

WILSON'S HERITAGE

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Tracing Changes and Revealing Culture: A Study of Shotgun Houses in the East Wilson Historic District, 1988-2019.

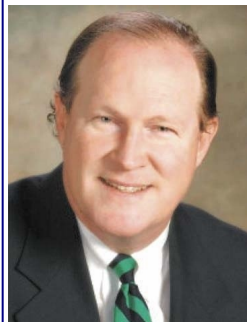
Monica Davis

Shotgun houses ("shotguns") are the most widely acknowledged expressions of African American architectural design in the United States. They are New World constructions, rooted in indigenous African architectural and spatial traditions and influenced by American Indian and European building techniques (Vlach, 1975). The place of shotgun houses in local and national social history justifies proactive preservation efforts to save and adapt the remaining shotgun houses in cities across America. These indisputably historic homes have important stories to tell about the social, economic, political, cultural, and demographic histories of their particular local communities; histories that would be lost, perhaps irretrievably, if these last shotgun houses are left to decay and disappear.

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A Message from the Association President

B. Perry Morrison, Jr.



After more than nineteen months, the COVID pandemic continues. Just when we think we are over it, another strain appears. All of our lives have been turned upside down. But, we will endure. At this writing, our fall meeting at Barton College on Thursday, November 18, at 7 pm is still scheduled.

Our speaker will be Dr. Marcus Witcher of the University of Arkansas, who was previously lined up to speak in March 2020 at our meeting cancelled at the very beginning of the pandemic. I previously wrote about Dr. Witcher in the Winter/Spring Newsletter of 2020, and if the meeting is to take place, I'll send out an update via e-mail.

Our feature article in this issue is by UNC-G graduate student, Monica Davis, who has been doing terrific research on Wilson's National Register Historic District of shotgun houses. Not only has she invested her intellectual capital, but she has also purchased several of the structures and has set about turning them into homes again. Way to go, Monica!

Since moving to the area from Wilmington several years ago, historians Margaret and Jim Bailey have really put their incredible research and writing skills to work in our area. They are writing in this issue about a Civil War cannon ball that was discovered in the Bloomery Swamp area a number of years ago, and they have been documenting the likely source of the cannon ball. Of course, that also reminds us that munitions were once manufactured here in Wilson County!

Let's all stay safe and help each other through this pandemic!

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Civil War Cannon Ball Unearthed In Bloomery Swamp Area



James A. Bailey and Margaret B. Bailey

Bloomery Swamp, once identified as the Great Swamp, extended from southern Nash County into northern Wilson County. The area derived its name, Bloomery Swamp, from bloomeries, also known as foundries or forges, constructed to produce iron products from iron ore mined in Bloomery Swamp near Toisnot Swamp. From 1863 to 1864, iron ore was mined and bloomeries were constructed in this area to manufacture iron products, including cannon balls for the Confederate Government. However, coal was needed to fire the bloomeries and after the war, coal became too costly to continue operating the bloomeries in Bloomery Swamp.¹ Although Bloomery Swamp bloomeries ceased in the mid-1800s, remnants of Bloomery Mill, one of the bloomery sites, still exists in Old Fields Township about three miles south of the mining area.² Also, in recent years cannon ball fragments and a cannon ball were discovered in the Bloomery Swamp area.

One of those discoveries occurred when Russell James Thompson, a Nash County native, was harvesting a fall crop in the late 1970s.³ He was contracted to harvest soybeans on the Reece J. and Lizzie W. Williams farm located in Jackson Township on Old Bailey Road near the Wilson County line. Thompson was operating a four-row Gleaner Model G combine late one November afternoon when a loud noise came from the combine resulting in it coming to a sudden stop. Upon inspection, he discovered the combine had unearthed a cannon ball which caused significant damage to the combine. The cannon ball soon became and remained a topic of conversation. The location of the cannon ball was in a field on the westside of Old Bailey Road approximately seven tenths of a mile north of West Hornes Church Road. Today, Jerome and Diane Vick, Nash and Wilson County agribusiness leaders, own the Williams track of land.

