
Chapter 4

Analysis

The “Cane River Expedition” returned to the Southeast Archeological Center with thirty-one standard (12 x 16 x 10 inch) storage boxes of material. Also brought back were 1,215 auger test forms, field logs, fifteen rolls of 35 mm color film, and fifteen rolls of 35 mm black-and-white film. Numerous field drawings and other documentation created from seven weeks of fieldwork were also included in our baggage. The documentation had to be put into order and the material arranged so that the laboratory phase of the project could be approached in a systematic and efficient manner. Additionally, field equipment was cleaned, repaired, and returned to storage. When these chores were completed, the material was washed, dried, sorted, and rebagged for classification.

SEAC conforms to the National Park Service’s curatorial standards for archeological collections as published in the *Automated National Catalog System (ANCS) User Manual* (NPS 1987). These standards foster collection accountability by ensuring that specimens are counted and/or weighed and by requiring consistency in classification. Reference collections and published type descriptions are used for classification. Attribution of nomenclature follows *The Revised Nomenclature for Museum Cataloging* (Blackaby et al. 1988) and SEAC’s *Catalog Manual for Archeological Objects* (1990).

Analytical work proceeded systematically with most of the crew classifying the specimens, while one person entered the provenience data and classificatory variables from the analysis forms. The number of observations recorded for each specimen (or lot of identical specimens) in the Magnolia Plantation collection ranged from as few as six to as many as ten, with a total of more than 95,000 observations entered.

This system allowed for consistent classification and data entry, efficient error correction, and completion of the database within a short time af-

ter classification. Analysis and database building are time consuming and labor intensive. The person hours for laboratory work far exceed that which is required to collect the material and document it in the field. However, the database, once created, provides the basis for collection accountability, proper storage, and analytical studies of chronological relationships, activity patterning, land use, and other aspects of historical and archeological interpretation. The data are also used to plan the conservation and management of archeological resources. Although expensive to compile, the database facilitates data manipulation and analytical research at a level that might otherwise be unachievable or far too expensive. The analytical manipulations used to interpret the archeological record in relationship to the documented history of the plantation are presented in Chapter 5.

MAGNOLIA PLANTATION COLLECTION

The database constructed for the comprehensive subsurface testing program lists 19,813 specimens, which weighed 329 kilograms. Brick, mortar, and plaster tabulated and discarded in the field weighed an additional 259 kilograms (the total weight of the material was 588 kilograms or over 0.64 ton).

The collection’s composition reflects the plantation’s complex history. Variety is the collection’s outstanding characteristic. It took 127 terms to describe the 19,813 specimens. Sixty of the terms cover single items; fifty-five cover five or fewer objects each; and twelve additional terms cover ten or fewer specimens each. Seventy-six percent of the terms used in the classificatory scheme include fewer than 3 percent of the objects in the collection. Conversely, just over 97 percent of the collection is covered by fewer than 25 percent of the terms used. This variety makes generalizing about the collection difficult.

There are many ways the collection could be arrayed to enable the reader to grasp its complexity and variety. It could be presented as groups of items related to different functions, as groups of items associated with an activity or human behavior(s), or as chronological groups (e.g., Adams 1987; South 1979a, 1979b; Sprague 1981). Other options are to group the data by raw material (animal, vegetable, mineral, and synthetic or man-made) or by method of manufacture (mass produced or handmade, for example). Each method of presentation emphasizes one or more important attributes or characteristics of the specimens while simultaneously diminishing others, which may be equally important. Thus, no single, simple way to view the collection exists, and all methods would be tedious to some degree. Consequently, keeping the project’s research goals in mind, these data will be conjugated in several ways to examine various aspects of the interpretation of the archeological evidence presented in Chapter 5.

The data has been placed into eight groups (Table 3). By combining a large number of culturally or behaviorally related artifact classes into a small number of groups, we can create a simple, straightforward tabular presentation of all the material from the comprehensive subsurface testing program.

Six of the groups pertain to the present research goals. They combine attributes that can be related to aspects of cultural behavior, plantation activities, or agricultural technology. These groups are

made up of artifact types that go a long way in determining the location of structures we know once existed at Magnolia Plantation and the activities that took place there. The two other groups include prehistoric Native American specimens and unclassified objects. These will be discussed first so they can be put aside since they do not have the potential to relate much about the history of Magnolia Plantation in the eighteenth- through mid-twentieth-centuries.

UNCLASSIFIED GROUP

At the beginning of the analysis phase of the project, we decided that unless an item identification was correct to a reasonable degree of certainty, it would be relegated to an unclassified, unknown, or indeterminate category. Unfortunately, approximately 20 percent of the collection (Table 4) could not be classified beyond the material from which it was made. For nine of the objects (0.045 percent of the collection) even the material could not be satisfactorily determined.

Ninety-four percent of the items in this group were unidentifiable metal fragments. Most were thin heavily rusted iron, probably representing tin cans. Generally, these metal fragments offer little analytic or chronological value. The canning industry was introduced into the United States in the 1820s (Buckles 1978:440–441). Although, some of the unidentified fragments may be from early tin cans, most probably postdate the introduction of the crimped “sanitary” can during the

Table 3 — Magnolia Plantation analytical groups.

| <i>Group</i> | <i>Count</i> | <i>% Count</i> | <i>Weight (Gr)</i> | <i>% Weight</i> |
|-----------------|--------------|----------------|--------------------|-----------------|
| Unclassified | 3,933 | 19.85 | 9,517.52 | 2.896 |
| Native American | 20 | 0.10 | 25.71 | 0.008 |
| Agricultural | 706 | 3.56 | 13,844.37 | 4.213 |
| Structures | 4,487 | 22.67 | 281,867.17 | 85.781 |
| Food | 9,375 | 47.32 | 20,262.50 | 6.167 |
| Clothing | 100 | 0.50 | 328.67 | 0.100 |
| Personal | 88 | 0.43 | 533.53 | 0.162 |
| Fauna and Flora | 1,104 | 5.57 | 2,211.15 | 0.673 |
| Total | 19,813 | 100.00 | 328,590.62 | 100.000 |

Table 4 — Unclassified group.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|-------------------|--------------|--------------------|
| Charcoal | 93 | 32.60 |
| Clay, fired | 1 | 2.26 |
| Metal fragments | 3,690 | 9,326.84 |
| Paper (tape?) | 2 | 1.38 |
| Plastic fragments | 117 | 46.97 |
| Shell | 1 | 0.10 |
| Unidentified | 9 | 100.72 |
| Wood fragments | 20 | 6.65 |
| Total | 3,933 | 9,517.52 |

1880s (Buckles 1978:440–441). Fragments of wire or nails mostly comprise the rest of this category. The second most numerous item was plastic, most of which was thin, wrapping or packaging film. Small amounts of unidentifiable biological remains (wood and shell) are also included here.

