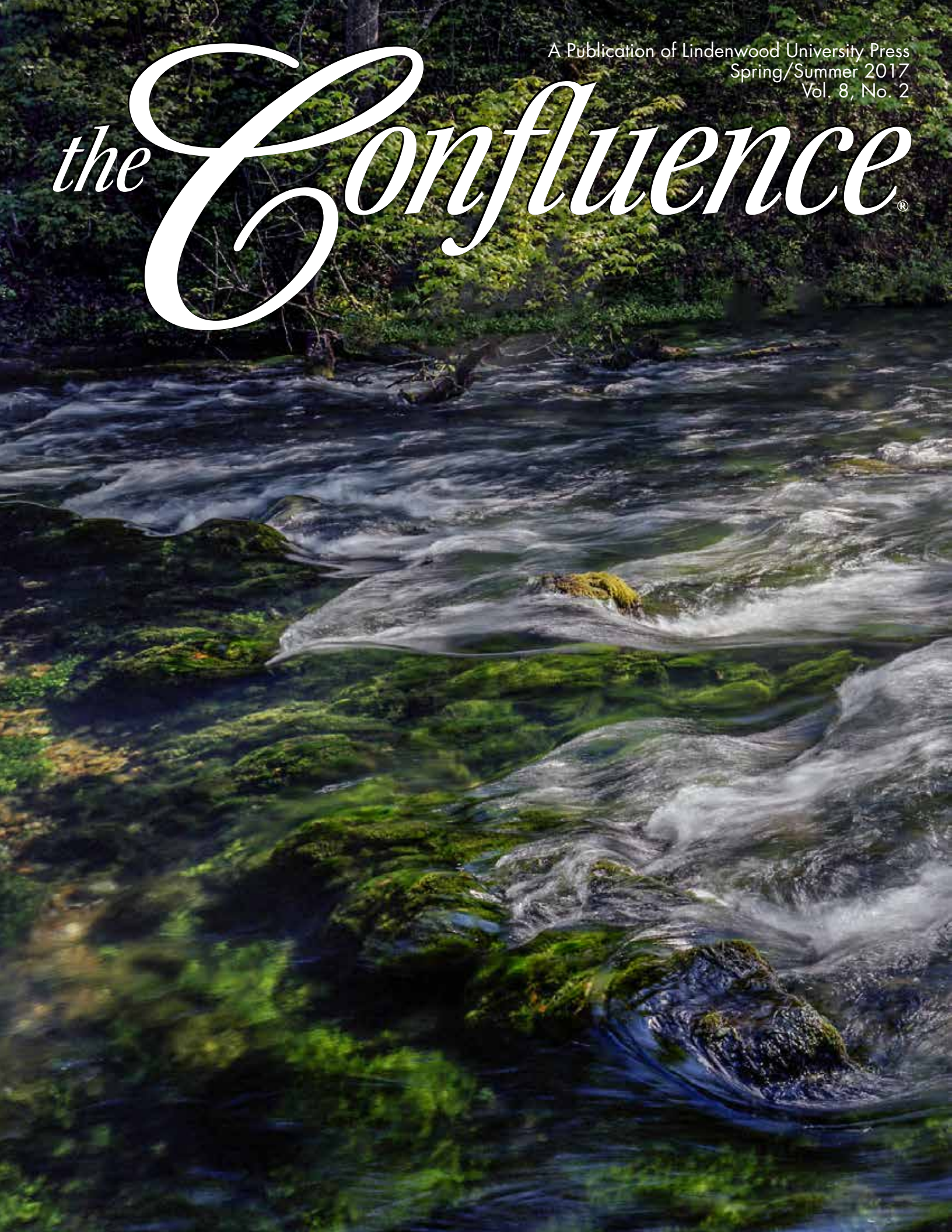


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the Confluence[®]



C O V E R I M A G E

The Blue Spring Branch, pictured here, is a tributary of the Current River that is part of the lead-mining region of Missouri. For more, see Quinta Scott's "Big Spring and Recharge Area and the Possibility of Lead Mining," starting on page 34.

C O N T E N T S



- 4 From Prairie to Destination: The Story of South Grand
By Andrew Weil and Josh Burbridge

The business district on South Grand between Arsenal and Utah streets evolved from a prairie setting into a thriving business district when streetcars arrived. In this essay, Andrew Weil and Josh Burbridge chart the evolution of the business district through its architecture.



- 16 Strengthening Slavery's Border, Undermining Slavery:
Fugitive Slaves and the Legal Regulation of Black Mississippi River
Crossing, 1804-1860
By Jesse Nasta

In the decades before the Civil War, St. Louis sat on a border between slave and free states. Jesse Nasta documents the role of common carriers—steamboats—on the Mississippi River for escaping slaves and the efforts of government to hold steamboat operators accountable for those escapes—efforts that reached all the way to the Missouri Supreme Court. This article is the recipient of the 2017 Tatom Award for the best student paper on a regional topic.



- 34 Big Spring and Recharge Area and the Possibility of Lead Mining
By Quinta Scott

In this second installment of her series of environmental studies, Quinta Scott examines the impact of lead mining on the region.



- 59 "The City is filled with Exhibitions & Places of Amusement": George
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George Catlin traveled to London and, later, Paris to exhibit and sell paintings of western Native Americans in the 1840s. His wife, Clara, joined him and sent these letters home about the experience.

The Confluence is a regional studies journal published by Lindenwood University and dedicated to the diversity of ideas and disciplines of a liberal arts university. It is committed to the intersection of history, art and architecture, design, science, social science, and public policy. Its articles are diverse by design.

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FROM THE EDITOR

With this issue, *The Confluence* is publishing the winner of the Jacqueline Tatom Award for the best student paper on a St. Louis topic. The St. Louis Metropolitan Research Exchange grants the award biennially. The Exchange is a group researchers and writers studying regional topics (as the name infers), drawing from a wide range of disciplines—public policy, political science, economics, history, geography, sociology, demographic studies—both in and beyond the academy. Meetings are pretty interesting. And because of its ecumenical nature, the papers submitted are a pretty interesting mix as well, running a wide swath of historical and contemporary, quantitative and literary. Deciding which papers to read is always a difficult decision.



