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INTRODUCTION

This study was made possible by a Cooperative Ecosystem Studies Unit (CESU) Task Agreement with the National Trails Intermountain Region of the National Park Service (NTIR) in Santa Fe, New Mexico.

MTSU Center for Historic Preservation (CHP) staff first visited the Wayside Store, a certified site on the Trail of Tears National Historic Trail, in December 2012 in order to document the site as part of a partnership project with NTIR to survey buildings associated with the Cherokee Trail of Tears. By this time, Gary Hacker, Ed Annable, Jon Musgrave, John Schwegman, and Dr. Charles Ruffner had compiled a substantial amount of information about the Wayside Store’s history in their report, *The Trail of Tears in Johnson County, Illinois: Documenting the Trail of Tears*. In 2013, Mark J. Wagner, David Birnbaum, and Ryan Campbell expanded the history of the Wayside Store through further archival and archaeological work in their report, *Archaeological and Architectural Investigations at the Bridges Tavern Site, Johnson County, Illinois*. This Historic Structure Report draws heavily from these two reports.

Although these prior reports thoroughly addressed the Wayside Store’s history, architecture, and archaeological work conducted at the site thus far, they did not offer any preservation recommendations for the building to the owners. Seeing a need for this, NTIR approached the CHP to complete a Historic Structure Report for the building. In August 2015, CHP staff members Amy Kostine and Dr. Carroll Van West visited the property in preparation for the report. Thanks are due to Gary Hacker (member of the Illinois Chapter of the Trail of Tears Association) and Mark J. Wagner (Interim Director and Staff Archaeologist at the Center for Archaeological Investigations at Southern Illinois University, Carbondale) for accompanying us on our visit and for sharing their expertise of the site. We particularly thank the team at the Center for Archaeological Investigations at Southern Illinois University for its collaboration and partnership in documenting and analyzing the historical significance and preservation needs of this important Trail of Tears property in Illinois. Finally, a very special thanks are due to property owner Lisa Thompson for allowing us to complete this study and for her kind hospitality.
LOCATION

In the early 1800s, John Bridges and his family immigrated to southern Illinois from North Carolina and later established a tavern and store two miles east of Pleasant Grove on the north side of today’s State Highway 146 in Johnson County (see Figure 1). According to oral traditions documented in the early twentieth century, during the Cherokee removal some Cherokee traveling the Northern Route of the Trail of Tears camped nearby and patronized both the tavern and the store (see Figure 2-3). Although the tavern burned down in 1940 and exists as an archaeological site today (11Js382), the remains of the single-pen, hand-hewn, log Wayside Store were incorporated into a frame, hay barn between 1938 and 1952 (UTM NAD83, Zone 16N: 321728E, 4145023N) and remain extant today on Lisa Thompson’s property, located at 6980 State Highway 146 (see Figure 3).

Figure 3. This ca. 1940 barn holds the remains of the Wayside Store.
Figure 2. Location of the Bridge's property in relation to the Northern Route of the Trail of Tears in Illinois. Source: Wagner, et al., "Archaeological and Architectural Investigations at the Bridges Tavern Site, Johnson County, Illinois," 4.
Figure 3. Aerial view of the Wayside Store and the approximate location of the Northern Route of the Trail of Tears. Courtesy of Google maps.
HISTORICAL BACKGROUND & CONTEXT

INTRODUCTION

"All are houseless & homeless in a strange land, and in a cold region exposed to weather almost unknown in their native country."

-The Reverend Daniel S. Butrick, accompanying Richard Taylor's detachment along the Trail of Tears in southern Illinois, December 1838.

The Reverend Daniel Butrick's moving words illustrate the harrowing journey of thousands of Cherokee through southern Illinois during their forced removal from the southeastern United States in 1838-1839. These men, women, and children belonged to eleven detachments that departed from removal camps in Tennessee and took the "Northern Route" along what became known as the Trail of Tears. These eleven detachments, totaling more than 11,500 people at departure, traveled from southeastern Tennessee through western Kentucky, southern Illinois, southern Missouri, and northwestern Arkansas before disbanding in eastern Oklahoma (see Figure 4).¹

The Cherokees' journey through southern Illinois began with the crossing of the Ohio River and ended with passage across the Mississippi River. In between, the people suffered miserably in the cold and, at least in Rev. Butrick's opinion, received little welcome from residents of the sparsely settled region. About halfway along their trek of about sixty miles across southern Illinois, the Cherokee passed the Bridges property, which included a tavern (no longer extant) and a frontier store the family operated out of a small rectangular log building similar in size to a single-pen log dwelling. While there is no known documentary evidence from 1838-1839 linking the Cherokee with either the tavern or the store, it is highly likely that some, if not all, of the detachments rested in the locust tree grove next to the tavern and then camped nearby. In addition, oral histories from the 1930s hold that some of the Cherokee purchased items from these two businesses run by the Bridges family.²

Figure 4. Map of the various routes of the Cherokee Trail of Tears. Source: National Park Service.
The Bridges family immigrated to Illinois when it was still a frontier territory. By 1810, John Bridges, a native of North Carolina, his wife Elizabeth, and their four young children had settled in the southern part of the territory, in Randolph County (two years later, Johnson County would be formed from part of Randolph). Geographically, the area is known as the Lesser Shawnee Hills and is characterized by fairly rugged terrain, including caves, sinkholes, ravines, floodplain, and river bluffs. In 1818, the year Illinois became a state, Bridges purchased 160 acres of land about one mile southeast of what would become the site of the Bridges tavern and store. The county census for that year listed John Bridges as the head of a household of eight dependents.3

The rough-and-tumble nature of frontier life, along with the high stakes associated with land claims, is readily apparent in the early history of the Bridges family in Illinois. In 1819, a man named William Russell charged John Bridges and two other men with assaulting him in November 1818 and stealing his farm, which was located in the same acreage where the Bridges Tavern would one day be built. Archaeologist Mark J. Wagner discovered that Russell had purchased land a half mile from the eventual tavern site. Wagner speculates that perhaps Bridges and the other men threw Russell off the farm because he was living there rather than on the land he had actually purchased. In Wagner's view, another possibility could be that Bridges had been squatting on the eventual tavern site and then Russell moved onto it, prompting the attack. While the resolution of the court case is unclear, in 1820 John Bridges filed a countersuit against Russell's estate for court costs, suggesting that Bridges had prevailed in the original suit. He also apparently had possession of the tavern site property. Archaeologist Wagner believes that the contest over the site in 1818 suggests that the east-west Golconda-Cape Girardeau Road already passed through it. The land was also desirable because of the freshwater spring running through it.4

John Bridges's altercation with William Russell apparently did not harm his standing in the community. Bridges served in various public capacities, including juror, constable, and road supervisor, and he was elected to the state legislature in 1824. Bridges's older sons held similar appointments at the county level during the 1820s.5

As the Bridges family grew steadily in number and prominence, John Bridges, Jr., and his wife, also named Elizabeth, formally acquired the tavern site, as well as land around it. According to Wagner's research in Johnson County deed records, Bridges, Jr., purchased a parcel directly north of the site in August 1831, bought the tavern site from the public domain in August 1834, and then purchased the parcel to the immediate west of the site in July 1838. Wagner concludes, "By the late 1830s the Bridges family owned a contiguous block of five land parcels totaling 360 acres located to the north and south of the [Trail of Tears]." Their holdings boasted several freshwater springs (see Figure 5).6