NATIVE AMERICAN GROUP

The small number ($n = 20$) of recovered Native American specimens (Table 5) consisted of lithics and ceramics. Their dispersed distribution across the park and low frequency (0.1 percent of the collection) and the absence of any observation suggesting an in situ prehistoric occupation indicates that Native American use of this area was neither intensive nor significant. Nonetheless, future archaeological investigators should consider the po-

Table 5 — Native American group.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|----------------|--------------|--------------------|
| Core | 1 | 1.79 |
| Debitage | 3 | 1.56 |
| Flake | 6 | 2.73 |
| Polished stone | 1 | 1.87 |
| Pottery sherds | 8 | 17.20 |
| Shatter | 1 | 0.56 |
| Total | 20 | 25.71 |

tential for discovering additional prehistoric data in the park.

Dr. Pete Gregory and Dr. Tommy Hailey, Northwestern State University archeologists, and Jeff Girard, Office of the Louisiana State Archaeologist, examined the specimens in February 1997. In their opinion, two shell-tempered sherds are characteristic of the Emory ceramic series of Caddo affiliation. Six dark-colored sand-tempered sherds may represent historic period Choctaw materials. We debated whether or not the single piece of polished stone represented a water-rolled polished pebble or a fragment of a pipe bowl, but came to no firm conclusion.

AGRICULTURAL GROUP

This group of artifacts comprised 3.56 percent of the collection (Table 6) by count and 4.2 percent by weight. The group is divided into three subgroups: field paraphernalia, machinery, and tools and accessories.

Table 6 — Agricultural group.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|-----------------------|--------------|--------------------|
| Field paraphernalia | 544 | 2,476.54 |
| Machinery | 130 | 9,751.64 |
| Tools and accessories | 32 | 1,616.19 |
| Total | 706 | 13,844.37 |

Field Paraphernalia

Objects associated with agricultural fields comprise this group (Table 7). They include remnants of fence posts, fence wire, barbed wire, fence staples, and nails.

The artifacts from this assemblage were used to separate agricultural areas from one another or from other activity areas and to keep livestock penned in or out of the fields.

The presence of barbed wire at Magnolia Plantation postdates 1875 (Buckles 1978:448). Pipe for crop irrigation and ceramic tiles for improving field drainage are also included in this subgroup.

Table 7 — Field paraphernalia.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|-----------------|--------------|--------------------|
| Barbed wire | 49 | 352.22 |
| Drain tile | 9 | 63.77 |
| Fence nail | 1 | 2.80 |
| Fence post | 2 | 346.20 |
| Fence staple | 98 | 597.15 |
| Fence wire | 384 | 1,017.32 |
| Irrigation pipe | 1 | 97.08 |
| Total | 544 | 2,476.54 |

Machinery

This subgroup (Table 8) is composed of artifacts related to agricultural machinery, such as tractors, mowers, cultivators, harvesters, combines, and cotton pickers. Some items may be related to transportation and probably came from the trucks or automobiles used for the main economic endeavor of the plantation. Other items, such as two single-tree center clips and the horseshoe (Figure 21), are indicative of the use of draft animals for farming. Unfortunately, these artifacts could not be assigned to a discrete temporal period.

Two matching brass fasteners (Figure 22) are also included in this group. They have octagonal flat heads that measure five-eighths of an inch across. The shafts are approximately half an inch long and appear to have been purposely bent. A star is centered on the machine-stamped faces and the words “Hungerford N.Y.” follow the circumference. Their function could not be determined.

In discussing artifact distribution in Chapter 5, I note that while some of the items may relate to other activities, their inclusion does not severely skew the distributions. Items that might be placed elsewhere represent a small percentage of this subgroup (63 percent of the terms in Table 8 represent only 17 percent of the total items).

Tools and Accessories

A small percentage (4.5 percent) of the agricultural group consists of tools associated with farming or used to maintain farm equipment (Table 9).

Table 8 — Machinery.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|-------------------------|--------------|--------------------|
| Auto/truck window glass | 1 | 12.07 |
| Ball bearing | 1 | 6.76 |
| Bolt | 27 | 1,750.46 |
| Bracket | 1 | 74.56 |
| Brake/clutch foot pad | 2 | 53.39 |
| Clamp | 1 | 16.12 |
| Cultivator point | 1 | 80.61 |
| Eye bolt | 1 | 74.76 |
| Fastener, brass | 2 | 3.85 |
| Flange | 1 | 41.33 |
| Gear | 1 | 91.16 |
| Handle | 3 | 179.95 |
| Horseshoe | 1 | 493.90 |
| Hose | 4 | 96.09 |
| Inner tube | 3 | 29.92 |
| Machine part (unknown) | 7 | 855.10 |
| Mechanical linkage | 1 | 506.40 |
| Nut | 10 | 535.30 |
| O-ring | 1 | 779.30 |
| Plate | 12 | 1,600.18 |
| Plug | 1 | 28.26 |
| Radiator thermostat | 1 | 33.35 |
| Ring | 4 | 144.47 |
| Rivet | 1 | 0.82 |
| Rod | 8 | 1,296.53 |
| Rod, threaded | 1 | 34.00 |
| Rubber fragment | 11 | 30.46 |
| Shim | 1 | 23.37 |
| Sickle bar blade | 1 | 23.60 |
| Single-tree center clip | 3 | 673.41 |
| Spindle | 2 | 83.88 |
| Spring | 1 | 15.42 |
| Thumbscrew | 1 | 28.71 |
| Tire | 3 | 3.13 |
| Valve | 1 | 1.56 |
| Washer | 9 | 49.46 |
| Total | 130 | 9,751.64 |

We have included rope and chain because these are tools in the sense that they were used to hook up or control draft animals or machinery for plowing, cultivation, or other farming activities.



Figure 21 — Singletree center clips and a horseshoe.

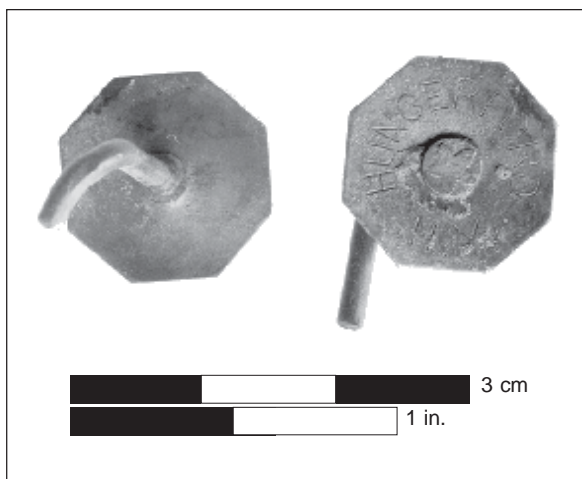


Figure 22 — Brass fasteners.