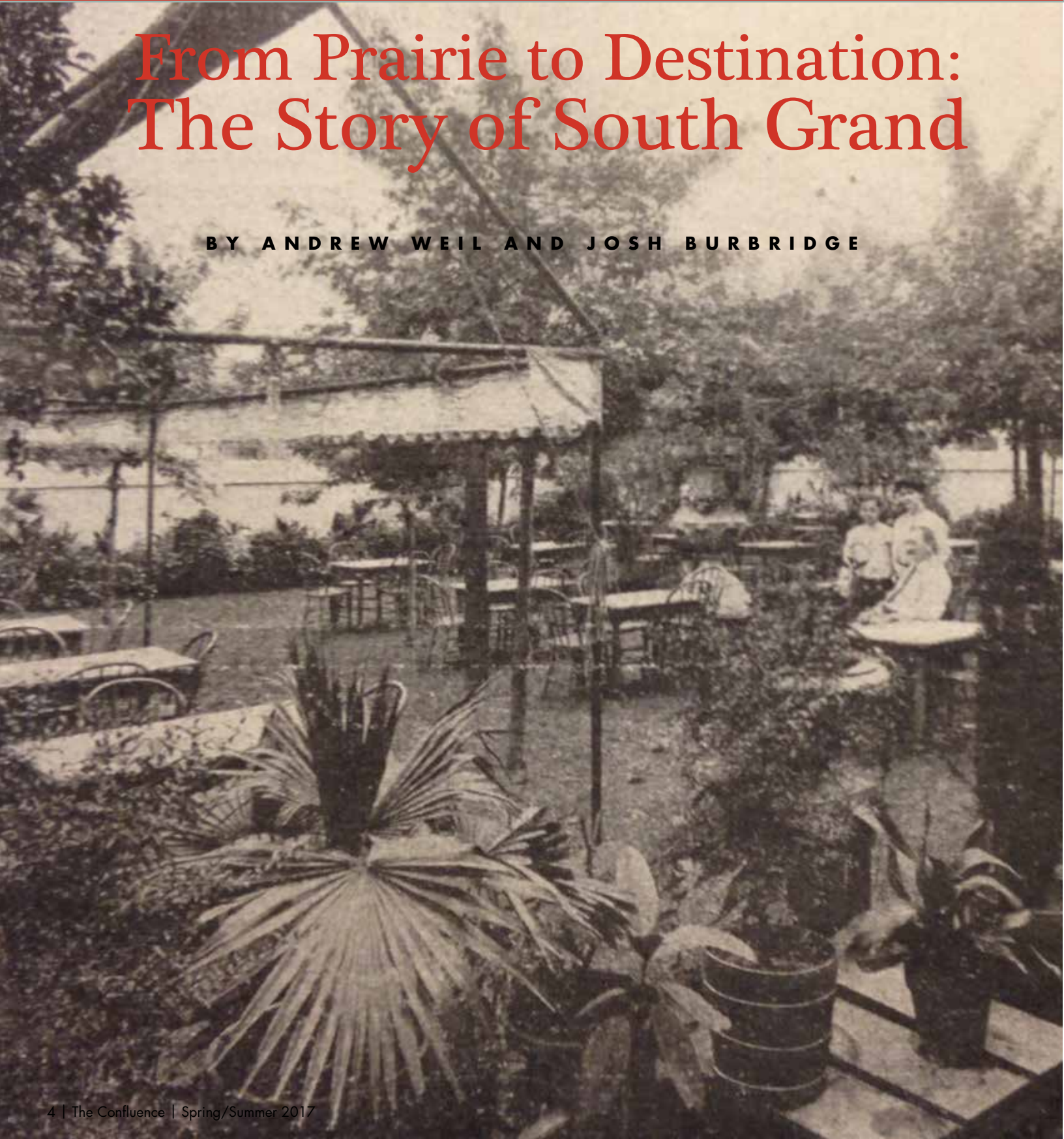
We're proud to publish the Tatom Award. It speaks to the breadth of the regional experience. More importantly, students—both graduate and undergraduate—are investigating and interpreting new topics with new research and fresh interpretations. Because they are often mining untapped intellectual veins, they often find rich seams of material to analyze and articulate. In the past, these articles have examined the views of African American educators about the *Brown v. Board of Education* decision, used GIS technology to understand neighborhood demographic changes over time, delved into domestic violence and divorce in the Civil War era, and investigated the relationship between religion and civil rights reform. It's quite a list. In this issue we are publishing an article by Jesse Nasta, who is interrogating Missouri laws that regulated the institution of slavery. He suggests that the introduction of steamboats onto the Mississippi River changed both the nature of escape for slaves and the ways slave owners had to respond. Common carriers—steamboat operators—became part of a complicated web connecting fugitives, owners, transportation technologies, and geography. We hope you like it, and like all the Tatom Award papers we publish.