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In May 2021, the authors examined the cannon ball that Thompson found. It was a hollow spherical iron ball with a hole to accommodate a fuse plug. Due to oxidation the outer and inner surfaces had a reddish brown coloration; however, there were no identification markings on the cannon ball. The wall thickness of the cannon ball was approximately 0.725 inches and the fuse plug opening measured about 0.900 inches. The cavity diameter was approximately 2.890 inches and the cannon ball was approximately 4.375 inches in diameter. It weighed roughly seven pounds. The volume of the cavity was approximately 285 cubic cm; therefore, the cannon ball would have held about nine ounces of black powder.⁴

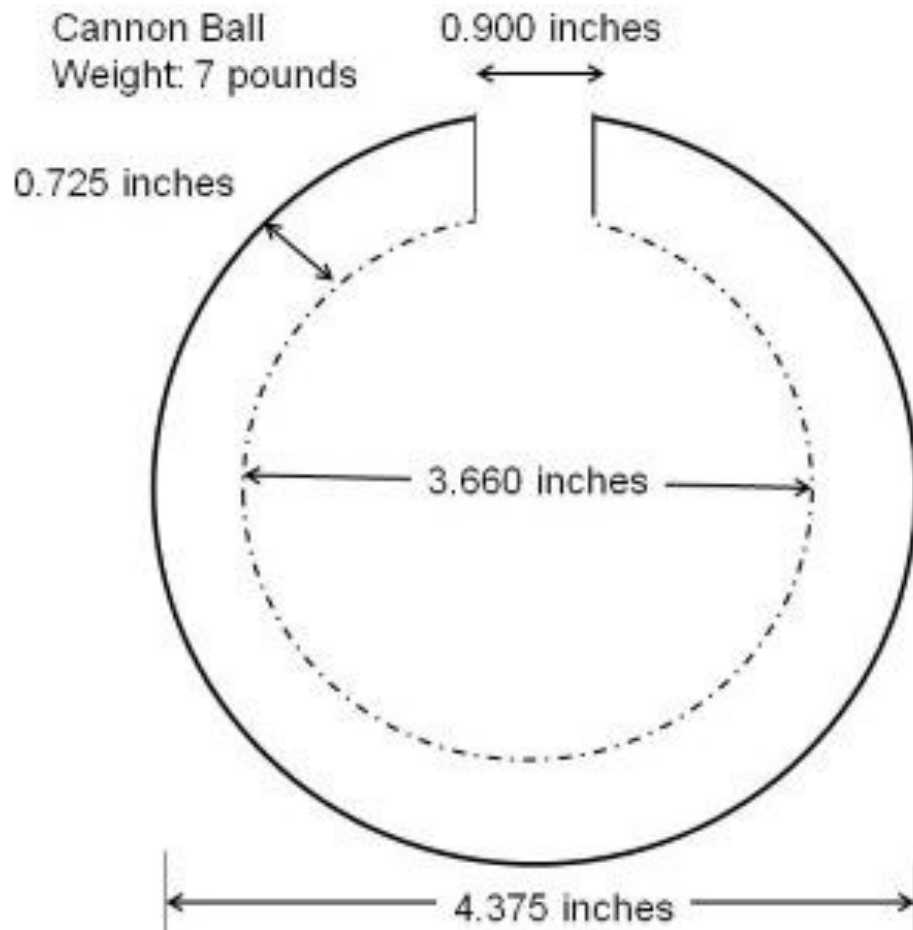
Civil War cannon sizes were described according to the ball weight the cannons fired. For example, a 12-pounder fired a 12-pound solid iron cannon ball. The bore diameter of a 12-pounder was 4.620 inches. Therefore, the 4.375 inches diameter cannon ball Thompson found would fit a 12-pounder cannon bore. In this case, if the cannon ball Thompson found had been manufactured of solid iron, based on the diameter of the cannon ball, it would have weighed approximately twelve pounds. Thus, it would be described as a 12-pounder cannon ball. Twelve-pounder smooth bore Napoleon cannons and Howitzers were used by both the Union and Confederate armies and could have chambered this type of cannon ball.⁵⁻⁶

When an iron cannon ball was poured, typically, there were seams on the ball from the mold. However, there were no visible casting seams on the exterior of the cannon ball. Perhaps the seams in this case were filed off as part of the finished cannon ball or the seams were obscured by the oxidized surface.⁷

Similar cannon balls of this type took a wooden fuse plug. To make the wooden fuse plug, a wooden dowel slightly conical in shape was made with a hole drilled in the center of the dowel. Then, a paper fuse or fuse made of rope fibers coated with an incendiary material was inserted in the fuse plug hole. After the cannon ball was filled with black powder, the fuse plug was inserted into the cannon ball cavity.⁸

Cannon balls were made to be slightly less in diameter than the smooth bore of cannon barrels from which they were fired. But, even when fired from a slightly larger, smooth bore cannon barrel, due to contact with the barrel as it passed down the barrel, the cannon ball would have had some linear striations on the surface of the ball. However, no evidence was found on the cannon ball to indicate it had ever been fired from a cannon. While the origin of this cannon ball remains a mystery, due to the proximity of the cannon ball's discovery in the Hornes Church's area, near Toisnot Swamp, it could have been manufactured at the Old Fields Bloomery Mill.