Table 9 — Tools and accessories.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|---------------|--------------|--------------------|
| Bale seal | 1 | 2.28 |
| Chain | 4 | 559.21 |
| File | 2 | 131.16 |
| Harrow point | 1 | 36.62 |
| Mattock | 1 | 414.50 |
| Metal banding | 18 | 408.13 |
| Rope | 5 | 64.29 |
| Total | 32 | 1,616.19 |

One cotton bale seal and eighteen pieces of steel banding or strapping were recovered. The bale seal measures 0.64 inches in diameter and is stamped with the number “326” (Figure 23). These objects represent either leftover material used in packaging bulky materials (e.g., cotton bales) for transport from the plantation or discarded packaging material from bulky goods and supplies brought to the plantation. The remaining objects in this subgroup are a fragment of a mattock and fragments of a bastard file (Figure 24).

STRUCTURES GROUP

Specimens relegated to this group (Table 10) constitute nearly 23 percent of the collection by count and 86 percent by weight (brick, brick bats, mortar, and plaster were not counted). For convenience in presentation, this group was divided into three subgroups: (1) structure elements or building materials, such as bricks, mortar, plaster, and build-

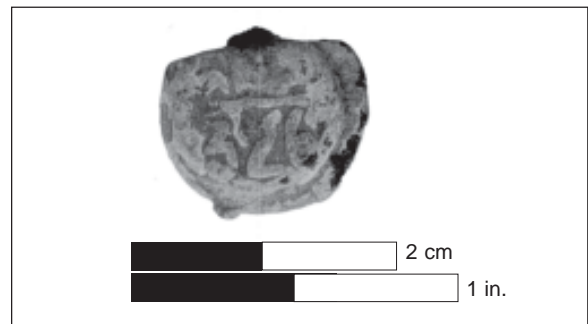


Figure 23 — Cotton bale seal.



Figure 24 — Mattock fragment and bastard file fragment.

Table 10 — Structures group.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|---------------------|--------------|--------------------|
| Structure elements | 4,075 | 279,783.60 |
| Electrical/plumbing | 11 | 409.49 |
| Furnishings | 401 | 1,674.08 |
| Total | 4,487 | 281,867.17 |

ing hardware (hinges, pintles, etc.); (2) electrical and plumbing systems; and (3) structure furnishings, including coal and other necessary or desirable accessories for daily life, such as clocks, mirrors, and lamps. This group was created for distributional studies to facilitate identifying locations of structures no longer extant at the park.

Structure Elements

As might be expected, this subgroup formed the bulk of the collection by weight. Brick, mortar, and plaster were not counted because such counts are meaningless in the present context. For example, three in situ bricks provide more information about

a structure's location than five times their weight of rubble. Instead, weights of these materials were recorded as a consistent and reliable measure of their distribution across the site. The items in this group (Table 11) comprise the intrinsic fabric of the structures at Magnolia Plantation. Besides bricks, mortar, and nails, the group contains roofing materials, including roofing nails with lead seals, door and shutter hinges and pintles, beams and boards, and window panes and screens.

Nails were identified as either wire or machine cut. The machine-cut nails ($n = 804$) post-date 1830 and are virtually indistinguishable from those made today (Nelson 1968). Wire nails ($n = 3,000$) gradually replaced machine-cut nails, but did not become the dominant type in use until the 1890s (Nelson 1968). None of the other items could be specifically ascribed to either the nineteenth or twentieth century.

Table 11 — Structure elements.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|---------------|--------------|--------------------|
| Beam | 1 | 195.40 |
| Board | 14 | 19.30 |
| Brick | 0 | 239,592.77 |
| Concrete | 1 | 1,260.00 |
| Flashing | 7 | 10.13 |
| Hinge | 2 | 255.45 |
| Mortar | 0 | 20,155.82 |
| Nail | 3,804 | 13,458.46 |
| Pintle | 2 | 106.64 |
| Plaster | 0 | 189.00 |
| Roofing nail | 19 | 40.10 |
| Roofing paper | 2 | 0.49 |
| Roofing tile | 2 | 3,177.10 |
| Screen | 3 | 0.65 |
| Screw | 5 | 58.55 |
| Shingle | 27 | 190.74 |
| Spike | 11 | 937.44 |
| Tile | 4 | 8.50 |
| Window pane | 171 | 127.06 |
| Total | 4,075 | 279,783.60 |

Table 12 — Electrical and plumbing systems.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|----------------------|--------------|--------------------|
| Electrical terminal | 1 | 57.55 |
| Fuse | 2 | 3.05 |
| Insulator | 2 | 52.48 |
| Light bulb | 3 | 11.59 |
| Pipe | 1 | 68.80 |
| Pipe fitting (union) | 2 | 216.02 |
| Total | 11 | 409.49 |

Electrical and Plumbing Systems

Because electricity was not available at Magnolia until after World War II, the eight electrical components in this subgroup (Table 12) provide evidence of structural renovation and improvements after the mid-1940s (Malone 1996:106). These components included two fuses, one glass insulator fragment, three light bulb fragments, and an electrical terminal. The most unique item in this subgroup is a glass insulator for a fuse that is embossed on the base with the words “Miller Fuse.” An attempt to identify the company was made by contacting the Electrical Products Sales Corporation (EPS), which has one of the largest inventories of terminals and fuses in the United States. A customer representative was unable to locate any information on this fuse.

Plumbing supplies consisted of a single piece of one-inch diameter galvanized pipe and two unions.

Structure Furnishings

This group of items relates to furnishings (or pieces of furnishings) commonly associated with domestic structures (Table 13). Therefore, it was no surprise to find remnants of dry-cell batteries, furniture tacks, gas or kerosene lamps, and mirrors. Two handles for tin buckets or pails were also assigned to this subgroup. These buckets may have been used to draw water from cisterns on the plantation. No specific chronological date could be determined for these handles.

