

## Greenwood Cemetery Excavation and Investigation



Kimberly Byrnes and Madison Long

Dr. Charles Ewen, Principal Investigator,  
Department of Anthropology

## East Carolina University

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We would like to acknowledge several community members for their work involved in bringing attention to this project, conducting historical research on the events surrounding the 1914 reburial of individuals, and for their support during the project. Thanks goes to Ben Watford, Chairperson for the James City Historical Society, and Robert Johnson, local pastor, for bringing the events of 1913 and 1914 to the attention of city officials and researching the issue. Thanks also goes to Bill Hand, reporter for the Sun Journal, for conducting research and reporting on the reburial. City manager, Mark Stephens, and Director of Parks and Recreation, Foster Hughes, for facilitating the excavation. Finally, thanks go to all of the community members involved in this project who were not specifically named.

## Management Summary

On March 15, 2019. Students from East Carolina University's Historical Archaeology class and volunteers from ECU's Bioarchaeology Laboratory excavated a burial vault at the Greenwood Cemetery in New Bern, North Carolina under the direction of Dr. Charles Ewen. The vault contained the remains of individuals who were removed from Cedar Grove Cemetery in 1914.

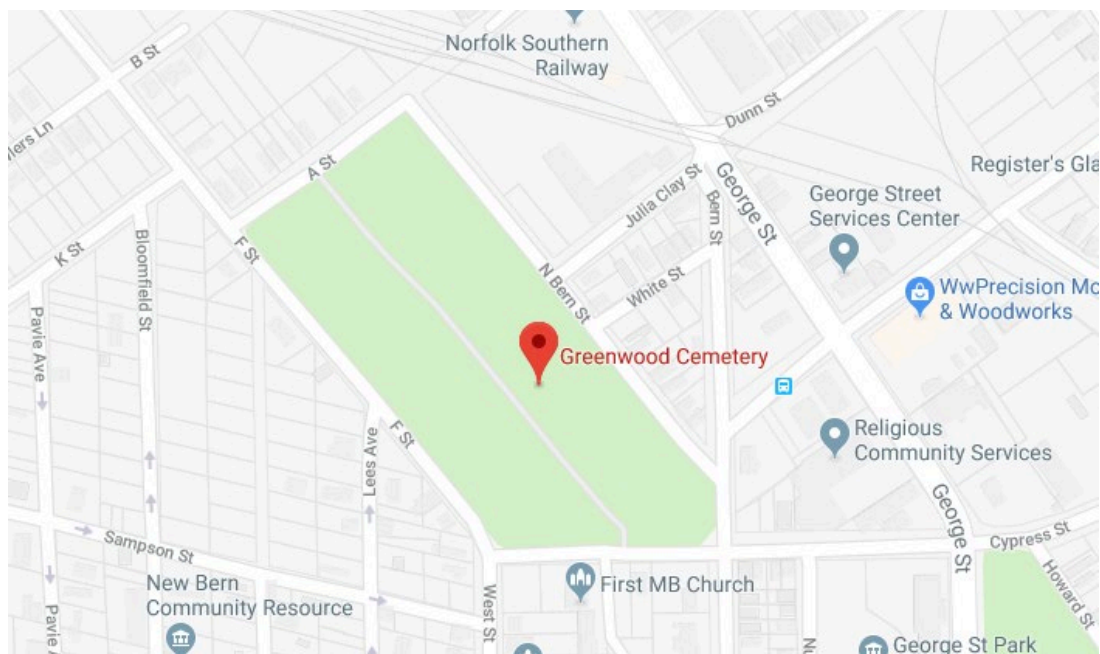
Local citizens of New Bern had become concerned with the treatment of the individuals who were removed from their original resting place in Cedar Grove Cemetery and moved to Greenwood Cemetery as part of that era's Jim Crow segregation policies. These citizens brought their concerns to city officials of New Bern and contacted Dr. Ewen to advise on the matter. The City decided to pursue a phased approach to assessing the remains at Greenwood.

The purpose of this excavation was to provide city officials with information on the presence and condition of the remains in question in order to make an informed decision on whether their final disposition. Excavations revealed a 6.2 by 6.5 foot brick-walled vault with remains encountered at 5.7 feet below the ground surface

The roof of the brick vault had collapsed in the past and the vault filled with dirt. Only a few bones were present on the floor of the vault and were in a fractured and commingled state.

## Introduction

Greenwood Cemetery is located in New Bern, Craven County, North Carolina (Figure 1). The Anthropology Department at East Carolina University was called upon to perform phase II archaeological excavation at the Greenwood Cemetery to investigate the suspected mass grave reinternment site of several African-American individuals who were relocated from Cedar Grove cemetery in 1913-1914. The suspected site of reinternment is marked by a group of headstones that were purportedly relocated with the human remains (Figure 2). The field project was carried out on May 15th, 2019 by Principal Investigator Dr. Charles Ewen, graduate and undergraduate students from ECU's Historical Archaeology class, and three graduate assistants from the ECU Bioarchaeology Lab. The goal of the project was to address three main questions: 1) Are there any burials underneath the cluster of headstones, 2) If there are burials, are they interred separately or in a single mass grave, and 3) What is the condition of any bones present?