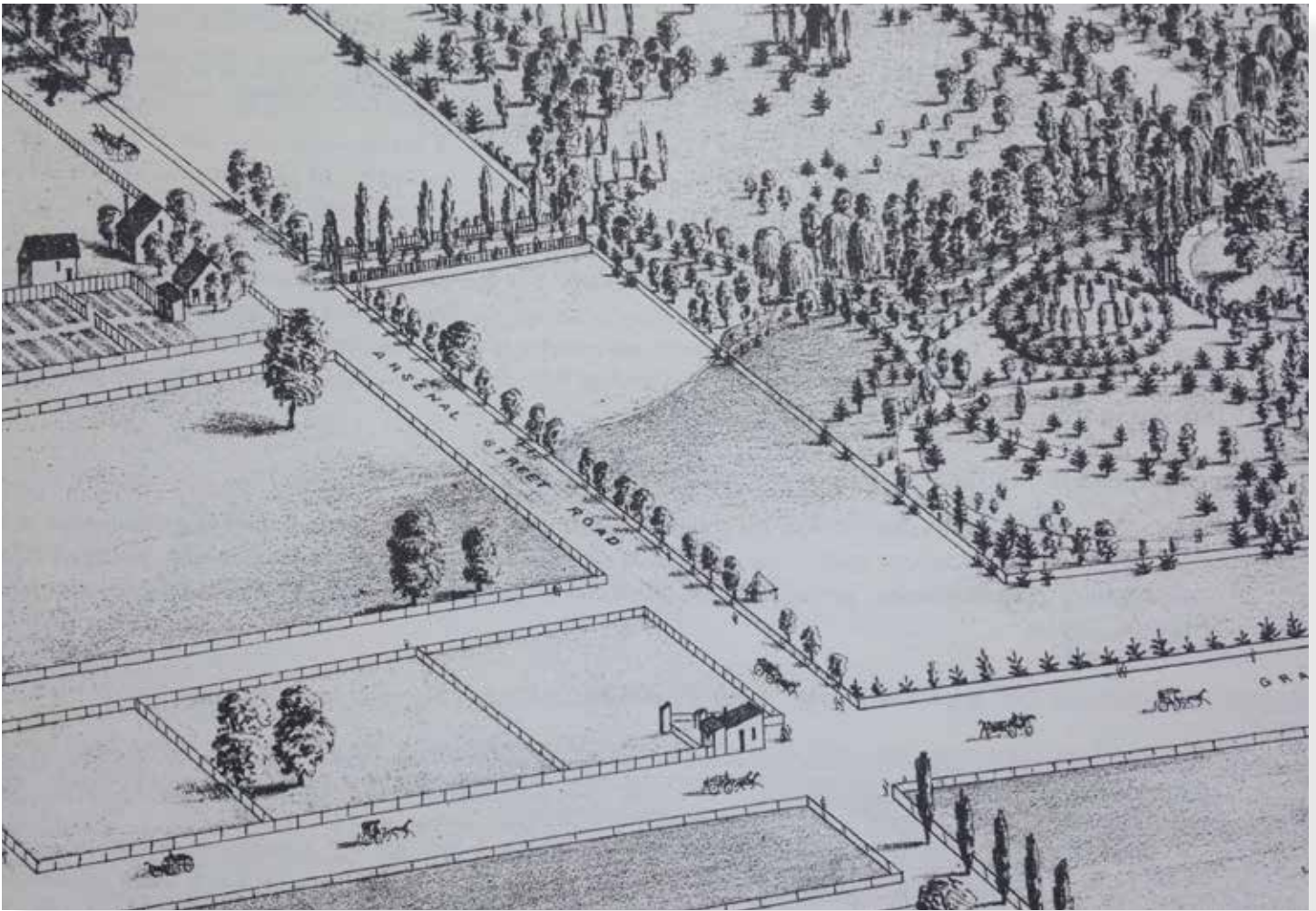
Jeffrey Smith, PhD

Editor

From Prairie to Destination: The Story of South Grand

BY ANDREW WEIL AND JOSH BURBRIDGE





The 1875 *Pictorial St. Louis* map provides an excellent view of the South Grand area prior to major development. Grand & Arsenal, c. 1875. (Image: *Pictorial St. Louis*, Plate 65)

A stroll through the South Grand business district today—from Grand and Arsenal south to Grand and Utah—requires some imagination to conjure the area’s history, but the buildings will speak if you know how to listen. The neighborhood still offers abundant amenities housed in the multistory commercial buildings that line the street for blocks. While some newer buildings from the end of the twentieth century intrude, the historic commercial corridor is largely intact and the surrounding residential areas remain a showplace of late nineteenth- and early twentieth-century homes. Evenings along South Grand are particularly vibrant as people from the surrounding neighborhoods (among the city’s most densely populated and diverse) and from across the region flock to the district’s one-of-a-kind restaurants and specialty stores. While the streetcars that once formed the backbone of neighborhood transit are

gone, the Metro Bus route through the district is the city’s busiest. Public transit, pedestrian traffic, and even automobiles in the South Grand business district have maintained a constant presence for well over a century.

But while the South Grand area in many ways has shown remarkable consistency over the last century, in its early years it was the scene of very rapid change. A streetcar approaching the business district in 1915 neared a bustling shopping center. That same streetcar fifteen years earlier was pulling into a remote outpost where real estate speculators and farmers still eyed each other over split-rail fences. Indeed, prior to the large-scale electrification of the city’s streetcar system in the 1890s, if you came to the area at all you were probably arriving in a horse-drawn omnibus and bound for a destination like the rural campus of St. Elizabeth’s Academy,

Left—Leonard Priester’s summer garden, shown here in 1907, is a good example of a South Grand business that served both tourists and residents. Priester occupied the space at 3106 South Grand as early as 1903. (Image: *South Grand Avenue Review*)

Christopher Schiller's vineyard, the Old Picotte (Pickers) Cemetery where Roosevelt High School is today, or the isolated retreat of Tower Grove Park.

An omnibus line had run along Arsenal to the area since the 1860s, mostly to serve recreational visitors to Tower Grove Park.¹ Grand Avenue had been surveyed by the middle of the nineteenth century, though for decades it remained a dirt track running along an isolated ridge. Proposed in the early 1850s, Grand Avenue as a formal thoroughfare was intended to divide several Colonial Era common fields while essentially ringing the new city limits from north to south. In the area of the South Grand business district, the street divided the St. Louis Common on the east from the Prairie des Noyers on the west.² Originally lands that were set aside for communal use, the city began sales of the property in the 1830s, though it was still mostly used for agricultural purposes and as country estates until the late nineteenth century.³

The neighborhoods surrounding Tower Grove and what would become the South Grand Business District remained largely undeveloped throughout the 1860s, 1870s, and 1880s, owing primarily to the area's distance from downtown. The city limits were expanded to the south with the annexation of Carondelet in 1870, and then to their current boundaries far to the west in 1876. Still, the current South Grand area remained largely undeveloped aside from some country estates and mining activities like Oak Hill to the west, where James Russell ran coal and clay mining operations.⁴

St. Louis was growing rapidly in the last third of the nineteenth century. The population increased by more than 150,000 residents between 1860 and 1870 alone, and it was becoming apparent that more space would soon be needed. Looking into the near future, real estate companies and developers began to see great opportunities along South Grand. One developer, William Switzer, borrowed more than \$500,000 (an enormous sum at the time) from the Connecticut Mutual Life Insurance Company to purchase lands in the area, but he passed away before he had the chance to realize his plans to create a new residential district. The land reverted to Connecticut Mutual in 1878, which then created a subsidiary known as the Connecticut Realty Company to pursue Switzer's vision.⁵

In 1889, the Grand Avenue Viaduct cleared the way for the route to become the major north-south artery of transit it remains today.⁶ Prior to its completion, the difficulty of crossing the busy rail yards in the Mill Creek Valley north of Chouteau hampered movement between north and south St.

Louis along Grand.⁷ With this problem solved, municipal authorities and developers who stood to profit from road improvements made concerted efforts to pave the route and its collector streets.

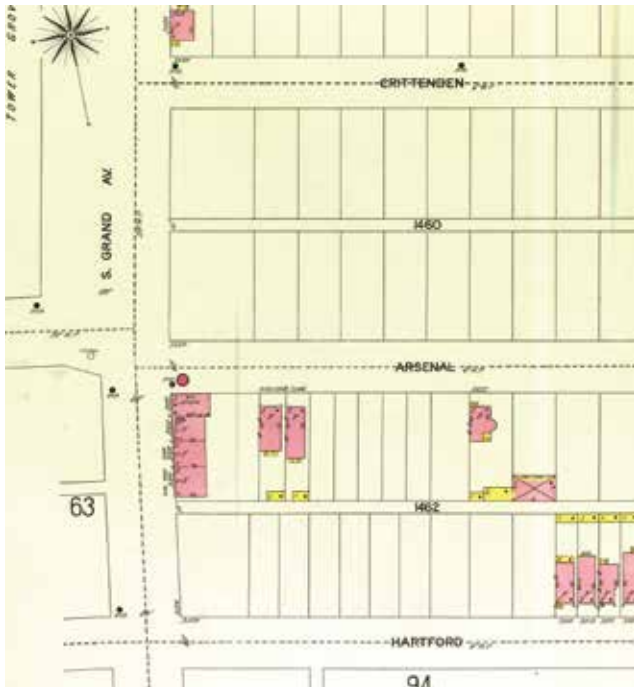
With the arrival of the electric streetcar, the area received the last piece of the development puzzle. Across the United States, the introduction of the electric streetcar after 1887 revolutionized intra-urban travel. The convenience and relative speed of the streetcar changed everything, from the areas where people could live and shop to how space was organized.⁹

As noted by the president of the Southwestern Mercantile Association in a 1908 promotional booklet, "[t]he rapid growth of this section is latterly due, of course, in no small measure, to the extension of our splendid street railway system." He continued, "[A]nd when it is remembered that the horse and mule held sway until the year of 1887, and that the speed of the cable line then opened was limited to eight miles per hour west of Garrison Avenue, this extension and improvement in the system itself is an achievement of which any city might well be proud."¹⁰ Because of the streetcar's affordability and efficiency, development began to expand throughout the city as never before.¹¹ Some entrepreneurs in the South Grand area catered to tourists and residents alike.