Table 13 — Furnishings.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|------------------------|--------------|--------------------|
| Basket | 1 | 7.41 |
| Box cover, brass | 1 | 27.26 |
| Bucket handles | 2 | 50.97 |
| Clock part | 1 | 23.47 |
| Coal | 157 | 181.70 |
| Disk | 2 | 104.16 |
| Dry-cell battery | 11 | 28.87 |
| Furniture clasp | 1 | 1.57 |
| Lamp chimney fragments | 4 | 0.93 |
| Mirror | 33 | 66.90 |
| Ornament | 1 | 1.34 |
| Slag | 183 | 1,174.62 |
| Tack | 4 | 4.88 |
| Total | 401 | 1,674.08 |

The eleven cylindrical battery cores varied in size. No determination could be made regarding their specific use. They are probably remnants of household flashlights or battery packs for early radios. Also within this subgroup is a fragment consisting of a shaft with a cog that may have served as an internal adjustment for a large clock.

Other items listed in the furnishings subgroup include four colorless glass fragments. Their thickness and curvature is characteristic of the glass used for the chimneys of kerosene or gas “hurricane” lamps. Several shattered mirror fragments, four brass furniture tacks, a furniture clasp (Figure 25), a pin-hinged rectangular brass box cover (Figure 26), a possible fragment of an ornamental



Figure 25 — Furniture clasp.



Figure 26 — Hinged brass cover.

tin box, and a fragment of an ornamental pot metal basket were also placed in this subgroup. Coal and slag fragments were included because they are indicative of the use of a furnace for either the heating of a dwelling or the manufacture of objects, as within the blacksmith shop.

FOOD GROUP

Objects related to food were the most common items in the collection. They represented over 47 percent of the items counted. For convenience in presentation, this group (Table 14) was divided into four subgroups: (1) preparation, storage, and serving (cooking gear, mixing and serving bowls, table service); (2) procurement (because rifles and shotguns were used to procure game, components of the hunting system are included); (3) consumption; and (4) packaging.

Table 14 — Food group.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|--------------|--------------|--------------------|
| Preparation | 8,309 | 15,921.46 |
| Procurement | 19 | 93.39 |
| Consumption | 19 | 175.29 |
| Packaging | 1,028 | 4,072.36 |
| Total | 9,375 | 20,262.50 |

Food Preparation, Service, and Storage

Preparing, serving, and storing food required a variety of vessels, from which many fragments were found—clear reminders of the culinary arts practiced at Magnolia Plantation. In that many of the vessels represented by the sherds (Table 15) recovered from the testing could have served one, two, or all of these functions no attempt was made to further segregate them. However, some comments can be made about the vessel assemblage.

The ceramic vessel fragments are classified broadly into three categories based on paste vitrification: earthenware (including tin-enameled ware, pearlware, whiteware, and yellow ware), stoneware (including ironstone), and porcelain. Analytic separation into these categories was visual, with each category represented by one or more of the archeological ware types discussed herein. Ultraviolet light was used to enhance the visual identification and sorting of the refined earthenwares—pearlware, creamware, and whiteware. When exposed to ultraviolet light, these types fluoresce with different intensities (Mathews 1986). Glass is also discussed even though the fragments could not always be identified as vessels.

■ *Tin-Enameled Ware*

Tin-enameled wares are possible indicators of eighteenth-century occupation at Magnolia Plantation. This ware is typically distinguished from other wares by the characteristic flaking of its thick glaze on a porous, often buff-colored paste. The types of tin-enameled wares most often encoun-

Table 15 — Food preparation, storage, and serving vessel fragments.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|---------------------|--------------|--------------------|
| Ceramic | 1,895 | 4,346.95 |
| Glass | 5,349 | 9,628.81 |
| Glass, unidentified | 1,044 | 1,632.55 |
| Pan, cast iron | 1 | 272.60 |
| Plastic | 20 | 40.55 |
| Total | 8,309 | 15,921.46 |

tered on Colonial American archaeological sites are English delftwares, French faience, and Spanish or Italian majolicas. At Magnolia Plantation, only one fragment could be identified as possible delftware. Two other fragments were identified as tin-enameled, but could not be assigned to a specific type. These specimens may be comparable to the faience sherds recovered upriver at the Marie Tereze Coin-Coin and Pougier sites (Gregory, personal communication 1997).

■ *Creamware*

Creamware ceramics appeared on American sites by 1770 (Miller and Stone 1970:42–44). A refined earthenware, it is distinguished from later refined earthenware by a characteristic yellow- or green-colored pooling of glaze that collects in the crevices of the vessel (Noël Hume 1969:130). Twenty-

seven vessel fragments from the assemblage were identified as creamware. All were plain except for one fragment identified as mocha creamware. Mocha is the name given to ceramics exhibiting a fairly common seaweed-like motif (Figure 27). Used on creamwares, it was curiously first applied as a mixture of tobacco juice and urine (Noël Hume 1969:130).

■ *Pearlware*

Like creamware, pearlware is typically identified by the characteristic blue appearance of its glaze where it collects in vessel crevices. A pearlware fragment also has an overall bluish caste when compared with creamware or whiteware. Pearlware was introduced to the United States during the early 1780s and sold alongside creamware throughout the second decade of the nineteenth

