a place in the middle, and put their jars & cover them with coals. It is this which gives them their firmness, and they have as much as ours, holding all sorts of liquids without perspiring. We can attribute this effect to the fine powder of shells mixed with the clay, an experiment we could do here to guide us perhaps to discoveries as pleasing and useful [Dumont de Montigny 1752].

Dumont's account highlights the primary role played by historic native women in pottery production, a generalization often assumed by southeastern archaeologists but supported by surprisingly little evidence. His descriptions of shell temper preparation, clay coiling, finishing, and firing methods all confirm interpretations developed by archaeologists from close artifact analysis and experimentation. He also described the creation of large pitchers, a form of Colonoware production by native women. Unfortunately the generalized nature of Dumont's account, which could have been based on observations of any number of native peoples, provides no information on the differences in ceramics made by different American Indian groups.

Archaeologists have worked steadily for the last three decades to sort out the ceramics used in historic times by the various distinct Indian peoples of the Gulf Coast and interior Southeast. While we understand there is not necessarily a correlation between ethnic identity and the various realms of material culture, we also know that pottery forms and decorative styles offered southeastern native peoples of the colonial era one means to express ethnic identity. When we look closely at the potteries found at colonial sites in any particular area, they tend to differ in specific ways from potteries produced elsewhere. By comparing archaeological evidence with our knowledge of native ethnic groups present in those locations, we have been able in several instances to correlate certain styles of pottery with specific ethnic groups. One important lesson from this process is our recognition that broadly defined ceramic wares and historical types have not been especially useful in this regard. Wares and types are helpful when tracing broadly-shared pottery-making traditions, but these traditions, we now know, subsumed pottery styles made by many different ethnic groups. Distinguishing ethnic groups on the basis of pottery requires finer-grained analysis of design motifs, rim treatments, vessel forms, temper mixtures, and similar attribute differences.

In our region of the north-central Gulf Coast we now recognize, thanks almost entirely to work by Richard Fuller, that the Mobilians of the lower Mobile-Tensaw delta and Mobile Bay area made incurved pottery bowls of a type called Port Dauphin Incised, with characteristic curvilinear motifs and plain lips, and that the Tomés and Naniabas of the upper delta produced Doctors Lake Incised bowls with mainly rectilinear motifs and notched lips (Fuller 1994). Potteries associated with the Apalachees and Chatos, both early eighteenth-century refugees from Florida, have also been identified (Waselkov and Gums 2000:125-130), and Barbara Hester (2012:155-158; this report, p. 91, Figure 3-5a-b) has tentatively attributed a thin-line incised motif to the Chitimachas, who were widely held as slaves in French colonial households in the region.

All along the central Gulf Coast there was a discontinuity in ceramic traditions that has created some challenges for archaeologists trying to disentangle the social complexity that existed during the historic period. In 1763-1764, upon the cession of the eastern parts of French Louisiana to the British, nearly all of the small tribes – the *petites nations*, as they are sometimes known – vacated their old homes and moved west of the Mississippi River, to resettle in Spanish Louisiana. This exodus included the Mobilians, Chatos, and Apalachees of the Mobile area, as well as the Pascagoulas and Biloxis of the Mississippi Coast. Only the Tomés took a different

course, and joined their relatives among the Choctaws to the north (Waselkov and Gums 2000:6-62). This dramatic abandonment of the coastal zone by the *petites nations* opened the area to the Choctaws and the Creeks, who took credit for causing the withdrawal and claimed the Coast by right of conquest. This replacement of native inhabitants is reflected directly in the archaeological record of the Mississippi Gulf Coast by a replacement of the local Pascagoula and Biloxi pottery traditions by pottery made by Choctaws.

Unfortunately, archaeologists have run into difficulties sorting out the ceramics made by the various components of the Choctaw nation, which was actually an amalgam of peoples who coalesced in the area of modern-day east-central Mississippi during the middle to late seventeenth century. Much of the early research on Choctaw ceramics was accomplished by John Blitz and Jerome Voss in the mid-1980s, based on survey collections. Drawing on earlier research, they recognized two principal types of combed pottery – sand-tempered Chickachae Combed and grog-tempered Kemper Combed – which are both relatively late (Blitz 1985; Voss and Mann 1986; Voss and Blitz 1988). Patricia Galloway (1984) hypothesized that the combed motif developed from the earlier and widespread Fatherland Incised type of the lower Mississippi valley, an interpretation that is generally accepted today, with the addendum that Pensacola Incised motifs in use to the east are equally likely and very similar predecessors. Galloway's additional hypothesis, that the technique of combing employed French boxwood trade combs, seemed plausible, but excavations by James Parker (1982) at Fort Tombecbé, garrisoned from 1736 to 1763 on the eastern edge of Choctaw territory, revealed no combed wares in use until after the end of French occupation. It now seems likely that combing simply involved the use of native-made combs similar (or perhaps identical) to those used for scratching by Choctaw warriors and ballplayers of the period. The most recent syntheses of ceramic evidence place the origin of combed types in the 1750s (Blitz and Mann 1993, 2000:114), which seems accurate in light of evidence from La Pointe-Krebs Plantation.

Once the broad sequence of Choctaw ceramics was established, attention turned in the 1990s to unraveling regional and ethnic and chronological variation among the diverse array of motifs seen on incised and combed ceramics. Galloway (1995) proposed three prehistoric homelands for the three historic divisions that would comprise the Choctaw Nation – the Tombigbee, Pearl, and Chickasawhay-Leaf-Pascagoula valleys – and argued that the distinct ceramic histories of those three regions would be discernible in ceramics made by each of the three divisions. This notion was soon tested by Timothy Mooney (1992, 1997) and Blitz (1993). Mooney, in particular, gathered evidence from across southern Mississippi and did find some important ceramic correlates with the Choctaw divisions, with associations between sand-tempered, shell-tempered, and grog-tempered ceramics and the Eastern and Southern Divisions (1997:50-51).

The 2010 excavations at La Pointe-Krebs Plantation offer a rare opportunity to study a large collection of native-made ceramics from a series of features with limited date ranges. Since the site is located in the coastal zone occupied from the late seventeenth century to 1763 by Pascagoula Indians, followed by a movement of Choctaws into the area, we expected to see a

transition in ceramics from Pascagoula to Choctaw, specifically the Chickasawhay portion of the Choctaw Nation.

When we examine Native American ceramics from the early French features, especially from Feature 90 and the lower zones of Feature 163, we see a coherent assemblage with a limited range of variation. We interpret this early assemblage, which dates from ca. 1718 to 1763, as pottery made by the Pascagoula Indians who occupied villages in the Pascagoula River valley north of La Pointe-Krebs Plantation and must have interacted with the French colonists on a frequent basis. Of course, the most direct way to establish which pottery styles were made by the Pascagoulas would involve discovery and investigation of the several Pascagoula village sites mentioned, visited, and mapped by Iberville, Dumont, and other French colonial chroniclers (Blitz and Mann 2000:71-74). Since none of those village locations has yet been established, we are left with the indirect approach of analyzing the native ceramics recovered from La Pointe-Krebs Plantation.

These early-assemblage ceramics include globular plain jars with finger-pinched or notched lips and scraped interior rims, and incurved bowls with notched lips and largely rectilinear incising and scraped interior rims. The bowls correspond well with Doctor Lake Incised type descriptions (see Figures 3-11 to 3-14). Although the incised motifs on the bowls vary somewhat, two common patterns are evident. One includes zoned hachured triangles, pendant from a line parallel to the rim (see Figure 3-11c). The other has alternating zoned hachured triangles separated by curvilinear multi-lined scrolls (see Figure 3-11a, h, i). We think this identification of some specific decorative motifs on the bulk of incised wares from La Pointe-Krebs Plantation suggests how specific the ethnic identifiers may be for the individual peoples, in this case the Pascagoulas, who have usually been grouped under the broad rubric, "Choctawan." Also noteworthy is the fact that the ceramic pastes from this early assemblage are generally tempered with fine sand with small to moderate amounts of fine shell, both angular and lamellar. There are virtually no sherds with a single temper; in most instances, multiple tempers are clearly present (also see Blitz and Mann 2000:107-108).

Two sherds decorated with glass beads deserve special mention (see Figure 3-7), since they seem to be the first reported from the Southeast. These rim sherds from incurved bowls were decorated with glass seed beads pressed into the pot exteriors before firing. One sherd still retains five beads in place (the other only exhibits bead impressions). The context of one sherd suggests deposition between 1750 and the 1780s, but the nature of the vessels – incurved bowls with scraped interior rims – places them in the Pascagoula tradition, pre-dating 1764. The beads were arranged in a line parallel with the lip on one sherd, and on the other in a line below the rim and forming an apparent pendant triangle or diamond shape, reminiscent of the most common incised motif seen on Doctors Lake Incised vessels from La Pointe-Krebs Plantation. The most parsimonious interpretation attributes the creation of these bead-impressed vessels to a Pascagoula potter.

Chickachae Combed ceramics appear earlier than they did at the Fort Tombecbé site. At La Pointe-Krebs Plantation they co-occur with the Pascagoula Indian types, particularly in

Feature 163, as early as the 1750s. But not all bowls have combed decoration. In Feature 122, many of the bowls, both incurved and simple, are red filmed without combing. Two scenarios seem about equally likely as explanations for these plain bowls on plantation and urban sites dating to the mid to late eighteenth century along the north-central Gulf Coast. They may well turn out to have been made by Choctaw Indians for sale to colonists, who provided them to their enslaved African work force. Or they may have been made by enslaved Africans for their own use. Deciding which of these is more likely is not possible with the pottery assemblage from La Pointe-Krebs Plantation.

# Calumet-style and Micmac-style Smoking Pipes

One unusual aspect of the La Pointe-Krebs Plantation artifact assemblage is the large number of calumet-style and Micmac-style smoking pipes – at least a dozen fragments of these artifact types from colonial contexts. The elbow-shaped calumet pipe form is widely known from southeastern colonial-era sites (Brown 2006). They functioned in ceremonies of greeting and ritual adoption among individuals from different societies who needed to conduct diplomacy or trade. Temporary truces negotiated between enemies by means of the calumet ceremony gave rise to the popular notion of the peace pipe, a name that was first applied by the French colonists themselves (Figure 7-2; #1 is labeled "Calumet de paix"). Although the calumet ceremony certainly originated with Indians of the Midwest and Great Lakes regions, the French immediately recognized the utility of the ceremony to achieve and maintain peaceful relations with native peoples in a dangerous region. By the mid-1600s, French colonists in Canada were making their own calumet pipes, including the distinctive stone pipe bowls (Daviau 2007), and that tradition continued when the French colonized the Gulf Coast, from 1699 onward. At their principal early settlement, now called Old Mobile, occupied from 1702 to 1711, many pieces of unfinished calumet pipes made from catlinite were recovered by archaeological excavation (Gundersen, Waselkov, and Pollock 2002). One of the La Pointe-Krebs Plantation calumet bowls, from the early eighteenth-century context in Area 7 (see Figure 3-33g), resembles the Old Mobile specimens (Figure 7-2).



Figure 7-2. Catlinite calumet-style pipe bowls from Old Mobile site (1MB94), dating to 1702-1711 (courtesy, Center for Archaeological Studies, University of South Alabama, Mobile) (actual size).

The eleven fragmentary Micmac-style pipes recovered from La Pointe-Krebs Plantation are more unusual. In the late nineteenth century this form was mistakenly associated with the Micmac Indians of New Brunswick and Nova Scotia, but is now known to have nothing to do with the Micmacs. Instead they originated in the upper St. Lawrence valley and lower Great Lakes in the mid-seventeenth century, probably derived from a combination of attributes from Iroquoian vasiform pipes and elbow-shaped calumet pipes from further west (Witthoft, Schoff, and Wray 1953; Chapdelaine 1996; Tremblay 2007:23-27).

Excellent recent studies by Roland Tremblay (2007) and Marie-Hélène Daviau (2007, 2009), of the use and distribution of Micmac-style pipes by colonial of New France and contemporaneous Indians nations, have greatly clarified their history, production, and social use. At least six distinct forms of Micmac-style pipes have been distinguished, at least a few of which are seventeenth-century forms. They evidently appeared soon after the first calumet pipes, but were uncommon until the 1670s, with their peak of popularity falling between 1740 and 1780, which is a reasonable interpretation of the dates of the La Pointe-Krebs Plantation specimens.

Early archaeological studies suggested the pipes were made and used by Indians, and they have been found in many Indian village sites throughout their area of distribution (Figure 7-3).

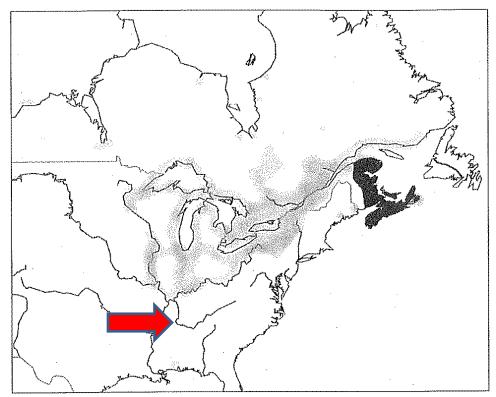


Figure 7-3. Roland Tremblay's distribution map of Micmac-style smoking pipes (shading) compared to the territory of the Micmac Indians (black) in the eighteenth century (from Tremblay 2007:24). Red arrow points to the small distribution outlier in the Pascagoula-Mobile area of the Gulf Coast.

