

Hidden Treasures: Discovering Artifacts in Rats' Nests



**Kymberly Mattern
Student Conservation Report
Conservation Science
HP810/HPSV 810
Frances Ford and Richard Marks
April 2016**

Table of Contents

List of Illustrations	3
Introduction	4
Literary Review	5
History	16
General Physical Account of Rat's Nest at the Aiken-Rhett House	24
Methodology	27
Findings.....	29
Values	32
Limitations and Recommendations	33
Conclusion	34
Works Cited	35
Appendix A: Inventory of Artifacts that Provide Information on Building Materials	37
Appendix B: Inventory of Artifacts that Provide Information on People	63

List of Illustrations

Cover Photograph of a Rat’s Nest	1
Courtesy of Historic Charleston Foundation	
Photograph of the Location of the Rat’s Nest in the Aiken-Rhett House Kitchen.....	25
Courtesy of Historic Charleston Foundation	
Photograph of the Rat’s Nest Removal from the Aiken-Rhett House Kitchen.....	25
Courtesy of Historic Charleston Foundation	
Photograph of the Rat’s Nest being Sifted Through by a Student.....	25
Courtesy of Historic Charleston Foundation	
Photograph of the Rat’s Nest at the Beginning of the Case Study.....	26
Taken by Kymberly Mattern	
Photograph of the Objects in the Rat’s Nest at the Beginning of the Case Study.....	26
Taken by Kymberly Mattern	
Photograph of Sorting Artifacts by Hand.....	27
Taken by Kymberly Mattern	
Photograph of Archaeological Sifting Screen.....	27
Taken by Kymberly Mattern	
Photograph of Archival Boxes.....	28
Taken by Kymberly Mattern	

Introduction

“Dirty,” “pests,” “scavengers,” and “disgusting” are four words that come to mind when most people see or think of a rat. What people do not typically think of when they see a rat is how rats’ nests can provide information about the past. Some rats’ nests can be occupied for a short duration of time by one rat family, while many other rats’ nests are utilized for a longer duration of time by many generations of rats because rats tend to live in multigenerational family groups, which can extend indefinitely over time.¹ Since many rats’ nests have been used over a period of many years, the materials found in a rats’ nest can provide insight on part of the history of a place, how the place may have evolved in function and architecturally over time, and the people who interacted with the place. The materials found in rats’ nests that have been occupied for only a short amount of time can also provide insight on the history of that place and the people who used that place during that particular period of time.²

A rat’s nest, which was found in one of the out buildings at the Aiken-Rhett House in 2011, will be utilized as a case study to explore how rats’ nests can contribute to understanding the history of places, buildings, and people. The case study will address the question “is there a protocol for documenting and sifting through a rat’s nest” by following a procedure that involves separating the materials in the nest, documenting key artifacts through photographs and notes, and archiving the materials. The goal of the case study is illustrate how finding and identifying objects that are found in a rat’s nest can contribute to understanding the history of a particular place. The limitations of this case study will be discussed, and the values, limitations, and

¹ Travis McDonald. "Rat Housing in Middle Virginia: The Diffusion of Everyday Life." *Perspectives in Vernacular Architecture* 10 (2005): 169-84.

² The artifacts in a rats’ nest can help give an approximate time frame of the rats’ nest. For example, newspaper scraps or patterns on textiles or wallpaper can be used to help give an approximate date that the rats’ nest was occupied.

recommendations should be taken into consideration when documenting and sifting through other rats' nests.

Literary Review

Rats

There are about 120 different species of rats, but black rats (*Ratus ratus*) and brown rats (*Ratus norvegicus*) are the best known species.³ A rat's nests is comprised of natural materials and household artifacts, whereas mice nests contain smaller pieces of nesting materials without household artifacts. Most of the objects found in rats' nests are found within close proximity to their nests. However, rats can range 100 to 150 feet from their nest if they are forced to find food or water. Rats' nests are segregated into different chambers (typically three to four), and each chamber serves as either a place to eat, sleep, or dispose of bodily wastes.⁴

Rats are nocturnal and eat animals, fish, grains, vegetables, and fruits and nuts. They hoard food, and eat it in private. Rats will gnaw to keep their front incisors from growing too long, and they have a strong sense of smell and taste. Rats are disliked by many people because they destroy food supplies, spread diseases, attack and bite people, and cause other types of destruction.⁵

Black rats are originally from southern Asia. In circa 1775, they came to the United States. The black rat is an average of seven to eight inches long, and weighs an average of ten ounces. They live in societal groups with dominant members and are described as aggressive, omnivorous, adaptable, and prolific. Black rats reach sexual maturity at two to three months of age, have six to ten pups per litter, and have three to six litters per year. The mortality rate is

³ McDonald, 168-184.

⁴ Ibid.

⁵ Ibid.

twenty surviving pups a year, and they have a one to three year lifespan. Black rats live in higher reaches such as attics, walls, and ceilings, while brown rats live closer to the ground in ground burrows. However, if brown rats are not present, then black rats' nests can be found in both higher and lower areas.⁶

The material found in rats' nests has the potential to contribute to the broad interpretive and multidisciplinary goals used in explaining human culture. Rats' nests found inside structures used by humans can yield cultural artifacts from and about the human society that produced and used the artifacts. Rats' nests can also offer a glimpse on the day-to-day life of humans.⁷

Rats' Nests

In the 1980's, a rat's nest was discovered in the attic above the Great Hall at Stratford Hall. This rats' nest dates back to the 18th century. The rat, believed to be a black rat, collected scraps of fabric, glass, nails, animal bones, a pewter button, and possibly ceramics. The staff at Stratford Hall catalogued the artifacts, took photographs, recorded measurements, and wrote written descriptions.⁸

In 1994, a pack rat's nest was found in Reno, Nevada that dates back to about 38,000 years ago. The nest was found relatively intact and preserved, possibly due to the dry climate in Nevada and/or rodent urine. Peter Wigand, a paleoecologist, argues that rodent nests can provide a detailed look at environmental history. Since rats will sometimes occupy and build onto pre-existing nests, the contents of the nest can offer insight on the abundance and disappearance of vegetation and water over time in a particular place.⁹

⁶ Ibid.

⁷ Ibid.

⁸ "A Real Rat's Nest." Stratford Hall. Accessed February 18, 2016. <http://www.stratfordhall.org/a-real-rats-nest/>.

⁹ "Prehistoric Rat Aids Modern Study : Science: The Preserved Nests of 38,000-year-old Rodents Have Been Found in Nevada. Scientists Are Using Them for Insight into Environmental Evolution." Los Angeles Times. July 32,

The elevation where the nest was found was marked, so scientists could determine what the climate might have been, based from the vegetation that was used in the nest. The nest was soaked and then strained through sieves. Scientists used tweezers to maneuver and separate the materials under a microscope. Arrowheads, twine, animal feces, tick heads, and fish scales were materials found in the nest.¹⁰

Travis McDonald argues that the artifacts found in a black rat's nest provide insight into the everyday life of the house such as what people ate, wore, read, bought, made, the games they play, how they furnished their house, the architectural finishes to their house, the crops they grew, the food they bought, and their habits. He identified ceramics, metal, cloth, food, leather, paper, wood, glass, and bones as the most common artifacts found in rats nests. McDonald points out that the context of a nest is important because most of the objects used in the nest were found within close proximity to the nest. McDonald recommends examining the nest to be sure that the nest is a rat's nest and not a mouse nest or bird's nest.¹¹

According to McDonald's methodology, sections of the nest should be surveyed at a time, and the sections should be a logical division of units. The nest should be spread out in a linear sequence as it was found to determine if the internal segregation of materials can help indicate functional uses and spaces of the nest. McDonald's process of examining the nest is: surveying, mapping, grid recordation, separation, cleaning, and cataloging. He suggests that materials should be collected in bags. Artifacts can be grouped into the categories of: paper, fabric, wood, metal, and miscellaneous objects. Non-artifact materials, which were not made by

1994. Accessed February 18, 2016.

http://articles.latimes.com/1994-07-31/local/me-21894_1_rat-nest.

¹⁰ Ibid.

¹¹ McDonald, "Rat Housing in Middle Virginia." 169-84

man, can be grouped into wood, food, natural material, and miscellaneous categories. Paper can provide absolute dating for the nest. However, paper's stratigraphic inference is threatened by the use and reuse of nesting materials in multigenerational family groups overtime. Fabrics are able to be dated by their style, material, and technology. McDonald also recommends looking through account books and letters to see if there are any references to the artifacts that were found to help date the artifacts and the nest. Fabric, string, rope, and other natural materials are used for structural support and the bedding chamber. Places where food is found in the nest indicate where the rats ate. Wooden objects were used for gnawing or served structural purposes for the nest. Metal was also used for gnawing. The use of glass and stones in the nest is unknown.¹²

Textiles

The Missouri Historical Society offered advice about preserving and archiving textiles and fabrics. The Missouri Historical Society recommends controlling the exposure of textiles to light, dust, insects, humidity, temperature extremes, mildew, molds, acids, rust, and stress in order to minimize the natural aging process of textiles. Items should be cleaned, and aging textiles should be cleaned with caution. Cleaning fluids with minimal agitations and heat should be used. Starch and finishing agents should be avoided because they can attract pests. Textiles can also be cleaned by gently vacuuming (using an up and down motion) the textile under a cloth-bound fiberglass screen.¹³

¹² Ibid.