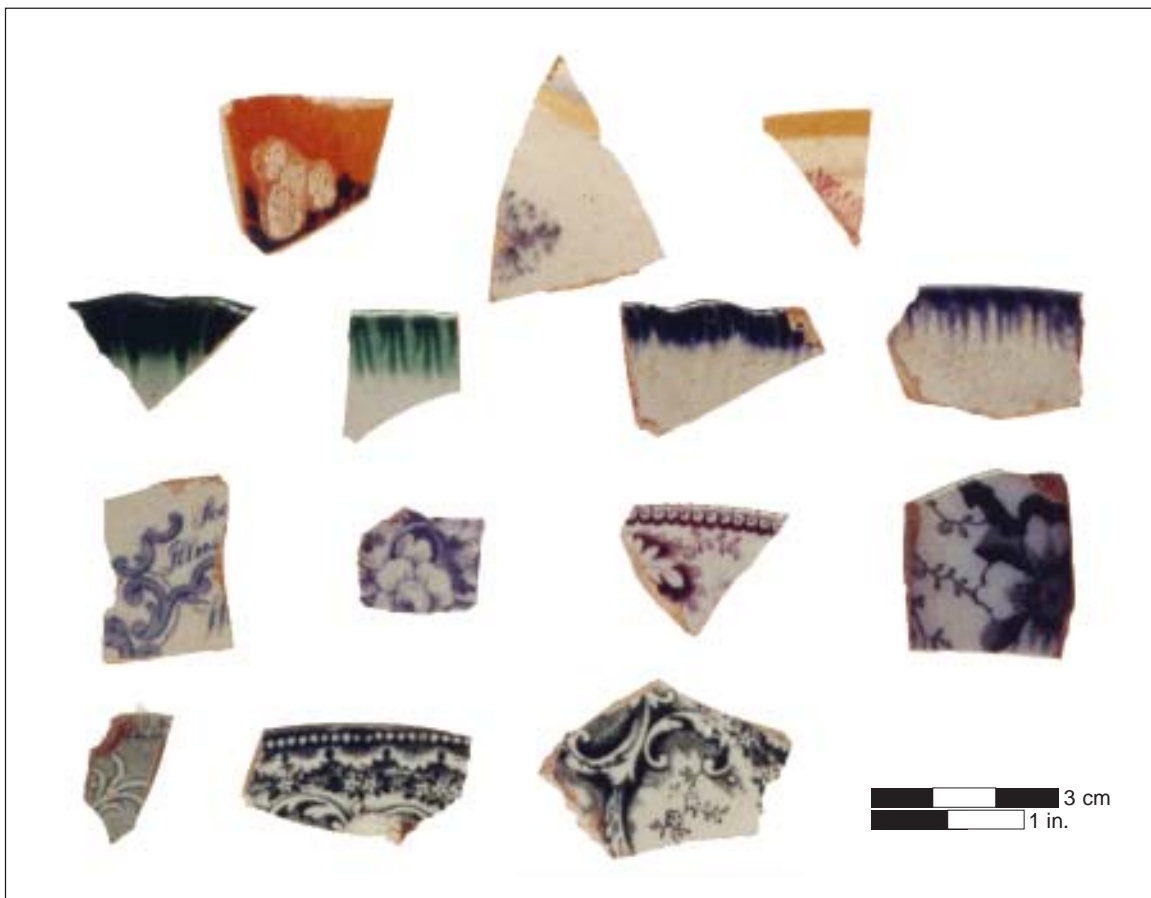


Figure 27 — Mocha creamware (row 1), shell-edged pearlware (row 2), and transfer printed whiteware (rows 3–4).

century (Noël Hume 1969:236; Price 1980:10). Most of the pearlware identified in the Magnolia Plantation ceramic assemblage is undecorated. Both green and blue shell-edged varieties were also identified (Figure 27). The seaweed-like motif appears on two fragments of pearlware in the collection. Six fragments are identified as annular wares, which include a variety of motifs from cat's-eyes to finger-painted "wormy" wares and various engine-turned specimens.

▪ **Whiteware and Ironstone**

Not surprisingly, the most ubiquitous vessel type identified within the Magnolia ceramic assemblage is whiteware (Figure 27). No attempt was made to distinguish whiteware from later ironstones, unless the specimen was clearly marked as such. Whiteware was first introduced as a new refined earthenware during the 1820s and continues to be manufactured today. Whiteware resulted from attempts by English potters to approximate the white appearance of costly imported Chinese porcelains. New feldspathic fluxes were discovered that enabled potters to virtually eliminate pooling of glaze colorants in the crevices of vessels. At Magnolia Plantation this ware type is, by far, the most varied in color, decoration, and technique used.

▪ **Yellow Ware**

Yellow ware was first imported from England in the latter half of the 1820s, mass produced in the United States by the 1840s, and declining in production by the turn of the century.

Liebowitz (1985) defines yellow ware produced in the United States as having a clear alkaline glaze. Within the assemblage, only two decorative varieties of yellow ware were identified: Rockingham and banded (Figure 28). Both are fairly common and probably indicative of occupation at Magnolia Plantation during the latter half of the nineteenth century.

▪ **Stoneware**

Stoneware is fired at a higher temperature than earthenware and may be of any natural color clay ranging from pure white to red-brown and gray (Greer 1981:14). The stoneware recovered from the auger testing program represents 5.6 percent of the total ceramic vessel fragment assemblage. No doubt, stoneware served a multitude of utilitarian storage purposes on the farm.

▪ **Porcelain**

Porcelain ceramic wares are extremely vitrified and translucent. They can be distinguished from other ceramic wares by a high-gloss glaze that

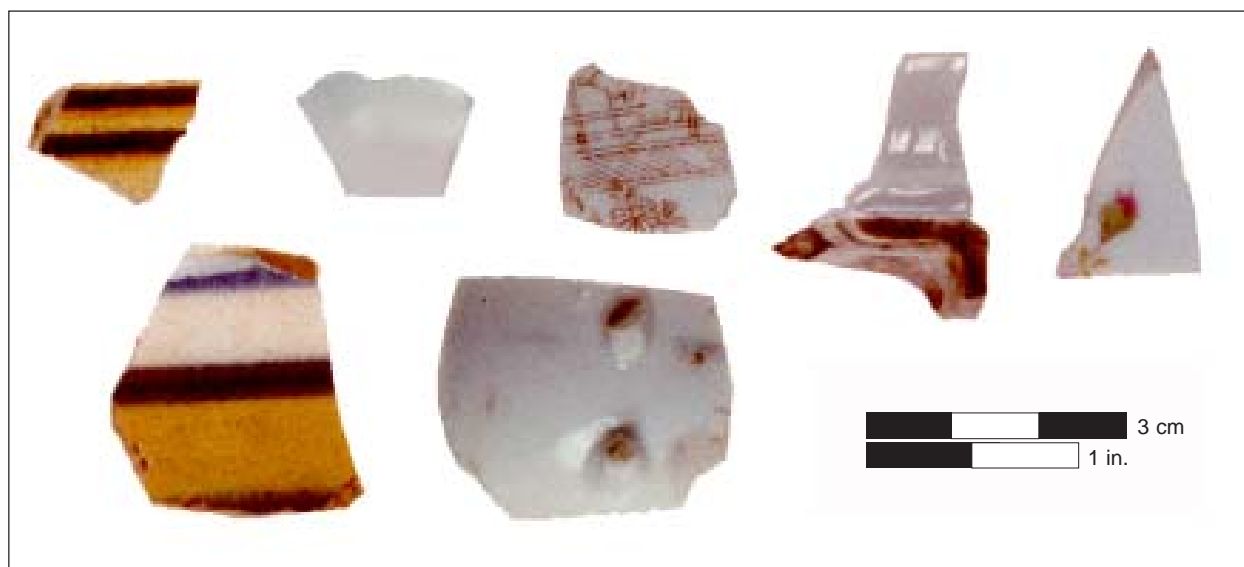


Figure 28 — Yellow ware (left), decorated porcelain, and a porcelain demitasse cup fragment.

does not flake (Noël Hume 1969:258). Porcelain was typically imported from Asia. Among early American archeological assemblages, it is often considered an indicator of the high status of those who used it. As porcelain became increasingly popular and available during the nineteenth century, it declined in quality (Noël Hume 1969:257). Most of the porcelain fragments in the ceramic assemblage are undecorated and probably represent more recent and readily available varieties. Decorated varieties are presented in Figure 28.