*Figure 1 - Google Maps location of Greenwood Cemetery, New Bern, North Carolina*



*Figure 2 - Headstones clustered above the site of reinternment at Greenwood Cemetery*

## Historical Background

Greenwood Cemetery was founded in 1882 and was relegated for the explicit use of New Bern's African American citizens in 1914 as part of the Jim Crow Era segregation laws (New Bern 2019; The Daily Journal 1914). Cedar Grove Cemetery, founded in 1800, was the original cemetery in New Bern, and prior to the Civil War was available for the use of citizens of African as well as of European decent (New Bern 2019). By 1913, Cedar Grove reported a shortage of space and city Alderman Disosway recommended in a General Assembly meeting of the board of aldermen that all of the remains belonging to people of color be exhumed and re-interred at Greenwood (Board of Aldermen 1913). The exact number of individuals moved was not

reported, but 12 headstones were also moved from Cedar Grove to Greenwood along with the remains (Hand 2018).

Prior to the Civil War, New Bern was the home to many freedmen. During this time free African American citizens lived alongside white citizens in the same neighborhoods and were buried in the same cemetery (Hand 2018). After the Civil War, North Carolina, along with the rest of the southern states, entered a period of Reconstruction. During this time, newly freed African Americans saw a rise in their status and even occupied positions of political power. Reconstruction ended in the late 1870s and marked a return to previous power relationships. Racist “Jim Crow” laws began to permeate southern states. This racial segregation did not see an official end until the 1950s and ‘60s during the Civil Rights Movement (Urofsky 2014).

During the Jim Crow Era, New Bern, a city which was unsegregated prior to the Civil War, began implementing segregation laws, such as the segregation of cemeteries. As previously mentioned Alderman Disosway, and members of the cemetery committee, brought up a concern of lack of space in Cedar Grove Cemetery to the board of aldermen and on August 5, 1913 suggested that R.A. Nunn, City Attorney, arrange for the removal of individuals of African American descent (Board of Aldermen 1913). A bill was passed which allowed the mayor and aldermen to remove individuals from Cedar Grove and re-inter them at Greenwood Cemetery (Board of Aldermen 1913). In December of that year, the city of New Bern posted a notice to anyone who had claim over burials at Cedar Grove that their ancestors may be moved. The notice also informed citizens that they had until the first of January 1914 to present a case to the city why their relation should remain in Cedar Grove, and that all individuals moved to Greenwood would be “properly and decently” re-interred (The Daily Journal 1913).

The removal of burials from Cedar Grove to Greenwood began on the first of January, and was completed in two weeks (The Daily Journal 1914). It is unknown how many individuals were re-interred at Greenwood, but over 70 people of color are still interred at Cedar Grove (Hand 2018). In May of 1914, Alderman Disosway introduced an ordinance which would legally enforce Cedar Grove only being of use to white citizens while Greenwood was reserved for African American citizens (The Daily Journal 1914).

The Daily Journal report from December 4, 1913 stated that all individuals moved to Greenwood would be “properly and decently” buried. This was an unsubstantiated claim until ECU’s excavations uncovered a brick-lined vault. Brick lined shaft burials, such as the one excavated at Greenwood Cemetery, came into use during the 18th century, primarily within churches, as a reaction to fear of infection from the dead (Mytum 1989). Additionally, the use of brick as lining within shaft burials is thought to have been a preventative measure regarding potential over-burial (Mytum 1989). Brick-lined burials have a history of use in both single and multiple interments, the latter usually being a family burial vault (Mytum 2004). It is unknown whether the vault was built by those the city hired to conduct the re-interment or families of those being moved.

The individuals moved to Greenwood were first brought to popular attention by a local reporter/historian, Bill Hand (Hand 2014). After meeting with archaeologist, Charles Ewen, a group of concerned citizens led by Ben Watford and Robert Johnson brought their concerns regarding these moved individuals to the attention of city officials in New Bern. In March of 2018 Hand and Johnson met with City Manager Mark Stephens, Mayor Dana Outlaw, Alderman Sabrina Bengal, Alderman Barbara Bent, and Charles Ewen to discuss what could be done regarding these moved individuals. Dr. Ewen recommended an archaeological survey be

conducted in two phases to determine whether remains were present and, if so, to assess the state of the remains, in order for city officials to have more information before making a decision on the disposition of the remains (Hand 2018). Watford and Johnson proposed the remains be removed from Greenwood and returned to Cedar Grove, though not in their original plots as those had been re-occupied. Other African American members of the community, such as historian Sharon Bryant, believed the remains should stay where they were and signage should be developed at both cemeteries to explain the events (Hand 2018).