Interestingly, in the heart of today's South Grand business district, residences and not commercial buildings were the earliest properties to be developed. While commercial infrastructure later replaced most of these early buildings, some evidence of the early days can be found on the west side of Grand between Juniata and Connecticut. A two-flat residence (3159-61 South Grand) constructed in 1894 was later turned into commercial storefronts on the ground floor. Two other residences were constructed in 1896 and 1897, at 3169 and 3167 South Grand, respectively. All three of these buildings stand today. The next earliest extant building in the business district is 3157 South Grand, which was constructed in 1901.

At the turn of the century, development was poised to begin in earnest. Connecticut Realty held successful lot auctions in the early 1900s, which were then followed by the rapid construction of entire blocks of new homes between 1904 and 1909.¹²

The change wrought by the activities of this one company was dramatic, as noted in 1908 in the promotional book, *Southwest Saint Louis*. James M. Rollins, president of the Tower Grove Heights Improvement Association, noted: "[F]our years ago when the Connecticut Realty Company placed upon the market the property which had been sub-divided,



Little development had occurred along South Grand by 1903, with just a few buildings present. (Image: Sanborn Fire Insurance Maps, #65 and #63. University of Missouri Digital Collections)

at a public auction, it was an uncertain problem as to what would be the outcome. No one could have imagined the results that immediately followed. Within this short period of time, thousands of homes and business houses have been erected, millions of dollars have been invested, and more than five

thousand citizens, most of whom own their own homes, now live within the district.”¹²

Commercial businesses soon followed the construction of homes and the large influx of new middle-class residents. One of the earliest commercial buildings constructed in the area was a drug store run by pharmacist Francis Hemm at the southwest corner of Grand and Arsenal in October 1902. Boosters noted, “When this corner was first opened at that time it was practically the only business house in ‘Tower Grove’ District and was on the part of the proprietor of the business an apparently risky venture.” Then, “Hardly two years after the opening of the business, the great World’s Fair came along . . . and in another year there followed a boom in this district like none ever was witnessed in St. Louis. Today, where four years ago was prairie for fourteen square blocks, now stands solidly built up, beautiful streets with fine and artistic residences.”¹⁴

Patrons need not head to downtown anymore, boosters claimed. “Rows upon rows of fine stores of every description, thoroughly equipped with first-class, up-to-date goods and pertaining to every line of trade, are now in evidence; and every day new enterprises are being started,” the president of the Southwest Mercantile Association proclaimed. “Some of these enterprises are of an astonishing magnitude, and . . . compare favorably with many of the more pretentious up-town establishments; so that shoppers are now no longer compelled to waste time and car-fare because of the necessity to patronize these last.”¹⁵

Bergstermann Floral in 1908 (both one- and two story buildings). Note open land to the west (behind the buildings) and Kleekamp Bros. Piano Co. to the south. The two Bergstermann buildings are where the Dickmann Building is today. (Image: Southwest Saint Louis)





Streetcar lines (in red) radiate from downtown in 1904. Note lines on Arsenal Street and Grand Avenue, which quickly became a prominent intersection as the terminus for multiple streetcar routes, including the Grand Avenue line, the Fourth Street line, and the Tower Grove line. Source: Portion of Map of St. Louis with Complete Streetcar System, Official Guide Company, c.1904. (Image: Missouri History Museum Library Map Collection.)

Otto Karbe, the first vice president of the Southwestern Mercantile Association, noted, “Today, one finds in these outlying districts splendid marts of every description, conducted by wideawake [*sic*], up-to-date proprietors, where is to be had any class of goods of as fine a quality, and as cheap in price as those that appear in the display windows of a Broadway or Washington Avenue merchant.”¹⁶

The majority of the district’s commercial buildings were constructed between 1905 and 1911.¹⁷ Most rose two or three stories tall, typically with a business on the first floor and physicians, dentists, or other professional offices occupying the second and third floors. Many of the earliest businesses were promoted using common watchwords of the time and traded on the modernity of the area. Advertisements espoused the “progressive” nature of the merchants, “pure food” quality of groceries and drugs, and the “newness” of a proprietor’s approach to business. Still, older practices continued. For instance, a number of commercial properties on South Grand had residences on the second or third floors where shopkeepers and local workers lived.

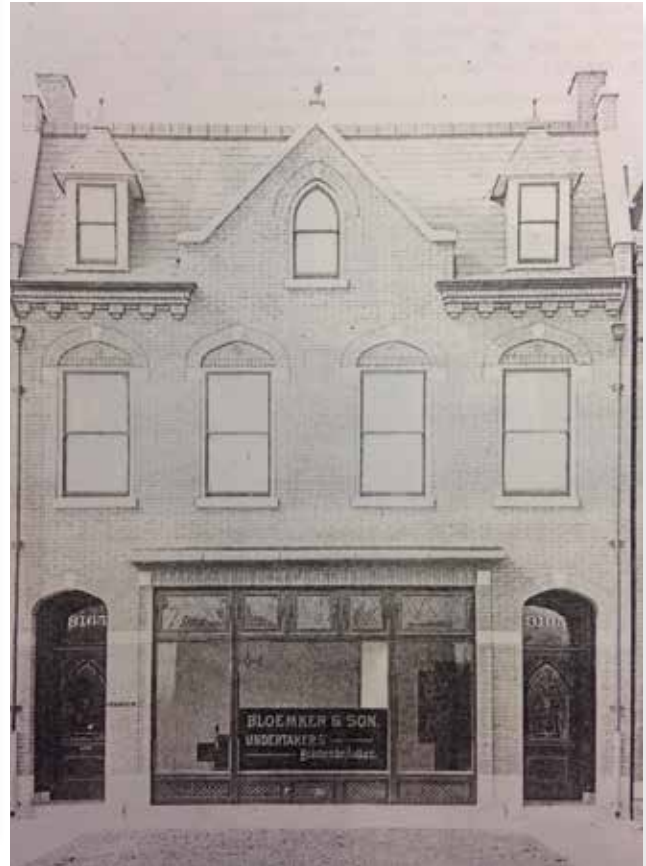
In addition to previously established businesses, the area attracted entrepreneurs who were ready to start businesses of their own. After working for his