■ *Glass*

Unidentified glass fragments—most of which are probably related to preparation, storage, or serving—are tabulated in Table 16 by color, count, and weight. Table 17 tabulates definite glass vessel fragments by count and color. Although color is never the sole criteria for evaluating an entire glass vessel assemblage at a site, it is interesting to note that some colors are more likely to be

Table 16 — Distribution of unidentified glass fragments by color.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|---------------------|--------------|--------------------|
| Amber, light | 6 | 6.04 |
| Amber | 42 | 57.68 |
| Amber, dark | 1 | 0.21 |
| Black | 1 | 0.37 |
| Blue, light | 14 | 8.68 |
| Blue | 7 | 4.30 |
| Blue-green, light | 32 | 50.58 |
| Blue-green | 1 | 1.63 |
| Colorless | 807 | 1,258.85 |
| Copper-green, light | 1 | 0.24 |
| Green, light | 33 | 42.43 |
| Green | 60 | 121.47 |
| Green, dark | 2 | 0.86 |
| Solarized | 10 | 30.10 |
| White | 13 | 29.19 |
| Yellow, light | 2 | 1.77 |
| Indeterminate | 12 | 18.15 |
| Total | 1,044 | 1,632.55 |

associated with certain container functions. For instance, liquor and beer products are typically bottled in amber or green glass because traditionally, before pasteurization, these colors helped prevent the sun from breaking down the yeast as it fermented in the bottles.

Amber or brown glass was widely used after 1860 for beer and whiskey (Fike 1987:13). Black glass was mostly used for heavier stouts, ales, and wines prior to 1870; colorless and green glass had a general application after 1875; and milk glass was commonly used for medicines, toiletries, food, and specialty items from the 1890s to the 1960s (Fike 1987:13). Blue-green glass has had a general and

Table 17 — Distribution of vessel glass by color.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|---------------------|--------------|--------------------|
| Amber, light | 32 | 32.87 |
| Amber | 532 | 803.75 |
| Amber, dark | 196 | 750.72 |
| Black | 2 | .65 |
| Blue, light | 166 | 284.67 |
| Blue | 42 | 55.96 |
| Blue, dark | 15 | 24.08 |
| Blue-green, light | 115 | 216.66 |
| Blue-green | 16 | 28.24 |
| Blue-green, dark | 2 | 3.92 |
| Colorless | 3,744 | 6,206.12 |
| Copper-green, light | 41 | 38.43 |
| Copper-green | 20 | 31.20 |
| Copper-green, dark | 1 | 0.17 |
| Green, light | 97 | 255.63 |
| Green | 111 | 242.35 |
| Green, dark | 1 | 2.26 |
| Pink, light | 2 | 1.96 |
| Purple | 3 | 10.42 |
| Purple, dark | 2 | 2.09 |
| Red | 1 | 2.91 |
| Solarized | 143 | 486.68 |
| White | 38 | 67.36 |
| Yellow | 3 | 2.26 |
| Indeterminate | 24 | 77.45 |
| Total | 5,349 | 9,628.81 |

versatile application since the introduction of glass bottles (Fike 1987:13).

A notably large percentage of the glass assemblage is solarized. Solarized glass is amethyst in color resulting from a chemical reaction of manganese due to prolonged exposure to sunlight. This glass is an excellent temporal indicator because the supply of manganese to the United States was interrupted with the advent of World War I, and selenium immediately replaced manganese as the dominate decolorizing agent used in American glass manufacturing (Colcleaser 1967:19).

Food Procurement

Commissary rations, garden vegetables, pork, beef, chicken, and mutton—all available on the plantation at one time or another during its history—were supplemented with game and fish. Items in the food procurement group (Table 18) relate to the hunting activities of the plantation’s residents. While hunting and fishing may be viewed as recreational activities or sports, they were also a means of supplementing the regular diet.

Except for one possible gunflint (Figure 29), all the items identified within Magnolia’s material culture assemblage as relating to food procurement are components of ammunition. Three lead bullets were identified—a .38 caliber, a .32 caliber, and a 7.62 millimeter standard military issue. The presence of the military bullet and a military identification tag on the site, probably attests to the proximity of Fort Polk—a large military base and training facility. Most of the brass cartridge cases were identified as .22 caliber and probably

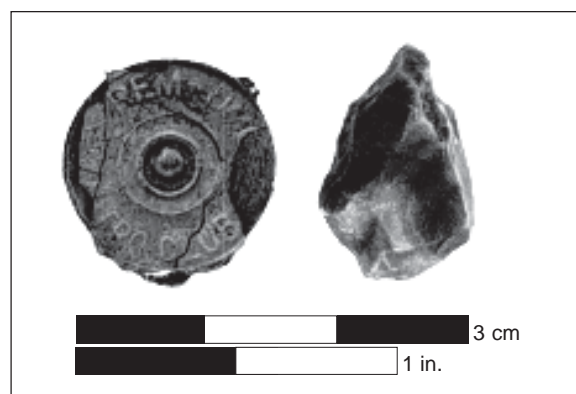


Figure 29 — Shotgun shell cap and possible gunflint.

used for hunting large fowl and small mammals, such as rabbits and squirrels. Also represented are one .45 caliber and three .38 caliber cartridges. These larger sizes are probably associated with recreational target practice on the plantation. Two shotgun shell fragments were also recovered. One shell was too corroded to determine the manufacturer, the other (Figure 29) was stamped “REM UMC”, “16”, and “Nitro Club”.

Food Consumption

Table 19 illustrates the items in this category, which include a cup, knives, forks, and other implements related to eating or drinking. Although other items, such as the vessel fragments listed in Table 15, might have been included here, this arrangement seemed appropriate since distribution studies (see Chapter 5) were based on group memberships.

Table 18 — Food procurement.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|-----------------|--------------|--------------------|
| Bullet | 3 | 29.56 |
| Case, cartridge | 11 | 27.72 |
| Gunflint | 1 | 2.10 |
| Shell, shotgun | 2 | 5.87 |
| Shot | 2 | 28.14 |
| Total | 19 | 93.39 |

Table 19 — Food consumption.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|---------------|--------------|--------------------|
| Demitasse cup | 1 | 6.73 |
| Fork | 6 | 35.71 |
| Knife | 2 | 83.29 |
| Pull-top | 8 | 4.15 |
| Soup spoon | 1 | 14.92 |
| Trivet | 1 | 30.49 |
| Total | 19 | 175.29 |



Figure 30 — Cutlery.