More recently, however, Tremblay and Daviau's analyses have clarified the important role of French colonists in the production and use of Micmac-style pipes. There had long been a suspicion of French involvement in production because unfinished pipes have turned up repeatedly in trading post, fort, and plantation contexts. For instance, in 1966 David Armour reported twenty partially completed pipes from Fort Michilimackinac, which he interpreted as evidence of local manufacture by colonists, not Indians (Armour 1966; see Morand 1994:48-50; Evans 2001:22-23, 2003:38; Côté 2005:198). By the 1740s, Canadians in the St. Lawrence valley were making pipes from limestone and red pipestone in considerable quantities for trade to interior posts and to Indians. Peter Kalm, a Swedish botanist visiting Canada in 1749, described this production in detail, and other chroniclers documented the wide use of stone pipes, called calumets by colonists in the north, as well as on the Gulf Coast (Kent 2001:794-795). Historical descriptions such as these make clear that the French applied the term "calumet" to Micmac-style as well as elbow-shaped pipe bowls (Figure 7-4). The distinction we draw today between the two forms is not apparent in historical accounts. Both required the use of a wooden stem and both have holes through a base flange or keel for suspension of feathers and other ornaments. Micmac-style pipes are particularly likely to have engraved decorations, usually geometrical designs, sometimes including concentric circles made with a compass. These are described in the Montreal trade records as "calumets grave," engraved or incised pipes, and were almost certainly produced by colonists (Kent 2001:795).

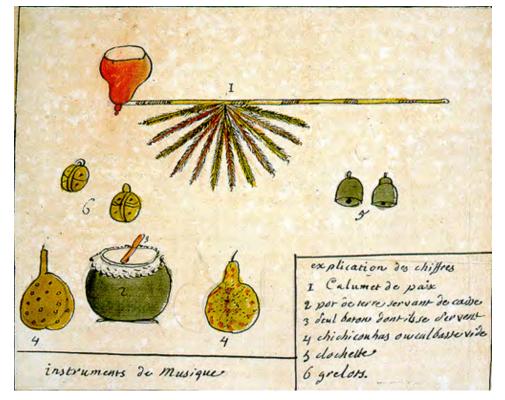
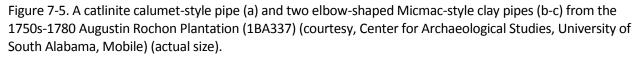


Figure 7-4. Dumont de Montigny's image, ca. 1742, of a calumet pipe with a Micmac-style bowl, along with bells, rattles, and a drum (courtesy, Newberry Library, Ayer Collection, Chicago, IL).

Until recently, Micmac-style pipes have been rarely reported from the Southeast. In fact, Ian Brown's thorough review of stone pipes in the Southeast turned up so few that he concluded they were probably "unrelated to calumet ceremonialism" (Brown 2006:385). So the eleven specimens from La Pointe-Krebs Plantation (Figure 3-33a-d, h) and two found a decade ago at the Augustin Rochon Plantation site (Figure 7-5c-d; Gums 2000:32) on the eastern shore of Mobile Bay are intriguing new finds far outside the normal range of distribution. Numerous discoveries of Micmac-style pipes from Fort Ouiatenon (Trubowitz 1989) and several colonial settlements in the Illinois country (Mazrim 2011:75, 115, 147, 172, 175, 184), nearly all of stone, confirms their association with colonists in that region. In the absence of other examples from the huge intervening area between southern Illinois and the Gulf Coast, we cannot say if the La Pointe-Krebs and Augustin Rochon Plantation specimens are true outliers or if other Micmac-style pipes from colonial Louisiana have simply not been recognized and reported.





The fact that the preponderance of the Gulf Coast specimens are made of clay, rather than being stone imports from the north, and their distinctive elbow-style, which is quite different from northern forms, suggests a separate southern tradition of local manufacture. Considering their recovery exclusively (so far) from colonial rather than Indian village contexts, their presence on ethnic French plantations suggests a relationship to French ethnic identity. That is apparently how they functioned late in the eighteenth century in Canada, where they gradually disappeared from use during the period between the British conquest in 1759-1760 and around 1800. The La Pointe-Krebs and Augustin Rochon plantations were both occupied by ethnic French colonials under British rule between 1763 and 1780. Perhaps these rare southern specimens of Micmac-style smoking pipes functioned like their northern counterparts, as overt expressions of French ethnicity and pride, literally an in-your-face signifiers of French identity that proved popular among some colonists during a period of religious and linguistic repression.

The artifact assemblage from La Pointe-Krebs Plantation has great potential for further comparative analysis in the future. In fact, this brief chapter touches on only a few interesting facets of this remarkable collection. Colonial archaeology of the Gulf Coast is still in its infancy. Astoundingly, a mere handful of colonial sites have been excavated in the great city of New Orleans, and fewer still in the state of Louisiana. Many other colonial sites await exploration in Mississippi and Alabama. As our body of evidence grows, our ability to draw inferences and test new ideas will increase as well. The 2010 investigations of La Pointe-Krebs Plantation have established a valuable baseline against which to apply new historical and anthropological approaches and ask new questions of Mississippi's colonial past.

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## APPENDIX A: La Pointe-Krebs Plantation (22JA526), Field Specimen (FS)

Catalog, by Bonnie L. Gums

## **1995 Field Specimen Catalog**

FS	Unit	Level/Feature/Description	Process
212	22	Level 1	1/16"
213	21	Level 1	1/16"
214	23	Level 1	1/16"
215	20	Level 1	1/16"
216	24	Level 1	1/16"
217	19	Level 1	1/16"
218	24 & 23	Feature 60 Mortar Concentration	1/16"
219	19	Feature 63 Mortar Sample	H-C
220	19	Feature 64 Mortar Sample	H-C
221	20 & 21	Feature 61 Mortar Sample	H-C
222	15	Level 1	1/16"
223	16	Level 1	1/16"
224	22	Fill In and Around Feature 62	1/16"
225	18	Level 1	1/16"
226	18	Feature 64 Mortar and Shell Rubble Layer	1/16"
227	22	Feature 62 Profile	1/16"
228	22	Feature 62 Mortar and Brick Sample	H-C
229	17	Level 1	1/16"
230	15	Feature 65	1/16"
231	31	Level 1	1/16"
232	34	Level 1	1/16"
233	32	Level 1	1/16"
234	33	Level 1	1/16"
235	30	Level 1	1/16"
236	30	Level 1	1/16"
237	22A	Level 1	1/16"
238	35	Level 1	1/16"
239	17	Feature 66 Mortar Sample	H-C
240	16	Feature 67 Mortar Sample	H-C
241	16	Feature 68 Mortar Sample	H-C
242	21A	Level 1	1/16"
243	36	Level 1	1/16"
244	37	Level 1	1/16"
245	21A	Feature 69 Charred Area	H-C
246	25	Level 1	1/16"
247	22A	Feature 70 Mortar Concentration	H-C

248	36	Feature 71 Mortar Sample	H-C
		·	
249	21A	Feature 72 Mortar Sample	H-C
250	21A	Feature 73 Mortar Sample	1/16"
251	21A	Feature 74 Mortar Sample	H-C
252	15	Level 1	1/16"
253	38	Unit 38 Under Brick Walk	1/16"
254	39	Level 1 Overburden	1/16"
255	39	Level 2	1/16"
256	-	Artifacts Found on Beach	H-C
257	24A	Level 1	1/16"
258	38A	Level 1	1/16"
259	20A	Level 1	1/16"
260	23A	Level 1	1/16"
261	38A	Feature 75 Shell and Mortar Sample	H-C
262	19A	Level 1	1/16"
263	19A	Feature 76 Shell and Mortar Tabby Midden	1/16"
264	18A	Level 1	1/16"
265	23A	Feature 77 Mortar Sample	1/16"
266	30A	Level 1	1/16"
267	40	Level 1	1/16"
268	27	Level 1	1/16"
269	25A	Level 1	1/16"
270	31A	Level 1	1/16"
271	37A	Level 1	1/16"
272	27	Feature 78 Tabby and Pebble Concentration	1/16"
273	34A	Level 1	1/16"
274	28	Level 1	1/16"
275	-	Feature 79 Posthole	1/16"
276	33A	Level 1	1/16"
277	25A	Level 2	1/16"
278	29	Level 1	1/16"
279	25A	Feature 80 Posthole	1/16"
280	25A	Feature 21 Posthole	1/16"
281	26	Level 1	1/16"
282	15A	Level 1	1/16"
283	16A	Level 1	1/16"
284	-	Level 1	1/16"
285	17A	Level 1	1/16"
286	19	Level 1	1/16"
287	18	Level 1	1/16"
288	40	Level 1	1/4"
289	35	Level 1	1/4"
290	28	Feature 82 Mortar Sample Pier	H-C

291	37	Level 1	1/16"
292	36	Level 1	1/4"
293	33A	Feature 83 Posthole	1/16"
294	25	Level 1	1/4"
295	31	Mortar Sample from Lens in South Profile Wall	H-C
296	26	Level 1	1/4"
297	20A	Level 1	1/16"
298	24A	Level 1	1/16"
299	21A	Level 1	1/16"
801	23A	Level 1	1/16"
802	22A	Level 1	1/16"
803	19A	Feature 76 Mortar Sample	H-C
804	38A	Feature 78 Mortar Sample	H-C
805	18A & 19A	Feature 84 Mortar Sample	H-C
806	15A	Mortar Sample from North Profile Wall	H-C
807	17A	Mortar Sample from North Profile Wall	H-C
808	39	Feature 85 Brick Sample	H-C
809	33A	Mortar Sample from Lens in South Profile Wall	H-C
810	33 & 32	Concrete Pier, 3rd Excavation by Contractors	1/4"
811	29	Pottery Concentration Along South Wall 37.0 cmbs	1/4"
812	30	Concrete Pier, 3rd Excavation by Contractors	1/4"
813	29	Concrete Pier, 3rd Excavation by Contractors	1/4"
814	32	3rd Excavation by Contractors	1/4"
815	33	3rd Excavation by Contractors	1/4"
816	34	3rd Excavation by Contractors	1/4"
817	34	Feature 86 Mortar Sample	H-C
818	27	3rd Excavation by Contractors	1/4"
819	39	Level 1	1/16"
820	38	Southwest Extension off Unit 38	1/16"
821	39	East 1/2 of Unit	1/16"
822	33 & 34	Level 1	1/4"
823	15A	Artifacts Mapped in North Profile Wall	H-C
824	18A	Material Mapped in North Profile Wall	H-C
825	23	North Profile Clean Up	H-C
826	24	North Profile Clean Up	H-C
827	-	Surface Collection North of House	H-C
828	-	Artifacts Collected by Contractor	H-C
829	-	Midden on Beach	H-C
830	35	North Profile Clean Up	H-C
831	15	North Profile Clean Up	H-C
832	17	North Profile Clean Up	H-C
833	18	North Profile Clean Up	H-C

834	20	North Profile Clean Up	H-C
835	21	North Profile Clean Up	H-C
836	22	North Profile Clean Up	H-C
837	-	Central Room East Fireplace, Contractors Excavation	H-C
1211	19	North Profile Clean Up	1/4"

## 2010 Field Specimen Catalog

FS	Area	Unit	Context	Level (cmbs)	Description	Process
849	Sump	-	General Collection	-	-	H-C
850	6	119E 145N	2x2-Meter Unit	1, 0-10	-	1/16"
851	6	111E 145N	Unit 22	-	Unit 22 Backfill from 1995	1/16"
852	6	117E 145N	2x2-Meter Unit	1, 0-10	-	1/16"
853	6	111E 145N	Unit 21	-	Unit 22 Backfill from 1995	1/16"
854	6	117E 145N	2x2-Meter Unit	2, 10-20	-	1/16"
855	6	119E 145N	Feature 88	2, 10-20	L-Shaped Shallow Linear Stain	1/16"
856	6	119E 145N	2x2-Meter Unit	2, 10-20	-	1/16"
857	6	111E 145N	2x2-Meter Unit	1, 0-10	-	1/16"
858	6	111E 145N	2x2-Meter Unit	2, 10-20	-	1/16"
859	7	157E 153N	2x2-Meter Unit	1, 0-10	-	1/16"
860	7	155E 153N	2x2-Meter Unit	1, 0-10	-	1/16"
861	7	157E 153N	2x2-Meter Unit	1, 0-10	-	1/16"
862	7	155E 155N	2x2-Meter Unit	1, 0-10	-	1/16"
863	3	111E 134N	1x2-Meter Unit	1, 0-10	-	1/16"
864	3	111E 134N	1x2-Meter Unit	2, 10-20	-	1/16"
865	3	111E 132N	1x2-Meter Unit	1, 0-10	-	1/16"
866	3	111E 132N	1x2-Meter Unit	2, 10-20	-	1/16"
867	3	111E 134N	1x2-Meter Unit	3, 20-30	-	1/16"
868	3	111E 132N	1x2-Meter Unit	3, 20-30	-	1/16"
869	3	111E 130N	1x2-Meter Unit	1, 0-10	-	1/16"
870	3	111E 130N	1x2-Meter Unit	2, 10-20	-	1/16"
871	3	112E 130N	1x2-Meter Unit	1, 0-10	-	1/16"
872	3	112E 130N	1x2-Meter Unit	2, 10-20	-	1/16"
873	3	111E 134N	1x2-Meter Unit	4, 30-40	-	1/16"
874	3	111E 132N	1x2-Meter Unit	4, 30-40	-	1/16"
875	3	112E 130N	2x2-Meter Unit	3, 20-30	-	1/16"
876	3	111E 130N	2x2-Meter Unit	3, 20-30	-	1/16"
877	7	157E 153N	2x2-Meter Unit	2, 10-20	-	1/16"
878	7	155E 153N	2x2-Meter Unit	2, 10-20	-	1/16"
879	7	155E 155N	2x2-Meter Unit	2, 10-20	-	1/16"
880	7	157E 155N	2x2-Meter Unit	2, 10-20	-	1/16"
881	1	111E 164N	1x2-Meter Unit	1, 0-10	-	1/16"