Figure 5. Spring near the Wayside Store.
When exactly the Bridges family began operating a tavern and store to cater to their neighbors and passing travelers is not known, but about 1830, give or take a few years, is likely (see Figures 6-7). The Johnson County commissioners’ court records are not extant for the years from 1829 through 1860, and no license had been issued for the tavern or store through 1828 (though this certainly does not rule out either being in operation). In 1834, one of the John Bridges was charged with assault by a man who accused Bridges of watering down the whiskey he served, suggesting that by that date the tavern was in operation. (The family’s later run-ins with the law included charges of selling liquor by the drink without a license, selling alcohol on Sunday, and permitting gambling at the tavern.) The origins of the store can similarly be deduced roughly from legal documents. The 1840 census listed John Bridges, Jr., as a farmer, and it wasn’t until a decade later that he was identified as a merchant. In 1843, however, the family was charged with running a store without a license (see Figure 8). Dendrochronology of a log section of the store by Charles Ruffner in 2008 placed the date of the section as anywhere between 1738 and 1831. Analysis of the existing structure by the team led by archaeologist Mark Wagner concluded that there was a “strong likelihood” that it existed during the Cherokees’ trek across southern Illinois. 

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**Figure 6.** Daughters of the American Revolution photograph of Bridges Tavern, 1934. 
*Source: Cairo Public Library.*

**Figure 7.** Wayside Store, east elevation.
A community named after the Bridges family had developed in Johnson County by at least 1837, when it was described in the *Gazetter of Illinois*, by J. M. Peck: "Bridge's Settlement, in Johnson county, ten miles west from Vienna [the county seat], contains some tolerably good land. Population about sixty families." Three years later, the census would list 3,626 residents for Johnson County. Farming predominated, roads were rudimentary, and both schoolhouses and stores relatively few in number.

**TRAIL OF TEARS**

The Northern Route of the Trail of Tears was blazed in 1837 by a detachment of Cherokee who had voluntarily left their homes under the direction of U.S. Army Lieutenant B.B. Cannon in the aftermath of the 1835 Treaty of New Echota. This group of about 360 people passed through southern Illinois from November 7-14, 1837, making good time in decent weather. Cannon's terse journal recounts four full days of travel, during which the Cherokee averaged 14.25 miles per day. While Cannon does not mention the Bridges family, store, or tavern, based on locations mentioned in his journal and local historian Gary Hacker's description of the Cherokees' route through Johnson County, the detachment would have been in the vicinity of the Bridges Tavern site on November 10, 1837. On the 9th, the group received corn, fodder, corn meal, and bacon from their military escorts, and on the 10th they were provided with corn, fodder, and salt. It took the group three days to cross the Mississippi due to time constraints and high winds.

As noted in the Introduction, eleven detachments of Cherokee who had been forcibly removed from their homes crossed southern Illinois in 1838-1839 (see Figure 9). The detachment conducted by Richard Taylor with the assistance of Red Watt Adair numbered about 1,030 people at departure. Taylor's detachment is significant because it included the Reverend Daniel S. Butrick, who since 1818 had been a Christian missionary to the Cherokee under the auspices of the American Board of Commissioners for Foreign Missions. Butrick's journal is one of the best sources of written information about the Cherokees' experiences along the Trail of Tears. Rev. Butrick and his wife, Elizabeth, a mission teacher, opposed

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*Figure 8. 1844 summonses ordering John Bridges, Jr., to appear in court to answer charges of selling liquor and retailing goods without a license. Source: Wagner, et al., "Archaeological and Architectural Investigations at the Bridges Tavern Site, Johnson County, Illinois," 4.*
In contrast to Cannon's detachment, Taylor's group encountered stormy and "excessively cold" weather in its trek across southern Illinois. Taylor's group was also about three times the size of Cannon's company, so traveling naturally took longer. The detachment crossed the Ohio River on December 15-16, 1838, and did not reach the Mississippi until January 25, 1839. Rev. Butrick made note of rampant sickness within several of the detachments, including Taylor's. In his entry for December 28-29, 1838, he estimated that there was sickness in almost every tent within Taylor's group. On January 10, 1839, he noted "a large number sick and unwell" in the camps. Some of those who did not survive may have been buried in a cemetery not far from the Bridges Tavern that had been used by Indians prior to white settlement in the area.

If the climate the Cherokee encountered was inhospitable, so were the people they met, according to Rev. Butrick. To put it mildly, he was not amused by the rough ways of the southern Illinois frontier. As soon as he disembarked near Golconda on December 15, 1838, he was affronted by the salty language of the men who worked at the harbor. Ten days into the journey, he

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**Figure 9.** 1838-1839 Cherokee Removal Detachments Traveling the Northern Route: Conductors, Assistant Conductors, Number of People at Departure, and Probable Locations of Departure and Disbandment. *Source: Duane King, The Cherokee Trail of Tears* (Portland, OR: Graphic Arts Books, 2008), Appendix A, 170-173.
penned this scathing assessment of the locals:

Thus far the citizens of Illinois appear more & more pitiable. They seem not only low in all their manners, but ignorant, poor, and ill humoured. They have no slaves...and because they cannot have slaves, let their work go undone.

In like fashion, Butrick later described Illinois's citizens as displaying "a more mean & niggardly disposition than I have ever found in any other part of the union." Perhaps most tellingly, Rev. Butrick portrayed the Cherokee as friendless along their journey through what he described as a "wilderness," where the locals viewed the travelers as nothing more than a possible source of financial profit: "I say wilderness, because, though many people are settled around us, yet we, Indians, have a little spot of woodland assigned us, in which we must reside as really as if all the region were a wilderness. White people come to sell & get gain, but not to invite any to a friendly roof."13

Intriguingly, Butrick recorded one of his few positive comments about the residents of southern Illinois when he was in the vicinity of the Bridges Tavern. Local historian Gary Hacker places Taylor's detachment near to the tavern and store in the early part of January 1839, and on January 3, Butrick wrote that he "rode a short distance to purchase a few articles of food. Found a delightful family. Will the Lord remember them in mercy." It would indeed be exciting if this entry by Rev. Butrick referred to the Bridges store (and if Butrick's rare accolade referred to the family), but that must remain mere speculation unless further evidence is discovered.14

Stories passed down through local families do connect the Cherokee to the Bridges store and tavern. These oral histories were collected almost a century after the Trail of Tears. Southern Illinois resident John G. Mulcaster, a veteran of the Spanish-American War and a dedicated amateur historian, took an avid interest in the Cherokees' trek and linked the Trail with the Bridges Tavern site in the 1930s. Mulcaster solicited family lore related to the Cherokee from residents along the Trail, eventually collecting more than 200 letters. At least one of the stories cited a member of the Bridges family (Sarah "Aunt Sally" Bridges (1853-1934), the widow of the son of John Bridges, Jr.) as a source for information regarding the purchase of alcohol and other supplies by the Cherokee during their removal. Another recollection detailed the experiences of a young girl, Susan Beggs, who was a niece of John Bridges and lived at the tavern when the Cherokee came through. Although they are based on second-hand information, these stories certainly lend weight to the probability that the Cherokee visited the site.15