Nineteen items were assigned to the food consumption group. Most can be directly linked with eating or drinking, although these too could have been included with the food preparation group. Of particular note in this group is a single incomplete porcelain demitasse cup (see Figure 28). The vessel is undecorated and does not appear to be from an expensive set. In general, the cutlery (Figure 30) and other utensils assigned to this group are inexpensive having been made primarily of plated metals.

Food Packaging

This subgroup (Table 20) contains items that can be directly linked to the storage or packaging and containerizing of foodstuff and beverages. Although more than three thousand metal fragments were found, many were likely from tinned goods. Because tin cans could have stored other materials, these items have not been included here.

Two amber glass fragments were identified as fragments of two beer bottles. One is embossed with the letters “bot...” on its base; the base of the

Table 20 — Food packaging.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|--------------------|--------------|--------------------|
| Bottle | 168 | 1,286.12 |
| Bottle, beer | 3 | 108.73 |
| Bottle, liquor | 2 | 6.43 |
| Bottle, soft drink | 72 | 329.66 |
| Bottle, wine | 460 | 1,177.28 |
| Can | 214 | 590.71 |
| Cap | 9 | 47.95 |
| Cap, bottle | 65 | 26.40 |
| Foil | 10 | 2.64 |
| Jar | 4 | 179.54 |
| Key, can | 1 | 2.79 |
| Lid | 1 | 68.81 |
| Liner, lid | 13 | 15.06 |
| Scrap | 3 | 224.09 |
| Seal, jar lid | 2 | 6.13 |
| Wrapper | 1 | 0.02 |
| Total | 1,028 | 4,072.36 |



Figure 31 — Coca Cola bottle fragments, a Faygo bottle cap, and an enameled pop bottle fragment.

other is embossed “R & Co.” The name of the latter company is known to have appeared on amber export beer bottles dating from 1880 to 1900 (Toulouse 1971:439). The other fragment is similar to the glass from modern amber beer bottles. Interestingly, there are relatively more wine than beer bottle fragments—perhaps a reminder of the French heritage of the Rivière aux Cannes.

Soda pop was a popular beverage at Magnolia Plantation judging by the number of bottle fragments recovered. A modern colorless soda bottle rim with an aluminum screw top that reads “Faygo” was recovered (Figure 31). Another clear glass vessel fragment (Figure 31) is enameled with a red and white banner reading “...Beve...” (Beverage). The specific manufacturer could not be determined. Sixty-nine fragments representing one Coca-Cola bottle are also included in this group (Figure 31). The bottle dates to the twentieth century and was manufactured by the Natchitoches Bottling Company.

Other items categorized as food packaging are various wine bottle fragments, bottle caps, jars, lid liners, and other canning elements. The majority of these items are not temporally diagnostic.

CLOTHING GROUP

This group (Table 21) consists of items associated with wearing apparel, such as buttons, buckles, snap fasteners, and zippers, as well as remnants of shoes and cloth. The items could have been associated with domestic structures, however, for distribution studies, it seemed wiser to group them separately as they could have also been discarded in trash dumps, lost in the fields during the workday, or otherwise misplaced.

Most of the items in this group are buttons. A total of forty-four buttons were identified in the assemblage. Buttons are listed by material type in Table 22. Only the iron and brass buttons have either company names or trademarks molded or stamped on them (Figure 32). One backing to a brass button is stamped “Scovill & Co.” Buttons with this name were probably manufactured between 1840 and 1850 (Luscomb 1967:174). Although the iron buttons are heavily corroded, three could be read after several hours of cleaning in an

Table 21 — Clothing.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|----------------|--------------|--------------------|
| Buckle | 2 | 15.49 |
| Buckle, belt | 2 | 59.81 |
| Buckle, shoe | 1 | 2.02 |
| Button | 44 | 48.75 |
| Cloth fragment | 1 | 0.35 |
| Clothespin | 4 | 16.14 |
| Glove | 4 | 41.36 |
| Grommet | 11 | 3.00 |
| Leather | 1 | 1.87 |
| Shoe | 22 | 127.29 |
| Snap, fastener | 4 | 3.99 |
| Zipper | 4 | 8.60 |
| Total | 100 | 328.67 |

Table 22 — Buttons by material type.

| <i>Item</i> | <i>Count</i> |
|-------------|--------------|
| Aluminum | 1 |
| Bone | 3 |
| Brass | 5 |
| Glass | 6 |
| Iron | 11 |
| Plastic | 12 |
| Porcelain | 3 |
| Shell | 2 |
| Unknown | 1 |
| Total | 44 |

ultrasonic tank. One of these reads “Panama” over the word “Mobile”. It could not be determined whether this refers to a military campaign or if the button is associated with a southern railroad line. Another iron button appears to be molded with the letters “CORLS BOSS”. Research on this button garnered no specific information. A third iron button reads “Wrangler” on its face, no doubt the remains of the popular jeans typically worn by many southern farmers.



Figure 32 — Buttons.

PERSONAL GROUP

Items included in this group (Table 23) are primarily personal property, although actual ownership or use may have been shared. If so, sharing would have been within the same household. Medicine, toiletry bottles, and other items related to grooming or hygiene are represented in this group, as are objects of education, recreation, entertainment or pleasures, and coinage.

One complete bottle and several bottle fragments are included in this group. Many of the fragments had the characteristic embossing and paneled attributes typically associated with patent medicines, which, from 1850 to 1950, were not subject to government scrutiny and thus widely available (Fike 1987:3). Unfortunately, none of the

Table 23 — Personal items.

| <i>Item</i> | <i>Count</i> | <i>Weight (gr)</i> |
|------------------------|--------------|--------------------|
| Ball | 1 | 52.58 |
| Bead | 3 | 1.48 |
| Bottle, medicine | 7 | 344.93 |
| Bottle, toilet | 14 | 21.55 |
| Brooch | 1 | 3.74 |
| Coin | 4 | 14.54 |
| Comb | 2 | 1.34 |
| Eraser, pencil | 3 | 2.07 |
| Harmonica | 1 | 1.19 |
| Label | 3 | 1.10 |
| Marble | 3 | 21.61 |
| Pencil, slate | 1 | 0.76 |
| Pipe, tobacco | 20 | 30.97 |
| Tag, GI identification | 1 | 4.67 |
| Token, tax | 2 | 1.84 |
| Toothbrush | 1 | 0.48 |
| Watch, pocket | 3 | 6.96 |
| Writing slate | 18 | 21.72 |
| Total | 88 | 533.53 |

fragments retained enough lettering to determine the product or manufacturer. Only the complete bottle (Figure 33) could be identified. Aqua in color with six side panels, the bottle is embossed “PEPTO-MANGAN GUDE” on the side and “Dr. A Gude & Co” on the base. According to Fike (1987:176), the product was first introduced in 1891. Through research, we learned of the ingredients of Dr. Gude’s tonics from the wording on some product labels, which read:

GUDE’S PEPTO-MANGAN, Neutral Organic Compound. Alcohol 16%. A Combination of the Peptonates of Iron and Manganese in Palatable, Easily Digested Form. A Stimulant and Tonic.