882	1	111E 166N	1x2-Meter Unit	1, 0-10	-	1/16"
883	1	111E 164N	1x2-Meter Unit	2, 10-20	-	1/16"
884	1	111E 164N	1x2-Meter Unit	3, 20-30	-	1/16"
885	1	111E 166N	1x2-Meter Unit	2, 10-20	-	1/16"
886	1	111E 164N	1x2-Meter Unit	4, 30-40	-	1/16"
887	1	111E 166N	1x2-Meter Unit	3, 20-30	-	1/16"
888	3	112E 132N	1x1-Meter Unit	1, 0-10	-	1/16"
889	3	112E 128N	2x2-Meter Unit	1, 0-10	-	1/16"
890	3	112E 128N	1x1-Meter Unit	2, 10-20	-	1/16"
891	3	112E 132N	1x1-Meter Unit	2, 10-20	-	1/16"
892	7	155E 153N	Feature 90, SW 1/4	Middle of 2, 10-20	Lime Slaking Pit	1/16"
893	7	157E 153N	Feature 90, SE 1/4	Middle of 2, 10-20	Lime Slaking Pit	1/16"
894	7	157E 155N	Feature 90, NE 1/4	Middle of 2, 10-20	Lime Slaking Pit	1/16"
895	7	155E 155N	Feature 90, NW 1/4	Middle of 2, 10-20	Lime Slaking Pit	1/16"
896	3	112E 128N	2x2-Meter Unit	3, 20-30	-	1/16"
897	3	112E 132N	1x1-Meter Unit	3, 20-30	-	1/16"
898	3	112E 128N	Feature 92, S 1/2	Base of 3, 20-30	Tree Root Disturbance	1/16"
899	3	112E 132N	Feature 94	Base of 3, 20-30	Square Posthole	Flotation
900	3	112E 130N	Feature 91	Base of 3, 20-30	Rectangular Stain, North of S.T.	1/16"
901	7	155E 155N	Feature 90, NW 1/4	2, 10-20	Lime Slaking Pit	1/16"
902	7	155E 155N	Feature 90, NW 1/4	2, 10-20	Lime Slaking Pit	Flotation
903	7	157E 155N	Feature 90, NE 1/4	2, 10-20	Lime Slaking Pit	1/16"
904	7	157E 155N	Feature 90, NE 1/4	2, 10-20	Lime Slaking Pit	Flotation
905	3	112E 132N	Feature 95, S 1/2	Base of 3, 20-30	Round Posthole	1/16"
906	3	111E 130N	Feature 93, N 1/2	Base of 3, 20-30	Oval Pit	1/16"
907	3	111E 130N	Feature 93, S 1/2	Base of 3, 20-30	Oval Pit	Flotation
908	3	112E 132N	Feature 95, N 1/2	Base of 3, 20-30	Round Posthole	Flotation
909	3	112E 130N	Feature 91, A & B, W 1/2	Base of 3, 20-30	Rectangular Pit	1/16"
910	3	112E 130N	Feature 91 A, E 1/2	Base of 3, 20-30	Rectangular Pit	Flotation
911	3	112E 128N	Feature 92, N 1/2	Base of 3, 20-30	Tree Root Disturbance	1/16"
912	3	112E 128N	Feature 92, N 1/2	Base of 3, 20-30	Tree Root Disturbance	Flotation

			Feature 91A, E	Base of 3,		
913	3	112E 130N	1/2	20-30	Rectangular Pit	1/16"
914	3	112E 130N	Feature 91B, E 1/2	Base of 3, 20-30	Rectangular Pit	1/16"
915	3	111E 130N	Feature 93, S 1/2	Base of 3, 20-30	Oval Pit	1/16"
916	3	112E 128N	2x2-Meter Unit	4, 30-40	-	1/16"
917	3	112E 130N	2x2-Meter Unit	4, 30-40	-	1/16"
918	3	112E 132N	1x1-Meter Unit	4, 30-40	-	1/16"
919	3	111-112E 130-132N	Feature 89	2 & 3, 10-30	Brick Rubble & Foundation	1/16"
920	3	112E 132N	Feature 96	Base of 3, 20-30	Builder's Trench for Brick Foundation	1/16"
921	7	157E 155N	Feature 90, NE 1/4	2, 10-20	Lime Slaking Pit	Flotation
922	3	112E 130N	2x2-Meter Unit	4, 30-40	-	1/16"
923	7	157E 155N	Feature 90, NE 1/4	2, 10-20	Lime Slaking Pit	Flotation
924	3	111E 134N	1x2-Meter Unit	5, 40-50	-	1/16"
925	3	111E 132N	1x2-Meter Unit	5, 40-50	-	1/16"
926	3	111E 134N	1x2-Meter Unit	5, 40-50		Flotation
927	1	111E 164N	1x2-Meter Unit	5, 40-50	-	1/16"
928	1	111E 166N	1x2-Meter Unit	4, 30-40	-	1/16"
929	1	111E 168N	1x2-Meter Unit	1, 0-10	-	1/16"
930	1	120E 170N	1x2-Meter Unit	1 & 2, 0-20	-	1/16"
931	1	122E 170N	1x2-Meter Unit	1, 0-10	-	1/16"
932	1	124E 170N	1x2-Meter Unit	1, 0-10	-	1/16"
933	1	122E 170N	1x2-Meter Unit	2, 10-20	-	1/16"
934	3	112E 126N	2x2-Meter Unit	1, 0-10	-	1/16"
935	3	112E 126N	Feature 97	Base of 1, 0- 10	Round Depression with Clam Shells	1/16"
936	3	112E 126N	2x2-Meter Unit	2, 10-20	-	1/16"
937	3	111E 134N	1x2-Meter Unit	6, 50-60	-	1/16"
938	3	111E 134N	1x2-Meter Unit	6, 50-60	-	Flotation
939	3	112E 128- 130N	Feature 103	Base of 4, 30-40	Builder's Trench for Brick Foundation	1/16"
940	3	112E 128N	Feature 104	Base of 4, 30-40	East-West Construction Trench	1/16"
941	3	111E 132N	Feature 99	Middle of 6, 50-60	Square Posthole	1/16"
942	1	118E 170N	1x2-Meter Unit	1, 0-10	-	1/16"
943	1	118E 170N	1x2-Meter Unit	2, 10-20	-	1/16"
944	1	120E 170N	1x2-Meter Unit	3, 20-30	-	1/16"
945	1	122E 170N	1x2-Meter Unit	3, 20-30	-	1/16"
946	3	112E 126N	2x2-Meter Unit	3, 20-30	-	1/16"
947	3	111E 134N	Feature 105	Base of 1, 0- 10	Large Deep Oval Pit	1/16"

948	3	112E 132N	NW Half of Feature 100 &	Base of 4, 30-40	Square & Round Postholes	1/16"
949	3	111E 132N	106 Feature 100	Middle of 5, 40-50	Square Posthole	1/16"
950	3	112E 132N	Feature 106	Base of 4, 30-40	Round Posthole	1/16"
951	3	112E 128- 130N	Feature 103 & 107	Base of 4, 30-40	Builder's Trench & East-West Construction Trench	Flotation
952	3	112E 128- 130N	Feature 108, W 1/2	Base of 4, 30-40	Square Pit	1/16"
953	3	112E 128- 130N	Feature 108, E 1/2	Base of 4, 30-40	Square Pit	1/16"
954	3	112E 128N	Feature 109	Base of 4, 30-40	North-South Construction Trench	1/16"
955	3	111E 134N	Feature 105	Base of 6, 50-60	Large Deep Oval Pit	Flotation
956	3	111E 132N	Feature 102	Middle of 5, 40-50	Square Posthole	1/16"
957	3	111E 132N	Feature 101	Middle of 3, 20-30	Square Posthole	1/16"
958	3	112E 126- 128N	Feature 107	Base of 3 & 4, 20-40	East-West Construction Trench	1/16"
959	3	111E 134N	Feature 105, N 1/2	Base of 6, 50-60	Large Deep Oval Pit	1/16"
960	3	111E 134N	Feature 105, S 1/2	Base of 6, 50-60	Large Deep Oval Pit	1/16"
961	3	112E 128- 130N	Feature 108 A	Base of 4, 30-40	Square Pit	1/16"
962	3	112E 128- 130N	Feature 108 A-1	Base of 4, 30-40	Square Pit	1/16"
963	3	111E 134N	Feature 105, N 1/2	Base of 6, 50-60	Large Deep Oval Pit	1/16"
964	3	111E 126- 128N	Feature 107 & 109	Base of 4, 30-40	East-West Construction Trench & Builder's Trench	1/16"
965	3	111E 126- 128N	Feature 107	Base of 4, 30-40	East-West Construction Trench	Flotation
966	3	111E 134N	Feature 105, N 1/2	Base of 6, 50-60	Large Deep Oval Pit, Bottom Zone	1/16"
967	3	112E 126N	2x2-Meter Unit	4, 30-40	-	1/16"
968	3	112E 130N	2x2-Meter Unit	5, 40-50	-	1/16"
969	3	111E 134N	Feature 105, S 1/2	Base of 6, 50-60	Large Deep Oval Pit, Dark Zone	1/16"
970	3	111E 134N	Feature 105, S 1/2	Base of 6, 50-60	Large Deep Oval Pit, Gray Zone	1/16"
971	3	111E 134N	Feature 105, S 1/2	Base of 6, 50-60	Large Deep Oval Pit, Bottom Zone	1/16"
972	3	112E 132N	1x1-Meter Unit	5, 40-50	-	1/16"
973	3	112E 128N	2x2-Meter Unit	5, 40-50	-	1/16"
974	3	112E 126N	Feature 110, N 1/2	Base of 4, 30-40	Oval Pit	1/16"

975	3	112E 126N	Feature 111	Base of 4,	Round Posthole	1/16"
976	3	112E 126N	Feature 112	30-40 Base of 4,	Smudge Pit	1/16"
	2	111-112E		30-40		-, -0
977	3	111-112E 126-134N	Units	4/5, 30-45	Area 3 Final Clean Up	1/16"
978	3	112E 126N	Feature 110, S 1/2	Base of 4, 30-40	Oval Pit	Flotation
979	6	119E 145N	Feature 113	Base of 2, 10-20	Shell & Mortar Rubble	1/16"
980	6	117E 145N	Feature 113	Base of 2, 10-20	Shell & Mortar Rubble	1/16"
981	3	111E 134N	Feature 105	Profile Clean Up	Large Deep Oval Pit	1/16"
982	7	157E 153N	Feature 90, SE 1/4	Middle of 2, 10-20	Lime Slaking Pit, Mortar Layer	1/16"
983	6	117E 145N	2x2-Meter Unit	3, 20-30	-	1/16"
984	6	119E 145N	2x2-Meter Unit	3, 20-30	-	1/16"
985	3	111-112E 126-134N	Units	-	West Profile Wall Clean Up	1/16"
986	6	111E 145N	2x2-Meter Unit	3, 20-30	-	1/16"
987	3	111E 134N	Feature 114	Middle of 3, 20-30	Square Posthole	1/16"
988	3	111E 134N	Feature 115	Base of 4, 30-40	Round/Oval Posthole	1/16"
989	3	111E 134N	Feature 116	Base of 3, 20-30	Wooden Post	1/16"
990	3	110E 134N	2x2-Meter Unit	1, 0-10	-	1/16"
991	6	111E 145N	Feature 117	2 & 3, 20-30	Shell & Mortar Rubble	1/16"
992	6	111E 145N	Feature 117	2 & 3, 20-30	Shell & Mortar Rubble	Flotation
993	6	111E 145N	2x2-Meter Unit	4, 30-40	-	1/16"
994	3	110E 134N	2x2-Meter Unit	2, 10-20	-	1/16"
995	3	110E 134N	2x2-Meter Unit	3, 20-30	-	1/16"
996	7	155E 155N	2x2-Meter Unit	3, 20-25	-	1/16"
997	7	157E 155N	2x2-Meter Unit	3, 20-25	-	1/16"
998	7	155E 153N	2x2-Meter Unit	3, 20-25	-	1/16"
999	7	157E 153N	2x2-Meter Unit	3, 20-25	-	1/16"
1000	3	111E 136N	2x2-Meter Unit	1, 0-10	-	1/16"
1001	3	111E 136N	2x2-Meter Unit	2, 10-20	-	1/16"
1002	3	111E 136N	2x2-Meter Unit	3, 20-30	-	1/16"
1003	3	110E 134N	Feature 118	Middle of 3, 20-30	Round/Oval Pit	1/16"
1004	3	110E 134N	Feature 119	Middle of 3, 20-30	East-West Construction Trench	1/16"
1005	3	110E 134N	Feature 118	Middle of 3, 20-30	Round/Oval Pit	Flotation
1006	3	110E 134N	Feature 119	Middle of 3, 20-30	East-West Construction Trench	Flotation
1007	6	117E 145N	2x2-Meter Unit	4, 30-40	-	1/16"