¹³ Missouri Historical Society. "Preserving Your Treasures-Care and Storage Methods for Clothing and Textiles." *Missouri Historical Society*, 2006. Accessed February 18, 2016.
http://www.mohistory.org/img/unCommonThreadsSite/preserving_treasures.pdf.

While in storage, the temperature and humidity should be maintained. All items should be labeled and photographed. The label should include the date the object was packaged for storage. Textiles should be stored flat, with as few folds as possible. Airtight containers are not recommended for storing textiles because that can cause mold growth. Wood products contain oils and acids that can lead to fabric deterioration, so if the textile is stored in a wood container, the container should be lined with non-buffered acid free and lignin free tissue paper, 100% cotton sheets, or washed, unbleached muslin. Colored tissue paper should not be used because the dyes can migrate into the fabrics. Buttons should be wrapped in non-buffered acid and lignin free tissue paper or polyethylene Ziplock bags. Attics and basements are not sufficient storage areas because the temperature and humidity cause the fibers to expand and contract, which can result in abrasion, wear, and breakage. The textiles should avoid exposure to direct sunlight while in storage. Finally, the textiles should also be examined annually to check for insects, mildew, and mold.¹⁴

Museum Textile Services has a slightly different approach to preserving textiles. Museum Textile Services believes that it is best to use the same pH-neutral materials to archive all items. The most common and most economical wrapping material is acid-free unbuffered tissue paper, but Japanese tissue, Photo-Tex tissues, washed and un-dyed cotton fabric, sheeting, archival polyester padding, Ethafoam, Volara, or specialty wrappings such as Remay, Tyvek, and Holeyex are also sufficient. A layer of tissue should be used to separate multiple items. A large piece of tissue should be placed first in every storage box, and folded over the top of the contents before a lid is put on the storage container. Archival plastic boxes are good for long-term storage

¹⁴ Ibid.

because they do not contain additives and do not re-acidify over time. Additionally, they are pest proof, water resistant, and can protect textiles from smoke and soot. Acid free and lignin free cardboard boxes are less pest proof, susceptible to moisture, hard to clean, and are easily crushed. Wool and silk should be stored in archival boxes, and cotton and linen textiles should be stored in archival plastic boxes.¹⁵

According to the American Institute of Conservation and Artistic Works (AIC), inappropriate lighting, improper temperature and relative humidity levels, excessive dirt, dust, and other pollutants, insects, mold and mildew, and incorrect handling are agents of deterioration for textiles. Lighting can fade the color and can cause permanent damage to textiles. High temperatures can speed up the rate of chemical reactions, which speeds up the rate of deterioration, so textiles should be stored away from heat sources. Attics and basements are not good places to store textiles. Fluctuations in temperature and humidity can cause textile materials to expand or contract as they absorb or lose moisture. Other problems that result from high temperature and humidity are mold and mildew, the corrosion of metals, and dyes that bleed. Relative humidity is best between 35% and 65% for storing textiles.¹⁶

Textiles are susceptible to abrasion and physical damage that is caused by dust and surface soiling. AIC recommends using particulate air filters and protective display and storage enclosure for textiles. Textiles are best preserved when placed in clean, well-ventilated areas that are routinely maintained. Dust and other clutter should be minimized because it reduces the possibility of being damaged by rodents, insects, molds, and fungi. Textiles should also be

¹⁵ Museum Textile Services. "Choosing the Best Storage Materials." *Press Release*.

http://www.museumtextiles.com/uploads/7/8/9/0/7890082/choosing_storage_materials.pdf.

¹⁶ American Institute for Conservation of Historic and Artistic Works. "Caring For Your Treasures: Textiles." *Caring For Your Treasures*.

<http://www.conservation-us.org/docs/default-source/public-relations/caring-for-your-treasures-textiles.pdf?sfvrsn=2>.

inspected regularly so problems can be detected early on. Textile discoloration, tarnishing of metal components, and a musty odor are indicators of deterioration. Small, irregularly shaped holes and insects encasings or excrement are signs of insect infestations.¹⁷

Vacuuming can reduce the amount of dust a textile is exposed to. Low suctioning is recommended, and vacuuming should be done with an up and down motion over a protective sheet of flexible plastic screening. Dusting lightly with a soft brush into a modified low-suction vacuum nozzle is another approach to vacuuming.¹⁸

When handling textiles, it is important to find out where the weak spots are on the artifact. The textiles should be handled with clean hands, and the use of white cotton gloves is suggested.¹⁹

Barrier films, acid-free buffered mat boards and paperboards, rolling tubes, and storage boxes are the best materials to use when storing textiles.²⁰

Paper

In *An Ounce of Preservation: A Guide to the Care of Papers and Photographs*, Craig Tuttle offered insight on preserving paper-based artifacts. Tuttle recommends that documents be placed in a pH balanced file folder and stored in pH balanced document boxes that are lignin-free and contain a buffer of calcium carbonate to retard the migration of acid. The use of boxes protects paper from fungi, pollutants, and light. Paper should be handled with clean hands, and it should not be folded or rolled. Plastiklips can be utilized to attach documents instead of using paper clips, string, or rubber bands. If a document needs to be cleaned, a cleaning pad that

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

removes surface dirt should be used. However, the cleaning pad should not be used on fragile documents or photographic materials. The pad should be squeezed so power falls on the affected area, and the residue should be removed using a soft-haired brush. Commercial erasers should never be used.²¹

According to the National Archives, paper artifacts should be stored at low temperatures because cooler temperatures slow the rate of deterioration. 75 degrees Fahrenheit is an ideal temperature for storing papers. The relative humidity should be below 65% to prevent mold grown and insects. However, the relative humidity should be above 15% because it can cause brittleness. The paper artifacts should not be stored in attics, basements, or garages. A shelf is an ideal location for storage. A box with folds that fit inside the box or a document box with spacer boards should be used. Paper can also be stored in a polyester L sleeve. Only one item should be placed in the sleeve. Rubber bands, rubber cement, poor quality glue, synthetic glue, pressure sensitive tape, non-stainless steel paperclips and staples, unknown plastics, and polyvinyl chloride plastics should be avoided.²²

The American Institute for Conservation of Historic and Artistic Works has slightly different guidelines for storing paper artifacts. Paper artifacts should be handled as little and gently as possible, and they should be handled with clean hands. Folders can be used to organize the artifacts, and the artifacts can be placed in polyester sleeves for added protection. Mats, folders, and storage boxes can be used for storing paper artifacts if they are made out of cotton or 100% chemically purified wood pulp with an alkali reserve that is equivalent to 2% calcium

²¹ Craig A. Tuttle. *An Ounce of Preservation: A Guide to the Care of Papers and Photographs*. Highland City, FL: Rainbow Books, 1995.

²² National Archives. "Storing Family Papers and Photographs."
<https://www.archives.gov/preservation/family-archives/storing.html>.

carbonate and buffered to a PH of 7.5 to 10. Paper artifacts in good condition may be stored in groups in a folder. Newsprint and other acidic papers should be stored separately. Individual enclosures are the best place of storage for damaged and fragile items. The most recommended method is to store documents in folders within containers made of durable materials.²³

Exposure to light can cause fading, can yellow or darken the paper, and can weaken the paper. Ultraviolet light is particularly damaging to paper. Therefore, the paper artifact's exposure to light should be minimized. Paper should also be stored in a cool and dry environment because warm and moist environments can lead to mold growth and insect activity. The storage temperature should be below 72 degrees Fahrenheit, and the relative humidity should be between 30% to 50%. The temperature and relative humidity should remain constant because, if it is not, then the paper can expand and contract, which can weaken the paper or cause distortions. To protect paper fully, each artifact should be enclosed.²⁴

In the Miles Brewton House, a rat's nest was discovered in the 1990's that contained scraps of wallpaper that were part of the gilt moshee borders in the wallpaper design. The nest was found behind a column on the hall side of a door to the second floor drawing room, or ballroom. There were many small (less than one inch) shreds of gilded material found in the nest, which were saved because they were believed to be the only surviving remains of the wallpaper in the room. Optical microscopy was utilized to examine the scraps. The optical microscopy revealed that the wallpaper was composed of short-fibered linen and cotton rag pulp, and that the wallpaper was built up in layers of negative or intaglio molds. Under ultraviolet illumination, the wallpaper revealed fluorescence, indicating that the paper was waterproofed or had hardened

²³ American Institute for Conservation of Historic and Artistic Works. "Caring For Your Treasures: Paper" Caring For Your Treasures. <http://www.conservation-us.org/docs/default-source/public-relations/paper.pdf?sfvrsn=2>.