### **Previous Investigation**

Stage one of the project involved the use of ground-penetrating radar (GPR) to survey the area of interest for any anomalies that could indicate the presence of burials. The GPR survey was conducted by Dr. Charles Ewen and ECU graduate student Matt Harrup using a TerraSIRch SIR System-3000. The survey took place in a 16ft. by 10ft. grid divided into 2ft. transects. The scans revealed the presence of many reflections, both parabolic and planar in shape. Notably, a consistent planar reflection, indicating a change in stratigraphy was observed at a depth of approximately 4ft. (Figure 3), with slightly stronger and more parabolic reflections, indicative of buried anomalies at a depth of just over 5ft (Figure 4). The presence of the anomalies indicated the need for excavation.



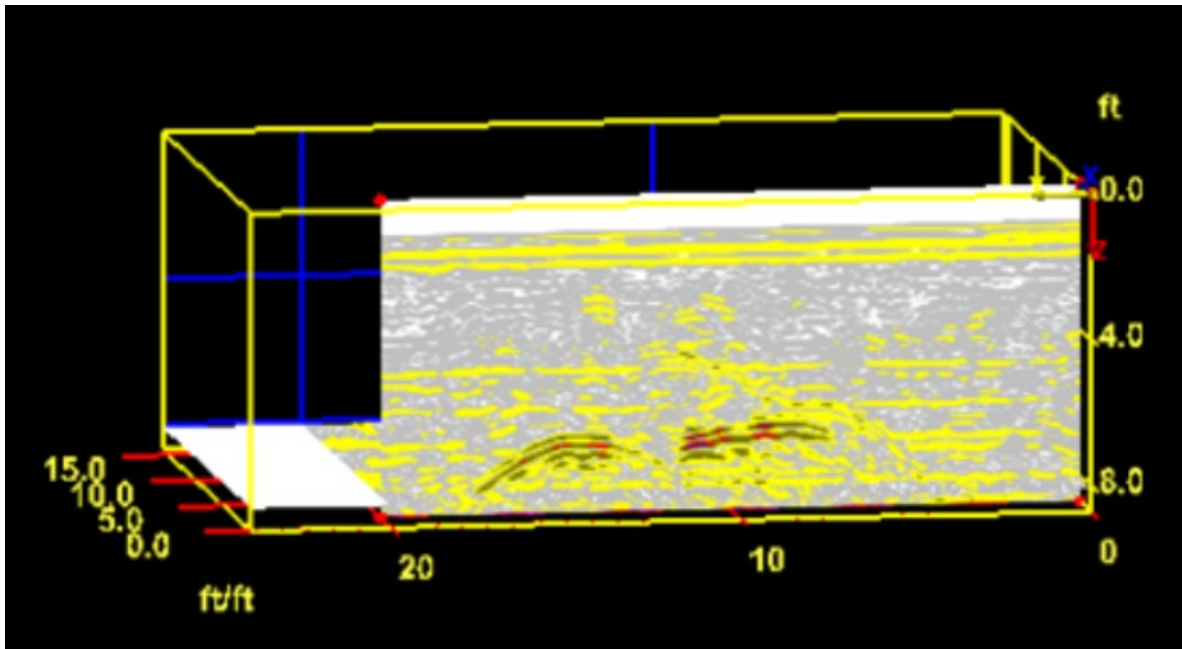


Figure 3 - GPR results showing consistent planar reflection at a depth of approximately 4ft