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1008	6	119E 145N	2x2-Meter Unit	4, 30-40	-	1/16"
1009	3	112E 136N	1x2-Meter Unit	1, 0-10	-	1/16"
1010	3	112E 136N	1x2-Meter Unit	2, 10-20	-	1/16"
1011	3	112E 136N	1x2-Meter Unit	3, 20-30	-	1/16"
1012	6	111E 145N	2x2-Meter Unit	5, 40-50	-	1/16"
1013	3	111-112E 136N	Feature 105, NE 1/4	Base of 2, 10-20	Large Deep Oval Pit, Zone A	1/16"
1014	3	111-112E 136N	Feature 105, NE 1/4	Base of 2, 10-20	Large Deep Oval Pit, Zone B	1/16"
1015	3	111-112E 136N	Feature 105, NE 1/4	Base of 2, 10-20	Large Deep Oval Pit, Zone D	1/16"
1016	3	111-112E 136N	Feature 105, NE 1/4	Base of 2, 10-20	Large Deep Oval Pit, Zone E	1/16"
1017	3	111-112E 136N	Feature 105, NE 1/4	Base of 2, 10-20	Large Deep Oval Pit, Zone F	1/16"
1018	3	111-112E 136N	Feature 105, NE 1/4	Base of 2, 10-20	Large Deep Oval Pit, Zone H	1/16"
1019	3	111-112E 134-136N	Feature 105, E 1/2	-	Large Deep Oval Pit, Clean Up After Rain	1/16"
1020	3	111E 136N	Feature 120	Middle of 3, 20-30	Mortar & Brick Concentration	1/16"
1021	3	111E 136N	Feature 120	Middle of 3, 20-30	Mortar & Brick Concentration	Flotation
1022	6	117-119E 145N	Feature 121, N 1/2	Base of 4, 30-40	Oblong Pit	1/16"
1023	6	117-119E 145N	Feature 121, S 1/2	Base of 4, 30-40	Oblong Pit	1/16"
1024	3	111E 136N	Feature 122	Middle of 3, 20-30	Double Construction Trenches, South Trench	1/16"
1025	3	111E 136N	Feature 122	Middle of 3, 20-30	Double East-West Construction Trenches, North Trench	1/16"
1026	3	111.25E 135.75N	25X25 cm Unit	1-3, 0-30	Unit to Uncover Edge of Feature 105	1/16"
1027	6	117E 145N	Feature 123	Middle of 2, 10-20	Large Mortar Slab	1/16"
1028	6	117E 145N	Feature 124	Base of 4, 30-40	Round/Oval Pit	1/16"
1029	6	117-119E 145N	Feature 121	Base of 4, 30-40	Oblong Pit, Soil Around Bones	Flotation
1030	6	119E 145N	Feature 125	Base of 4, 30-40	Round Posthole	1/16"
1031	6	117-119E 145N	Feature 121	Base of 4, 30-40	Oblong Pit, Skeleton 1	H-C
1032	6	117-119E 145N	Feature 121	Base of 4, 30-40	Oblong Pit, Skeleton 2	H-C
1033	6	117E 145N	Feature 126	Base of 4, 30-40	Round Posthole	H-C
1034	3	112E 136N	Feature 127	Middle of 3, 20-30	Mortar Rubble	1/16"
1035	6	117-119E 145N	Feature 121, SW 1/2	Base of 4, 30-40	Oblong Pit	1/16"

1036	3	112E 136N	Feature 128	Middle of 3, 20-30	Oyster Shell Concentration	1/16"
1037	3	112E 136N	Feature 129	20-30 Middle of 3, 20-30	Mortar Rubble	1/16"
1038	3	110E 134N	Feature 119	Middle of 3, 20-30	East-West Construction Trench	Flotation
1039	6	117-119E 145N	Feature 121, SE 1/2	Base of 4, 30-40	Oblong Pit	1/16"
1040	6	117E 145N	2x2-Meter Unit	5, 40-50	-	1/16"
1041	6	119E 145N	Feature 130, S 1/2	Below Feature 121	Round Pit	1/16"
1042	6	119E 145N	Features 121 & 130	Base of 4, 30-40	Olbong & Round Pits, Slope Wash	1/16"
1043	3	110E 134N	Feature 131	Middle of 3, 20-30	North-South Construction Trench	1/16"
1044	3	110E 134N	Feature 131	Middle of 3, 20-30	North-South Construction Trench	Flotation
1045	6	119E 145N	2x2-Meter Unit	5, 40-50	-	1/16"
1046	3	112E 136N	Feature 122	Middle of 3, 20-30	East-West Construction Trench	1/16"
1047	6	119E 145N	Feature 132	Middle of 5, 40-50	East-West Construction Trench	1/16"
1048	6	119E 145N	Feature 134	Middle of 5, 40-50	Oval Posthole	1/16"
1049	6	119E 145N	Feature 133	Middle of 5, 40-50	Post in Trench	1/16"
1050	3	111-112E 136N	Feature 137	Middle of 3, 20-30	Round Posthole	1/16"
1051	6	117E 145N	Feature 132	Middle of 5, 40-50	East-West Construction Trench	1/16"
1052	3	112E 136N	Feature 122	Middle of 5, 40-50	East-West Construction Trench	Flotation
1053	6	117E 145N	Feature 136	Middle of 5, 40-50	Round Posthole	1/16"
1054	3	111-112E 136N	Feature 105, NE 1/4	Base of 2, 10-20	Large Deep Oval Pit, Zone D	Flotation
1055	3	111-112E 134-136N	Feature 105, E 1/2	-	Large Deep Oval Pit, Clean Up	1/16"
1056	3	111-112E 136N	Feature 105, NE 1/4	Base of 2, 10-20	Large Deep Oval Pit, Zone H	1/16"
1057	3	111-112E 136N	Feature 105, NE 1/4	Base of 2, 10-20	Large Deep Oval Pit, Zone I	1/16"
1058	3	111E 136N	Feature 122	Middle of 3, 20-30	Double East-West Construction Trenches, North Trench	Flotation
1059	6	119E 145N	Feature 138	Middle of 5, 40-50	Round Posthole	1/16"
1060	6	117E 145N	Feature 135	Middle of 5, 40-50	Round Posthole	1/16"
1061	6	117E 145N	Features 132 & 139	Middle of 5, 40-50	East-West Construction Trench & Pit/Posthole	1/16"
1062	6	117E 145N	Feature 139	Middle of 5, 40-50	Pit/Posthole	1/16"

1063	6	111E 145N	Bulk in NE Corner	1-5, 0-50	-	1/16"
1064	3	111-112E 134-136N	Feature 105	-	Large Deep Oval Pi, West Profile Clean Up	1/16"
1065	6	111E 145N	Feature 140	Middle of 5, 40-50	Round/Oval Pit	1/16"
1066	6	111E 145N	Feature 141	Middle of 5 <i>,</i> 40-50	Round Posthole	1/16"
1067	6	117E 145N	Feature 142	Middle of 5, 40-50	Round/Oval Pit	1/16"
1068	6	111E 145N	Feature 143	Middle of 5, 40-50	Oval Posthole	1/16"
1069	6	117E 145N	Feature 139	Middle of 5, 40-50	Pit/Posthole	Flotation
1070	6	117E 145N	Feature 132	Middle of 5, 40-50	East-West Construction Trench	Flotation
1071	6	111E 145N	Feature 144	Middle of 5, 40-50	East-West Construction Trench	1/16"
1072	3	112E 136N	Feature 145	Middle of 3, 20-30	Square Posthole	1/16"
1073	6	111E 145N	Feature 146	Middle of 5, 40-50	Round Posthole with Wood	1/16"
1074	3	112E 136N	Feature 129 & 148	Middle of 3, 20-30	Mortar Rubble & East-West Construction Trench	1/16"
1075	6	111E 145N	Feature 149 & 150	Middle of 5, 40-50	Round/Oval Postholes	1/16"
1076	6	111E 145N	Feature 149 & 150	Middle of 5, 40-50	Round/Oval Postholes	1/16"
1077	6	111E 145N	Feature 150	Middle of 5, 40-50	Round/Oval Posthole	1/16"
1078	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone A	1/16"
1079	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone B	1/16"
1080	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone B1	1/16"
1081	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone D	1/16"
1082	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone D1	1/16"
1083	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone E	Flotation
1084	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone F	1/16"
1085	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone G	1/16"
1086	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zones H & J	1/16"
1087	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone I	1/16"
1088	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone A	Flotation
1089	3	110E 134-	Feature 105, W	Middle of 3,	Large Deep Oval Pit, Zone B	Flotation

		136N	1/2	20-30		
1090	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone C	Flotation
1091	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone D	Flotation
1092	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone F	Flotation
1093	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone H	Flotation
1094	3	110E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone I	Flotation
1095	3	112E 136N	Feature 151	Below Feature 129	Round Posthole	1/16"
1096	6	111E 145N	2x2-Meter Unit	Middle of 5 <i>,</i> 40-50	East Profile Clean Up	1/16"
1097	3	112E 136N	Feature 152	Below Feature 129	Round Posthole	1/16"
1098	3	112E 136N	Feature 148	Below Feature 129	East-West Construction Trench	1/16"
1099	3	110E 134N	Feature 114	Middle of 3, 20-30	Square Posthole	1/16"
1100	3	111E 134N	Feature 153	Middle of 3, 20-30	Round Posthole	1/16"
1101	3	111E 136N	Feature 154	Below Edge of F105	Round Posthole	1/16"
1102	6	111E 145N	Feature 144	Middle of 5 <i>,</i> 40-50	East-West Construction Trench	1/16"
1103	6	111E 145N	Feature 155	Middle of 5 <i>,</i> 40-50	North-South Construction Trench	1/16"
1104	3	111E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone H	1/16"
1105	6	111E 145N	Feature 156	Middle of 5, 40-50	Square Posthole	1/16"
1106	3	111E 134- 136N	Feature 105, W 1/2	Middle of 3, 20-30	Large Deep Oval Pit, Zone K	1/16"
1107	6	111E 145N	Feature 157	Middle of 5 <i>,</i> 40-50	Round Posthole	1/16"
1108	3	111E 134- 136N	Feature 105	-	Large Deep Oval Pit, Final Clean Up	1/16"
1109	1	118E 170N	1x2-Meter Unit	2, 10-20	-	1/16"
1110	1	120E 170N	1x2-Meter Unit	5, 40-50	West 1/2 of Unit	1/16"
1111	1	122E 170n	Feature 158	3, 20-30	East-West Trench	1/16"
1112	1	122E 170n	Feature 158	3, 20-30	East-West Trench	Flotation
1113	1	120-122E 170N	Feature 159	3, 20-30	Shallow Basin	1/16"
1114	1	120E 170N	Feature 160	3, 20-30	Mortar & Shell Midden	Flotation
1115	1	118E 170N	Feature 161	Base of 2, 10-20	Mortar & Shell Midden	1/16"
1116	1	120E 170N	Feature 161	Base of 2, 10-20	Mortar & Shell Midden	1/16"
1117	1	118E 170N	Feature 161	Base of 2,	Mortar & Shell Midden	Flotation

				10-20		
1118	1	111E 164- 166N	Feature 162	Middle of 5, 40-50	North-South Trench	1/16"
1119	1	111E 164N	Feature 163	Middle of 5, 40-50	Top 10 cm of Large Circular Stain	1/16"
1120	1	111E 164- 166N	Feature 162	Middle of 5, 40-50	East-West Trench	Flotation
1121	1	111E 164N	Feature 163, N 1/2	Middle of 5, 40-50	Large Deep Storage Pit	1/16"
1122	1	111E 168N	Feature 165	1, 0-10	Oyster Shell Midden	1/16"
1123	1	120E 170N	Feature 164	3, 20-30	Oval Posthole	1/16"
1124	1	111E 164N	Feature 163, S 1/2	Middle of 5, 40-50	Large Deep Storage Pit, Zone A	1/16"
1125	1	111E 164N	Feature 163, S 1/2	Middle of 5, 40-50	Large Deep Storage Pit, Zone B	1/16"
1126	1	111E 164N	Feature 163, S 1/2	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone C	1/16"
1127	1	111E 164N	Feature 163, S 1/2	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone B	Flotation
1128	1	111E 164N	Feature 163, S 1/2	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone C	Flotation
1129	1	117-119E 145N	Feature 165	5, 40-50	Oyster Shell Midden	Flotation
1130	1	111E 164N	Feature 166	In Feature 163	Post-like Stain in Feature 163	1/16"
1131	1	111E 164N	Feature 167	In Feature 163	Post-like Stain in Feature 163	1/16"
1132	1	111E 164N	Feature 163, S 1/2	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone D	Flotation
1133	1	111E 164N	Feature 163, S 1/2	Middle of 5, 40-50	Large Deep Storage Pit, Zone E	1/16"
1134	1	111E 164N	Feature 163, S 1/2	Middle of 5, 40-50	Large Deep Storage Pit, Zone F	1/16"
1135	1	111E 164N	Feature 163, S 1/2	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone F	Flotation
1136	3	111E 136N	Feature 168	Middle of 3, 20-30	Square Posthole	1/16"
1137	3	112E 136N	Feature 169	Middle of 3, 20-30	North-South Construction Trench	1/16"
1138	3	112E 136N	Feature 169	Middle of 3, 20-30	North-South Construction Trench	Flotation
1139	3	112E 136N	Feature 172	Middle of 3, 20-30	East-West Construction Trench	1/16"
1140	3	112E 136N	Feature 171	Middle of 3, 20-30	Round Posthole	1/16"
1141	3	112E 136N	Feature 170	Middle of 3, 20-30	Round Posthole	1/16"
1142	1	111E 164N	Feature 173	Middle of 5, 40-50	Builder's Pit for Feature 163	1/16"
1143	3	111E 134N	Feature 174	Middle of 5, 40-50	Round Posthole	1/16"
1144	3	111E 136N	Feature 122	Middle of 3,	Double East-West Construction	1/16"