²⁴ Ibid.

with linseed oil. The shreds of wallpaper were laid out in an organized way to analyze the design of the wallpaper and to join the pieces together. The shreds were mechanically cleaned in order to remove large encrustations. Pieces were joined together with a 50% (w/v) resin solution in acetone, and fragile pieces were consolidated before joined with a 20% (w/v) solution of B72 in toluene. The joints were reinforced with small pieces of Japanese paper, which was adhered with Rhoplex A.C. 33. A few areas of the wallpaper were bridged with paper and Rhoplex to fill in the missing parts. A fill was then built up on top of the wallpaper using Polyfix. Lastly, the surfaces of the wall paper were cleaned with ethanol. The larger repaired border section and several additional pieces that did not make contiguous joints were stored in a box, which was constructed of basswood, birch plywood, and glass. The archival storage box made it possible to minimize restoration.²⁵

Ceramics

According to the American Institute for Conservation of Historic and Artistic Works, improper handling, storage, display, and shipping cause cracking and breaking in ceramics, which are the most common forms of deterioration in ceramics. Soluble salts and freezing water were also identified as major causes of deterioration in porous ceramics. The AIC advises that only one ceramic object or one part of a ceramic object should be carried and handled at a time, and that ceramics should be stored on sturdy and level surfaces. The ceramic objects should be covered or enclosed for protection against dust and dirt. Ceramic pieces can be wrapped up in lignin-free tissue paper and stored in acid-free cardboard boxes. It is recommended that ceramic

²⁵ Jonathan Thornton. "The History, Technology, and Conservation of Architectural Papier Mâché." *Journal of the American Institute for Conservation*, 7th ser., 32, no. 2 (1993): 165-76.
http://cool.conservation-us.org/jaic/articles/jaic32-02-007_3.html.

objects should avoid exposure to dust, debris, and oily residues, but they should not be washed routinely, and porous ceramics should never be immersed in water.²⁶

Eric May and Mark Jones identified agents of deterioration and offered suggestions for storing ceramics in *Conservation Science: Heritage Materials*. May and Jones stated that the ageing of ceramics may produce color changes, accumulation of dirt, crumbling, and disintegration, and that the rate of degradation is a function of composition, pore structure, manufacturing procedure, structural design, surface finish, and damage from daily use. May and Jones also claimed that the deterioration of ceramics results from freezing and thawing, salt crystallization, chemical attacks by water and other substances, expansion reactions, and a mismatch of various components in objects. Porosity, rehydration, temperature changes, and humidity were also identified as agents of deterioration.²⁷

May and Jones recommended avoiding fluctuations of temperature and humidity when storing ceramics in order to prevent salt crystallization. Ceramics should also be kept in dry environments and should have minimal exposure to air pollutants. Damaging salts can be removed by long-term soaking in water, which can stabilize ceramic materials. According to May and Jones, light does not play an important role in the degradation of ceramics, so monitoring light is only necessary for special colored low-fired ceramics.²⁸

Wood Identification

In *Understanding Wood: A Craftsman's Guide to Wood Technology*, Bruce Hoadley provides insight on identifying types of wood. According to Hoadley, the most reliable approach

²⁶ American Institute for Conservation of Historic and Artistic Works. "Caring For Your Treasures: Ceramics." Caring For Your Treasures.

<http://www.conservation-us.org/about-conservation/caring-for-your-treasures/glass-and-ceramics#.VsfgVpMrJAY>.

²⁷ Eric May, and Mark Jones. *Conservation Science: Heritage Materials*. Cambridge, UK: RSC Pub., 2006. 180-183

²⁸ Ibid.

to identifying wood is based on microscopic features, where thin sections of wood should be examined under a microscope. The standard magnification is 10X, and that magnification should be used to examine the wood under a microscope. The wood should be cleanly cut, and the end grain should be severed by a flat and clean slice and be free of cellular disturbances. A sharp tool, such as a pocket knife, is sufficient to make the cut. Only a small area with a single growth ring is needed to identify wood. When examining the wood, the texture, resin, canals, pores, parenchyma, color, luster, odor, density, and hardness should be observed. Hoadley also provides a key using images of wood under a microscope to help identify different types of wood.²⁹

History

Henrietta Aiken Rhett became the owner of the Aiken-Rhett House and surrounding property after the death of Harriet Lowndes Aiken in 1892. When Henrietta Aiken Rhett died in 1918, the property was left to her children, William Aiken Rhett, Edmund Rhett, Harriet Lowndes Rhett Maybank, I'on Lowndes Rhett, and Andrew Burnet Rhett. In 1949, I'on L. Rhett took ownership of what is now known as the Aiken-Rhett House after purchasing the interests of his siblings, which had been passed down to their children. I'on Rhett and his wife, Frances Hinson Dill Rhett, lived at the house until I'on Rhett's death in 1959. Frances Rhett continued to live on the property after her husband's death until 1975, when she conveyed the property to the Charleston Museum for \$1. In 1975, the Charleston Museum converted the building into a house museum. In 1995, the property was purchased by Historic Charleston Foundation, who currently use the house and its outbuildings as a museum.³⁰

²⁹ R. Bruce Hoadley, "Wood Identification" in *Understanding Wood: A Craftsman's Guide to Wood Technology*. Newtown, CT: Taunton Press, 1980.

³⁰ The rat's nest dates to the middle of the twentieth century, so only the history of the Aiken-Rhett house and property from the twentieth century to the present is relevant.

The rat's nest was found in the ceiling above the door to the east of the stairs in the kitchen, laundry, and slave quarters outbuilding (which is referred to as the kitchen building) at the Aiken-Rhett House in Charleston, South Carolina in 2011. Since rat's stay in a close proximity of about 100 feet to their nests, only the history of the buildings and rooms that are in close range to where the nest was discovered will be discussed.

Kitchen

The kitchen, which was built in circa 1820, has experienced three periods of significant construction or improvements in the nineteenth century.³¹

The first period of construction dates from 1820-1822 and includes the southern half of the building. The building was a two story structure with two rooms on each floor. The rooms flanked a central passageway. The building was likely used as a kitchen and a house to slaves and servants when John Robinson moved to the main house around 1822. The second floor rooms were utilized as the slave and servant quarters, and the rooms were accessed by stairs in the central passageway. The building had a separate exterior access to the slave quarters. The walls were laid in Flemish bond (with some instances of English bond), using Savannah gray bricks that were an average of 9" by 4.5" by 3" in size. The bricks were finished with a traditional Charleston "beak joint," and they were tuck pointed with a bright white lime mortar. There were no chimneys or windows on the rear walls, which sat on the property boundary. This wall measured 19'6" by 36'1." ³²

Martha Zierden. "Aiken-Rhett House: Archaeological Research" in *Archaeological Contributions* 31. October 2003. 21

³¹ Graham, Willie, Carl Lounsbury, and Orlando Ridout, V. *Architectural Investigations of the Aiken-Rhett House*. Vol. 1,2. January 12, 2005. 179-185

³² Ibid. 179-185

The room on the first floor closest to the house was used as a kitchen until the 20th century. The door in the first room led to a service yard on the west. Across from the passage to the kitchen was another room, which was about the same size. This room had a large fireplace with a crane, indicating that this room may have been a laundry room. This room could also be entered directly from the yard, similar to the kitchen. Both of the rooms on the lower floors were lit by a window on the western facade. There was a total of five bays on the facade. There was a single window on the first story that was offset to the west, which provided light in each of the two rooms on the gable end. On the south end, this window was set below one of the pairs of windows on the second floor. The upper wall to the north was later demolished. The stair passage served only the upper floor. Each chamber upstairs was heated and generously lit. There were two windows that overlooked the yard and two that faced the house.³³

The original doors were board-and-batten with simple bead jambs. The windows were double-hung sash windows with external shutters and internal horizontally set wooden bars. The windows upstairs had externally swinging shutters, which were mounted below a transom. The walls and ceilings were made of plaster, and most of the rooms had baseboards. Both of the fireboxes were outfitted with Rumford-style splays. The south room had a Federal style mantel, and the northern chamber had a decorated mantel shelf. The stair passage had a fake mantel treatment, but the date is unknown. The stair mantel was most likely added after the stairs moved.³⁴

There is a shallow pit that was constructed at the north end of the building, which was likely intended for use as a one-story brick privy that was appended to the north end of the

³³ Ibid. 179-185

³⁴ Ibid. 179-185

laundry. This pit was 12'7" deep, and ran in a north-south direction. The recess was 4'8" deep. The structure could have also housed a cistern instead of a privy.³⁵

In the early 1830's, Robinson's house was lost to creditors, and the main house became a tenement for William Aiken, Sr. However, there is a *Charleston Courier* advertisement in 1825 that does not mention any outbuildings on the property. William Aiken Jr. then inherited the property from his father and made improvements to the kitchen-quarter building.³⁶

The second phase of construction (1833-1835) occurred when William Aiken Jr. was preparing the building for his bride, Harriet Loundes. The couple wed in 1831. In March 1833, William Aiken Sr.'s estate was settled, so William Aiken Jr. could perform renovations on the site. Harriet Loundes and William Aiken Jr. moved to the property in 1835, after the main house and outbuildings had undergone a significant enlargements and decorative upgrades.³⁷

During the second phase of construction, the building was extended to 35'11" and the facades took on a Greek Revival architectural style. Both of the floors were remodeled for more convenient work spaces and additional quarters on the upper floor. The original passage on the ground floor was removed, and additional space was added for the kitchen. A brick-based stew stove was most likely erected in the kitchen, and a 4'6" deep stone hearth was added in front of the stew stove and fireplace. A doorway was cut through the south gable window, which provided a more direct route to the newly relocated kitchen. The circulation of the building improved so the servants could traverse through the gable-end door of the kitchen, across a small