South Grand and Arsenal Street in the 1910s, looking southeast. (Image: Missouri History Museum)





Umbrella merchant Louis Onimus and his family lived above his umbrella shop at 3127 South Grand with a residence for his family above. For many years Onimus had owned a shop at 2214 South Broadway, but then his customers started moving westward, a common migration pattern of the time. (Image: Southwest St. Louis)



Frank Bloemker & Son Undertakers in 1908. Note the address is listed at 3105, pointing to the original address of the block. The address was later changed to 3163. (Image: Southwest St. Louis)

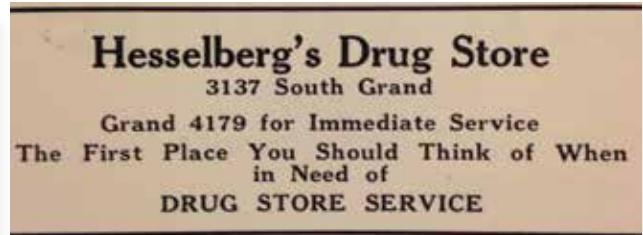
father, 24-year-old graduate pharmacist Henry F. Sum opened a drug store in 1907 at Grand and Wyoming.¹⁸ E.J. Fuess had worked in the dry goods business in Milwaukee as well as three different dry goods stores in St. Louis before opening his own shop at 3122 S. Grand.¹⁹ Alex Stengel left his family's grocery business, Stengel Bros., and opened his own shop on South Grand.

By the end of World War I, the district was packed with establishments offering every imaginable kind of good and service. With the opening of the 600-plus seat Grand-Arsenal Theater, local residents had the opportunity to view the same motion pictures that played in the downtown nickelodeons. Within a year, the Juniata Theater opened down the street, and following a brief closure of the Grand-Arsenal, the two operated simultaneously for many years.²⁰

Reflecting an age when music was largely "homemade," a number of music-related businesses, including the Louis Retter Conservatory of Music, the aforementioned Kleekamp Brothers Piano Co.,

and Kleekamp's Hall, a performance and meeting space, along with several music teachers operated in the business district. The larger landscape of music-related halls and societies located nearby on Grand included the Strassberger Conservatory (southeast corner of Grand and Shenandoah) and the Liederkranz Club (formerly at 2700 S. Grand) which centered around a German choral society.²¹ Residents of German extraction represented the largest single ethnic group in the area, which explains why the Tower Grove Turnverein (a German athletic club) was constructed in 1906 at the southeast corner of South Grand and Juniata Street (today the parking lot north of Jay International Foods).²²

The 1920s along South Grand reflected the economic prosperity and optimism that characterized the country at large, despite the restrictions imposed by Prohibition. During this time, national chain stores began to make their appearance in the district, including the Great A&P Tea Co., Piggly Wiggly, Kroger, and Woolworth's.



The Grand Meat Co. served South Grand for about 30 years. A number of South Grand's longtime businesses catered to neighboring Roosevelt High School students and staff. (Image: Roosevelt High School, Bwana, January 1926)

In reaction to increasing demand for commercial space, and an absence of available land, the Dickmann Realty Co. tore down several smaller buildings to construct the six-story Dickmann Building in 1926. With South Grand already known as a destination for health-related services, the Dickmann Building became a focal point of this industry, housing the offices of at least 26 physicians, dentists, or chiropractors, and the C.F. Knight Drug Store by the end of the decade.

Real estate and loan offices also thrived in the district, reflecting the fact that builders were still constructing homes in the surrounding neighborhoods. As the area matured, affluent residents and businessmen formed the Tower Grove Heights Improvement Association. The association tasked itself with positive neighborhood development and protection against “undesirable” outside influences.

Wanting to keep pace with changing times, some buildings in the district updated their appearance as the 20th century progressed. In keeping with the “Modernize Mainstreet” movement of the 1930s, Hesselberg Drugs at the southwest corner of Grand and Hartford updated their storefront with the addition of Art Deco–inspired round windows and maroon-colored Vitrolite glass.

The construction of the Dickmann Building, with its grand white glaze terra cotta façade, served

as the culmination of development and optimism in the South Grand business district, even if it was not apparent at the time. The building’s scale was larger than any existing building in the district, though it was considered a logical step in the evolution toward ever-higher density. The neighborhood was thriving and space was at a premium. To accommodate large numbers of residents efficiently, large apartment buildings, like those at Grand and Connecticut and at Grand and Utah, were becoming more common. Farther north, enormous new residential hotels like the Saum and the Marmaduke arose. Demand was such that it wasn’t unusual for relatively new buildings to be demolished to make way for larger replacements. In the case of the Dickmann Building, low-rise commercial buildings that were barely twenty years old were razed.²³ If the economy of the “roaring twenties” had continued, it is likely that the South Grand business district of today would be characterized by much larger buildings.

Of course, the move toward ever higher density along Grand came to an abrupt halt when the stock market crashed in 1929. As the Depression deepened, city directories record a growing rate of vacancy in the area’s commercial spaces. The overall picture was mixed, however, with a strong business community still evident. Ads of the era may have emphasized thrift and value at times, but the availability of radios, new clothing, and other goods indicate a



WE carry a complete stock of bathing suits for boys and girls. California Styles. Separate trunks and shirts, belts, water wings and a large supply of bathing caps and shoes.

We also carry boys athletic shirts and track pants; athletic supporters. If you are interested in bathing, in fact most any sport, you surely will be interested in our "QUALITY MERCHANDISE" at lowest prices.

HOELL'S

3143 S. Grand Blvd.

This advertisement on the left from 1925, displays leisure in the years before the Great Depression. (Image: Roosevelt High School, Bwana, 1925)

middle-class community that was holding on at least enough to keep local stores from closing. During the Depression, a branch store of the local chain Worth's sold women's clothing at 3103 South Grand, and Ida Wetzel sold hosiery across the street at 3106. Eugene Ganz operated a women's clothing shop, and William Huning even managed to sell jewelry. Werner Boot Shop, Senst Restaurant, Hoell Dry Goods, and Florene Shoppe all remained open, as did the offices of doctors and dentists, whose services remained critical regardless of economic conditions.

Following the end of Prohibition in 1933, liquor stores and taverns reappeared, although in some cases they had managed to stay in business throughout the "Dry Times." Laurence Meyer constructed his saloon in 1911 at 3232 S. Grand. During Prohibition, the business remained open selling non-alcoholic drinks, before returning to liquor sales in the 1930s. The space remained a tavern or lounge into the 1970s. Of note considering South Grand's reputation today as a destination for ethnic restaurants, the district's first Chinese restaurant, "Oriental Kitchen," opened at 3189 ½ South Grand in 1934. Followed shortly thereafter by Hing's Café, by the 1940s South Grand had an established Asian food scene!