**AFTER THE TRAIL OF TEARS**

In the decade and a half after the Trail of Tears, John and Elizabeth Bridges, Jr., thrived economically while running the tavern (and likely a related stagecoach stop) and store. The 1850 census that listed John Bridges, Jr., as a merchant valued his real estate holdings at $17,500. The agricultural census from that year listed him as the owner of a 300-acre farm that included 100 improved acres and 24 horses. Just a few years later, Bridges, Jr., died, and his estate was valued at $14,504.83. After debts had been paid and the widow's dower and inheritances set aside, just over $4500 remained. His children and grandchildren apparently did not come to enjoy a similar level of financial success to his.16

Elizabeth Bridges continued to live at the tavern for the next few decades. Late in 1853, she married Joseph N. Newton, a younger man who was a native of Kentucky.
The 1860 census listed $10,000 in real estate and $4000 in personal property for him, which probably included his wife’s inheritance from her first husband. During the Civil War, Newton enlisted in the 120th Illinois Infantry in 1862 and died the next year while on garrison duty in Memphis (one of Elizabeth's sons, David, fought for the Confederacy for a year as a member of the 4th Missouri Cavalry). In the wake of Newton’s death, Elizabeth or her sons filed at the Johnson County courthouse titles to ten parcels of land they had purchased between the 1830s and 1850s, including the title to the Bridges Tavern site. Elizabeth Bridges Newton appears to have run the tavern after the death of her second husband. The 1865 Illinois state census listed her as owning livestock worth more than $1400, and in 1869 she was charged with selling liquor by the drink without a license. Living near to her were a son, John D. Bridges (nicknamed "Went" or "Wint") and his family, and a daughter, Elizabeth Hernard and her husband Robert. Elizabeth Bridges Newton’s death in 1870 resulted in two significant changes. Her son John D. apparently inherited the tavern site land, and the family store probably ceased operation. Among the items auctioned off to settle claims against Elizabeth Bridges Newton’s estate were multiple dry goods, including fabric, patterns, gloves, shawls, handkerchiefs, and hats. Archaeologist Mark Wagner speculates that these items constituted the contents of the store. The family would have had to restock it from scratch had they ever placed the store back in business. In 1880, Simeon White built a barn for John D. Bridges, which may have been the original barn constructed around the store. John D. "Went" Bridges’s ownership of the tavern site ended tragically with his suicide in December 1883, apparently as a result of mounting debts. His widow, Sarah J. (Ragains) Bridges (later known as "Aunt Sally") received a widow’s dower that likely included the tavern and its surrounding acreage. Sarah lived at the tavern for the next fifty years, accompanied by various children and stepchildren as the years passed. She was listed in the 1900 census as the head of the household and a farmer. By 1920, she was living on her own, and ten years later, her daughter Laura and her husband were living with her and running the farm.

Figure 10. Ellen Mulcaster (left), Colonel L.O. Trigg (center), and John G. Mulcaster (right). Source: Wagner, et al., “Archaeological and Architectural Investigations at the Bridges Tavern Site, Johnson County, Illinois,” 21.
During the 1930s, John Mulcaster and other history buffs visited the tavern site in their quest to follow the Cherokees' journey (see Figure 10). Although Mulcaster had begun his Trail of Tears research while Sarah Bridges was still alive, he apparently did not interview her, suggesting that she may have been in poor health by the 1930s. In a 1933 newspaper article about the tavern and store, he noted the sturdiness of the tavern building and stated that the "wayside store," enclosed by a barn, was being used as a granary. In 1934, Mulcaster accompanied a tour of the Trail organized by several local chapters of the Daughters of the American Revolution. Mulcaster planned to write a book on the Trail of Tears in southern Illinois but died of cancer in 1937, before he could complete the work. Sarah Bridges died in 1934. A description of the tavern from about 1938 stated that a tenant was living in the tavern, although that could have been a family member. When the Bridges Tavern burned down in November 1940, Cal Begg and his family lived there.²²

CONCLUSION

When Daniel Butrick and the Cherokee in Taylor's detachment made it to the Mississippi River on January 25, 1839, Butrick wrote, "We have long been looking forward to this river, and numbers who crossed the Ohio with us have not lived to arrive at this." Today, the Bridges's family's small log store remains from the time of that sorrowful journey across southern Illinois more than 175 years ago. At the time of the removal, the store and lively tavern owned by the Bridges family represented the commercial and social growth of a frontier area just a few decades removed from Illinois statehood—the very kind of growth that had ultimately resulted in the removal of the Cherokee from their lands. Thanks to the work of Butrick, John Mulcaster, Gary Hacker, Mark Wagner, and others over the years, the history of the Trail of Tears through southern Illinois and its intersection with the Bridges Tavern site can be reconstructed, though gaps remain. Hopefully, future researchers will unearth some additional sources that will increase our understanding of the connection between the two.
WAYSIDE STORE ARCHITECTURAL DESCRIPTION

By Mark J. Wagner

The Wayside Store is a 20’ x 20’ single-pen (i.e., single room) log structure (see Figures 11-12). The original height of the structure is unknown as the upper portion of the building is no longer present. Missing structural elements include the loft joists that would have supported an upper floor; the "plates" or long beams that supported the rafters; and the rafters and roof. Mary McCorvie, however, has noted that the majority of nineteenth-century log houses in southern Illinois appear to have been one-and-a-half-story buildings. Two-story structures were uncommon and one-story log houses, although present, appear to primarily date to the twentieth century. As such, the Wayside Store may originally have been a one-and-a-half-story structure.

The structure walls consist of hand-hewn horizontal logs. The logs have hewed sides while bark is still present on the upper and lower surfaces (see Figures 13-14). An unusual feature of the logs is that they are...
rectangular rather than square, being taller than they are wide. The north wall logs, for example, range between 14” to 16” high x 6” wide. McCorvie, however, recorded log structures in southern Illinois that had log timbers in their walls that measured up to 16” high by 5” wide, or only slightly less than the Wayside Store.25

The building also is not “chinked,” that is, it lacks any trace of clay “daub” sealing between the wall logs. Daub or chinking consisting of clay mixed with straw that was used from the eighteenth to early twentieth centuries to fill in the space between the logs in the walls of log buildings. If the Wayside Store was chinked, all trace of this fill between the logs has disappeared.

The structure logs are not nailed together. Instead, the corners are held together by interlocking “half-dovetail” joints (Figure 16), the predominant type of nineteenth-century corner joint in southern Illinois. McCorvie noted that “half dovetail notches originated in North Carolina,” a conclusion that agrees with the North Carolina origin of the Bridges family and the oral histories that state they were the builders of the Wayside Store.26

The front (west) side of the Wayside Store currently rests on the ground surface. The ground gradually drops away to the east with the centers of the north and south walls being supported by sandstone block piers (see Figure 15). The east (rear) wall of the building also is supported by stone piers.
Figure 15. Sill resting on a stone pier.

Probing revealed that stone piers that are now-buried beneath the surface also support the northwest and southwest corners of the building. As such, rather than resting on the ground surface, the west (front) wall of the Wayside Store most likely rests on now buried stone piers similar to the east wall of the structure.

The structure has a central door opening on the west (front) side with a second door opening located in the southeast corner of the east (rear) wall. The central door opening is original while the rear door opening is a later modification. Windows are present on the west, north, and south walls. The south wall window is original to the structure while the north and west windows are interpreted as later modifications. The interpretation of the central door opening and south window as being original is based on the presence of ca. pre-1890 cut nails in the frames of these openings.27

Figure 16. Half-dovetail notching on the western corner of the Wayside Store’s north elevation.
The structure lacks a stone or brick firebox. It also lacks an opening in the rear or side walls for a fireplace. This suggests that the structure either was heated with a stove or that it was an unheated outbuilding.