³⁵ Ibid. 179-185

³⁶ Ibid. 179-185

³⁷ Ibid. 179-185

courtyard, and directly into the service passage of the house. The north end of the kitchen had a blind gothic door added to match the stable.³⁸

The laundry room had doorways added and a possible closet with shelving was constructed. A new doorway cut into the former north gable, and led to the new stair passage. Another door cut through the south partition for direct access to the kitchen.³⁹

A new wing that was added was 26'10" in length. It had two original exterior doors that led to the west. The wing had a 7'1" wide fireplace on the north end, which was directly beneath the firebox in the northernmost quarter on the second floor. There was a half vault in the room, which was situated beneath the fireplace in the quarter that adjoins the end room on the second floor. There was a stove placed in the southern half of the room, which penetrated the vault to dispose of smoke through the upper story fireplace. A set kettle, which was 6" off of the north face of the chimney in the new room and stood 3'3" above the height of the present floor, was added north of the firebox between the 1830s and 1850s. The use of the wing was unknown, but it was likely used for laundry, and the middle room was possibly used as a scullery. The back wall was laid in Flemish bond to a height of 4'9," starting at the north end of the room until 4'8" shy of the partition with the stair passage. The wall was a continuation of the garden wall. The back wall of the kitchen extension was more shallow for a distance of 4'8" off the partition that extended south into the new stair passage.⁴⁰

There was a switchback stair used with an opening string, a round handrail, and balusters. The stairs landed at the intersection of the longitudinal passageway on the upper floor for independent access to various chambers. The two end quarters on the north and south were

³⁸ Ibid. 179-185

³⁹ Ibid. 179-185

⁴⁰ Ibid. 179-185

not truncated by the new passageway. The old exterior window locations remained, but additional windows were installed in rooms that had no western exposure. The windows were built into partitions and shared the passage for air and light. The two end chambers had their own fireboxes, and the chamber over the laundry space was also heated. The upper floor was expanded to the north and had two rob lights. Circular cast iron vents were added to the upper gables to match the stables.⁴¹

The third phase of construction, which happened from 1857 to 1858, involved the addition of gas lighting, a set kettle and stew stove, service bells, plumbing, drainage, enhanced paving, and the modernization of the kitchen facility.⁴²

Stable and Carriage House

The stable and carriage house was constructed in circa 1820, and has two significant periods of construction and improvements.⁴³

The first period of construction is circa 1820. The first evidence for the existence of the stable and carriage house is in a 1852 map, which depicts the structure scaled to close to its present length. The building has tuck-pointed Flemish bond brickwork and some instances of English bond. The walls were intended to be stuccoed. When the structure was renovated, the original north gable was taken down to grade. The foundations of that wall are still visible, and they are situated at the louvered partition that separates the stable area and the tack room. The building was initially L-shaped, and had vents in the north wall. The first vent is centered 20'9" north of the south corner on the street facade.⁴⁴

⁴¹ Ibid. 179-185

⁴² Ibid. 179-185

⁴³ Ibid. 186-189

⁴⁴ Ibid. 186-189

The space closest to the house on the south was used to store the carriages, stalls were located to the north, and there was a room for stable hands and a room for storage on the second floor. There were two south gable window openings. On the west wall, there was a carriage door that was set 3'10" north of the inside gable wall and was 7'7" wide. On the east side, there is a window at the south end of the wall and most likely a conventionally sized doorway. The upper floor was accessed from an exterior doorway, which was located between the carriage doors and the door to the stable. There was a small lobby inside the opening that leads to an L-shaped stair that is 2'6" wide, the same width as the upper story passageway. There are two doors that lead to separate heated chambers at the landing of the stairs.⁴⁵

The second period dates from 1832-1835. The changes from this time period include the building's expansion to the north. The stable dependency was given a gothic revival treatment on the outside and interior of the stalls. Gothic-arched recesses were built onto the upper floor of the west facade. The first floor was expanded to include a larger carriage bay with room for two carriages. There was a large tack room between the carriage space and the newly expanded stable. The north brick gable of the original building was replaced with a frame partition, which formed the division between the stalls and the tack room. The partition had an angled wall for a doorway between the two spaces. The stalls were expanded to six stalls. Two doors from the yard were used for horses and people. There was a wide doorway on the gable end that was centered on the wall, and was probably used for air circulation. There was a winder staircase built into the northeast corner of the room that leads to the hay loft. There were also drops constructed over the mangers. This room was isolated from the rest of the upper floor, and was

⁴⁵ Ibid. 186-189

lit by five windows that overlooked the yard. The south room was a large chamber that was given a fireplace and mantel during the 1830s upgrade. A closet was also built into the southwest corner of the room and furnished with a half louvered, half paneled door that was likely a circa 1820s fragment from the main house's remodeling. This room had five windows, three of which overlook the yard and two of which are on the gable end. The room to the north was smaller, and only had two windows that overlooked the yard. This room had a fireplace and had no closet.⁴⁶

Servants' Hall, East Wing

The east wing was constructed in 1835. The cellar of the east wing was partitioned to include stairs, a circulation passage, and a heated service room. The partition that separates the servants' hall from the stair passage was built shortly after the east wing was constructed. The staircase leading to the main floor was also added at that time. There is one original window on the north wall and one in the south wall that light the servants' hall. The servant's hall also had windows on the west wall, which were original to the east wing's construction. There are a total of six windows in the servants' hall. The two larger windows were cut in the 1870s through the east wall to bring in additional light. There are two door openings in the servants' hall. One door is an exterior door in the north wall, and one is an interior door connecting the passageway. The storage cabinets that line the east and south walls were originally oak grained and are original to the room. The cabinets on both sides of the chimney were reduced in size in the 1870s for the addition of two six-over-six windows. The cupboard at the north end of the east wall was originally a triple cupboard that measured 11'7" long by 2'2.75" deep by 7'5.25" to the ceiling.

⁴⁶ Ibid. 186-189

This cupboard was later reduced to a double cupboard so a window could be cut in the wall. The cupboards at the south end of the east wall measure 11'5.5" long by 2'4.5" deep by 7'8.5" long (onto the removal of the north cupboard). The cupboard on the south wall is 8'5.75" long by 2'2.25" deep by 7'7" (to the ceiling height). It consists of a pair of cupboards enclosed by a two-panel bead-and-butt door.⁴⁷

The floor is laid with square stone pavers that measure 16" square. They are about 2" thick, are red sandstone, and are laid in a staggered running bond. There is no base, wainscoting, cornice, medallion, or chair rail. The three exterior walls are plastered on riven lath applied to vertical furring studs, which are laid against the brick walls. The east partition is plastered directly on the brick. The plaster is composed of a brown base with very little lime and a finish coat that does not contain a significant amount of lime. The ceiling was plastered using a brown coat and finish coat applied to riven lath and is original to the wing.⁴⁸

Susan Buck's paint analysis demonstrated that the mantel in the servants' hall was originally installed in the west bedchamber on the second-floor and is part of the 1820 construction phase. The mantel was installed in the servants' hall in 1835. The mantel is federal style, and consists of a board surround with reeded pilasters, molded caps, and reeded side blocks and center block applied to a plain frieze. The mantel also has a shelf that is 6'8" in length made of cuma and astragal. The back of the fireplace is fitted with a sheet of iron.⁴⁹

⁴⁷ Ibid. 66-71

⁴⁸ Ibid. 66-71

⁴⁹ Ibid. 66-71

There is evidence of an early twentieth century knob-and-tube wire system in the servants' hall. A later period of wiring was also found strung along the face of the storage cupboard in the northeast corner of the room.⁵⁰

General Physical Account of Rat's Nest at the Aiken-Rhett House

The rat's nest was found above the lath on the ceiling in the kitchen. Some of the lath was removed from the ceiling in order to access the rat's nest. When the rat's nest was removed, it was put in a plastic container. Students and staff at Historic Charleston Foundation sifted through the nest to see what artifacts were in the nest, and pulled out artifacts that they thought were important. Some of these artifacts were put back in the plastic container. Two pieces of wooden lath were placed in a sealed plastic bag, and three pieces of textile were put in an archival folder. The rat's nest had been left untouched in the plastic container since 2011.

⁵⁰ Ibid. 66-71



The photograph above illustrates the location of the rat's nest in the Aiken-Rhett House kitchen. Courtesy of Historic Charleston Foundation.



Brandy Culp sifting through the rat's nest after it was removed from the Aiken-Rhett House kitchen. Courtesy of Historic Charleston Foundation.



Mariah Schwartz and Katherine Pemberton removing the rat's nest from the Aiken-Rhett House kitchen. Courtesy of Historic Charleston Foundation.



The photographs above depict the rat's nest at the beginning of the case study. Some of the objects in the rat's nest are visible in the bottom photograph.

The rat's nest contains wooden lath, pieces of textiles, slate, wood, a few pieces of brick, several pieces of plaster, plastic, paper, and miscellaneous objects such as beads and buttons.