Despite the Depression, in 1935 the buildings that had been demolished in the 1920s between Juniata and Connecticut (3172-76 South Grand) were replaced with the much larger, extant building that today houses Jay Asian Grocery. Reflecting the rising popularity and accessibility of the automobile in American society, Weber Implement & Automobile Company (an ancestor of today's Weber Chevrolet) opened a dealership in the large space.

Facilitated by the automobile, St. Louis' population shifted ever westward in the 1930s, though South Grand remained a strong center of commerce at the start of World War II, and the area remained a destination for healthcare. Of the approximately 60 health-related offices located within the business district, 36 were housed in the Dickmann Building alone. Many more were located across the street in the (now demolished) Tamm Building. Despite a few storefront vacancies, the district was dense with business activity. Ice cream and candy shops, hat stores, restaurants, dress shops, and even a pet shop lined the street.

At the outset of the war, a Selective Service office opened at 3165 South Grand. The office was

in a building that also housed the offices of doctors and dentists, presumably in an effort to streamline the medical component of the registration process. In an ugly and perhaps largely forgotten chapter in St. Louis' history, the Oriental Kitchen was among other Asian-owned businesses across the city that were closed and guarded by the police for a time due to misplaced xenophobic paranoia following the Japanese bombing of Pearl Harbor.²⁴

Following the end of the war, South Grand was home to companies that reflected the growth of the real estate market as new federal housing programs for returning G.I.s were implemented. While Tower Grove Bank had been in the district since 1911, financial institutions like savings and loan associations (which provided building and home loans to stock members) became more prevalent in the postwar period. Among these were the Tower Grove Savings & Loan Association at 3539 Arsenal and the Hamiltonian Federal Savings & Loan Association at 3142 South Grand. Realty companies also had a strong presence in the area. The combination of the Baby Boom and federal housing insurance enabled these companies to do a brisk business, putting soldiers and their families into homes both old and new. At least seven of these companies were located in the business district in the years following the war.

By the 1950s, the age of the automobile had fully arrived. With the Grand-Gravois business district, the growing Kingshighway business district, the emerging Hampton Avenue business district, and the numerous growing centers of population and commercial activity in St. Louis County, South Grand faced strong competition. From the old days, Plotz Flowers and Hoell's Dry Goods remained. Both a pharmacy and a baker remained at the southwest corner of Grand and Hartford. Now run by different proprietors, the uses of the storefronts hadn't changed since the building was constructed. La Merite Bridal Shop was still a popular destination. New businesses Tevis Radio & Appliance Co. (3191 South Grand), Spector's Bootery (3104 South Grand), and Grace Yaeger Dresses (3171 South Grand) had opened in recent years, as had a number of branch or chain locations, including St. Louis' own Mavrakos Candy, Nine-O-Five Liquors, and Dixie Cream Donuts.

Despite the fact that the Hamiltonian Federal Savings & Loan Association invested in the area with the construction of an International Style modern branch in 1961 (today's Rooster), the 1960s were a decade of decline on South Grand. St. Louisans were leaving the city in droves for the new suburbs in St. Louis County, and the age of the neighborhood



Oriental Kitchen advertisement. (Image: Roosevelt High School, Bwana, 1936)

shopping district was giving way to the age of the strip center and self-contained shopping mall. The combination of vacancy, disinvestment, and an increased need for parking in the second half of the twentieth century resulted in the demolition of some buildings, including the original home of Francis Hemm's pharmacy, the longtime home of La Merite Bridal Shop (the business moved to the suburbs), a few buildings on Arsenal (including Albrecht Hall, a fraternal meeting place in the 1940s and 1950s), the New Tower Grove Bank Building at 3143 South Grove (the original building at 3157 remains), and the Ritz Theater. Later, even the Tower Grove Turnverein succumbed after a fire.

Of course, both change and continuity have defined the area. For example, a barber shop is still at 3192 South Grand as it was a century ago, and a person transported from 1915 to today could still find a pharmacy at the corner of Grand and Hartford. The Orpheum Cleaners has been around since the 1940s, and establishments like Jay International Foods, the King & I Restaurant, CBGB, Mangia Italiano, and New Dawn Natural Foods are becoming institutions in their own right, with each having been in operation for 25 years or more.

Today a destination neighborhood known for ethnic food, nightlife, and eclectic shopping, South Grand has recovered its vibrancy from the downturn of the late twentieth century but retains its historic character. Its surrounding turn-of-the-century housing stock is once again highly desirable, as is its proximity to Tower Grove Park. The business district and neighborhoods boast many buildings on the National Register of Historic Places, including the Dickmann Building and the Hamiltonian Federal Savings & Loan Building. Recent improvements to the sidewalks and streets have made the area more

accommodating to pedestrians, and amenities like rain gardens and the Ritz “pocket park” improve the appearance and functionality of formerly debilitated spaces. As modern populations increasingly seek out mixed-use, walkable environments defined by unique buildings, they are recognizing those qualities in the South Grand business district. Of course, to fully appreciate South Grand, modern residents should have some sense of its history. By looking back at how South Grand came to be, it becomes easier to see ourselves as part of the story. Today, we are simply writing a new chapter in the history of one of St. Louis’ greatest streets.

Like many business, Tower Grove Bank & Trust used advertisements to aid the war effort. (Image: *South Side Journal*, September 8, 1943)



It'll cost you an extra \$100 Bond to look him in the eye !

HE'S AN AMERICAN SOLDIER.

Some day, if God is with him, he'll come home.
 And when he does, you'll get the biggest thrill of your life if you can look him squarely in the eye and say, "I wouldn't help you fight unless I did everything in my power to help you win."
 There's only one way you can say that... honestly say it. And that is to help him win now... when he needs all the help you can give him.
 Today's particular job he gets to accept together every

time you invest by an extra \$100 worth of War Bonds! That's your job in the 3rd War Loan!



3RD WAR LOAN

BACK THE ATTACK...WITH WAR BONDS

TOWER GROVE BANK AND TRUST CO.

GRAND BOULEVARD AT HARTFORD ST.

Parking Plaza for Your Convenience

Open Friday Evenings 5 to 8 P.M.