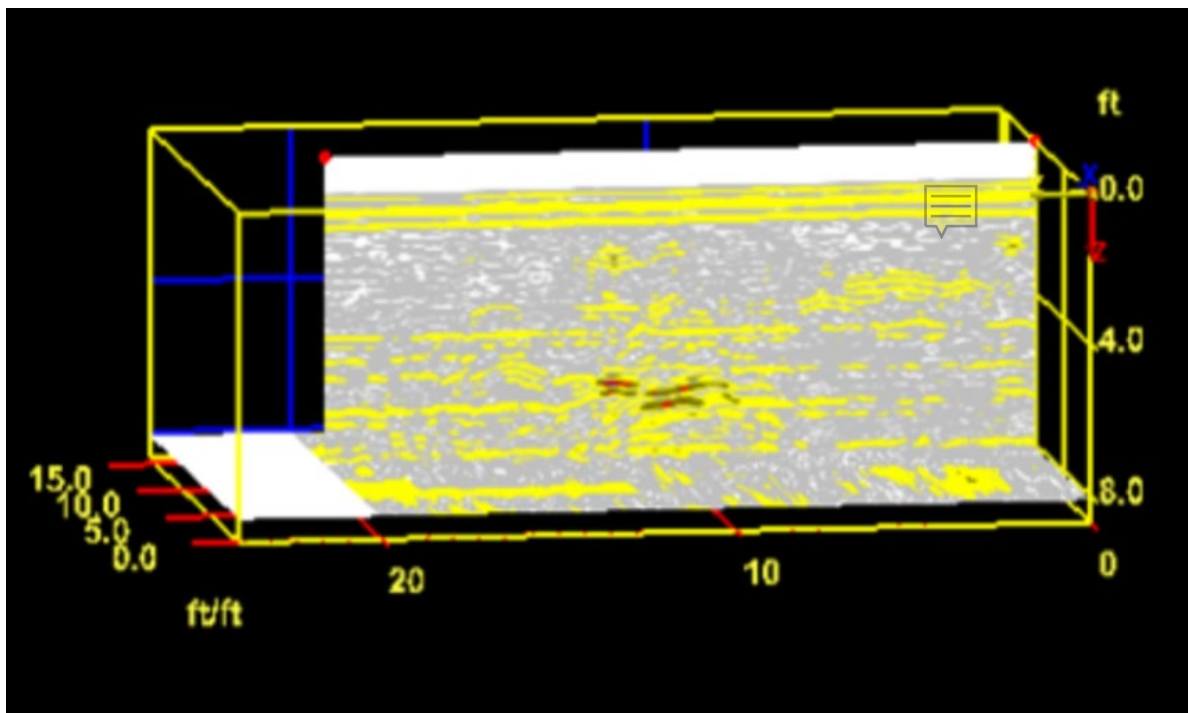


Figure 4 - GPR results showing stronger, more parabolic reflection at a depth of approximately 5ft.

## Methodology

The findings of the GPR survey suggested the presence of remains and moved the project into the second phase of investigation. Ewen agreed to conduct this excavation the following Spring, and made it a project for his Historical Archaeology class. Along with volunteers from the Anthropology Department's Bio-archaeology Laboratory the project took place on March 15, 2019. The purpose of the excavation was to assess the state of the remains to provide information to the city so officials could make an informed decision regarding the plot. Students with experience in excavating, identifying, and analyzing human remains took part in the excavation and assessment of the plot at Greenwood Cemetery (Figure 5).



*Figure 5 - Screening –Facing Southeast*

Based on past GPR research, it was determined that there were no anomalies in the ground until at least four feet below surface level. To expedite the excavation, a backhoe was used to carefully remove these top few feet of fill soil (Figure 6). The headstones were removed



from the plot to facilitate the excavation. These stones were photographed and set to the side (Figure 7). A backhoe was used to excavate the first three to four feet of soil, until the brick walls of an unexpected burial vault were exposed around the perimeter of the burial plot (Figure 8).



*Figure 6m- Backhoe Excavation – Facing West*



*Figure 7 - Headstones*





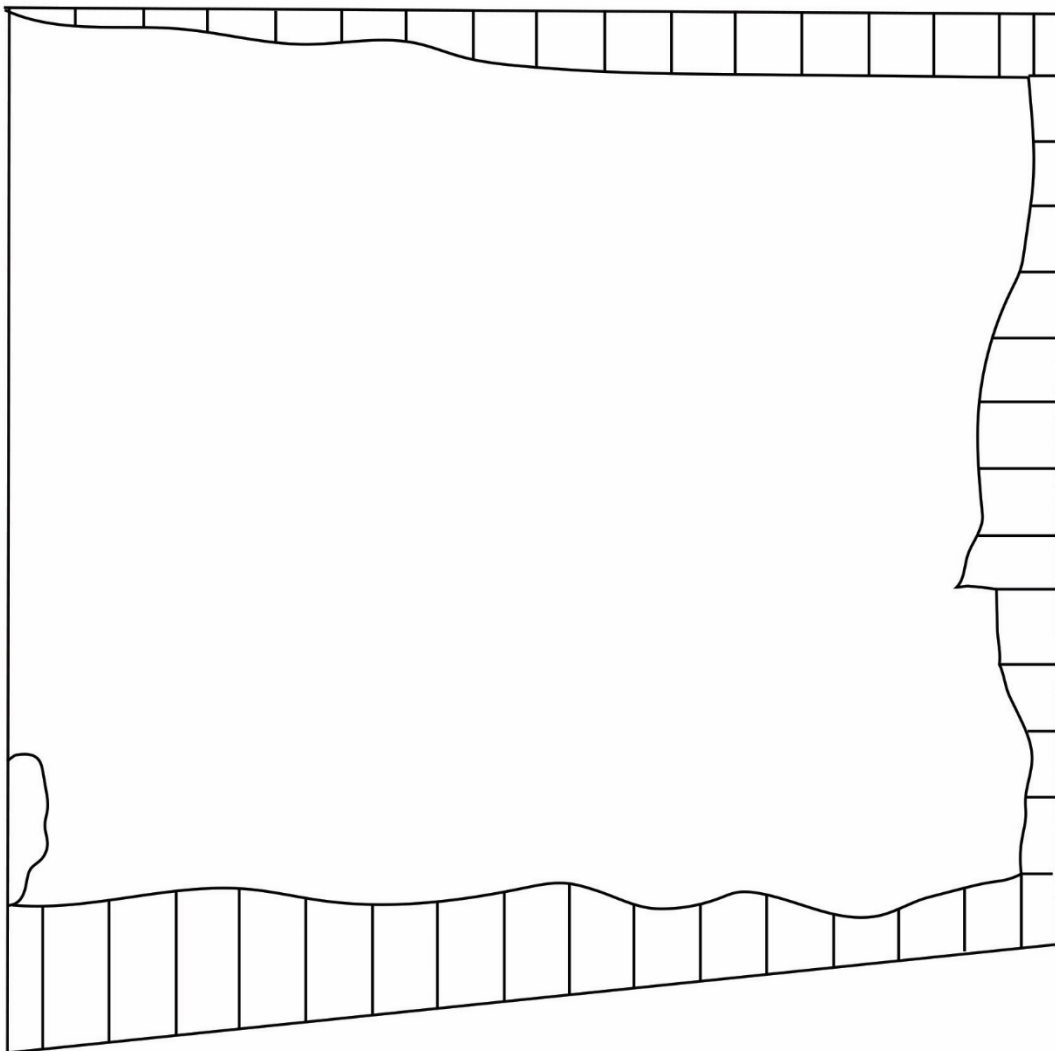
*Figure 8 = Backhoe Excavation Close-up – Facing Southwest*