				20-30	Trenches, North Trench	
				Base of 5,	Trenches, North Trench	
1145	6	111E 145N	Feature 175	40-50	Round Posthole	1/16"
1146	3	111E 136N	Feature 176	Below Feature 122	Round Posthole	1/16"
1147	6	117E 145N	Feature 177	Within Feature 139	Round Posthole	1/16"
1148	1	111E 164N	Features 163 & 173	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit & Builder's Pit, Clean Up	1/16"
1149	1	111E 164- 166N	Feature 178	Middle of 5, 40-50	East-West Construction Trench	1/16"
1150	1	111E 164- 166N	Feature 178	Middle of 5, 40-50	East-West Construction Trench	Flotation
1151	1	111E 164N	Feature 163	Middle of 5, 40-50	Large Deep Storage Pit, Zone D	1/16"
1152	1	111E 164N	Feature 163	Middle of 5, 40-50	Large Deep Storage Pit, Zone H, White Sand	1/16"
1153	1	111E 164N	Feature 163	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone I, Dark Zone	1/16"
1154	1	111E 164N	Feature 163	Middle of 5, 40-50	Large Deep Storage Pit, Zone I, Dark Zone	Flotation
1155	1	111E 164N	Feature 163	Middle of 5, 40-50	Large Deep Storage Pit, Zone J, Sand & Mortar Zone	1/16"
1156	3	111-112E 130-132N	Feature 89	Middle of 2, 10-20	Brick Foundation	Brick Sample
1157	1	111E 164N	Feature 163	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone J, Sand & Mortar Zone	Flotation
1158	1	112E 164- 165N	Feature 163, E 1/3	Middle of 5, 40-50	Large Deep Storage Pit, Zone A	1/16"
1159	1	112E 164- 165N	Feature 163, E 1/3	Middle of 5, 40-50	Large Deep Storage Pit, Zone B	1/16"
1160	1	112E 165N	Feature 163, E 1/3	Middle of 5, 40-50	Large Deep Storage Pit, Zone A1	1/16"
1161	1	110E 164- 165N	Feature 163, W 1/3	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone A & Disturbance	1/16"
1162	1	112E 164N	Feature 163, E 1/3	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone H	Soil Sample
1163	1	112E 164N	Feature 163, E 1/3	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone K	1/16"
1164	1	112E 164- 165N	Feature 163, E 1/3	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone H, White Sand	1/16"
1165	1	112E 164- 165N	Feature 173, E 1/2	Middle of 5 <i>,</i> 40-50	Builder's Pit for Feature 163, Outer Fill	1/16"
1166	1	110E 164- 165N	Feature 163, W 1/3	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone A	1/16"
1167	1	110E 164- 165N	Feature 163, W 1/3	Middle of 5, 40-50	Large Deep Storage Pit, Zone C	1/16"
1168	1	110E 164- 165N	Feature 163, W 1/3	Middle of 5, 40-50	Large Deep Storage Pit, Zone E	1/16"
1169	1	110E 164- 165N	Feature 173, W 1/3	Middle of 5, 40-50	Builders' Pit for Feature 163	1/16"
1170	1	111E 163N	Feature 163, S 1/3	Middle of 5,	Large Deep Storage Pit, Zone A	1/16"

				40-50		
				Middle of 5,		
1171	1	111E 163N	Feature 163, S 1/3	40-50	Large Deep Storage Pit, Zone B	1/16"
1172	1	111E 163N	Feature 163, S 1/3	Middle of 5, 40-50	Large Deep Storage Pit, Zone C	1/16"
1173	1	111E 163N	Feature 173, S 1/3	Middle of 5, 40-50	Builder's Pit for Feature 163	1/16"
1174	1	112E 164N	Feature 163, E 1/3	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone B, Collapsed	1/16"
1175	1	112-113E 165N	Feature 179	Base of Stripping	East-West Construction Trench	1/16"
1176	1	112-113E 165N	Feature 180	Base of Stripping	East-West Construction Trench	1/16"
1177	1	110-112E 164-165N	Feature 163	Base of Stripping	Large Deep Storage Pit	H-C
1178	1	109-113E 163-166N	Topsoil & Midden	Stripping 0- 35	General Collection	H-C
1179	1	110E 164- 165N	Feature 163, E 1/3	Middle of 5 <i>,</i> 40-50	Large Deep Storage Pit, Zone I	1/16"
1180	1	110E 164- 165N	Feature 163, E 1/3	Middle of 5, 40-50	Large Deep Storage Pit, Zone I	Flotation
1181	1	110E 164- 165	Feature 163, E 1/3	Middle of 5, 40-50	Large Deep Storage Pit, Zone J, Sand & Mortar	1/16"
1182	1	110E 164- 165N	Feature 163, E 1/3	Middle of 5, 40-50	Large Deep Storage Pit, Zone H, Dark Zone in Zone J	1/16"
1183	1	110E 165N	Feature 178, E 1/2	Middle of 5, 40-50	East-West Construction Trench	1/16"
1184	1	111E 165N	Feature 173, N 1/3	Middle of 5, 40-50	Builder's Pit for Feature 163	1/16"
1185	1	111-112E 164-165N	Feature 163	Middle of 5, 40-50	Large Deep Storage Pit, Zone J	1/16"
1186	1	111-112E 164-165N	Feature 163	Middle of 5, 40-50	Large Deep Storage Pit, Zone L, Dark Artifact Layer	1/16"
1187	1	111-112E 164-165N	Feature 163	Middle of 5, 40-50	Large Deep Storage Pit, Zone L, Dark Artifact Layer	Flotation
1188	1	111-112E 164-165N	Feature 163	Middle of 5, 40-50	Large Deep Storage Pit, Zone M, Sand Zone	1/16"
1189	1	110E 163N	Feature 181	Base of Stripping	Oval Posthole	1/16"
1190	1	111E 163N	Feature 183	Base of Stripping	Round Posthole	1/16"
1191	1	109E 164- 165N	Feature 163	Base of Stripping	Large Deep Storage Pit, Upper 80 cm of West Edge	1/16"
1192	1	109-112E 163-165N	Feature 163	Base of Stripping	Large Deep Storage Pit, General Collection Clean Up	1/16"
1193	1	109E 164- 165N	Feature 163, W 1/3	Base of Stripping	Large Deep Storage Pit, ca. 80- 100 cm from Top	1/16"
1194	1	109E 164- 165N	Feature 163, W 1/3	Base of Stripping	Large Deep Storage Pit, ca. 100- 120 cm from Top	1/16"
1195	1	109E 164- 165N	Feature 163, W 1/3	Base of Stripping	Large Deep Storage Pit, ca. 120- 140 cm from Top	1/16"
1196	1	109E 164-	Feature 163, W	Base of	Large Deep Storage Pit, ca. 140-	1/16"

		165N	1/3	Stripping	165 cm from Top	
1197	1	109E 164- 165N	Feature 163, W 1/3	Base of Stripping	Large Deep Storage Pit, ca. 140- 165 cm from Top	Flotation
1198	1	111E 164N	Feature 163, E 1/3	Base of Stripping	Large Deep Storage Pit, Wood Post	Wood Sample
1199	1	109E 164- 165N	Feature 163, W 1/3	Base of Stripping	Large Deep Storage Pit, Wood Timber, ca. 130 cmbs	Wood Sample
1200	1	109-110E 165-166N	Feature 180	Base of Stripping	East-West Construction Trench	1/16"
1201	1	111E 163N	Feature 182, W 1/2	Base of Stripping	Entrance to Features 163 & 173, Large Deep Storage Pit & Builder's Pit	1/16"
1202	1	111E 163N	Feature 182, E 1/2	Base of Stripping	Entrance to Features 163 & 173, Large Deep Storage Pit & Builder's' Pit	1/16"
1203	1	109-110E 165N	Feature 179	Base of Stripping	East-West Construction Trench	1/16"
1204	1	109-110E 166N	Feature 165	Base of Stripping	Oyster Shell Midden	H-C
1205	1	109-110E 166N	Surface	-	Grassy Area North of Park Fence on Water's Edge	H-C
1206	-	-	Surface	-	Donation from Resident Southwest of Park	H-C
1207	3	111E 134N	Feature 105	Middle of 3, 20-30	Large Deep Oval Pit, Surface Collection	H-C
1208	3	-	General Collection	-	Lost Provenience	1/16"
1209	1	111E 164N	Feature 163	Middle of 5, 40-50	Large Deep Storage Pit, Zone J, Sand & Mortar Zone	Soil Sample
1210	3	111E 164N	Feature 147	Middle of 3, 20-30	Wide Shallow North-South Trench	1/16"
1217	1	118-122E 170N	Trench Backfill	Surface	-	H-C

APPENDIX B: La Pointe-Krebs Plantation (22JA526), Faunal Samples Studied by Elizabeth J. Reitz, Kevin S. Gibbons, and Maran E. Little

Area	Fea.	Feature Part, Zone/Context	Unit	FS	Depositional Period	Analytical Period
7	06	SW 1/4, Zones A and A1	155E 153N	892	Early French (1718-1732)	French/British
7	90	SE 1/4, Zones A and A1	157E 153N	893	Early French (1718-1732)	French/British
7	60	NE 1/4, Zones A and A1	157E 155N	894	Early French (1718-1732)	French/British
7	90	NW 1/4, Zones A and A1	155E 155N	895	Early French (1718-1732)	French/British
7	06	NW 1/4, Zones A and A1	155E 155N	901	Early French (1718-1732)	French/British
7	90	NE 1/4, Zones A and A1	157E 155N	903	Early French (1718-1732)	French/British
7	06	SE 1/4, Zones A and A1	157E 153E	982	Early French (1718-1732)	French/British
б	105	All zones	111E 134N	947	French/British/Spanish (1732-1810)	Spanish/Early American
б	105	N 1/2, Zone I (105-120 cm)	111E 134N	963	Late French/British (1732-1780)	French/British
ю	105	N 1/2, Zone I (120-125 cm)	111E 134N	996	Late French/British (1732-1780)	French/British
ю	105	S 1/2, Zone H	111E 134N	696	Late French/British (1732-1780)	French/British
б	105	S 1/2, Zone I	111E 134N	971	Late French/British (1732-1780)	French/British
б	105	NE 1/4, Zone D	111-112E 136N	1015	Late French/British (1732-1780)	French/British
б	105	NE 1/4, Zone E	111-112E 136N	1016	Late French/British (1732-1780)	French/British
б	105	NE 1/4, Zone F	111-112E 136N	1017	Late French/British (1732-1780)	French/British
ю	105	NE 1/4, Zone H	111-112E 136N	1018	Late French/British (1732-1780)	French/British
б	105	W 1/2, Zone A	110E 134-136N	1078	Spanish (1780-1810)	Spanish/Early American
ю	105	W 1/2, Zone B	110E 134-136N	1079	Spanish (1780-1810)	Spanish/Early American

French/British	Late French/British (1732-1780)	1152	111E 164N	N 1/4, Zone H	163	1
Spanish/Early American	Spanish (1780-1810)	1151	111E 164N	N 1/4, Zone D	163	1
French/British	Late French/British (1732-1780)	1134	111E 164N	S 1/2, Zone F	163	1
Spanish/Early American	Spanish (1780-1810)	1126	111E 164N	S 1/2, Zone C	163	1
Spanish/Early American	Spanish (1780-1810)	1125	111E 164N	S 1/2, Zone B	163	1
Spanish/Early American	Spanish (1780-1810)	1119	111E 164N	Zone A (top 10 cm)	163	1
French/British	British (1763-1780)	1144	111E 136N	Both trenches	122	б
French/British	British (1763-1780)	1046	112E 136N	Both trenches	122	б
French/British	British (1763-1780)	1025	111E 136N	North trench	122	б
French/British	British (1763-1780)	1024	111E 136N	South trench	122	б
Spanish/Early American	Early American (1811-1850)	1039	117-119E 145N	SE 1/4, Zones A and B	121	9
Spanish/Early American	Early American (1811-1850)	1035	117-119E 145N	SW 1/4, Zones A and B	121	9
Spanish/Early American	Early American (1811-1850)	1032	117-119E 145N	Skeleton 2	121	9
Spanish/Early American	Early American (1811-1850)	1031	117-119E 145N	Skeleton 1	121	9
Spanish/Early American	Early American (1811-1850)	1023	117-119E 145N	S 1/2, Zones A and B	121	9
Spanish/Early American	Early American (1811-1850)	1022	117-119E 145N	N 1/2, Zones A and B	121	9
French/British	British (1763-1780)	958	112E 126-128N	All zones	107	б
French/British	Late French/British (1732-1780)	1106	111E 134-136N	W 1/2, Zone K	105	б
French/British	Late French/British (1732-1780)	1104	111E 134-136N	W 1/2, Zone H1	105	б
French/British	Late French/British (1732-1780)	1087	110E 134-136N	W 1/2, Zone I	105	б
French/British	Late French/British (1732-1780)	1084	110E 134-136N	W $1/2$ , Zone F	105	б
French/British	Late French/British (1732-1780)	1082	110E 134-136N	W 1/2, Zone D1	105	б
French/British	Late French/British (1732-1780)	1081	110E 134-136N	W 1/2, Zone D	105	ю