Methodology

The larger materials in the rat's nest were picked out by hand before the rat's nest was sifted using a ¼ inch archaeological sifting screen. The materials were sorted into the following groups: wooden lath, wood, slate, plaster, small pieces of plaster, textiles, landscape elements, plastic, paper, and miscellaneous. Material, size, shape, and use of the material were factors in determining the groups. The larger debris from the rat's nest that was on top of the archaeological sifting screen (after sifting) and the smaller dirt and debris that was on the bottom of the archaeological sifting screen (after sifting) were put in separate sealable plastic bags that were labeled. The dirt and debris were gently brushed off of every artifact before the artifacts were archived. Artifacts that yielded information about the building materials,



The photograph illustrates paper artifacts in the process of being sorted by hand.



The photograph illustrates the archaeological sifting screen used in the case study.

landscape, architecture, or the people who interacted with the kitchen and out buildings were documented using photographs and notes. Only the larger artifacts were documented in instances where there were several similar artifacts. The photographs and notes were then placed in one of two inventories. The inventories are divided into two groups: objects that provide information about building materials and objects that yield information about the people who lived at the Aiken-Rhett House or interacted with the kitchen and out buildings.⁵¹ Every artifact was placed in a sealable plastic bag, but the larger textile artifacts and some of the paper artifacts were placed directly into archival folders instead. The sealable plastic bags were then sorted by building materials or artifacts that yield information about the people who interacted with the kitchen and surrounding area and placed into archival folders. The archival folders were labeled before they were placed into one of two cardboard archival boxes for storage (one archival box for the building materials, and one for artifacts that yield information about the people).

The paper group was subdivided into four smaller groups: small pieces of newspaper, large pieces of newspaper, pieces of paper that contain important information, and other pieces of paper (that were not newspaper). The small pieces of newspaper, the pieces of paper that contain



The photograph illustrates the archival boxes used in the case study.

⁵¹ See Appendix A and B.

important information, and the other pieces of paper were placed in separate sealable plastic bags. The large pieces of newspaper were placed directly into archival folders.

The wood folder also contains a smaller sealable plastic bag, which is for the smaller pieces of wood. This bag is labeled as such.

One of the textiles folder contains several sealable plastic bags that are each labeled, and the other textiles folders contain the larger pieces of textiles. There is a small sealable plastic bag for textiles with a blue floral pattern, textiles with a blue and white checker pattern, the textile with a button, and textiles with a green and white checker pattern. The other textiles, which do not have a pattern or design and are mostly different shades of brown, are in a bigger sealable plastic bag. There is a separate small sealable plastic bag for buttons. Strings are also in their own sealable plastic bag.

There is a separate small sealable plastic bag in the plastic folder that contains a piece of a plastic bag artifact. This artifact is separated because every other piece of plastic in this folder belongs to the same artifact.

Each artifact in the miscellaneous group was placed in its own bag and labeled. The miscellaneous group artifacts were separated into groups. These groups are: hardware, beads, a peanut shell, and unknown objects.

Findings

Information about the Aiken-Rhett House kitchen and surrounding area and the people who interacted with this area was discovered after sorting out and examining each material in the rat's nest. The information that the artifacts reveal about the building materials and landscape artifacts is already known due to the large amount of research that has been done on the

Aiken-Rhett House. Therefore, these artifacts confirm information and can challenge information from previous research. Many of the artifacts that yield information about the people who interacted with the kitchen and surrounding area provide information about the day-to-day lives of these people, such as the newspapers they read, the food they ate, and their textile preferences.

The paper scraps that contained important information revealed dates that the rat's nest was most likely active. The dates found on the paper scraps include March 31, 1954, 1964, 1965, 1966, 1967, 1968, October 30, 1968, Friday December 12, 1969, and April (in the 1960s).⁵² These dates can help identify the people who lived at the Aiken-Rhett House and most likely interacted with the kitchen and the surrounding buildings and rooms when the rat's nest was active. It is likely that many of the other artifacts found in the rat's nest were artifacts from the residents (and other people who interacted with the kitchen and surrounding out buildings) between the 1950s to the late 1960s, so the artifacts from the nest can provide further information about I'on and Frances Rhett and their house staff. The dates found on the newspaper scraps can also help date other artifacts (such as the corn chip wrapper).

The newspaper scraps that contained important information also included the name and location of the newspapers that were read by the people who lived at or interacted with the Aiken-Rhett House. One newspaper scrap had "ston Evening Post" and another had "Charleston Even," so it is inferred that at least one person who lived at or interacted with the Aiken-Rhett House read *The Charleston Evening Post*. Two other newspaper scraps had "Char" and "Charle" on them, indicating that the newspapers read at the house were Charleston based newspapers. It

⁵² 1966 and 1967 were both found on two scraps of paper. See Appendix B for photographs of the scraps of paper.

is unknown if newspapers from other places were read at the house during the time the rat's nest was active, but there is no evidence that suggests that they were.

Some of the materials found in the rat's nest provide information on the food people cooked and ate. The pieces of the plastic wrapper indicate that someone ate Tom's Corn Chips, which were made by Tom's Foods. There were also two Juicy Fruit gum wrappers in the rat's nest, so someone likely enjoyed chewing gum. The remnants of a peanut shell suggest that someone ate peanuts, but it is unknown if they were boiled peanuts or unboiled peanuts. Additionally, there was a price and weight label discovered in the rat's nest for frying chicken, and parts of pages of recipes.

Textile patterns, buttons, and beads possibly worn, used, or liked by people who interacted with the Aiken-Rhett House kitchen were discovered in the rat's nest. These textile materials can provide insight on fashion and decoration preferences of the people who lived on the property or interacted with the kitchen and surrounding buildings and rooms. The designs and patterns on the textiles include a dark blue textile with a light blue button, several pieces of textile that are different shades of brown or grey with no distinct pattern on them, a textile with a green and white checkered or striped pattern on it, several pieces of textile with a dark blue background and white flowers on them, a grey woven textile made of wool, larger pieces of textile with a simple grey design, and two pieces of textile with a blue and white checkered or striped pattern on them. Additionally, the rat's nest had a textile that was tied together, which can provide information on knots used by people during the time period the rat's nest was active. There was also a long piece of textile that was a dark red-orange, had holes in it, and had a nail in it. The use of this textile is unknown, but it was possibly attached by nails to a wall, a window

or door molding, furniture, a ceiling, or a floor. The buttons were white, off-white, and grey and had two or four buttonholes. There was also one large red bead and a small white bead found in the rat's nest. The purpose and age of these beads is not known.

The rat's nest included several building materials. These building materials include wood, plaster, wooden lath, paint colors (brown and red) on plaster, slate, nails, and a hook. These materials do not contribute new information about the kitchen and surrounding buildings and rooms, but they reinforce research that has already been done. These materials could undergo further testing to identify and understand the properties of the building materials. The wood artifacts could be examined under a microscope to identify the type of wood used in the structure, and wood maceration could help identify the age and type of wood. A porosity test could provide more information on the properties of the wood. The slate could also undergo a porosity test to provide information on the properties of the slate.

There were several pieces of walnut shells included in the rat's nest. This suggests that there was at least one walnut tree within about 100 feet of the rat's nest. There were also parts of limbs and twigs in the rat's nest. These can be identified to see if they match the types of trees in the archaeological and historical records at the Aiken-Rhett House. These walnuts may have also been consumed as food.

Values

This method allowed for materials that yielded important information to be sorted from the materials that did not. The materials that did contain information that was important were documented using photographs and put in an inventory, so it is easy to access the information if needed. The folders are labeled in the archival boxes, and the bags are labeled in the folders, so it

is easy to locate the objects. The artifacts were stored in cardboard archival boxes, so they are protected from the ultraviolet and artificial light, water, and pests.

Limitations and Recommendations

The rat's nest had been tampered with before this case study, and some of the objects had already been pulled out, so not every object is included in the inventory and is stored with the rest of the objects.

The objects in the rat's nest had all been stored together in a transparent archival box for five years, so the objects were exposed to light and had not been cleaned. This could increase the rate of deterioration for some of the artifacts.

The rat's nest was not pulled out or stored in the way that it was found in the wall. Taking the rat's nest out by portions and laying the portions out like they were when the rat's nest was found could yield information about where the objects were found in the rat's nest, the organization of the rat's nest, and the use of each of the chambers in the rat's nest.

The archaeological sifting screen helped separate the materials that could not be sorted out by hand. However, there was still debris on the top and bottom of the screen that could not be separated by hand or by the archaeological screen. This debris, which contains pieces of plaster, newspaper, paper, textiles, plastic, and wood, was placed in two bags: one for the debris on the top of the screen and one for the debris on the bottom of the screen. These artifacts do not contribute any new information. An archaeological sifting screen that uses a larger sifting screen on top of a smaller sifting screen could be used to help sort portions of the rat's nest that are more difficult to separate.

Due to time, only the important artifacts were documented in the inventories using photographs and notes. Every artifact should be recorded in the inventory, so the information is available and easily accessible.

The dirt and debris was only gently brushed off of the objects. It would be beneficial to thoroughly clean every object using a small vacuum (using an up and down motion) to remove as much dirt as possible from every artifact.

Each artifact was placed with other similar objects in a sealable plastic bag and/or archival folder because of monetary and spatial reasons. It would be helpful to have every object archived and stored separately in order to decrease the threat of deterioration by dirt and other harmful substances. The objects could be stored individually in drawers that are lined with lignin-free paper, or stored individually in sealable plastic bags or lignin-free archival folders. Each object should be labeled.