We have speculated that the World War II military identification tag (dog tag) (Figure 34) may represent evidence of the war games played in the Natchitoches area by General George Patton’s



Figure 33 — Patent medicine bottle.



Figure 34 — Dog tag.

Third Army prior to the Allies’ European invasion. However, it is more likely that this is an identification tag for a military dependent or civilian employee of the Department of Defense.

Because of the *terminus post quem* implications of the coins, they deserve additional com-

ment. Of the two U.S. pennies, one was minted in 1964, the other in 1989. One of the two U.S. nickels was minted in 1954. The date on the second, a Jefferson nickel, was illegible. However, the Jefferson nickel, which is still issued today, was introduced in 1938. All of the coins except the 1989 penny were probably lost by the residents of the quarters.

Aluminum sales tax tokens were used in several southern states from the mid-1930s until 1942 when aluminum was reserved for the war effort. The tokens could be purchased in 1, 1.5, 2, and 5 mil denominations. Two Louisiana 1 mil sales tax tokens (Figure 35) were found at Magnolia. Because of their recent age, the coins and tax tokens, unfortunately, tell us nothing about the earlier history of the plantation.

A woman's brooch (Figure 36), made of pot metal and set with white glass, is an example of personal adornment. Three pieces of what appears to be parts of a pocket watch measuring 3.5 centimeters in diameter (Figure 37) were recovered from the same auger test.

FAUNA AND FLORA GROUP

Nineteen taxonomic groupings for faunal and floral material were identified at Magnolia Plantation (Table 24). Most of this material was too fragmentary to assign to a specific taxon. Unidentified animal bone represented 82.61 percent of the collection by count, and unidentified plants accounted for 1.45 percent.

The sample of biological material is so small and fragmentary and the context so broad that it has limited value for drawing conclusions about the use of animals whether for labor (horses and mules) or consumption. However, note that both domestic animals and wild game, along with fish and turtle, are present in the collection. Clearly, pork, beef, and poultry (chicken bones are surely present among the unidentified bird remains) were raised and consumed by the residents of the plantation. Deer, rabbit, and raccoon also apparently contributed to the diet. We speculate that many of the species represented in our limited collection were prepared as stews for consumption at the slave village.



Figure 35 — A 1 mil Louisiana tax token.

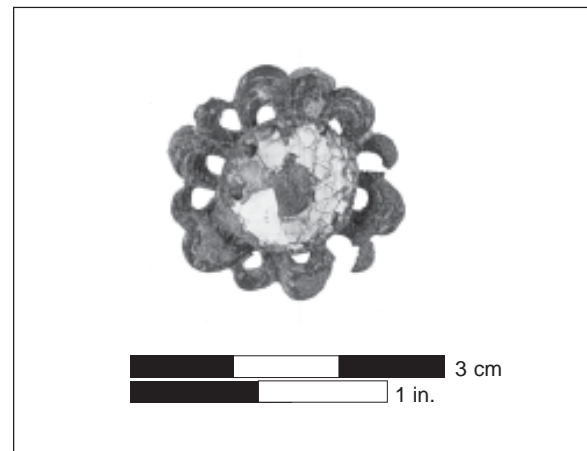


Figure 36 — Woman's brooch.



Figure 37 — Pocket watch parts.

Table 24 — Faunal and floral remains.

| <i>Taxon</i> | <i>Common Name</i> | <i>Count</i> | <i>Weight (gr)</i> | <i>% Count</i> |
|----------------|--------------------|--------------|--------------------|----------------|
| Animals | | | | |
| Animalia | Unidentified | 29 | 11.57 | 2.63 |
| Mammalia | Unidentified | 883 | 1,664.32 | 79.98 |
| Equidae | Horse | 3 | 6.87 | 0.27 |
| Bovidae | Cow | 10 | 296.58 | 0.91 |
| Suidae | Pigs | 35 | 143.67 | 3.17 |
| Cervidae | Deer | 6 | 10.11 | 0.54 |
| Procyonidae | Raccoon | 1 | 1.45 | 0.09 |
| Leporidae | Hares, rabbits | 2 | 0.02 | 0.18 |
| Aves | Birds | 17 | 11.04 | 1.54 |
| Meleagrididae | Turkey | 1 | 0.75 | 0.09 |
| Reptilia | | | | |
| Testudinidae | Tortoises | 33 | 23.13 | 2.99 |
| Trionychidae | Soft shell turtles | 3 | 1.26 | 0.27 |
| Emydidae | Box turtles | 1 | 4.07 | 0.09 |
| Kinosternidae | Mud turtles | 2 | 1.90 | 0.18 |
| Osteichthyes | Bony fish | 7 | 5.68 | 0.63 |
| Sciaenidae | Drums | 2 | 1.15 | 0.18 |
| Ictaluridae | Freshwater catfish | 2 | 1.58 | 0.18 |
| Lepisosteidae | Gar | 35 | 8.32 | 3.17 |
| Bivalvia | Bivalves | 11 | 14.98 | 1.00 |
| Gastropoda | Snails | 5 | 0.12 | 0.45 |
| Subtotal | | 1,088 | 2,208.57 | 98.55 |
| Plants | | | | |
| Plantae | Plants | 16 | 2.58 | 1.45 |
| TOTAL | | 1,104 | 2,211.15 | 100.00 |

SUMMARY

This chapter discussed the variety, size, and complexity of the collection recovered from the intensive fieldwork. Investigations were guided by the need to better understand the archeological resources on the eighteen acres of land now owned by the National Park Service. A major goal was to relate archeological findings to documented structures on the plantation and activities known to have taken place there. Another goal was to gather

enough data through these studies to develop plans for future archeological investigations at the park.

The analysis of recovered materials has in no way been exhaustive and complete. Much can and will be learned from additional data manipulation. The way in which the materials were recovered from the auger holes did not provide adequate control for temporal studies. Nonetheless, as shown in the following chapter, the collection can be used to identify, in a general sense, internal chronological events and patterns in the plantation's history.