1	163	N 1/4, Zone I	111E 164N	1153	Late French/British (1732-1780)	French/British
1	163	N 1/4, Zone J	111E 164N	1155	Late French/British (1732-1780)	French/British
1	163	E 1/3, Zone K	112E 164N	1163	Late French/British (1732-1780)	French/British
1	163	E 1/3, Zone H	112E 164-165N	1164	Late French/British (1732-1780)	French/British
1	163	W 1/3, Zone A	112E 164-165N	1166	Spanish (1780-1810)	Spanish/Early American
1	163	S 1/3, Zone A	111E 163N	1170	Spanish (1780-1810)	Spanish/Early American
1	163	S 1/3, Zone B	111E 163N	1171	Spanish (1780-1810)	Spanish/Early American
1	163	General collection	110-112E 164-165N	1177	Spanish (1780-1810)	Spanish/Early American
1	163	E 1/3, Zone I	110E 164-165N	1179	Late French/British (1732-1780)	French/British
1	163	E 1/3, Zone J	110E 164-165N	1181	Late French/British (1732-1780)	French/British
1	163	E 1/3, Zone H	110E 164N	1182	Late French/British (1732-1780)	French/British
1	163	Center, Zone J	111-112E 164-165N	1185	Late French/British (1732-1780)	French/British
1	163	Center, Zone L	111E 164-165N	1186	Late French/British (1732-1780)	French/British
1	163	Center, Zone M	111-112E 164-165N	1188	Late French/British (1732-1780)	French/British
1	173	All zones	111E 164N	1142	Late French/British (1732-1780)	French/British
1	173	E 1/3, All zones	112E 164-165N	1165	Late French/British (1732-1780)	French/British
1	173	W 1/3, All zones	112E 164-165N	1169	Late French/British (1732-1780)	French/British
1	173	S 1/3, All zones	111E 163N	1173	Late French/British (1732-1780)	French/British
1	179	Zone A	112-113E 165N	1175	British/Spanish (1763-1811)	Spanish/Early American
1	179	Zone A	109-110E 165N	1203	British/Spanish (1763-1811)	Spanish/Early American
1	180	Zone A	112-113E 165N	1176	British/Spanish (1763-1811)	Spanish/Early American
1	180	Zone A	109-110E 165-166N	1200	British/Spanish (1763-1811)	Spanish/Early American

Measurements from Feature 90	ature 90														
Тахоп	FS	Element	Side	Dim	mm	Dim	mm	Dim	шш	Dim	mm	Dim	mm	Dim	mm
Ariidae	893	Sagitta otolith		Th	4.53										
Ariidae	894	Sagitta otolith		Тh	8.37										
Gallus gallus	901	Humerus	Lt	Bd	11.31										
Gallus gallus	894	Tarsometatarsus	Rt	SC	7.37										
Odocoileus virginianus	893	Astragalus	Lt	GLI	34.4	GLm	32.73	Bd	21.61	D	18.92				
Odocoileus virginianus	893	Acetabulum	Rt	ΓA	34.73	LAR	29.51								
Odocoileus virginianus	893	Calcaneus	Rt	GB	26.12										
Odocoileus virainianus	903	Ilium	Rt	SH	20.96	SB	8.9	sc	51.04						
Odocoileus virginianus	903	Humerus	Rt	SD	17.15										
Odocoileus virginianus	903	Molar Row	Rt	23	36.63										
Odocoileus virainianus	894	1st Phalanx		GL	44.19	SD	10.51	Bd	10.84						
Bos taurus	893	3rd Phalanx		BF	22.84										
Measurements from French/Early British Period: Features 105, 107, 122, 163, 173	ench/Ear	'ly British Period: Fe	atures	105, 10	7, 122, 1	63, 173									
Taxon	FS	Element	Side	Dim	mm	Dim	mm	Dim	шш	Dim	mm	Dim	mm	Dim	mm
Ariidae	1024	Sagitta otolith	Ľ	Len	10.1	Wth	8.84	Th	4.84	Brt	9.24				
Ariidae	1024	Sagitta otolith	Rt	Len	15.08	Wth	13.21	Th	6.41	Brt	14.4				_
Ariidae	1024	Sagitta otolith	Rt					Th	3.04						
Ariidae	1165	Sagitta otolith	Rt	Len	14.77	Wth	11.63	Th	6.53	Brt	13.08				
Ariidae	1165	Sagitta otolith	Ľ	Len	12.08	Wth	11.56	Th	5.68	Brt	11.07				
Ariopsis felis	1155	Sagitta otolith	Rt	Len	13.29	Wth	10.98	Th	5.95	Brt	10.96				
Mugil spp.	1165	Atlas		Wth	4.57										_
Micropogonias undulatus	1155	Sagitta otolith	Lt	Len	7.01	Wth	5.29	Th	2.99						

APPENDIX C: La Pointe-Krebs Plantation (22JA526), Faunal Measurements T. T.:441. 17 Let Elizote at I D ait

1024 1024
Sagitta otolith
Carpometacarpus
Tarsometatarsus
Radius
Ulna
_
Coracoid Lt
Carpometacarpus Rt
Humerus Lt
Humerus Lt
Farsometatarsus Rt
Tarsometatarsus Rt
Humerus Rt
Scapula Lt
Carpometacarpus Lt
Coracoid Rt
Tibiotarsus Lt
Ulna Lt
Humerus Rt
Femur Lt
Femur Rt
Tibiotarsus Lt
Tibiotarsus Rt
Tibiotarsus Lt
Tibiotarsus Rt
Tarsometatarsus Lt
Tarsometatarsus
Tarsometatarsus
Tarsometatarsus

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Rallidae	1155	Tarsometatarsus	Ľ	GL	38.51	Bp	4.78	SC	1.72	Bd	4.48				
Rallidae	1155	Tarsometatarsus	Rt	GL	26.53	Bp	3.29	sc	1.46	Bd	3.67				
Rallidae	1155	Tarsometatarsus	Rt	Bd	6.77										
Rallidae	1155	Tarsometatarsus	Rt	GL	42.74	Вр	4.99	SC	1.94	Bd	4.37				
Rallidae	1155	Tarsometatarsus	Rt	Bd	7.02										
Rallidae	1155	Tarsometatarsus	Rt	Bd	4.23										
Rallidae	1155	Tarsometatarsus	Rt	Bd	3.62										
Rallidae	1182	Tibiotarsus	Ľ	sc	1.97	Bd	4.58	рq	3.93						
Rallidae	1182	Tarsometatarsus	Ľ	Dip	5.16										
Rallidae	1179	Carpometacarpus	Rt	Did	3.04										
Gruidae	1024	Carpometacarpus	Ľ	Did	10.38										
Grus canadensis	1155	Carpometacarpus	Ľ	GL	113.32	_	112.95	Did	14.67						
Grus canadensis	1155	1st Phalanx		GL	48.64	_	45.02								
Grus canadensis	1186	Ulna	Ľ	GL	174.5	Вр	13.27	Dip	13.82	SC	6.28	Did	11		
Laridae	1024	Tibiotarsus	Rt	Bd	6.18	рq	6.55								
Laridae	1024	Carpometacarpus	Rt	Вр	9.45										
Corvus brachyrhynchos	1186	Humerus	Lt	sc	5.64	Bd	15.55								
Corvus brachyrhynchos	1186	Humerus	Rt	GL	62.93	Bp	17.18	sc	5.65	Bd	15.55				
Corvus brachyrhynchos	1186	Ulna	Lt	GL	76.03	SC	4.38	Bd	8.7	Bp	96.6	Dip	8.99		
Corvus brachyrhynchos	1186	Ulna	Rt	GL	76	sc	4.18	Bd	8.89	Bp	10.26	Dip	9.69		
Corvus brachyrhynchos	1186	Radius	Lt	sc	1.97										
Corvus brachyrhynchos	1186	Radius	Rt	SC	2.06										
Corvus brachyrhynchos	1186	Carpometacarpus	Rt		42.59	Bp	10.84								
Corvus brachyrhynchos	1186	Femur	Lt	sc	4.24	Bp	9.28	Dp	5.7						
Corvus brachyrhynchos	1186	Femur	Rt	GL	51.8	Е	48.88	Bp	9.4	SC	4.34	Bd	10.19	pq	8.08
Corvus brachvrhvnchos	1186	Tibiotarsus	Ľ	Bd	8.51	Dd	7.82								
Corvus	1186	Tibiotarsus	Lt	Dip	13.14										