The structure interior currently has a plywood floor. This was applied at some point in the 1970s based on newspaper scraps contained beneath the plywood. Beneath this is a sawn wood plank floor nailed into the underlying log sills with post 1880-wire nails. As such, this cannot represent the original floor. As noted by McCorvie, the original floor most likely consisted of hewn timbers.

The Wayside Store was used as a dog kennel in the recent past and remains of frame animal pens are located along the north wall of the structure. Other alterations associated with this same activity include electric lines and wire mesh over the windows of the building. The building interior is filled with lumber, scrap wood, and other debris.

Figure 17. The remains of the Wayside Store are located within a frame barn with a gambrel roof constructed between 1938 and 1952. This image shows the north and west elevations of the barn containing the Wayside Store.

Figure 18. West and south elevations of the barn containing the Wayside Store.

Figure 19. South elevation of the barn containing the Wayside Store.

Figure 20. East elevation of the barn containing the Wayside Store.
Observations on the west (front) wall were hindered by the fact that this side is flush with and covered by the west side of the ca. 1940s frame barn (see Figure 22). The wall appears to consist of six courses of logs similar to the other sides of the building. The centers of the fifth and sixth courses from the ground are heavily rotted due to rain coming in through the front of the frame barn (see Figure 24).

The west wall contains two openings in the form of a doorway and a small window located left of the doorway (see Figure 23). The slightly off-center doorway, which has a modern frame door attached to it, represents the original nineteenth-century entrance into the structure. The northern edge of the door entrance is located 3.2 m from the northwest corner of the building while the south edge is located 4.35 m north of the southwest corner. The entrance itself is approximately 1.5 m wide.
Figure 23. West elevation, depicting the current door and window.

We used an iron pry bar to remove the barn siding next to the north (left) side of the door. This revealed that remnants of the original cypress doorjamb are still present on this side of the entrance. Pre-1880 cut nails are still present in the doorjamb, indicating that it most likely is an original nineteenth-century doorjamb. The door jamb is missing on the other side of the entrance.

Comparison of the door entrance with a 1934 DAR photograph of the original “nailed” door to the Wayside Store reveal that this is the entrance that the door was hanging from when John G. Mulcaster and the DAR tour group visited the site in the 1930s (see Figures 25-26 and Appendix A for more information). The 1934 photograph shows that a notch had been cut into the bottom of the fifth log from the bottom to accommodate the top of the door. This same rectangular cut is visible in the bottom of the log above the doorway to the Wayside Store today, confirming that this was the doorway that the door hung on in 1934 and that the door indeed does go to the Wayside Store.

We could not determine whether the rectangular window located north of the door is original or not. The window opening is framed with modern lumber and has a steel mesh screen insert similar to the modern window on the north side of the building. The modern boards framing the opening would have to be removed to inspect the cut ends of the logs bordering the opening to determine whether these were made with a modern saw. The similar appearance of this window to that on the north side of the building, however, makes us suspect that it is a later modification to the structure.
Figure 25. Current door, west elevation.

Figure 26. Daughters of the American Revolution photograph of the Wayside Store’s original “nailed door.” Source: Cairo Public Library.
The 6.10 m (ca. 20 ft) north wall currently consists of six courses of logs (see Figures 27-28). The five lower courses are intact while the uppermost course now consists only of approximate 2 ft and 3 ft long log sections at the east and west ends, respectively (see Figure 25). The wall measures approximately 9’ high from the current ground surface to the top of the uppermost log. The base of the bottommost log is raised approximately 6-12” off the ground, with the space between the log and ground reaching its greatest height at the northeast corner.
The logs are all hand-hewn with visible ax marks. The logs comprising the wall are “plank-like” in form, being much higher than they are wide. Height, for example, varied from 14-16” while width was approximately 6”. The logs still have bark on their upper and lower edges. No chinking was visible.

A window opening has been cut into the fourth course from the bottom at the northeast end of the wall (see Figure 29). The window opening measures 34” long by 15” high. It is located from 42” to 76” west of the northeast corner of the wall. Pieces of modern milled lumber have been nailed to the two sides of the opening to create a window frame. One side consists of a single 2” x 6” board section while the other consists of two 2” x 3” board sections nailed next to each other to create a 2” x 6” board. All of the boards are nailed in with post-1880 wire nails. The “window” itself consists of a metal grill with window screen located behind it.

Saw marks extending into the log below that appear to have been made by a modern saw are present on either side of the window opening. The end of one of the logs framing the opening also has been cleanly cut, as would be expected of a modern saw. As such, the window opening is most likely a modern modification to the structure rather than being original.30

Other post-construction alterations to the north side consist of (1) a series of milled boards have been nailed lengthwise to the base of the wall to seal the crawlspace beneath the structure (see Figures 30-31). Vertical uprights have been nailed to these planks to hold them together; (2) approximately 75% of the uppermost (sixth) log course has been removed with only two end sections remaining. Dr. Charles Ruffner removed a section of the northwestern part of this log for a dendrochronological sample.
The remainder may have been removed to form a crude “window” to provide additional light into the interior of the structure similar to what was done on the south wall.

Finally, notches are present between the fifth and six logs at the east and west ends of the wall (see Figures 32-33). These are believed to have held the ends of log beams that once extended out of the north wall. It may be that these beams connected the Wayside Store with a second log structure to the north in a “dog trot” type of arrangement with an open but roofed area located between the two structures. It may also be that some type of closed shed addition was attached to the north wall of the Wayside Store. If either of these two scenarios is correct, it indicates that the Wayside Store as it currently exists represents only part of a structural complex that once existed in this area. These additional structures may have been demolished ca. 1880 to make the Wayside Store fit in the frame barn that is believed to have been built at the site at that time.
The approximately 20’ long east wall consists of six courses of logs and an additional square log sill at the base (see Figures 34-35). A doorway is located near the southeastern corner of the wall (see Figures 35 & 37). The door entrance was cut through the four bottom wall logs, meaning that it definitely was not part of the original construction. In addition, the south end of the bottommost log to the right of the doorway has a very cleanly cut edge similar to what would be expected of a modern saw. The base of the door entrance rests on the log sill of the structure.

Other factors that indicate the doorway is a late-nineteenth-or-twentieth-century modification to the original structure include (1) the presence of vertical milled 2” x 4” boards on both sides of the door entrance. Although at first glance these appear to be door jambs, their real function appears to have been to stop the bottom four log courses from sagging after the door entrance.
was cut through the walls. The 2” x 4” boards were attached to the ends of the cut-off wall logs using post-1880 wire nails; (3) A large vertical plank nailed into the wall to the right of the door entrance. This plank is nailed into the log sill, the four cut-off logs, and the intact log above the door entrance using post-1880 wire nails. We suspect that this plank was nailed to the wall prior to cutting the door entrance. Its purpose was to hold the four bottom logs in place while their southern ends were being cut off and prevent them from sagging. A 43” long 2” x 4” board located ca. 55”-59” north (right) of the door entrance that is nailed into the bottom two log courses and the sill appears to have served the same purpose.