Historically, iron ore was mined in the Bloomery Swamp area and bloomeries were located near mining sites. The ore mined from Bloomery Swamp consisted of a relatively high percentage of quality metallic iron ore and was used to manufacture iron products including cannon balls. While the exact location of all the Civil War era bloomeries in the area is unknown, remnants of Bloomery Mill are located in Wilson County near Lamm Crossroad.⁹⁻¹⁰



The type of ore mined from Bloomery Swamp was limonite and was sometimes referred to as bog ore.¹¹ An 1893 analysis of the iron ore on the edge of nearby Toisnot Swamp was tested for the ore's composition. The ore contained approximately 43% metallic iron, 15% silica, 16% organic matter and water with traces of manganese, aluminum, magnesium, sulphur, phosphorus and other elements.¹²

Bloomeries, sometimes referred to as Catalan forges, were used to produce the pig iron from the Bloomery Swamp ore.¹³ These types of bloomeries were used in medieval Spain to produce excellent quality iron by heating iron ore with charcoal. When a glowing ball of iron was removed from the forge, it was hammered to help expel the slag. In general, early bloomery construction designs were simple. Early bloomeries had a chimney or stack made out of clay or bricks with pipes for oxygen inlets at the base. A mixture of roasted ore mixed with coal or charcoal filled the stack and was ignited at the top of the chimney or stack. As the mixture burned the carbon monoxide gas from the charcoal, the heat produced a mass of iron and slag, termed a bloom. By 1860, iron manufacturing technology had improved and in general, puddler furnaces were commonly used. This type of furnace was more advanced than the Catalan forge. It had a fire-proof brick chamber and chimney for smelting the ore. The molten iron was mixed in the puddler furnace and impurities were expelled yielding a higher grade of iron.¹⁴

In 1951, Missouri High Ferrell, a ninety-one-year-old Town of Bailey resident whose husband, John W. Ferrell, was one of the heirs to an iron ore mine, recalled visiting a bloomery as a child. The property where the iron ore was first mined was owned by Thomas Horn in 1779.¹⁵ Later, before 1860, John Matthews purchased the land and was owner when the war began. At that time, William H. Tappey and W. C. Lumsden, experienced foundry operators from Petersburg, Virginia, were contracted to manufacture cannon balls for the Confederacy and reopened the iron mine. During this period, bloomeries were constructed at or near the mining sites. Ferrell recalled the bloomery she saw as a child had a foundry with a brick chimney about forty feet tall. She remembered since coal could not be obtained from the North, large hardwood trees were timbered, burned and reduced to charcoal which was used in the smelting process to make cannon balls.¹⁶

Initially, in the mid 1860s, iron ingots and cannon balls were shipped to Richmond; however, by the end of the war, a large supply of cannon balls remained at a bloomery in Bloomery Swamp. Although Mrs. Ferrell was a child, she remembered that to prevent them from falling into enemy hands, the cannon balls were buried. Following the war the bloomery closed. Afterwards, the large slag piles began to vanish and eventually the brick chimney collapsed. In the early 1900s, farmers began growing tobacco and needed bricks to build tobacco barn furnaces. So, they purchased piles of bricks that had previously been used to construct the bloomery chimney. Since the chimney bricks were repurposed and in the absence of waste slag piles, today the exact location of the bloomery Mrs. Ferrell described is unknown.¹⁷ Additionally, no maps

have been located that identify the precise iron production site.

In conclusion, circumstantial evidence supports the claim that the cannon ball Thompson found was manufactured locally for the Confederacy. There are three reasons for this supposition. First, the vicinity where the cannon ball was discovered was in the same general area where iron ore was mined in Bloomery Swamp and where numerous articles report the existence of a bloomery. Second, the size of the cannon ball is more consistent with Confederate artillery compared to the larger artillery used by Union forces. Finally, Bailey resident, Missouri Ferrell, recalled cannon balls in the bloomery inventory were buried before the close of the war to prevent the inventory from being seized by the Union Army. Consequently, the cannon ball Thompson found most likely was manufactured from local bog iron ore at the Mill Bloomery or one of the bloomeries in Bloomery Swamp sometime prior to the end of the Civil War.¹⁸⁻²⁰