After the brick burial vault wall was uncovered, shovels were used to level out the excavation surface and hand trowels were used to carefully expose more of the brick. Soil was screened using  $\frac{1}{4}$  inch mesh to ensure the recovery of artifacts and human remains in the soil. Three brick walls were exposed on the north, south, and east sides of the burial plot (Figure 9). The excavation extended to the west wall as well, but that side was not completely excavated as it was directly beneath the headstones which were left in place. After the burial vault was mapped, the north half of the excavated area was sectioned off to be excavated further. Excavation was conducted using shovels and hand trowels, and arbitrary levels were established every half of a foot to maintain vertical control over the excavation. All artifacts were placed in 2mil plastic curation bags, and each bag was labeled according to level.



# Vault Exposed

N ↑



1 Foot

Brick Vault

Figure 9 - Plan View Map of Exposed Brick Vault

The water table was reached approximately 4.4 feet below ground surface and excavation of the northern half of the burial vault continued with shovels into the water and mud until a brick fall was identified approximately five feet below ground surface (Figure 10). At this time the southern half of the burial vault was excavated down to the same level as the northern half with the backhoe in order to expose more of the brick fall. Once this was accomplished, a sump pump provided by city officials of New Bern was used to pump water out of the unit for excavation to continue (Figure 11).



*Figure 10 - Water Filled Feature – Facing South*





*Figure 11 - Feature 1 Floor Excavation – Facing Southeast*

As the brick fall was uncovered on the floor of the burial vault, human remains were identified during the screening and excavating. The remains which were identified in the screen were photographed and bagged separately from artifacts. Remains identified during excavation were analyzed and photographed in situ. Once remains were identified, efforts were made to limit their removal. All remains appeared to be underneath the articulated brick, suggesting a wall or ceiling had collapsed on top of the burials. The artifacts and remains which were removed from the burial were photographed, bagged, and replaced before the burial plot was back-filled with soil at the end of the excavation.



## Results

Phase II excavation of the Greenwood Cemetery site consisted of a 5 x 7' trench that was placed at the location of the remaining headstones after their removal. A backhoe was used to remove the top 3-4 ft. of soil due to the position of the reflections seen in the GPR survey conducted prior to excavation. Use of the backhoe ceased at this depth based on the soil change observed from a light brownish gray sand (10 YR 6/2) to a very dark greyish brown sand (10 YR 3/2). Artifacts recovered from the topfill include brick, ceramic sherds, nails, and shells. Once the depth of approximately 3-4ft. was reached, a brick vault feature was revealed along the north, east, and south edges of the trench. The brick vault was designated Feature 1, and the northern half of the trench was excavated in five levels before the floor of the feature was reached.

Level 1 extended from 1.9ft. down to 2.4ft. below the ground surface. The soil was wet, and shifted from a dark gray brown at the top to a light gray at the bottom (Figure 12).

Artifacts recovered from level 1 include blue glass, brick, ceramic sherds, and charcoal.