A final argument for the rear doorway being a later modification is that its creation weakened the east wall by cutting off the half-dovetailed south ends of the four lowest wall logs. The purpose of notched joints at the corners of log structures is to join two opposing walls firmly together. Although the corner notched joints of the four bottom logs are still present, they no longer serve to attach these logs to their counterparts on the south wall.

Three east-west oriented floor joists are visible at the base of the east wall (see Figure 36). These logs, which rest on the log sill, are discussed in more detail in the section on the sub-floor system of the Wayside Store.

Figure 36. Hand-hewn floor joists rest on the east elevation’s sill.

Figure 37. Detail of entrance, east elevation.
The south wall is currently made up of 6 courses of logs (see Figures 38-40). The southeast corner of the bottommost log rests on a massive north-south oriented sill, which is twice the thickness of the wall logs. The sill rests on a stone pier comprised of two large sandstone slabs. A third tilted slab located west of the pier currently does not support anything, but may have been part of another pier at one time. A second pier is comprised of 2 irregular sandstone slabs that support the center of the wall. The western end of the log (the southwest corner of the wall) now rests on the ground surface. Probing, however, indicated that it appears to rest on a now-buried stone pier.
The south wall also contains a modern window. The western part (approximately 11 feet) of the fourth log from the bottom has been removed from the southwest corner all the way to where it intersected the original window. The horizontal window opening is framed by a combination of 2" x 6" and 2" x 4" modern boards on the top, bottom, and sides. The "window" itself consists of a wire mesh screen with plastic sheeting behind it to admit light.

Finally, as on the north wall, a notch has been cut into the wall between the fifth and six logs to hold the end of a log that once must have extended south from the wall (see Figure 41). This notch does not line up with those on the north wall, indicating that the two sets of notches are not related. As on the north wall, the presence of this notch suggests that some type of addition was once located off the south wall of the building.
The structure interior lacks any original furnishings such as shelves, staircase, or metal hooks and latches (see Figures 42-43). The structure floor currently consists of sheets of 3/4" plywood nailed to the underlying log sills. The remains of wooden animal pens associated with the use of the structure as a dog kennel are located along the north wall (see Figure 44). A large amount of scrap lumber, wooden crates, and other trash is scattered around on the floor.

Removal of two of the plywood sheets revealed that the plywood floor covered an earlier wooden sawn plank floor (see Figure 45). Fragments of several undated pages from the *St. Louis Post Dispatch* and *Chicago Tribune* newspapers were found wedged between the two floor layers (see Figure 46). Both newspapers contained stories about the Vietnam War, indicating that they dated to the late 1960s or early 1970s. In addition, one of the papers contained a news article about a U.S. Congressman who only served two terms between 1968-1971. This indicates that the plywood floor had to have been laid down after 1968 and before 1971, most like to provide a stable floor for the dog kennels.

The 1”-thick boards in the plank floor are of varying widths (5, 6, 9, and 10 inches) and lengths indicating that they most likely represent scrap lumber recycled from another building. The boards are milled with saw mark scars present on some of them. They are attached to the underlying floor joists with post-1880 wire nails (Figure 47). This contrasts with the pre-1880 machine cut nails contained in the door and window jambs of the Wayside Store, indicating that the plank floor is almost certainly not the original floor of the structure.
SUB-FLOOR SYSTEM

Figure 48. Floor joists supporting the plank floor.

Removal of a small section of the plank floor exposed the floor joists and underlying ground surface, which is located about 10” below the floor. The floor rests on east-west oriented hand-hewn joists (see Figure 48). The two joists exposed in the hole in the structure floor are separated by 15 inches. However, the ends of four joists separated by intervals of 12, 19, 21, and 23 inches are visible at the east end of the structure.

The floor joists exposed in the hole under the floor have hewed or planed flat top and bottom surfaces while the sides are untrimmed. Another floor joist on the west side of the structure has a hewed lower surface (see Figure 49). However, another floor joist on the west side of the structure has clearly been recycled from an earlier structure (see Figure 50). This joist has multiple notches cut into it as the result of either having been used as a sill or part of the roof framework of a log structure.

The presence of recycled logs in the Wayside Store would be a problem if the Bridges family did indeed first move to the Bridges site in 1834, only three years before the Cherokee emigration. This would leave only three or four years for log buildings at the site to fall into a state of disrepair and be recycled for use in other buildings. However, based on the 1818 court case against John Bridges, it is clear that log structures were present at the site by at least that date if not earlier. This leaves at least 20 years for earlier log structures at the site to be demolished and recycled into later log buildings, which would mean that if the Wayside Store was built in the 1830s it could contain parts of earlier structures.

Figure 49. Floor joist with hewed bottom, view to the northwest. Source: Wagner, et. al., “Archaeological and Architectural Investigations at the Bridges Tavern Site,” 85.

Figure 50. Notched floor joist. Source: Wagner, et. al., “Archaeological and Architectural Investigations at the Bridges Tavern Site,” 86.
PRESERVATION NEEDS & RECOMMENDATIONS FOR THE WAYSIDE STORE

As mentioned earlier, the remnants of the Wayside Store are located within a ca. 1940 hay barn. The north, east, and south elevations of the Wayside Store lie within the barn’s interior and are largely protected from moisture-related problems caused by direct contact with environmental elements. The west elevation of the Wayside Store, however, is incorporated in the barn’s exterior west wall. Covered by vertical wood siding that is rapidly deteriorating, this elevation of the Wayside Store has direct exposure to environmental elements and needs immediate intervention to halt active deterioration. In its current condition, heavy winds, ice, or snow could result in a potential, catastrophic collapse of the barn if it is not stabilized. When addressing preservation concerns, it is always advisable to contact experienced professionals and to follow the Secretary of the Interior’s Standards for Preservation.

First, it is important to address the overall stability of the Wayside Store and the ca. 1940 barn, along with the causes of the moisture related damage to the Wayside Store’s west elevation. Both are essential to the long-term preservation of the building.

- **Erosion and soil grading.** Surface ground water is a contributing factor to not just the stability of the ca. 1940 barn, but to the ongoing moisture damage to the Wayside Store’s lower west elevation and the accumulation of silt underneath the building. As a result of poor soil grading and a lack of rain gutters on the roof, water flows directly into the barn during rainstorms. This has severely eroded the soil around the barn’s stone pier foundation on its southern wall and is also an issue on its northern wall (see Figures 51-53). Continuous soil erosion can impact the stability of the barn’s foundation and cause it to fail. If the foundation fails, then the barn’s walls may collapse and damage the Wayside Store in the process. Grading the soil to divert the water away from the building should be your first step towards the preservation of the Wayside Store, and a qualified archaeologist should be on site to monitor the surface disturbance during the soil grading process.

Secretary of the Interior’s Standards for Preservation

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.

2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
Figure 51. Soil erosion on the barn’s north elevation.

Figure 52. Detail of soil erosion near one of the barn’s south elevation piers.