Discriptionalizatripolisat di alignalizationalizationalizationalizationalizatio																
	brachyrhynchos															
	Corvus brachvrhvnchos	1186	Tarsometatarsus	Lt	GL	60.06	Вр	9.1	sc	3.29						
methon         1136         i arsometatarsus         K         b         9.02         3.5 $3.44$ wigninua         1024         vertebra, cervical         H         21.91 $3.12$	Corvus			i	ſ	000	0									
	brachyrhynchos	1186	larsometatarsus	¥	дд	9.02	S	3.44								
virginizing         1024         Vertebra, cervical         H         21.91 $ger         1046         Astragalus         Rt         cl         9.16           ger         1165         Calcaneus         Rt         cl         9.35         GL         9.67         84           p.         1046         Astragalus         Rt         cl         9.325         GL         9.57         89         9.67         84         14.27           p.         1046         Acetabulum         Lt         LR         3.21         r         9.67         84         14.27           p.         1024         Phalamx         Ind         Cl         17.73         8p         6.97         57         8p         4.51           p.         1024         Phalamx         Ind         Cl         17.73         8p         6.97         57         8p         4.51           p.         1024         Phalamx         Ind         Cl         17.74         8p         4.75         8p         4.75           p.         1024         Phalamx         Ind         Cl         17.74         8p         4.76         4.75           p.         10$	Passeriformes	1024	Scapula	Lt	Dic	6.72										
	Didelphis virginiana	1024	Vertebra, cervical		т	21.91										
	Scurius niger	1046	Astragalus	Rt	GL	9.16										
Ger         1134         Humerus         It         GL         53.26         GLC         5.87         Bp         9.67         Bd         14.27           p.         1046         Acetabulum         It         LAR         3.21 $\mathbf{T}$ $$	Sciurus niger	1165	Calcaneus	Rt	GL	15.13	GB	5.68								
p.         1046         Acetabulum         It $IAR$ 3.21 $IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII$	Sciurus niger	1134	Humerus	Ħ	GL	53.26	GLC	52.87	Вр	9.67	Bd	14.27				
gentus         1081         Atlas         GL         19.69         BFc         25.63         BFcd         19.77         H         16.22           ericonus         1087         Radius         Rt         GL         290         SD         17.41         Ph         16.27         Ph         16.17	Rattus spp.	1046	Acetabulum	Ľ	LAR	3.21										
gentus         num	Urocyon	1081	Δtlac		Ū	19 69	RECL	75.63	RErd	19 77	Т	16 22				
ericanus         1087         Radius         Rt         GL         290         SD         17.41           1024         Phalanx         Ind         GL         17.75         Bp         6.97         Dp         5.78         SD         4.26           1024         Phalanx         Ind         GL         17.75         Bp         6.97         Dp         6.01         SD         4.57           1024         Phalanx         Ind         GL         97.19         Premolar         61         97.19         Premolar         61         5.78         SD         4.51           1024         Upper M2         Rt         Len         3.12         Brt         17.17         Premolar         94           1024         Upper M3         Rt         Len         20.47         Brt         15.6         24.1           1024         Upper M3         Rt         Len         20.47         Brt         17.17           1024         Upper M3         Rt         Len         20.47         Brt         17.17           1024         Upper M3         Rt         Len         20.47         Brt         17.17           1024         Humerus         Lt <t< td=""><td>cinereoargenteus</td><td>1001</td><td>6004</td><td></td><td>5</td><td>0.01</td><td>5</td><td>0.04</td><td>3</td><td></td><td>:</td><td>101</td><td></td><td></td><td></td><td></td></t<>	cinereoargenteus	1001	6004		5	0.01	5	0.04	3		:	101				
	Ursus americanus	1087	Radius	Rt	GL	290	SD	17.41								
	Felidae	1024	Phalanx	Ind	GL	17.75	Вр	6.97	Dp	5.78	SD	4.26	Bd	5.22	BFd	4.63
	Felidae	1024	Phalanx	Ind	GL	17.84	Вр	6.95	Dp	6.01	SD	4.57	Bd	5.17	BFd	4.64
lae         1142         Tooth         GL $97.19$ 1024         Upper M2         Rt         Len         31.32         Brt         17.19           1024         Upper M3         Lt         Len         31.32         Brt         17.19           1024         Upper M3         Lt         Len         31.32         Brt         17.17           1024         Upper M3         Lt         Len         20.47         Brt         15.6           1179         Premolar Row         Rt         Len         20.47         Brt         15.6           1179         Premolar Row         Rt         20.47         Brt         15.6           969         Axis         SBV         30.36         Brt         17.19           1155         Scapula         Rt         Bq         34.25         LG         27.51         BG           1173         Radius         Lt         Bq         34.25         LG         27.51         BG           1173         Radius         Lt         Bq         34.25         LG         27.51         BG           1173         Radius         Lt         Bq         30.74         Bd         20.73	Felidae	1024	Phalanx	Ind	GL	16.79	Вр	9	Dp	6.15	SD	4.11	Bd	5.14	BFd	4.67
	Delphinidae	1142	Tooth		GL	97.19										
	Sus scrofa	1024	Upper M2	Rt	Len	31.32	Brt	17.49								
$ \begin{array}{ ccccccccccccccccccccccccccccccccccc$	Sus scrofa	1024	Upper M3	Ľ	Len	32.38	Brt	17.17								
	Sus scrofa	1024	Upper M3	Rt	Len	20.47	Brt	15.6								
1081         Humerus         Lt         Bd         41.64         BT         38.59           25         969         Axis         SBV         30.86         BFcr         51.18         LCDc           25         1155         Scapula         Rt         GLP         34.25         LG         27.51         BG           25         1173         Radius         Lt         Bp         38.48         7.51         BG           26         1173         Radius         Lt         Bp         38.48         7.51         BG           26         1173         Radius         Lt         Bp         38.48         7.51         BG           26         1084         Tibia         Rt         Bd         30.74         Dd         20.73         SD           26         1084         Tibia         Rt         Bd         30.74         Bd         26.29         SD           26         1046         Tathalanx         Rt         GL         63.44         Bd         26.29         SD           21024         Phalanx, 1st/2nd         Ind         DLS         59.15         LD         42.85           21024         Phalanx, 1st/2nd	Sus scrofa	1179	Premolar Row	Rt	29	43.16										
Jest bit is a constrained by the constrate by the constrained by the constrained by the constrai	Odocoileus virainianus	1081	Humerus	Lt	Bd	41.64	ВТ	38.59								
969         Axis         SBV         30.86         BFcr         51.18         LCDc           15         Scapula         Rt         GLP         34.25         LG         27.51         BG           15         Scapula         Rt         GLP         34.25         LG         27.51         BG           15         1173         Radius         Lt         Bp         38.48         20.73         BG           15         1084         Tibia         Rt         Bd         30.74         Dd         20.73           15         969         1st Phalanx         GL         63.44         Bd         26.29         SD           1046         Carpal, radial         Rt         GB         43.31         1         10.43         10.44         10.45         10.73         10.73           1024         Phalanx, 1st/2nd         Ind         DLS         59.15         LD         42.85         10         10.48         10.46.09         Dp         35.17           1024         Humerus         Rt         BT         33.07         10         42.85         10	Odocoilaus															
L5       Scapula       Rt       GLP       34.25       LG       27.51       BG         L5       1173       Radius       Lt       Bp       34.25       LG       27.51       BG         L5       1173       Radius       Lt       Bp       38.48       7       20.73       BG         L5       1084       Tibia       Rt       Bd       30.74       Dd       20.73         L5       969       1st Phalanx       GL       63.44       Bd       26.29       SD         L6       1046       Carpal, radial       Rt       GB       43.31       104       26.29       SD         L1024       Phalanx, 1st/2nd       Ind       DLS       59.15       LD       42.85         L1024       Phalanx, 1st/2nd       Ind       GL       46.09       Dp       35.17         L1024       Humerus       Rt       BT       33.07       35.17       35.17	virginianus	696	Axis		SBV	30.86	BFcr	51.18	LCDC	71.41						
LS     1173     Radius     Lt     Bp     38.48       LS     1084     Tibia     Rt     Bd     30.74     Dd     20.73       LS     969     1st Phalanx     GL     63.44     Bd     26.29     SD       LS     969     1st Phalanx     GL     63.44     Bd     26.29     SD       LS     1046     Carpal, radial     Rt     GB     43.31       L024     Phalanx, 1st/2nd     Ind     DLS     59.15     LD     42.85       L024     Phalanx, 1st/2nd     Ind     GL     46.09     Dp     35.17       L024     Humerus     Rt     BT     33.07	Odocoileus virginianus	1155	Scapula	Rt	GLP	34.25	PI	27.51	BG	24.1						
JS     1084     Tibia     Rt     Bd     30.74     Dd     20.73       JS     969     1st Phalanx     GL     63.44     Bd     26.29     SD       IS     969     1st Phalanx     GL     63.44     Bd     26.29     SD       IO46     Carpal, radial     Rt     GB     43.31     1024     Phalanx, 1st/2nd     Ind     DLS     59.15     LD     42.85       IO24     Phalanx, 1st/2nd     Ind     GL     59.15     LD     42.85       IO24     Phalanx, 1st/2nd     Ind     GL     46.09     Dp     35.17       IO84     Humerus     Rt     BT     33.07	Odocoileus virainianus	1173	Radius	Lt	Bp	38.48										
JS         Log         Log <thlog< th="">         Log         <thlog< th=""> <thlog< th=""> <thlog< th=""></thlog<></thlog<></thlog<></thlog<>	Odocoileus	108/1	cidiT	ŧ	למ	30 7 <i>1</i>		20 72								
Is         969         1st Phalanx         GL         63.44         Bd         26.29         SD           Is         1046         Carpal, radial         Rt         GB         43.31         1024         Phalanx         Ind         DLS         59.15         LD         42.85         1024         Phalanx, 1st/2nd         Ind         GL         46.09         Dp         35.17         1084         Humerus         Rt         BT         33.07	virginianus	1001			2	t	č	r								
Image: Signal State	Bos taurus	696	1st Phalanx		GL	63.44	Bd	26.29	SD	24.1						
Is         1024         Phalanx         Ind         DLS         59.15         LD           Is         1024         Phalanx, 1st/2nd         Ind         GL         46.09         Dp           Is         1084         Humerus         Rt         BT         33.07	Bos taurus	1046	Carpal, radial	Rt	GB	43.31										
<ul> <li>1024 Phalanx, 1st/2nd Ind GL 46.09 Dp</li> <li>1084 Humerus Rt BT 33.07</li> </ul>	Bos taurus	1024	Phalanx	Ind	DLS	59.15	LD	42.85								
1084 Humerus Rt BT	Bos taurus	1024	Phalanx, 1st/2nd	Ind	GL	46.09	Dp	35.17								
	Caprinae	1084	Humerus	Rt	ΒТ	33.07										

	101		đ	F											
caprinae	CTUL	numerus	RI	2	33.47										
Caprinae	959	Humerus	Rt	ΒТ	29.95										
Measurements from Spanish/Early American Period: Features 105, 121, 163, 179, 180	anish/E	arly American Perio	d: Feati	ures 10	5, 121, 1(	3, 179,	180								
Taxon	FS	Element	Side	Dim	mm	Dim	mm	Dim	mm	Dim	mm	Dim	mm	Dim	mm
Ariidae	947	Sagitta otolith	Rt	Len	14.82	Wth	14.6	Th	6.62	Brt	12.64				
Ariidae	947	Sagitta otolith	Rt	Wth	13.65	ц	6.22	Brt	12.14						
Ariopsis felis	1119	Sagitta otolith	Rt	Len	13.6	Wth	11.12	Th	5.6	Brt	13.1				
Ariopsis felis	1119	Sagitta otolith	Ľ	Len	13.13	Wth	11.51	μ	6.01	Brt	12.46				
Micropogonias undulatus	1119	Sagitta otolith	Rt	Len	7.46	Wth	5.56	Th	3.39						
Anas platyrhynchos	1125	Tibiotarsus	Rt	GL	55.91	La	54.15	Dip	7.96	SC	2.63	Bd	5.81	Dd	5.6
Anas platyrhynchos	1126	Coracoid	Ę	GL	39.33	Lm	34.96	Bb	16.44	ΒF	14.19				
Gallus gallus	1022	Humerus	Ľ	SC	6.88										
Gallus gallus	1022	Humerus	Rt	SC	6.97										
Gallus gallus	1022	Ulna	Ľ	SC	5.41	Did	9.58								
Gallus gallus	1022	Femur	Ħ	SC	7.37										
Gallus gallus	1032	Scapula	Ľ	Dic	12.87										
Gallus gallus	1032	Ulna	Rt	Did	9.84										
Gallus gallus	1032	Radius	Rt	SC	3.13	Bd	5.14								
Gallus gallus	1032	Carpometacarpus	Rt	Вр	12.33										
Gallus gallus	1032	Femur	Rt	SC	7.06										
Gallus gallus	1032	Tibiotarsus	Ħ	SC	9.9	Bd	12.19	GL	112	Dd	12.31				
Gallus gallus	1032	Tibiotarsus	Rt	SC	6.63	Bd	11.99	Dd	11.34	Dip	109.4				
Gallus gallus	1032	Tarsometatarsus	Ľ	Bd	12.97	Вр	14.59								
Gallus gallus	1032	Tarsometatarsus	Rt	SC	6.65	Bd	12.84	Ы	80.57						
Gallus gallus	1126	Coracoid	Ħ	Г	48.1										
Sciurus spp.	947	Scapula	Rt	SLC	7.24	GLP	9.7	BG	4.95						
Sciurus spp.	947	Ulna	Ľ	SDO	4.77	DPA	5.08	BPc	3.39						
Canidae	947	Calcaneus	Ľ	GB	10.49										
Urocyon	1079	Ulna	+	SDO	13.31	DPA	15.85	BPc	6.84						
cinereoargenteus			i												
Lynx rufus	947	Radius	Lt	ВFр	10.01	Вр	11.83								
Sus scrofa	1078	Metapodial		Вр	20.32										
Odocoileus virainianus	947	Atlas		GLF	57.1	BFcd	50.49								