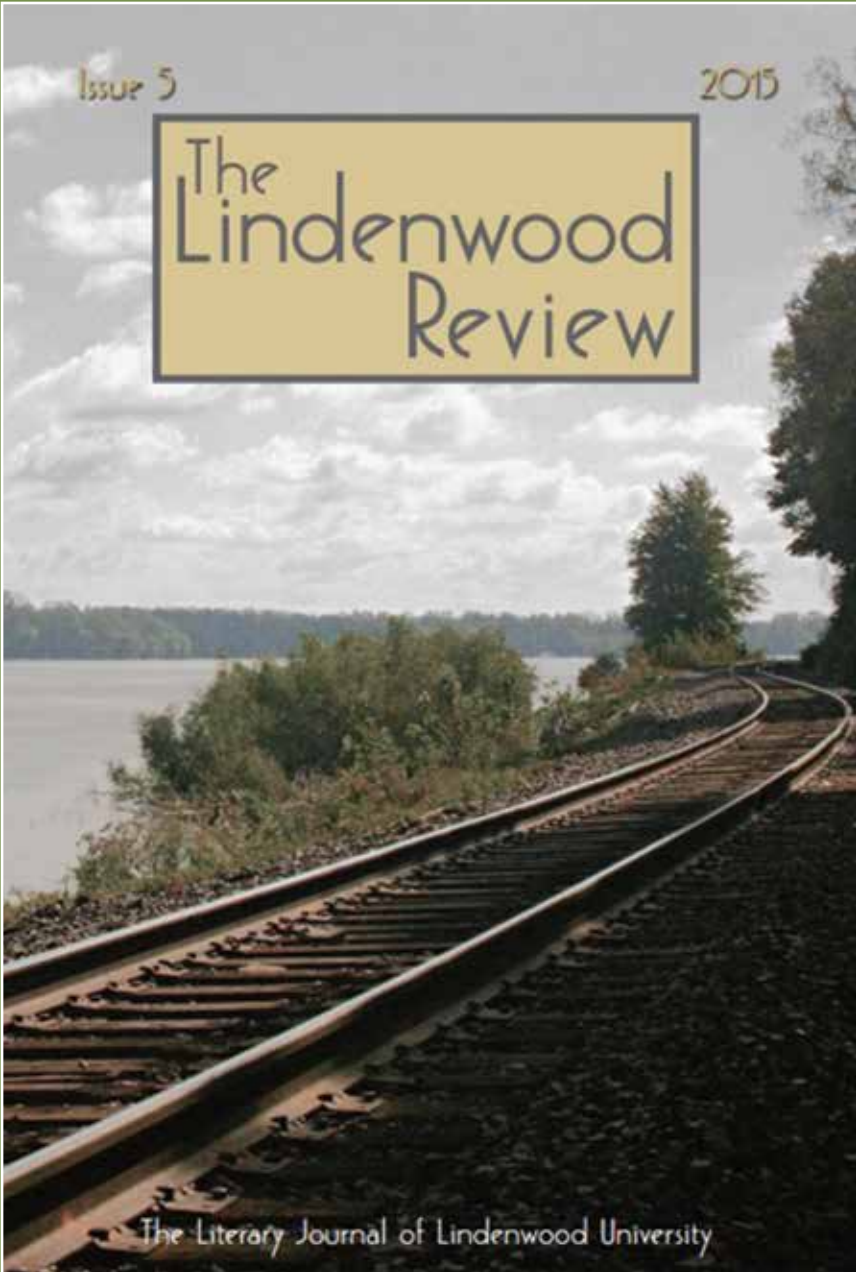
prepare for the disaster that's against the wind.
REMEMBER THIS—you aren't giving your money. You're lending it to the government for a while. And you're making the best investment in the world.

WORLD'S SAFEST INVESTMENTS

Choose the security that fits your requirements.
 United States War Bonds...
 United States Savings Bonds...
 United States Treasury Bonds...
 United States Government Securities...
 United States Postal Savings Bonds...
 United States War Bonds...
 United States Savings Bonds...
 United States Treasury Bonds...
 United States Government Securities...
 United States Postal Savings Bonds...

ENDNOTES

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- ² Eric Sandweiss, *St. Louis: The Evolution of an American Urban Landscape* (Philadelphia: Temple University Press, 2001), 71–72; Norbury L. Wayman, *History of St. Louis Neighborhoods: Shaw* (St. Louis: St. Louis Development Agency, 1980).
- ³ Sandweiss, *St. Louis*, 73–74.
- ⁴ Norbury L. Wayman, *History of St. Louis Neighborhoods: Oak Hill*. (St. Louis: St. Louis Community Development Agency, 1981).
- ⁵ Richard Compton and Emile Dry, *Pictorial St. Louis* (St. Louis: Compton and Company, 1876), Plates 62 and 65.
- ⁶ Lynn Josse, *Tower Grove Heights Historic District*, Sec. 8, 197.
- ⁷ Sally E. Schwenk, Cathy Ambler, and Kerry Davis, *South St. Louis Historic Working- and Middle-Class Streetcar Suburbs*, Sec. E, 24.
- ⁸ *Ibid.*, Sec. E, 20.
- ⁹ Sandweiss, *St. Louis*, 176–77.
- ¹⁰ Schwenk, *South St. Louis Historic Working- and Middle-Class Streetcar Suburbs*, Sec. E, 4–5.
- ¹¹ *Southwest Saint Louis*, 1.
- ¹² Kenneth Jackson, *Crabgrass Frontier: The Suburbanization of the United States* (New York: Oxford University Press, 1985), 112.
- ¹³ Josse, *Tower Grove Heights Historic District*, Sec. 7, 5.
- ¹⁴ *Southwest Saint Louis*, 7.
- ¹⁵ *Ibid.*, 49.
- ¹⁶ *Ibid.*, 1.
- ¹⁷ *Ibid.*, 2.
- ¹⁸ Josse, *Tower Grove Heights Historic District*, Sec. 7, 6.
- ¹⁹ *Southwest Saint Louis*, 54.
- ²⁰ *Ibid.*, 52.
- ²¹ A. H. Glebler, “Grand Avenue Houses: Arsenal Theater To Open,” *The Moving Picture World*, Vol. 27, February 12, 1916, 997; G. H. Glebler, “Our Correspondent Makes More St. Louis Calls,” *The Moving Picture World*, Vol. 27, March 11, 1916, 1686.
- ²² Harris, *A Grand Heritage*, 51–54; 56–57.
- ²³ Stacy Stone, Lynn Josse, and Carolyn Hewes Toft, *Tower Grove Heights Historic District* (Boundary Increase), Section 8, 163.
- ²⁴ Mark Abbott, *Tower Grove* (St. Louis: Reedy Press, 2009), 66.
- ²⁵ Huping Ling, *Chinese St. Louis: From Enclave to Cultural Community*, 124–125.



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**Strengthening Slavery's Border,
Undermining Slavery:
Fugitive Slaves and
the Legal Regulation
of Black Mississippi River Crossing,
1804-1860**

BY JESSE NASTA



In 1873, formerly enslaved St. Louisan James P. Thomas applied for a United States passport. After collecting the passport at his attorney's office, Thomas hurried home "to take a look at it" because he had "never expected to see" his name on such a document. He marveled that this government-issued passport gave him "the right to travel where he choose [*sic*] and under the protection of the American flag." As Thomas recalled in his 1903 autobiography, he spent "most of the night trying to realize the great change that time had wrought." As a free African American in 1850s St. Louis, he had been able to cross the Mississippi River to Illinois only when "known to the officers of the boat" or if "two or three reliable citizens made the ferry company feel they were taking no risk in carrying me into a free state."¹ Thomas wrote no more on this subject. To him, and to many subsequent historians, no further explanation was needed. St. Louis was in a slave state, Illinois was a free state, and the Mississippi River divided them.