Figure 53. Soil erosion on the barn’s south elevation.
After grading the soil, an overall treatment option should be chosen in order to preserve the Wayside Store. Although the ca. 1940 barn has helped protect the remnants of the Wayside Store for decades, particularly its north, east, and south elevations, its poor construction and deferred maintenance threaten the stability and condition of the Wayside Store. Owner Lisa Thompson utilizes the barn for a backdrop for her photography business and prefers to keep the barn as opposed to razing it. If the barn is kept rather than destroyed, then its foundation and frame must be stabilized under the direction of an experienced professional and with proper safety protocols in place. Deteriorated siding should also be repaired or replaced, particularly on the barn’s west elevation. A gutter system will need to be installed along the edge of the roofline, as well. The current roof does not direct water away from the building, rather the water is directed from the roof right to the building’s pier foundations on its north and south elevations creating severe erosion issues. In addition to stabilizing the barn, repairing its deteriorated siding, and adding a gutter system, one of the following options may be considered in order to offer additional protection from rain, ice, and snow to the Wayside Store’s west elevation:

**OPTION A: EXTEND THE ROOF’S OVERHANG ON THE WEST ELEVATION.**

One option of reducing ongoing moisture damage with the building’s west elevation without changing its general appearance is to extend the roof’s overhang. As mentioned earlier, the entire barn would need to be stabilized to support the additional weight of a roof extension on the west elevation.

**OPTION B: CONSTRUCT AN OPEN SHED ROOF ON THE WEST ELEVATION.**

Instead of extending the roof’s overhang on the west elevation, another option to provide additional protection from the elements is to construct an open shed roof just above the Wayside Store’s uppermost log on the west elevation. Just as with Option A, the barn’s stability would need to be considered in this process, as more weight would be added to this elevation. This option would impact the general appearance of the barn’s façade, perhaps making it less desirable as a photographic backdrop.

Estimating the final costs of stabilizing the barn with Options A or B requires consultation with a historic architect and a contractor who has experience and expertise in repairing historic buildings. The overall cost depends on a variety of factors, including design, engineering, materials, and how the work is being done (i.e. contractors working at prevailing wage rates versus the
owner or volunteers). It is best to contact multiple architects and contractors to compare estimated cost and experience with working with historic resources, as they could vary substantially from one to another.

Another overall treatment option to consider for the Wayside Store involves tearing down the ca. 1940 barn, since it is not historically significant and is in poor condition, and installing a steel canopy over the remnants of the Wayside Store (see Figure 55). Tearing down the existing barn must be done very carefully and in such a way that it does not damage the Wayside Store.

**OPTION C: TEAR DOWN THE EXISTING BARN AND INSTALL A STEEL CANOPY OVER THE WAYSIDE STORE.**

This option eliminates necessary and costly repairs to the barn when it is of no historical value. It will also lower future maintenance costs, since maintenance would be reduced to a single-pen room versus an entire barn. Cost savings from repairing the barn could be used to repair the Wayside Store.

![Figure 55](image)

**Figure 55.** In 1958, a steel canopy was constructed over the McKendree Chapel in order to protect this 1819 church in Jackson, Missouri. A similar canopy could be constructed over the Wayside Store.

As mentioned earlier, the Wayside Store is missing its loft joists, plates, rafters, and roof, and the original height of the building is unknown. Rather than reconstructing the roof without a sufficient understanding of how it was originally built, a simple steel canopy installed over the Wayside Store will shelter the building and protect it from the elements. The steel canopy is an excellent alternative to a costly and possibly historically inaccurate reconstructed roof.

Since tearing down the barn would eliminate a favored backdrop for the owner’s photography business, reclaimed wood from the barn’s exterior walls could be used to build a freestanding wall for the use as a backdrop at another location on the property (see Figure 56-58). Close-up portraits taken in front of the false wall would still offer the same weathered wood backdrop desired by both the photographer and client.
Estimating the final costs of Option C requires consultation with a historic architect and a contractor who has experience and expertise in repairing historic buildings since you will be removing mid-twentieth-century material from a historic nineteenth-century log building. As mentioned before, the overall cost depends on a variety of factors, including design, engineering, materials, and how the work is being done (i.e. contractors working at prevailing wage rates versus the owner or volunteers). It is best to contact multiple architects and contractors to compare estimated cost and experience with working with historic resources, as they could vary substantially from one to another.

Deciding which option is best is left to the property owner, who needs to weigh use today versus long-term preservation of an invaluable piece of history. Any efforts to stabilize or remove the barn should be done
under the watchful eye of an experienced professional with proper safety protocols in place. After an overall treatment option is chosen and the soil is graded, preservation issues directly associated with the Wayside Store should be addressed. The following recommendations focus on the repairs and preventative maintenance of the historic Wayside Store:

- **Inspect and stabilize foundation piers.** Addressing issues with the foundation should be the starting point for any preservation project, because problems found there will affect the entire structure. The dry-stacked stone pier on the Wayside Store’s southeast corner is not stable and is not supporting the building’s eastern sill sufficiently (see Figures 59-60). In addition, the building’s northwest corner pier is no longer supporting the western sill (see Figure 61). Under the direction of an experienced professional and with safety protocols in place, the foundation stones should be reset in their original place, supporting the sill. All of the piers should be professionally inspected for stability and reset if needed.

- **Rotted sill.** Sills are square-hewn beams that rest on top of the foundation, supporting not just the floor joists, but the entire structure. The Wayside Store’s sills measure approximately 11” x 11” and are located on the building’s western and eastern elevations (see Figure 62). The western sill is rotted and has lost its structural integrity (see Figures 61 and 63). Since the sill is no longer able to bear its load, it should be replaced with decay-resistant wood or pressure-treated timber by an experienced professional.

- **Silt deposits.** As mentioned before, the Wayside Store’s west elevation currently rests on the ground surface, whereas the center of the building’s north and south elevations, along with the east elevation, are supported by stone piers. The west elevation was originally supported by stone piers, as well, but silt deposits built up over the years have buried these piers. A minimum of 18’ of clearance should exist underneath the entire building in order to allow airflow under the building to keep sills and joists from rotting. Low clearance between the ground and the western sill may have been a contributing factor of its deterioration. Remove soil and other debris from under the building so there is at least 18” of clearance between the ground and the nearest surface of the log sills or the floor joists.
Figure 61. The Wayside Store’s northwest corner pier is no longer supporting the sill affecting the structural integrity of the wall.

Figure 62. The arrow points to the Wayside Store’s eastern sill. Source: Wagner, et. al., “Archaeological and Architectural Investigations at the Bridges Tavern Site,” 73.

Figure 63. Detail of deteriorated western sill, which no longer supports the floor joists.
• **Rotted wall logs.** There are some rotted wall logs near the top of the Wayside Store’s west elevation (See Figures 64-65). It is always preferable, and less costly, to repair a partially deteriorated log rather than replacing it, but if the log is completely rotted through, then the log should be replaced with one of the same size and wood species. Although repairs should be made by an experienced restoration specialist, “Preservation Brief 26: The Preservation and Repair of Historic Log Buildings,” by Bruce D. Bomberger, offers some excellent information on various techniques to repair rotted logs:

**Wood Splicing**

Wood splicing can involve several types of techniques. Also referred to as "piecing-in" or "Dutchman" repair, it involves treating a localized area of deterioration by cutting out the decayed area of the log, and carefully carving and installing a matching, seasoned wood replacement plug or splice. The wood species, if available, and the direction and pattern of the grain should match that of adjacent original wood. The location and depth of decay should determine the splicing technique to be used. In a case where decay runs deep within a log, a full-depth segment containing the affected area can be cut out, severing the log completely, and a new segment of log spliced in, using angled "scarf" joints or square-cut "half-lap" joints. The splice is secured to the severed log by angling lag screws or bolts through the upper and lower surfaces that will be concealed by daubing.