Conclusion

Sifting through a rat's nest can provide detailed information that may not be available through written historical records about a place or people, or it can also reinforce or challenge research that has already been done. Additionally, sifting through a rat's nest can add to archaeological research on a historic site or place due to the artifacts that can be found in a rat's nest.

This method of sifting through, documenting, and archiving a rat's nest could also apply to other types of nests, including mouse nests and birds nests. More research can be done to discover better ways to separate, document, and archive artifacts found in a nest, and further

testing can be done on the objects found in the nest to better understand the uses and properties of the artifacts.

Works Cited

- American Institute for Conservation of Historic and Artistic Works. "Caring For Your Treasures: Ceramics." Caring For Your Treasures.
<http://www.conservation-us.org/about-conservation/caring-for-your-treasures/glass-and-ceramics#.VsfgVpMrJAY>.
- American Institute for Conservation of Historic and Artistic Works. "Caring For Your Treasures: Paper." Caring For Your Treasures.
<http://www.conservation-us.org/docs/default-source/public-relations/paper.pdf?sfvrsn=2>.
- American Institute for Conservation of Historic and Artistic Works. "Caring For Your Treasures: Textiles." Caring For Your Treasures.
<http://www.conservation-us.org/docs/default-source/public-relations/caring-for-your-treasures-textiles.pdf?sfvrsn=2>.
- "A Real Rat's Nest." Stratford Hall. Accessed February 18, 2016.
<http://www.stratfordhall.org/a-real-rats-nest/>.
- Graham, Willie, Carl Lounsbury, and Orlando Ridout, V. *Architectural Investigations of the Aiken-Rhett House*. Vol. 1,2. January 12, 2005.
- Hoadley, R. Bruce. "Wood Identification" in *Understanding Wood: A Craftsman's Guide to Wood Technology*. Newtown, CT: Taunton Press, 1980.
- May, Eric and Mark Jones. *Conservation Science: Heritage Materials*. Cambridge, UK: RSC Pub., 2006. 180-183
- McDonald, Travis. "Rat Housing in Middle Virginia: The Diffusion of Everyday Life." *Perspectives in Vernacular Architecture* 10 (2005): 169-84.
- Missouri Historical Society. "Preserving Your Treasures-Care and Storage Methods for Clothing and Textiles." *Missouri Historical Society*, 2006. Accessed February 18, 2016.
http://www.mohistory.org/img/unCommonThreadsSite/preserving_treasures.pdf.
- Museum Textile Services. "Choosing the Best Storage Materials." *Press Release*.
http://www.museumtextiles.com/uploads/7/8/9/0/7890082/choosing_storage_materials.pdf.
- National Archives. "Storing Family Papers and Photographs."
<https://www.archives.gov/preservation/family-archives/storing.html>.

"Prehistoric Rat Aids Modern Study : Science: The Preserved Nests of 38,000-year-old Rodents Have Been Found in Nevada. Scientists Are Using Them for Insight into Environmental Evolution." Los Angeles Times. July 32, 1994. Accessed February 18, 2016.
http://articles.latimes.com/1994-07-31/local/me-21894_1_rat-nest.

Thornton, Jonathan. "The History, Technology, and Conservation of Architectural Papier Mâché." *Journal of the American Institute for Conservation*, 7th ser., 32, no. 2 (1993): 165-76. http://cool.conservation-us.org/jaic/articles/jaic32-02-007_3.html.

Tuttle, Craig A. *An Ounce of Preservation: A Guide to the Care of Papers and Photographs*. Highland City, FL: Rainbow Books, 1995.

Zierden, Martha. "Aiken-Rhett House: Archaeological Research" in *Archaeological Contributions 31*. October 2003. 21

Appendix A

Inventory of Artifacts that Provide Information on Building Materials

This inventory identifies the significant building materials that were found in the case study. These building materials were likely from the kitchen at the Aiken Rhett House, or the surrounding out buildings. Further testing on these materials can provide more information about the architecture and building materials in these structures.

These artifacts include: plaster, wood, and hardware.

Plaster:



Plaster:



Notes: The plaster is cracked, and should be handled with care.

Plaster:



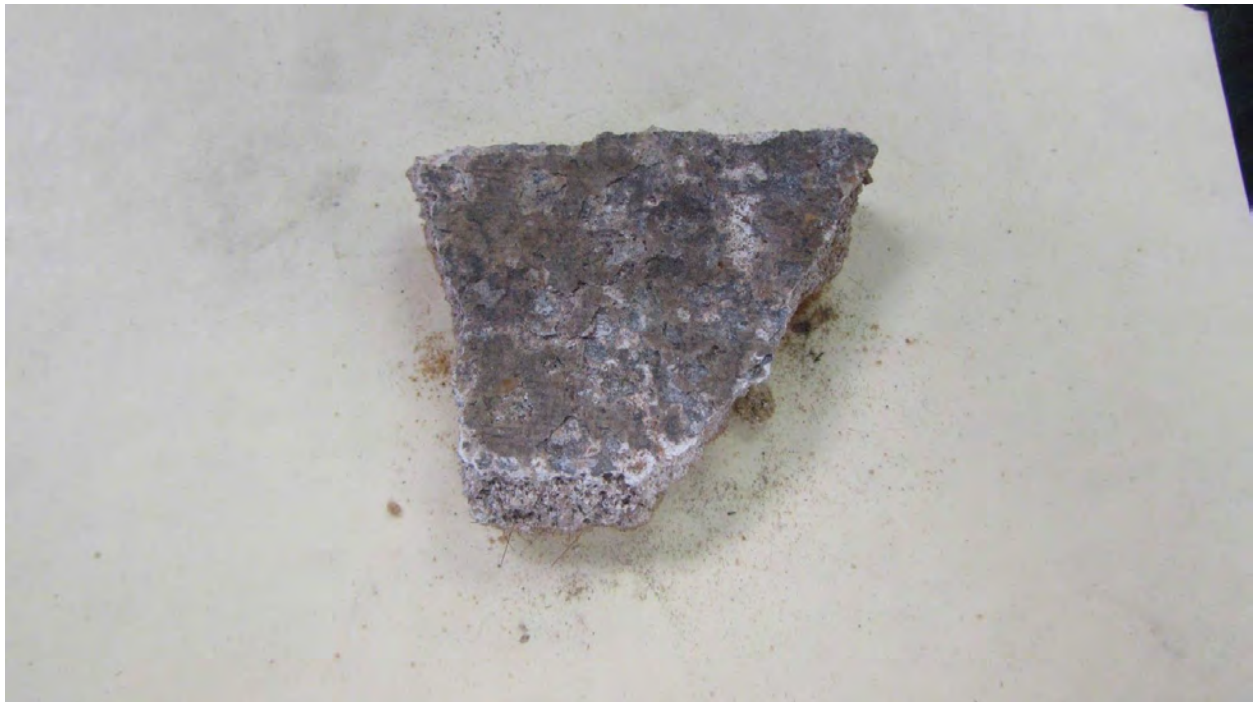
Plaster:



Plaster:



Plaster:



Plaster:



Plaster: The plaster appears red-brown.

Plaster:



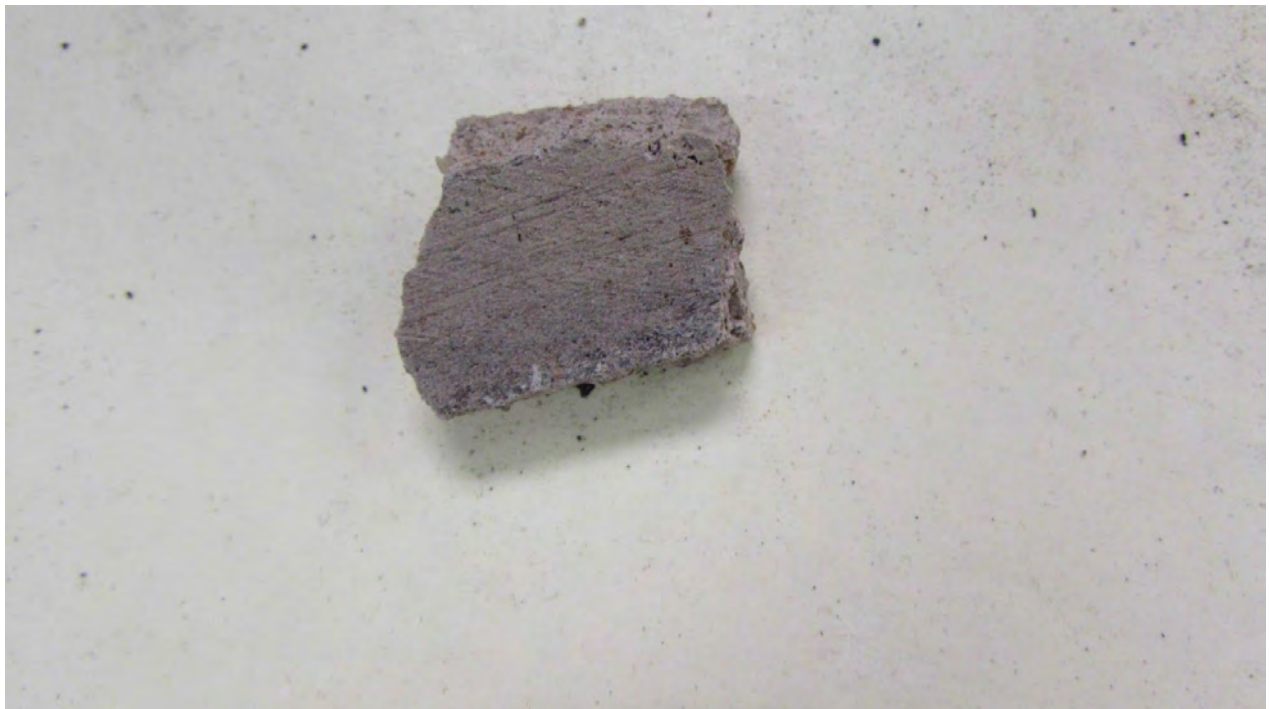
Notes: The plaster contains horsehair as a binder, which is visible without a microscope.