947CubonavicularLtGB29.07947Calcaneus (fused)LtGL $77.57$ GB947Calcaneus (unf.)LtGB $23.76$ $31.76$ 947Calcaneus (unf.)RtGB $23.76$ $31.76$ 947Calcaneus (unf.)RtGB $23.76$ $31.76$ 947Calcaneus (unf.)RtGB $23.76$ $31.76$ 947FemurLtDC $23.35$ $51.76$ 1078TibiaRtBd $31.7$ Dd1125RadiusLtBd $52.0$ $71.76$ 947MetatarsalLtBd $52.0$ $71.76$ 1125RadiusLtBd $52.0$ $71.76$ 1126RadiusLtBd $52.0$ $71.76$ 1127MetatarsalLtBd $52.0$ $71.76$ 1128RadiusLtBd $52.0$ $71.76$ 1129MetapodialLtBd $33.52$ $80$ 1004MetapodialCH $33.62$ $80$ 1003HumerusLa $35.36$ $81$ 1003HumerusBd $23.76$ $81$ 1004MetapodialCH $80$ $35.97$ $81$ 1093HumerusBd $35.97$ $81$ 1093HumerusBd $35.37$ $81$ 1093HumerusBd $35.37$ $81$ 1093HumerusBd $35.37$ $81$ <td< th=""><th>947CubonavicularItGB<math>29.07</math>947Calcaneus (tused)ItCl<math>7.57</math>GB<math>24.44</math>947Calcaneus (unti)ItCB<math>23.76</math><math>3.76</math>947Calcaneus (unti)ItCB<math>23.76</math><math>3.76</math>947Calcaneus (unti)ItCB<math>23.76</math><math>3.76</math>947Calcaneus (unti)ItCB<math>23.76</math><math>3.77</math>947Calcaneus (unti)ItCB<math>23.76</math><math>3.77</math>947FemuItDC<math>23.35</math><math>3.75</math>947FemuItDC<math>23.35</math><math>3.75</math>947RadiusItBd<math>25.04</math>1125(epiphysis)ItBd<math>25.04</math>947MetatarisalItBd<math>25.04</math>947MetatarisalItBd<math>25.04</math>947MetatarisalItBd<math>25.07</math>947MetatarisalItBd<math>25.07</math>947MetatarisalItBd<math>25.72</math>947MetatarisalIt<math>35.32</math><math>177</math>947MetatarisalIt<math>35.32</math><math>177</math>947MetatarisalIt<math>35.32</math><math>177</math>947MetatarisalIt<math>35.32</math><math>177</math>948MetatarisalIt<math>35.32</math><math>177</math>949MetatarisalIt<math>35.32</math><math>177</math>949MetatarisalMetatarisal<math>10.94</math><math>10.74</math>949Metatarisal<math>1</math></th><th>Odocoileus virginianus</th><th>947</th><th>Astragalus</th><th>Lt</th><th>GLm</th><th>31.34</th><th>GLI</th><th>33.23</th><th>Bd</th><th>21.44</th><th></th><th></th><th></th><th></th><th></th><th></th></td<>	947CubonavicularItGB $29.07$ 947Calcaneus (tused)ItCl $7.57$ GB $24.44$ 947Calcaneus (unti)ItCB $23.76$ $3.76$ 947Calcaneus (unti)ItCB $23.76$ $3.76$ 947Calcaneus (unti)ItCB $23.76$ $3.76$ 947Calcaneus (unti)ItCB $23.76$ $3.77$ 947Calcaneus (unti)ItCB $23.76$ $3.77$ 947FemuItDC $23.35$ $3.75$ 947FemuItDC $23.35$ $3.75$ 947RadiusItBd $25.04$ 1125(epiphysis)ItBd $25.04$ 947MetatarisalItBd $25.04$ 947MetatarisalItBd $25.04$ 947MetatarisalItBd $25.07$ 947MetatarisalItBd $25.07$ 947MetatarisalItBd $25.72$ 947MetatarisalIt $35.32$ $177$ 947MetatarisalIt $35.32$ $177$ 947MetatarisalIt $35.32$ $177$ 947MetatarisalIt $35.32$ $177$ 948MetatarisalIt $35.32$ $177$ 949MetatarisalIt $35.32$ $177$ 949MetatarisalMetatarisal $10.94$ $10.74$ 949Metatarisal $1$	Odocoileus virginianus	947	Astragalus	Lt	GLm	31.34	GLI	33.23	Bd	21.44						
947Calcaneus (fused)ItGL77.57GB $24.44$ 947Calcaneus (unf.)ItGB $23.76$ $23.76$ 947Calcaneus (unf.)RtGB $23.76$ $23.35$ 947Calcaneus (unf.)RtGB $23.76$ 947Calcaneus (unf.)RtGB $23.76$ 947Calcaneus (unf.)RtBd $31.7$ Dd947FemurItDC $23.35$ $24.7$ 947ThibiaRtBd $25.0$ $25.94$ 947MetatarsalItBd $25.04$ 947MetatarsalItBd $25.47$ 947MetatarsalItBd $52.47$ 947MetatarsalItN $700$ 947MetatarsalItN $700$ 947MetatarsalIt $700$ 947MetatarsalIt $700$ 947MetatarsalIt $700$ 947MetatarsalIt $700$ 947MetatarsalIt $700$ 948It $700$ $700$ 949It $700$ $700$ 941It $700$ $700$ 943It $700$ $700$ 944MetapotalIt $700$ 944It $700$ $700$ 944It $700$ $700$ 944It $700$ $700$ 944It $700$ 944It $700$ <tr< td=""><td></td><td>Odocoileus virginianus</td><td>947</td><td>Cubonavicular</td><td>Lt</td><td>GB</td><td>29.07</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>		Odocoileus virginianus	947	Cubonavicular	Lt	GB	29.07										
947Calcaneus (unf.)LtGB23.76947Calcaneus (unf.)RtGB23.76947Calcaneus (unf.)RtGB23.35947FemurLtDC23.351078TribiaRtBd31.7Dd1125RadiusLtBd25.0947MetatarsalLtBd25.0947MetatarsalLtBd25.0947MetatarsalLtBd25.0947MetatarsalLtBd25.0947MetatarsalLtBd25.0947MetatarsalLtBd25.0947MetatarsalLtBd25.0947MetatarsalLtBd25.0947MetatarsalLtBd25.0947MetatarsalLtBd25.0947MetatarsalLtBd25.0947MetatarsalLtBd25.3947MetatarsalLtBd25.4947MetatarsalLt10.3Th948MetatarsalLt10.3SB949MetatarsalLt10.3SB941MetatarsalLt10.3SB944MetatarsalLt10.3SB944MetatarsalLt10.3SB944MetatarsalLt10.3SB944MetatarsalLt10.3SB		Odocoileus virginianus	947	Calcaneus (fused)	Lt	GL	77.57	GB	24.44								
		Odocoileus virginianus	947	Calcaneus (unf.)	Lt	GB	23.76										
		Odocoileus virginianus	947	Calcaneus (unf.)	Rt	GB	23.76										
		Odocoileus virginianus	947	Femur	Lt	DC	23.35										
	1125         Radius (epiphysis)         Lt         Bd         25.0           947         Metatarsal         Lt         Bd         52.47           ents from         Site         Mm         Dim         Dim         Mm         Dim         Mm	Odocoileus virginianus	1078	Tibia	Rt	Bd	31.7	Dd	25.94								
947         Metatarsal         Lt         Bd         52.47           ents from French/British Heavy Flotation:         Features 90, 105, 119         mm         Dim         mm         Dim         mm	947       Metatarsal       Lt       Bd       52.47         ents from French/British Heavy Floation:       Eatment Side       Dim       Dim </td <td>Odocoileus virginianus</td> <td>1125</td> <td>Radius (epiphysis)</td> <td>Lt</td> <td>Bd</td> <td>25.0</td> <td></td>	Odocoileus virginianus	1125	Radius (epiphysis)	Lt	Bd	25.0										
ents from French/British Heavy Flotation: Features 90, 105, 119         mm         Dim         Dim         Mm         Dim         Dim         Dim	ents from French/British Heavy Flotation: Features 90, 105, 119         mm         Dim         Dim         Mm         Dim	Bos taurus	947	Metatarsal	Lt	Bd	52.47										
ents from French/British Heavy Flotation: Features 90, 105, 119           FS         Element         Side         Dim         mm         Dim         mm <th< th=""><th>ents From French/British Heavy Flotation: Features 90, 105, 119           Fs         Element         Side         Dim         mm         <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<></th></th<>	ents From French/British Heavy Flotation: Features 90, 105, 119           Fs         Element         Side         Dim         mm         Dim         Mm <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>																
Fs         Element         Side         Dim         mm         Dim         Dim         Mm         Dim <th>FSElementSideDimmmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimDimMmDimMmDimMmDimMmDimMmDimMmDimMmDim<thd< th=""><th>Measurements from F</th><th>rench/B</th><th>ritish Heavy Flotation</th><th>n: Featu</th><th>ures 90,</th><th>105, 119</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></thd<></th>	FSElementSideDimmmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimMmDimDimMmDimMmDimMmDimMmDimMmDimMmDimMmDim <thd< th=""><th>Measurements from F</th><th>rench/B</th><th>ritish Heavy Flotation</th><th>n: Featu</th><th>ures 90,</th><th>105, 119</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></thd<>	Measurements from F	rench/B	ritish Heavy Flotation	n: Featu	ures 90,	105, 119										
ccellatus       1004       Otolith, sagitta       Wth       10.35       Th       7.0         or       1004       Metapodial       GL       33.62       Bd       5.42         1003       Innominate       LA       35.36       LAR       27.02       SH       19.89       SB       8.61         1093       Humerus       Bd       35.97       BT       33.13       1       10.89       SB       8.61         1093       Humerus       Bd       29.87       BT       33.13       1<	ccellatus         1004         Otolith, sagitta         Wth         10.35         Th         7.0           or         1004         Metapodial         GL         33.62         Bd         5.42           or         1003         Innominate         LA         35.36         LAR         27.02         SH         19.89         SB         55.6           1093         Humerus         Bd         35.97         BT         33.13            55.6           1093         Humerus         Bd         29.87         BFd         24.15	Taxon	FS	Element	Side	Dim	mm	Dim	mm	Dim	mm	Dim	mm	Dim	mm	Dim	mm
or     1004     Metapodial     GL     33.62     Bd     5.42       1093     Innominate     LA     35.36     LAR     27.02     SH     19.89     SB     8.61       1093     Humerus     Bd     35.97     BT     33.13       1094     Radius     Bd     29.87     BFd     24.15       1093     Humerus     Bd     82.17     BT     73.65       1093     1st nhalanx     Bfn     23.77     Bn     75.18	or     1004     Metapodial     GL     33.62     Bd     5.42       1093     Innominate     LA     35.36     LAR     27.02     SH     19.89     SB     6.1     SC     55.6       1093     Humerus     Bd     35.97     BT     33.13       1       1004     Radius     Bd     29.87     Bfd     24.15       1093     Humerus     Bd     82.17     BT     73.65       1093     1st phalanx     Bfp     23.72     Bp     26.18	Sciaenops ocellatus	1004	Otolith, sagitta		Wth	10.35	Тh	7.0								
1093     Innominate     LA     35.36     LAR     27.02     SH     19.89     SB     8.61       1093     Humerus     Bd     35.97     BT     33.13     1       1004     Radius     Bd     29.87     BFd     24.15       1093     Humerus     Bd     82.17     BT     73.65       1093     Ist nhalanx     Bfn     23.77     Bn     73.65	1093         Innominate         LA         35.36         LAR         27.02         SH         19.89         SB         6.61         SC         55.6           1093         Humerus         Bd         35.97         BT         33.13	Procyon lotor	1004	Metapodial		GL	33.62	Bd	5.42								
1093         Humerus         Bd         35.97         BT           1004         Radius         Bd         29.87         BFd           1093         Humerus         Bd         82.17         BT           1093         1st oblanx         Bfn         23.77         Bn	Odocoileus1093HumerusBd35.97BT33.13virginianus1004RadiusBd29.87BFd24.15Odocoileus1003HumerusBd29.87BFd24.15Bos taurus1093HumerusBd82.17BT73.65Bos taurus10931st phalanxBFp23.72Bp26.18Note: Dimensione (Dim) of hirds and mammals follow Driasch (1976)Those of fish are described in the text	Odocoileus virginianus	1093	Innominate		ΓA	35.36	LAR	27.02	SH	19.89	SB	8.61	SC	55.6	Lfo	36.52
1004         Radius         Bd         29.87         BFd           1093         Humerus         Bd         82.17         BT           1093         1st nhalanx         BFn         23.72         Bn	Odocoileus1004RadiusBd29.87BFd24.15virginianus1093HumerusBd82.17BT73.65Bos taurus10931st phalanxBFp23.72Bp26.18Note: Dimensione (Dim) of hirds and mammals follow Driesch (1976)Those of fish are described in the text	Odocoileus virginianus	1093	Humerus		Bd	35.97	ВТ	33.13								
1093 Humerus Bd 82.17 BT 1093 1st nhalanx BFn 23.72 Bn	Bos taurus     1093     Humerus     Bd     82.17     BT     73.65       Bos taurus     1093     1st phalanx     BFp     23.72     Bp     26.18       Note: Dimensions (Dim) of hirds and mammals follow Driesch (1976)     Those of fish are described in the text	Odocoileus virginianus	1004	Radius		Bd	29.87	BFd	24.15								
1093 1st nhalany BFn 23 72 Bn	Bos taurus 1093 1st phalanx BFp 23.72 Bp 26.18 Note: Dimensions (Dim) of hirds and mammals follow Driesch (1976) Those of fish are described in the text	Bos taurus	1093	Humerus		Bd	82.17	ВΤ	73.65								
	Note: Dimensions (Dim) of birds and mammals follow Driesch (1976). Those of fish are described in the text	Bos taurus	1093	1st phalanx		BFp	23.72	Вр	26.18								

## **APPENDIX D: "Poterie de Peuples de la Louisiane"**

by M. D. M. [Jean-François-Benjamin Dumont de Montigny]

From Journal oeconomique, ou, Memoires, notes et avis sur l'agriculture, les arts, le commerce, & tout ce qui peut y avoir rapport, ainsi qu' a la conser.... Chez Antoine Boudet, Paris, November 1752, pages 133-135.

Quoique rien ne soit plus commun en France que l'art de faire de la poterie de terre & de la vernisser, peut-être ne sera-t-on point fâché de sçavoir comment les Naturels de la Louisiane viennent à bout de se fournir de tous les vaisseaux dont ils ont besoin, sans le secours de la roue ni d'aucun instrument: peut-être encore sera-t-il de quelqu' utilité de le sçavoir à ceux, qui éloignés des manufactures, ne peuvent s'en fournir à leur gré, & ignorent absolument la façon de rendre les pots de terre capables de contenir toutes les liqueurs même devant le feu: ce que font des femmes sans aucune instruction; car ce sont elles, qui, dans le pays dont nous parlons, font chargées de cet ouvrage, ainsi que de presque tous les autres; je pense qu'il ne sera pas difficile de l'exécuter ici, je crois au contraire que l'on fera bientôt mieux qu'elles, par le talent naturel qu'ont les François de perfectionner toutes choses.

Lorsque ces femmes ont amassé la terre propre à la poterie, & qu'elles l'ont bien nettoyée, elles prennent des coquillages, les pilent & les réduisent en poudre fine, qu'elles passent par leur tamis le plus fin. Elles mêlent cette poudre avec la terre, & y jettant de l'eau, paîtrissent le tout avec les mains & les pieds comme on fait de la pâte. La matiere étant ainsi préparée, elles la mettent en rouleaux longs de six à sept pieds, & gros, selon l'usage qu'elles en veulent faire. Pour façonner un plat ou en vase, elles prennent un de ces rouleaux, & d'un de ses bouts avec le pouce de la main gauche, elles établissent le centre du vaisseau, & tournant autour de ce centre avec une dextérité & une justesse admirables, elles décrivent une ligne spirale, & forment ainsi une assiette, un plat, une terrine, une cruche ou tout autre ustensile. De tems à autre elles trempent leurs doigts dans de l'eau qu'elles ont soin d'avoir auprès d'elles, & avec la main droite elles applatissent le dedans & le dehors de leur ouvrage, qui sans cette attention seroit tout ondulé, comme on peut aisément se l'imaginer. C'est ainsi qu'elles font des cruches étroites par le bas, plus larges par le col & la bouche, & fort enflées par le ventre: il en est qui contiennent jusqu'à quarante pintes & plus.

Il ne s'agit plus que de faire cuire cette poterie, après qu'elle a séché à l'ombre. Pour cet effet elles font un grand feu, & lorsqu' elles voyent une braise suffisante pour ce qu'elles ont de vaisseaux, elles font une place au milieu, y mettent leurs pots & les couvrent de charbons. C'est ainsi qu'elles leur donnent toute leur consistance; & ils en ont autant que les nôtres, contenant toutes fortes de liqueurs sans qu'elles transpirent. On ne peut attribuer cet effet qu'à la poudre fine de coquillages mêlée avec le terre: l'expérience que l'on en pourroit faire ici conduiroit peut-être à des découvertes aussi agréables qu'utiles.