Splicing can also be performed using epoxy as an adhesive. A log with shallow decay on its outer face can be cut back to sound depth, and a half-log face spliced on, adhered with epoxy, screws or bolts. A technique for the repair of badly deteriorated log crowns involves cutting them back to sound wood, and into the notching joint if necessary, and installing new crowns cut to match. Fiberglass or aluminum reinforcement rods are inserted into holes drilled into the new crowns, and into corresponding holes drilled in the ends of the original cutoff logs. Epoxy is used as an adhesive to attach and hold the new crowns in place. Long lag screws can be angled up through

![Figure 64. Rotted logs can be seen through the the rotted siding on the west elevation.](image)

![Figure 65. Rotted logs above the door on the Wayside Store’s west elevation. Source: Wagner, et. al., "Archaeological and Architectural Investigations at the Bridges Tavern Site," '74.](image)
the underside of the crown into the log above to provide additional support for the repair.

**Epoxy Consolidation and Repair**

In some instances, epoxies may be used by themselves to consolidate and fill the voids left by deteriorated wood. Epoxies are versatile in performance, relatively easy to use by experts, and, after curing, may be shaped with woodworking tools. Their use requires that sufficient sound wood survives for the epoxy to adhere. But they can be used to stabilize rotted wood, return full or greater than original strength to decayed structure-bearing members, and to reconstitute the shape of decayed log ends.

Epoxies resist decay and insects, and while epoxy itself is resistant to moisture, epoxy tends to cause adjacent wood to retain moisture rather than dry out, and if not used in the right location, can actually further a continuing cycle of wood decay. Hence, epoxy repairs are most successful in areas where they are protected from moisture. Epoxies, of which there are a variety of commercially-available products on the market, are prepared in essentially two forms: a liquid consolidant and a flexible putty filler. Each consists of a resin and a hardener which must be mixed prior to use.

The technique of treating, for an example, a decayed log crown with epoxies is begun by removing loose decayed wood, and drying the area if necessary. The rot-affected cavity and surface of the log end is then saturated with liquid epoxy by repeated brushing, or by soaking it in a plastic bag filled with epoxy that is attached to the log. The porous condition of the rot-damaged wood will draw up the epoxy like a lamp wick. Once the liquid epoxy has saturated the log end and cured, the log end has been consolidated, and is ready for the application of an epoxy putty filler. The filler resin and hardener must also be mixed, pigments must be mixed with the filler epoxy to color the patch, and more importantly to protect it from ultraviolet sunlight. The filler can be applied with a putty knife, pressing it into the irregularities of the cavity. The cured patch can be worked like wood and painted with an opaque stain or a dull finish paint to help it blend with surrounding wood, although epoxy repairs can be difficult to disguise on natural, unpainted wood.

Epoxies can be used to consolidate and repair other areas of a log, including rotted internal areas which have not yet progressed to damage the log's outer surface. Saturation of small internal areas can be accomplished by drilling several random holes into the log through an area that will be concealed by daubing, and then pouring in liquid epoxy. If a pure resin is used, it should be a casting resin to minimize shrinkage, and it is best to fill voids with a resin that contains aggregates such as sand, or micro-balloons. Epoxy is frequently used by architectural conservators to strengthen deteriorated structural members. The damaged log can be strengthened by removing the deteriorated wood, and filling the void by imbedding a reinforcing bar in epoxy filler, making sure the void is properly sealed to contain the epoxy before using it. Sometimes larger decayed internal areas of a log can be more easily accessed and repaired from the interior of a structure. This may be a useful technique if it can be accomplished without causing undue damage to the interior finishes in the log building. However, despite its many advantages, epoxy may not be an appropriate treatment for all log repairs, and it should not be used in an attempt to conceal chinking, or extensive log surface patching that is exposed to view, or logs that are substantially decayed or collapsed.
Log Replacement
Repairing or replacing only a segment of a log is not always possible. Replacement of an entire log may be the only solution if it has been substantially lost to decay and collapsed under the weight of logs above it. Log replacement, which should be carried out only by experienced craftspersons, is begun by temporarily supporting the logs above, and then jacking them up just enough to insert the new log. Potential danger to the structure may include creating inadequate temporary bearing points, and crushing chinking and interior finishes which may have settled slowly into non-original positions that cannot withstand jacking.

To begin the process of log replacement, the entire length of the log must be inspected from the exterior and the interior of the structure to determine whether it supports any structural members or features, and how their load can be taken up by bracing during jacking and removal. On the exterior, sheathing such as weatherboard, and adjacent chinking, must be removed along the length of the log to perform this inspection. Likewise, on the interior, abutting partition walls and plaster may also need to be removed around the log to determine what, if any, features are supported by or tied into the log to be removed.

A replacement log should be obtained to match the wood species of the original being removed. If it is a hewn log, then the replacement must be hewn to replicate the dimensions and tool marks of the original. If the same wood species cannot be obtained in the original dimensions, a substitute species may have to be used, and may even be preferable in some instances if a more durable wood can be found than the original wood species. It should, however, be chosen to match the visual characteristics of the original species as closely as possible.32

• Apply a wood preservative. It is recommended that a borate wood preservative be applied to the surface of the Wayside Store’s log walls by spray or brush. Borate solutions help prevent and kill wood boring beetles, carpenter ants, termites, and wood rot.

• Insects. Mud dauber nests can be seen in numerous locations on the Wayside Store’s exterior elevations (see Figure 66). Although the mud dauber will not cause physical damage to the building, they can be a nuisance to visitors and they will sting, but only when threatened or aggravated. If the mud daubers become too much of a nuisance, contact a licensed pest control specialist.

• Perform annual inspections. Remember to inspect the store on a regular basis for new damage or deterioration. Check the foundation for stability, the logs for rot, increasing silt deposits under the buildings, and make sure that there are no leaks in the roof.
Figure 66. Mud dauber nest.
APPENDIX A: WAYSIDE STORE DOOR

Source: Gary Hacker, Ed Annable, Jon Musgrave, John Schwegman, & Dr. Charles Ruffner, “The Trail of Tears in Johnson County, IL: Documenting the Trail of Tears” (research compendium published by Gary Hacker and the Johnson Co. Genealogical and Historical Society, rev. ed. 2010), Appendix C.

Bridges Project

The Door – Preliminary Report

By

Ed Annable

November 1, 2005

Mr. Ken Buzbee of southern Illinois owns the door that is described in the following report completed by Ed Annable. Mr. Buzbee reports that his father purchased and removed this door from the Bridges Wayside Store building, sometime in the 1940’s. Mr. Buzbee and his father are descendants of John Bridges. This door was on display at the Southern Illinois University Museum in 2005 when Mr. Annable examined it and wrote this report.

Mr. Ken Buzbee and Mrs. Juanita Whiteside report that his father used to take this door around to various elementary schools in southern Illinois and show it to the students and discuss its history. Mr. Buzbee has preserved and protected this door since it came into his possession from his father a number of years ago. As one views this old door, one is amazed by not only its apparent age but the number of nails that were driven into its surface.

Monday, October 31, 2005 – Inspection of the door currently on display at the SIU University Museum.