Plaster:



Notes: The plaster contains horsehair as a binder, which is visible without a microscope.

Plaster:



Notes: The plaster has been painted red.

Slate:



Notes: Further testing could include a porosity test.

Wooden Lath:



Notes: Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wooden lath matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Wood:



Notes: Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wood matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Wood:



Notes: Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wood matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Wood:



Notes: The wood appears to have been burnt. Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wood matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Wood:



Notes: Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wood matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Wood:



Notes: This piece of wood appears burnt. This piece of wood could use further cleaning. Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wood matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Wood:



Notes: Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wood matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Wood:



Notes: Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wood matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Wood:



Notes: Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wood matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Wood:



Notes: This wood appears burnt. Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wood matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Wood:



Notes: This wood appears burnt. Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wood matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Wood:



Notes: This wood appears burnt. Further testing could include wood identification, porosity testing, and wood maceration to ensure that the wood matches the wood type that is in the architectural and historical records at the Aiken Rhett House.

Hardware:



Notes: The hardware found in the rat's nest includes nails and a hook. The nails are from different time periods.

Appendix B

Inventory of Artifacts that Provide Information on People

This inventory identifies the artifacts that were found in the case study that can provide information about people who interacted with the kitchen at the Aiken Rhett House and the surrounding out buildings. Further research on these materials can provide more information about the people who interacted with these structures.

The artifacts include: textiles, plastic, walnut shells, a peanut, beads, the unknown objects, and pieces of paper that provide information about the people who interacted with the Aiken Rhett kitchen.

Plastic:



Notes: This object is a piece of a plastic bag. It might be part of a wrapper, as suggested by the yellow portion.

Plastic:



Notes: These pieces are all part of a food wrapper. The pieces contain text that indicates that the food is “Tom’s Crispy Corn Chips” and is a product of “Tom’s Foods.”

Textile:



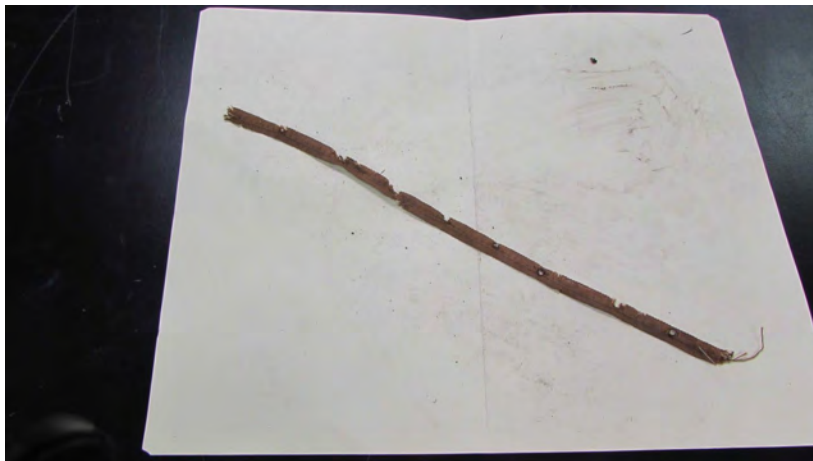
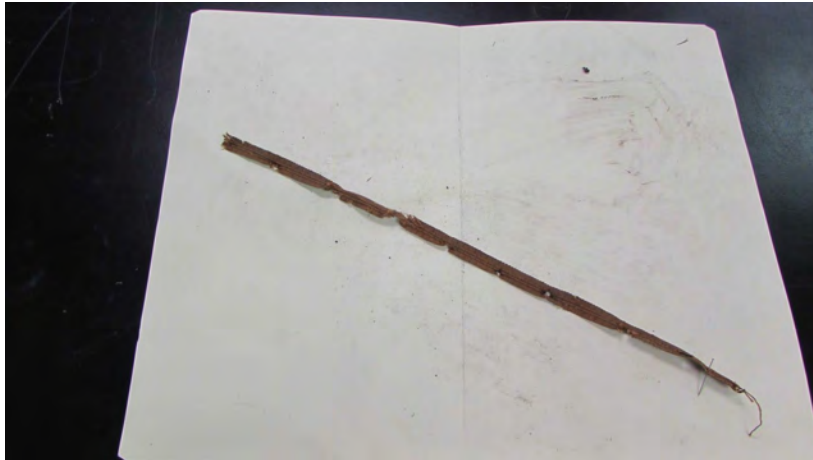
Notes: This textile has a simple grey design. The textile also contains holes, which could possibly be caused by rats.

Textile:



Notes: This textile has a simple grey design.. The textile also contains holes, which could possibly be caused by rats.

Textile:



Notes: This textile is a dark red-orange. This piece of textile had a nail in it. The nail has been removed from the textile, and put in a small sealable plastic bag in the textile folder. The textile is orange and has several small holes in it. Further research could identify the use of the textile.

Textile



Notes: This textile artifact has a simple grey design.

Textile:



Notes: This textile artifact is grey, and it is made of wool that has been woven.

Textile:



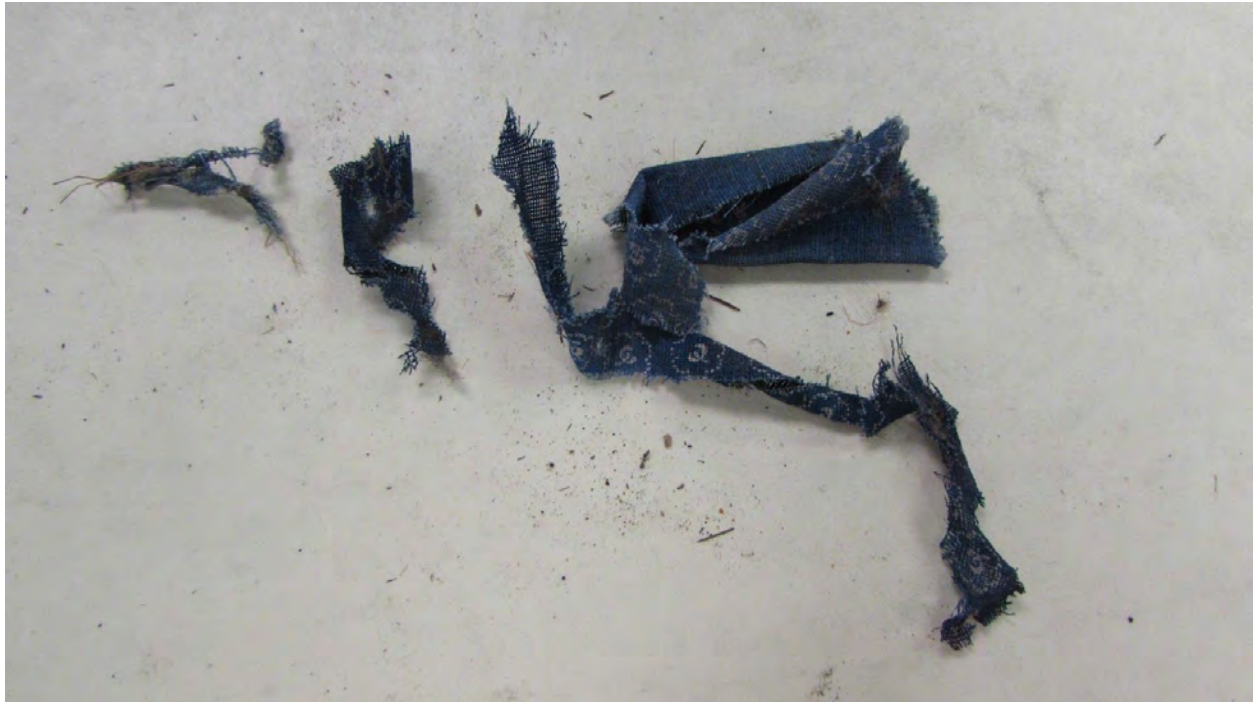
Notes: The textile artifact has a simple grey design. The textile has been tied together.

Textile:



Notes: The pieces of textiles have a blue and white checkered or striped pattern. These pieces of textiles could be lightly vacuumed in order to remove more of the dirt and debris.

Textiles:



Notes: These pieces of textile are blue with white flowers on them.