References

1. "A Big Sale," *The Wilson Advance* (Wilson, NC), May 21, 1891, 3.
2. "The Old Bloomery," *The Wilson Advance* (Wilson, NC), August 29, 1884, 3.
3. Authors' Note: Thompson could not recall the exact year he found the cannon ball but believed it was between 1978 and the early 1980s.
4. Authors' Note: One cubic centimeter of black powder weighs approximately 15 grains.
5. Jack Coggins, *Arms and Equipment of the Civil War* (The Fairfax Press: New York, 1983) 66.
6. Authors' Note: Dr. Dough Scott, retired National Park Service battlefield archaeologist noted that Union and Confederate forces used Napoleon cannons and howitzers during the war, May 22, 2021.
7. Authors Note: The authors met Russell J. Thompson on May 17, 2021 and May 20, 2021 to examine the cannon ball at Thompson's residence.

8. Edward S. Farrow, *Farrow's Military Encyclopedia*, (New York: Military Naval Publishing Company, 1895) 2 ed., vol. 3, 52.
9. Author's Note: The historic Bloomery Mill site is located on Countryside Road near I-95 – Highway 264 Interchange. Also, excerpt from Hugh Buckner Johnston's "The Historic Wilson County Bloomery," contributed by Reese Ferrell, *Trees of Wilson: Wilson's Family Heritage: Chronicles of the Wilson County Genealogical Society* (Wilson, NC), March 2009, Vol. 18, No. 3, p. 26-27, designated, "About the turn of this century and even later the locally famed Thomas Ruffin 'Sprawls' Lamm was still operating a cornmeal at the historic Bloomery Mill site...about six miles W.N.W. of Wilson and just beyond Lamm's Crossroads."
10. Authors' Note: Eric and Vickie Thompson Brock, Wilson County residents, currently own the property where the Bloomery Mill was located.
11. W. C. Kerr, *Report of the Geological Survey of North Carolina* (Raleigh: Josiah Turner, State Printer and Binder, 1875) vol. 1, 218.
12. J. A. Holmes, *North Carolina Geological Survey*, "Iron Ores of North Carolina," Bulletin No. 1, 1893, 35-36.
13. *Ibid.*
14. Albert Sauveur, "Making Wrought Iron a New Way: A Mechanically-Operated Puddling Furnace which Does Away with Much Manual Labor," *Scientific American*, vol. 129, no. 3 (September 1923), 186.
15. "I'm Thinking," *Rocky Mount Telegram* (Rocky Mount, NC), April 22, 1963, 4.
16. Howard and Jessie Farmer, "Old Iron Mine in Nash Rich in History," *Rocky Mount Telegram* (Rocky Mount, NC), July 29, 1951, 19.
17. *Ibid.*
18. Authors' Note: Missouri High Ferrell, the daughter of Hackney and Harriett Eatman High, was born May 9, 1860 and lived in the Town of Bailey from 1916 until her death on February 15, 1952. Mrs. Ferrell's husband J. W. Ferrell, was one of the heirs to the iron ore mine property. Mrs. Ferrell also visited relatives as a child who lived near the Civil War bloomery on Old Bailey Road.
19. Missouri Ferrell's Death Certificate, North Carolina State Board of Health, Bureau of Vital Statistics, North Carolina Death Certificates, Microfilm S.123, Rolls 19-242, 280, 313-682, 1040-1297, North Carolina State Archives, Raleigh, NC, North Carolina.
20. Howard and Jessie Farmer.

Acknowledgments from James A. Bailey and Margaret B. Bailey

We would like to express our appreciation to Russell Thompson, owner of the cannon ball, for answering questions and allowing us to examine the cannon ball. Also, we would like to thank his sister, Ellen Thompson Gray, for providing information about her brother's cannon ball discovery. We would like to express our thanks to Jerome and Diane Vick for allowing us access to the property where the cannon ball was found and Dr. Doug Scott, retired national park service battlefield archaeologist, for providing expert analysis and information about identifying Civil War cannon balls. Also, we are grateful to Ricky Hayes, Resource Conservationist, Wilson County Soil and Water Conservation District, who provided information which aided us in determining the location of the historic Mill Bloomery in Old Fields Township, Wilson County.

SAVE THE DATE

Wilson County Historical Association Fall Meeting

Marcus Witcher, Ph.D., a professor of history at the University of Arkansas, will give the BB&T Lecture in American History at 7:00 pm on Thursday, November 18, 2021 in the Ragan Center at Barton College. His topic will be related to Ronald Reagan and the end of the Cold War.

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ADDRESS CORRECTION REQUESTED

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