*Figure 12 - Feature 1 North Half Level 1 Base – Facing North*

Level 2 extended from 2.4ft. to 3.9ft. from the ground surface, and was 0.5ft. to 1.0ft. below the surface of the exposed brick wall (Figure 13). The soil was thick and muddy. Artifacts recovered from level 2 were similar to those recovered from level 1.



*Figure 13 - Feature 1 Level 2 Base – Facing North*

Level 3 extended from 3.9ft. to 4.4ft. below the ground surface, and 1.0ft. to 1.5ft. below the surface of the brick wall (Figure 14). The water table was reached within this level, and shell fragments were the only material recovered from the fill.



*Figure 14 - Feature 1 Level 3 Base – Facing North*

Level 4 began at 4.4ft. below the ground surface and extended down into the water table and ended at 5.1ft (Figure 15). Brick and mortar fragments were recovered and identified as brick fall. No other artifacts were recovered from Level 4.





*Figure 15 - Feature 1 Level 4 Excavation – Facing Northeast*

Level 5 was excavated with the backhoe until a flat level of brick was reached at 5.7ft., and deemed a brick floor (Figure 16). At this point, bone fragments were reached.



*Figure 16 - Brick Floor – Facing North*

Commingled human skeletal remains were recovered from within channels existing throughout the brick floor in a crisscross pattern. Human remains recovered included many small

fragments and a few larger pieces of long bones and an os coxae (pelvis), including a femur shaft and ilium (portion of pelvis) respectively (Figure 17). Of the smaller fragments, identifiable elements include ribs and acetabula (hip joint on pelvis). Additionally, at least four teeth were recovered, some of which were noted to be molars, all with relatively good preservation levels. Overall, however, the preservation level of the skeletal remains was poor and fragmentary. Based on the identification of brick fall, it is also likely that the skeletal remains were crushed by brick, adding to the poor levels of preservation. In addition to the human skeletal remains, wood fragments (possible coffin remain) and one leather fragment were also recovered from level 5.



*Figure 17 - Recovered Human Remains*

The artifacts recovered from the top fill and the first four levels of the brick vault were considered to be associated with fill dirt instead of associated with the burials. Based on the artifact types and the presence of collapsed brick on top of the remains, it is believed that when



the brick collapsed it caused a depression in the ground which was then filled in. This fill dirt contained the sparse collection of artifacts excavated. The artifacts consisted of nails or other pieces of unidentifiable metal, ceramic dishes, glass from jars and a fragment of a small blue urn, and shoe leather (Figures 18, 19, and 20).