Textile:



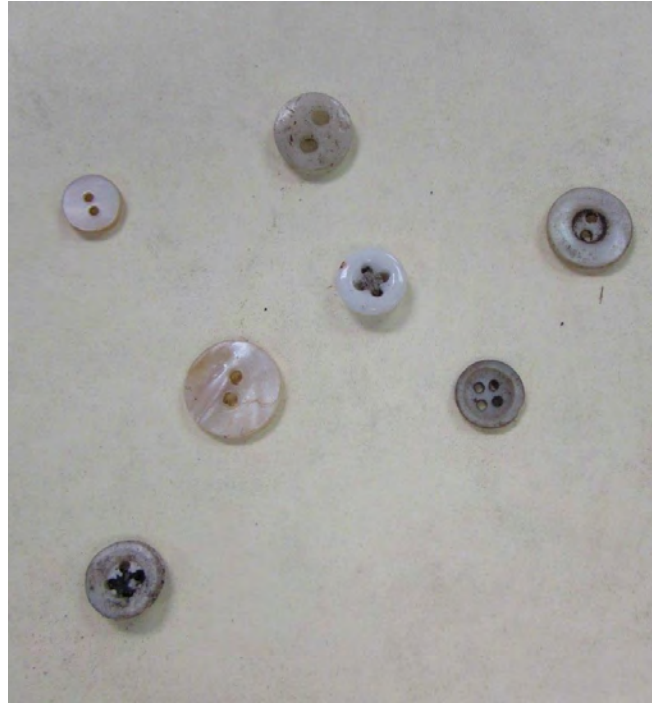
Notes: This textile artifact has a green and white stripe and checker pattern. This pieces of textile could be lightly vacuumed in order to remove more of the dirt and debris.

Textile:



Notes: These are the textiles labeled “others.” These textiles are mostly brown or grey in color, and they are small.

Buttons:



Notes: Each button is different in size and color. The buttons have either two or four buttonholes. Some of the buttons still have thread in the buttonholes.

Textiles:



Notes: The textile is dark blue and has a light blue button attached to it.

Textile:



Notes: There were several strings found in the rat's nest. Some of the string artifacts were twine.

Walnut Shells:



Notes: There were walnut shells found in the rat's nest, indicating that there was at least one walnut tree located close to the kitchen.

Unknown Object:



Notes: This object looks like a small cork. Further research may be able to help identify this object.

Peanut:



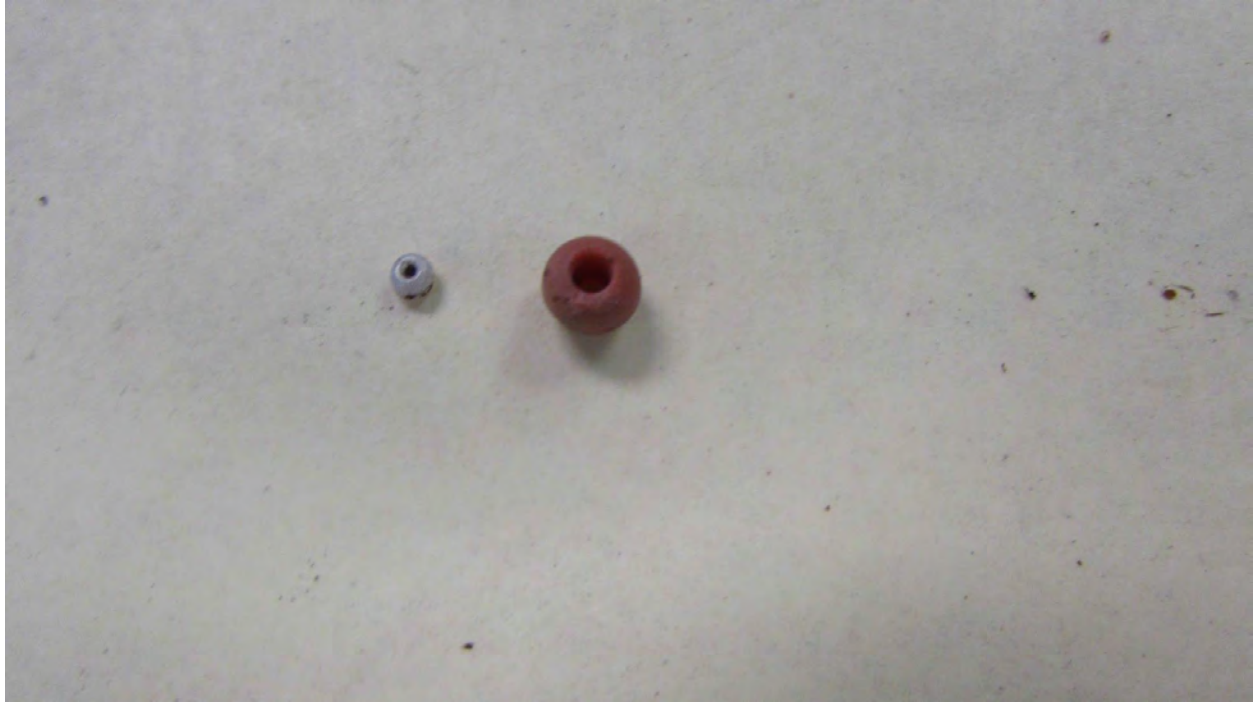
Notes: A person who interacted with the Aiken Rhett House kitchen and its surrounding areas probably ate peanuts.

Unknown Objects:



Notes: Further research could help identify these objects and their use.

Beads:



Notes: Further research could help date and provide more information regarding these beads.

Unknown Object



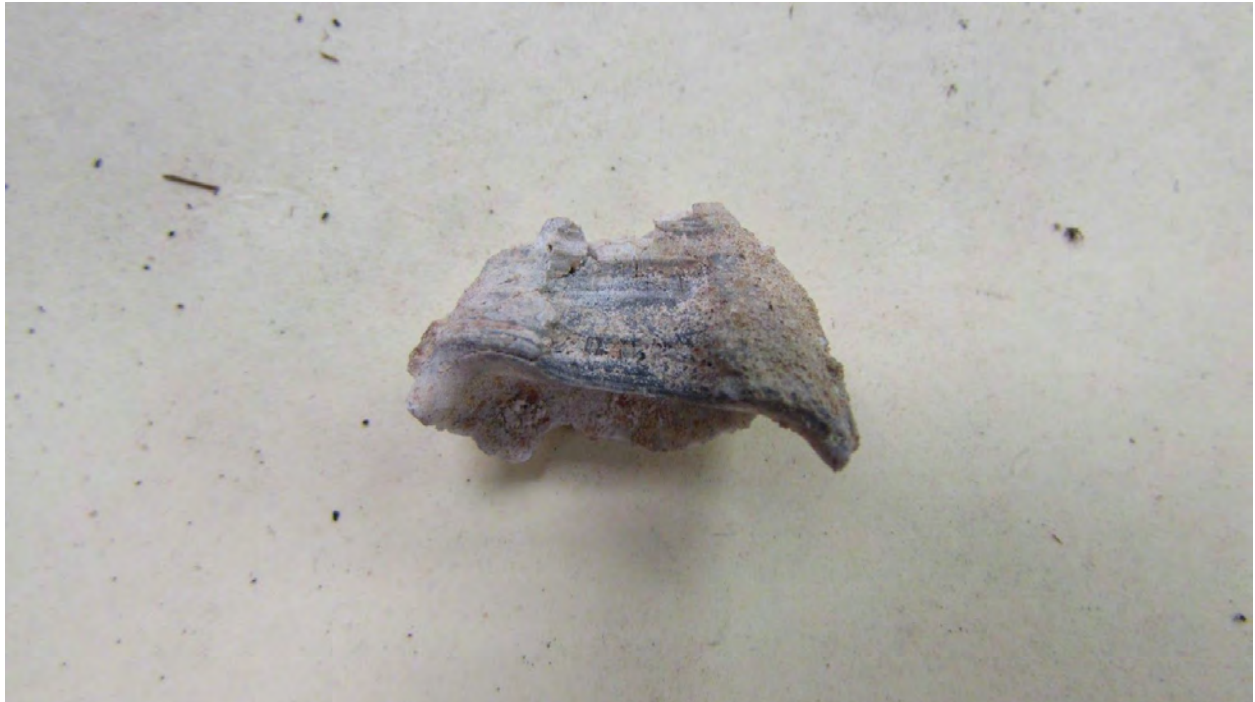
Notes: This object needs further cleaning. Further research could help identify the object and its use.

Unknwon Object:



Notes: This object needs further cleaning. Further research could help identify the object and its use.

Unknown Object:



Notes: Further research could help identify the object and its use.

Paper that Yields Information about the People who Interacted with the Aiken Rhett House Kitchen:

















Notes: Dates found on the newspaper pieces are: March 31, 1954, 1964, 1966, 1965, 1967, 1968, October 30, 1968, Friday December 12, 1969, and April (likely sometime in the 1960's). There newspaper pieces also revealed that the newspapers were Charleston based newspapers, and someone read the *Charleston Evening Post*. Also included is a label for frying chicken, pieces of pages with recipes on them, and two chewing gum (Juicy Fruit) wrappers with some chewing gum still attached to the wrapper.