Present were: Gary Hacker, Janet Hacker, Karen Frailey & Ed Annable

Appearance – The door seems to be in a remarkable state of preservation considering its supposed age. There is some apparent wood shrinkage with some looseness of metal objects. The surface appears to be made of Cedar which shows no saw marks. Each plank is approximately eight inches wide and about one half inch thick. The absence of saw or tool marks may be due to deterioration of the wood surface. The second layer of boards run in a vertical direction – ninety degrees to that of the surface planking. The second layer appears to be 6-7” wide by one inch thick boards that may be Cypress. Below that layer are three horizontal boards approximately six inches by one inch – these forming the structural elements of the door.
Surface Appearance – The surface of the door is studded with nails. These are cut nails of a very old type. They are not driven into the door at random but form a pattern.

Bridges Door B

Most planks that are eight inches wide have 14 rows of nails. These are spaced at 20 per inch. Counting the number of planks X 14 rows X width X 20 (per inch) = more than 8000 nails.

The pattern appears to be rows horizontally and rows in a diagonal. This causes the nails to form a diamond pattern on the door.

Bridges Door C

Yellow Lines Added for Illustration

Why Were The Nails There?

It has long been reported that the nails were driven into the door to keep thieves from drilling into the door and exposing the lock mechanism. The fact that the nails leave no place where a drill larger than one half inch could penetrate the wood without damage is apparent.

There is, however, a decorative element to the appearance. The previous photograph shows the diamond pattern that was painstakingly achieved. This pattern was planned and carefully laid out. The diamond effect would have been strikingly beautiful in a day when it was difficult to obtain a flat wall on a cabin or structure. The maker of this door had artistic aspirations for his finished work. If the nails were merely for protecting the door from intrusion, the total amount of nails used was in excess of that aim. Nails driven only at vulnerable locations could have achieved the same protection. This door was a work of art in a wilderness where random shapes and patterns were the norm in building construction.

Bridges Door D
Second Layer or Innermost Layer of the Door

The pattern of the innermost layer of wood can be seen by looking at the above photo of the exterior of the door. This pattern effect of vertical lines is caused by the deterioration of the edges of the planking below causing the nails to have come loose. The nail heads are rounded and have a coat of rust on them forming a smooth patina. The loose nails seem to not have this smoothness causing a pattern of vertical lines where they have become loose at the joints between the board planking below.

We were unable to get a close look at the inside of the door because we could not remove it from its wood cabinet. We were, however, able to lift the door and peer underneath at the construction. The door construction can be seen on the following page.

Door Structure

Doors of a later period (the only ones we have seen) were usually constructed with a classic "Z" pattern to keep from sagging. Another pattern (not as common) was the sidewise "W" as shown in the line drawing below.

The Bridges door uses neither of these patterns but rather has three horizontal boards to hold the door together as seen in the photo below.
Hinges

There appears to have been two sets of hinges on this door - an original set and a set added later. The earliest hinges were of a wrought design or blacksmith created type. The second set appears to be of a more modern design - probably known as “strap hinges.”

A view beneath the door shows one of the older wrought hinges.

Bridges Door H

Note the portion of the hinge shown by the yellow arrow. The end appears to be rounded while the whole length appears to be the same width from end to end.

The bolts that hold this hinge to the door can be seen in the photo below.

Bridges Door J

These old wrought hinges appear to be the oldest apparent set of hinges that were used on the door. They are similar to the illustration below.

Another set of hinges were added at a later date. These appear to be of a more modern type similar to those shown below.

Modern Type Strap Hinge

The hinge mounting can be seen for this type of hinge in the next photo.

Bridges Door K

Yellow Arrows Indicate Hinge Mounting Holes

It appears that the door opened inward which would substantiate the stories that the door was built for security. With the hinges on the inside of the building, it would be almost impossible to remove the door from its mounting if one was on the outside.

For more details on the hinge mounting see the drawing of the entire door.
Door Latching Mechanism

It cannot be determined what type of latch or lock was used on the door from the limited view of the inside of the door. There appears to be a keyhole as well as one other round hole and a rounded or worn section of the door that is missing.

Questions That Need to be Answered

1. Is the outer planking original or was it added at a later time? The door without the outer planking is a structurally sound door. The outer skin may have come from a different period of time than the door.

2. How many sets of hinges has this door had? Although it appears to have had two sets of hinges, there is a possibility that another set was used at an earlier date. The long strap hinges are not mounted on the structural cross boards of the door which is the usual manner. An earlier set of wood hinges could have been used on this door which would predate the long iron hinges.

3. What sequence did the different hinge mountings appear? Are we correct in assuming that the older long iron straps predated another set of hinges as indicated by the second set of hinge mounting holes or were these holes used to mount an older set of hinges?

4. Is the keyhole original or of a more modern period?

5. Was the type of nails used contemporary with the supposed age of the door?
Nails Used in the Door

Bridges Door P

The above photo of one of the actual nails in the door is not as sharp as we would like to have but it can readily be seen by inspection that they are of a type known as "Type B" Cut Nails.

Type "A" Cut Nail (1790-1830)

Type "B" Cut Nail (1820-1900)

An earlier type of nail predated the two above but these nails do not appear to be from that period of time.

Door to Bridges Side:

Appears to be 9 horizontal bands approx. 1/8" thick - Similar over vertical panels of approx. 1/4" thick - Sheppard with three horizontal panels approx. 5/16" wide horizontally - Sheppard.
APPENDIX B: DENDROCHRONOLOGY

Source: Gary Hacker, Ed Annable, Jon Musgrave, John Schwegman, & Dr. Charles Ruffner, “The Trail of Tears in Johnson County, IL: Documenting the Trail of Tears” (research compendium published by Gary Hacker and the Johnson Co. Genealogical and Historical Society, rev. ed. 2010), Appendix H.

Dr. Charles Ruffner (above) laying out section to cut from log of the Bridges Wayside store. Dr. Ruffner (below) photographing the section that he had just cut.
ENDNOTES

1 The Journal of Rev. Daniel S. Butrick, May 19, 1838-April 1, 1839: Cherokee Removal, Monograph One (The Trail of Tears Association, Oklahoma Chapter, 1998), 52 [hereafter Butrick Journal]; Tiffany Momon, Noel Harris, Amy Kostine, and Carroll Van West, The Crider Corncrib Historic Structure Report, Figure 10: 1838-1839 Cherokee Removal detachments traveling the Northern Route: Conductors, Assistant Conductors, Number of People at Departure, and Probable Locations of Departure and Disbandment (Source: Duane King, The Cherokee Trail of Tears (Portland, OR: Graphic Arts Books, 2008), Appendix A, 170-173), 8.


5 Hacker, et al., "The Trail of Tears in Johnson County, IL: Documenting the Trail of Tears," Appendix D, 4-5, and Appendix E, Aug. 2, 1824.


13 Butrick Journal, 49, 51, 52, 55.


16 Mark Wagner suggests that the large number of horses may indicate that there was a stagecoach stop on the property. Wagner, et. al., "Archaeological and Architectural Investigations at the Bridges Tavern Site," 32, 34-35, 40.


19 There is also no reference to the store or mercantile activity in the 1870 or 1880 census listings for John D. "Went" Bridges, or in the 1884-1885 documentation associated with his estate. Wagner, et. al., "Archaeological and Architectural Investigations at the Bridges Tavern Site," 38-40, 149-165.


25 McCorvie, 88.

26 McCorvie, 99.

27 McCorvie, 84.

28 McCorvie, 88.

29 See Appendix A.


31 See Appendix B.