*Figure 18 - Recovered Artifacts*

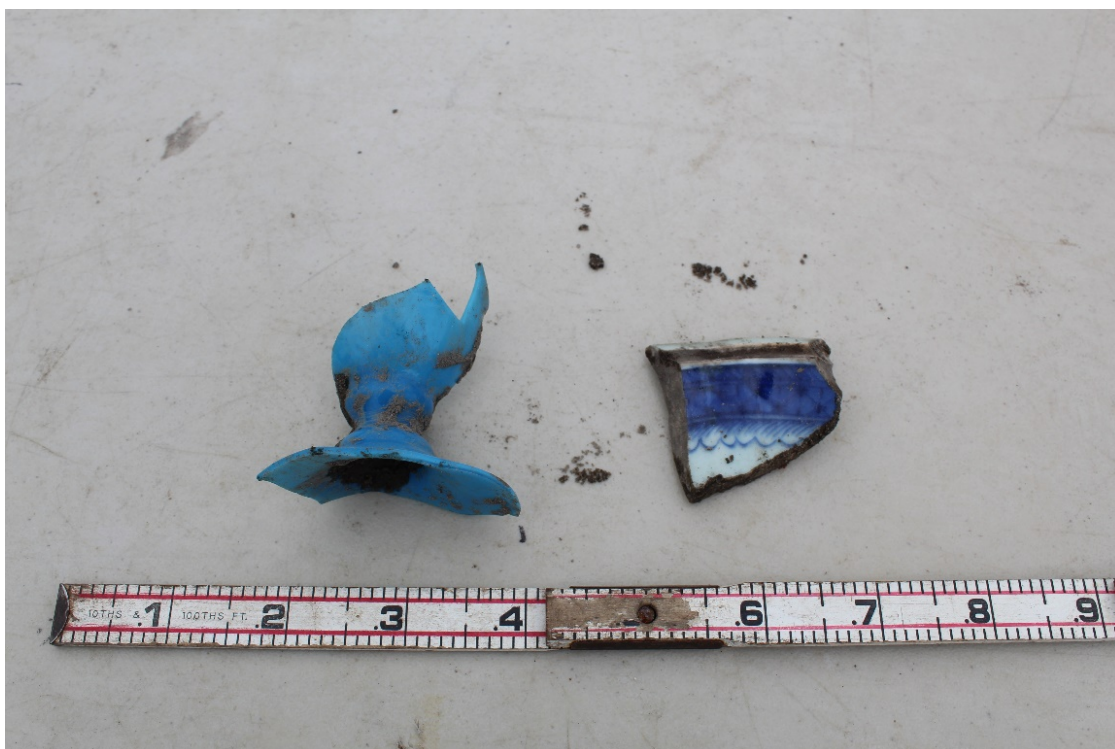


Figure 19 - Ceramic fragments



Figure 20 - Urn fragment



The nails and shoe leather might be associated with burials, being nails from the coffin and shoe leather from the deceased. However, many of the individuals moved from Cedar Grove cemetery had been buried there in the mid 1800s or earlier, and leather typically degrades within 50 years (Reference 2019). Reducing exposure to light will help preserve leather and keeping it moist will reduce cracking. The leather excavated was moist, but reduced cracking does not mean increased preservation. The best situation for preservation is an environment with little to no oxygen (Dirksen 1997). This was not the case for the shoe leather identified in the top level excavated, therefore making it unlikely to be associated with these burials which are 200-150 years old. The nails recovered could be from coffins but, again, they were found in the upper mixed fill level. Perhaps they were from coffins, but as no coffin wood was excavated in the top level with the nails, there is little evidence directly associating the nails with coffins.

The remainder of artifacts, fragments of ceramic dishes, glass jars, and a glass urn, can all be associated with activities of visitors to cemeteries. Most obvious is the blue, glass urn as this type of vessel is associated with burials and was likely left as a grave gift or to hold flowers. Glass jars are also used to protect objects left at graves, such as letters or other offerings which may be damaged by exposure to weather. The ceramic dishes could also be objects left at graves by mourners, or they could be the remnants of the American trend of picnicking at cemeteries. This practice became common in the 1800s and fell out of fashion in the 1920s (Kendall 2018). These artifacts represent the types of objects left at graves, and therefore could reasonably have ended up in fill dirt used to fill the depression which appeared after the brick vault collapsed onto the remains in this burial.

## Public Outreach

This project was the result of concern expressed by Ben Watford, chairperson of the James City Historical Society, and local pastor Robert Johnson, so public outreach was an important aspect of the project. The archaeological work conducted was on the behest of city officials in New Bern after the issue was discussed at City Hall meetings. The project was community driven and open to the public . In response, several individuals were at the cemetery during the excavation including local historians, city officials, reporters, and interested citizens (Figures 21 and 22). These community members took pictures of the excavation, interviewed students, asked questions about archaeological methods, and even provided assistance in emptying the burial of water. With so many interested individuals present at this excavation, there was a feeling of serving the community.



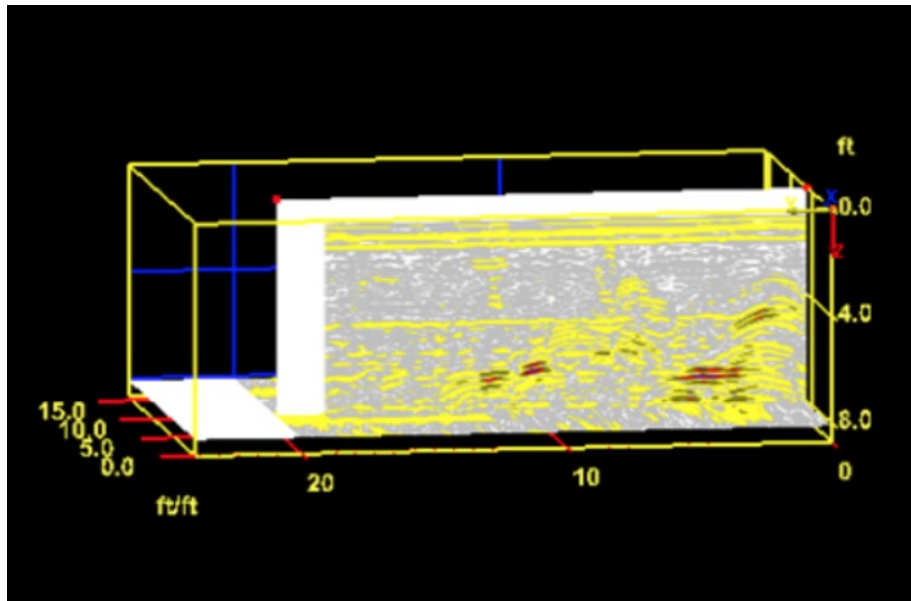
*Figure 21 - Public Outreach – Facing Northwest*



*Figure 22 - Community Interest – Facing Southeast*

## **Conclusions and Recommendations**

According to the results of the phase I survey and phase II excavation that has taken place at the Greenwood Cemetery site, further archaeological investigation is not recommended. The GPR results show reflections at depths below 5.7ft, the level at which excavation ceased (Figure 23). However, it is likely that these reflections are indicative of the floor of the vault and water, as the water table was reached by a depth of 4.4ft. (level 3 of excavation).



*Figure 23 - GPR results showing additional reflections below 5.7ft.*

Valuable information about the nature and preservation of the burial site was gained through phase I survey and phase II excavation that would allow for recognition and interpretation of the site through historical signage or other means that do not require further excavation and analysis of the site, artifacts, and skeletal remains. However, further excavation is possible and could provide more information regarding the reinternment process and the lived experiences of the individuals buried within the brick lined shaft at Greenwood Cemetery. More extensive inventory and osteological analysis of the human skeletal remains from the site could provide a minimum number of individuals (MNI), as well as additional demographic information. At least one os coxa (pelvis) was preserved enough that it would be possible for sexually dimorphic features (i.e. greater sciatic notch) to be assessed for sex estimation (Buikstra & Ubelaker 1994). While there is a possibility for DNA analysis, it is likely that significant exposure to water has decreased the likelihood of successful DNA extraction (Figure 24) (Götherström et al. 2002). Overall, the fragmented and commingled nature of the remains would



make further demographic information difficult to obtain through osteological methods. Additionally, the preservation levels and commingling of the remains render it extremely challenging, if not impossible, to determine which bones are from the same skeleton, and to whom those remains may belong.

All the remains recorded during the excavation were bagged and carefully replaced on the floor of the vault before backfilling the vault. Should further analysis be desired, the backfill would be removed and the bagged and any loose bones would be recovered and the vault fully exposed and recorded. Additional historical research should be undertaken in any event to better understand the transferal event and perhaps determine who responsible for the construction of the brick vault.



*Figure 24 - Bones on the vault floor Floor - Southeast*

## References Cited

Board of Aldermen

1913a Board of Aldermen Minutes. City of New Bern, NC. From the vertical files at the New Bern-Craven County Public Library Kellenberger Room. 5 August 1913. New Bern, NC.

Board of Aldermen

1913b Board of Aldermen Minutes. City of New Bern, NC. From the vertical files at the New Bern-Craven County Public Library Kellenberger Room. 9 October 1913. New Bern, NC.

Buikstra, Jane, and Douglas H. Ubelaker

1994 Standards for Data Collection From Human Skeletal Remains. Arkansas Archaeological Survey Publications. Fayetteville, AK.

Daily Journal, The

1913 Notice of Removal of Bodies from Cedar Grove Cemetery. The Daily Journal 4 December 1913. New Bern, NC.

Daily Journal, The

1914 Cemetery Committee. The Daily Journal 3 May 1914. New Bern, NC.

Dirksen, Vicki

1997 The Degradation and Conservation of Leather. *Journal of Conservation and Museum Studies* 3:6-10.

Götherstöm, A., Collins, M. J., Angerbjörn, and K. Lidén

2002 Bone Preservation and DNA Amplification. *Archaeometry* 44(3): 395-404.

Hand, Bill

2018a When Blacks Were Removed from Cedar Grove Cemetery. *Sun Journal* 25 March 2018. New Bern, NC.

Hand, Bill

2018b ECU to do Study of Re-Interred Blacks in New Bern. *Sun Journal* 9 May 2018. New Bern, NC.

Hand, Bill

2018c Some Blacks Still Buried in New Bern's Cedar Grove Cemetery. *Sun Journal* 18 May. New Bern, NC.

Kendall, Jonathan

2018 Remembering When Americans Picnicked in Cemeteries. *Gastro Obscura*. Atlas Obscura < <https://www.atlasobscura.com/articles/picnic-in-cemeteries-america>>. Accessed 22 April 2019.

Mytum, Harold

1989 Public health and private sentiment: The development of cemetery architecture and funerary monuments from the eighteenth century onwards. *World Archaeology* 21(2): 283-297.

Mytum, H.C.

2004 *Mortuary Monuments and Burial Grounds of the Historic Period*. Kluwer Academic/Plenum Publishers. New York, NY.

New Bern

2019a Cedar Grove Cemetery. Crystal Coast Visitors Guide. New Bern, NC  
<https://www.newbern.com/cedar-grove-cemetery.html>. Accessed 8 April 2019.

New Bern

2019b Greenwood Cemetery. Crystal Coast Visitors Guide. New Bern, NC  
<https://www.newbern.com/greenwood-cemetery.html>. Accessed 8 April 2019.

Reference

2019 How Long Does It Take for Leather to Decompose? Environmental Science. Reference <  
<https://www.reference.com/science/long-leather-decompose-c6ece124c2dba5a4>>. Accessed 22 April 2019.

Urofsky, Melvin I.

2014 Jim Crow Law: United States [1877-1954]. Encyclopedia Britannica  
<https://www.britannica.com/event/Jim-Crow-law>. Accessed 6 March 2019.