Yet what Thomas experienced as a heavily policed river border by the eve of the Civil War had not emerged automatically. Rather, decades of confrontation, improvisation, and interplay between law and the everyday realities of African American border crossing gradually infused this geographic border with legal meaning. By crossing the river as fugitives from slavery, as self-hired slaves, and as free black workers of ambiguous legal status, mobile African Americans sparked the legal conflicts and legal changes that gradually constructed this border, giving rise to the legal "risk" that steamboat and ferry owners and crew assumed when carrying African Americans like Thomas across the Mississippi River.

The basic consistency in Missouri statute has masked the profound changes in how people experienced, and in turn shaped, the legal regulation of black border crossing during the six decades between the Louisiana Purchase and the Civil War.² As early as 1804, one year after the Louisiana Purchase, the territorial legislature laid down a central rule: no master of any vessel could transport any slave out of the Upper Louisiana Territory, which became the Missouri Territory in 1812, without his or her master's permission. Despite periodic revisions, this prohibition against carrying African Americans across the Mississippi River without proof of a

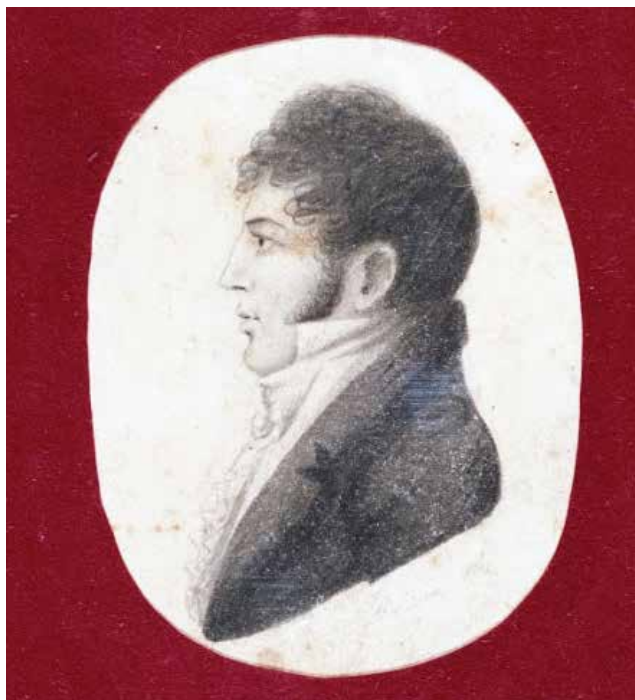
master's consent, or of the passenger's free status, persisted until the Civil War.³

Yet, while the text of the Missouri statute remained fairly constant, its meaning changed over the six tumultuous decades between the Louisiana Purchase and the Civil War because virtually everything else in this border region changed. The former Northwest Territory, particularly Illinois, was by no means an automatic destination for those escaping slavery. For at least four decades after the Northwest Ordinance of 1787 nominally banned slavery from this territory, the enslavement and trafficking of African Americans persisted there. Although some slaves risked escape to Illinois, enslaved African Americans also escaped from this "free" jurisdiction, at least until the 1830s, as a result. Others avoided Illinois entirely, seeking sanctuary in the emerging urban Mississippi and Ohio river ports south of the former Northwest Territory.

But then, during the 1820s and increasingly during the 1830s, the rise of steamboats and St. Louis' resulting transformation into a western river metropolis, a boom in the city's free and enslaved black population, the emergence of the underground railroad in Illinois, and the resulting rise in slave escapes to what was gradually becoming seen as free soil, all converged to change the cultural context within which people interpreted and experienced the black-letter laws. While Missouri statute had outlawed the transporting of "slaves" across the Mississippi River without a pass since 1804, it became increasingly difficult for steamboat owners and crew to differentiate among self-hired slaves, fugitive slaves, and free African Americans. In many cases, all of these groups carried documents purporting to authorize their mobility, whether passes from masters or free papers, some authentic and others forged. Increasingly during the 1830s and 1840s, Missouri judges responded by holding steamboat owners and crew strictly liable for slave escapes, even if they believed the escaped slave was free when they transported them or if the fugitive stowed away. In doing so, Missouri courts shifted the financial risk posed by slave escapes from masters to common carriers, incentivizing steamboat and ferry owners and operators to scrutinize all people of African descent as suspected fugitive slaves until proven otherwise. Although lawmakers and

Top left – Slaves being transported in groups were often chained together, as portrayed here in Henry Bibb's *Narrative*, published at mid-century. (*Image: Narrative of the Life and Adventures of Henry Bibb, An American Slave, Written by Himself, New York, 1849*)

Bottom left – Steamboats transformed St. Louis into a thriving commercial center, with more than 200 steamboats arriving each year. This scene is the site of today's Gateway Arch. (*Image: Library of Congress*)



Amos Stoddard (1762–1813) was military commander at St. Louis between the cession of Louisiana to the United States and early October of 1804, and represented the United States at the “three flags ceremony” in St. Louis in March 1804. (Image: Thepublici.blogspot.com)

judges never managed to stop enslaved people from escaping, these legal transformations made the Mississippi River an increasingly sealed and scrutinized border between slavery and freedom.

Before, and Beyond, Sectionalism: The Multiple Paths of Fugitive Slaves, 1787–Early 1820s

Although the territorial legislature in what became Missouri moved to prevent slave escapes immediately after the Louisiana Purchase, the vagueness of the statute that they passed in 1804 suggests that lawmakers did not yet consider black movement between Missouri and the Northwest Territory to pose a legal crisis. Adopted just one year after the Louisiana Purchase, the law forbade masters of any vessel from transporting any “servant whatsoever, or any negro or mulatto, or other slave” out of the Upper Louisiana Territory without the master’s “consent or permission.” Although the statute reflected lawmakers’ desire for some type of regulation for transporting slaves across the Mississippi River, the text of the law provided only the barest guidelines for making this a reality. The statute provided no guidance as to what constituted



William Wells Brown (c. 1814–1884) was a former slave and the first African American novelist in the United States. While in St. Louis, Brown’s owners routinely rented him out to steamboat operators. Brown’s first escape attempt, portrayed here in his *Narrative of William W. Brown, A Fugitive Slave, Written by Himself*, was not successful, but his second escape in 1834—via steamboat to Cincinnati—was. (Image: Library of Congress)

“consent or permission.” More fundamentally, the text of this law used the terms “servant,” “negro or mulatto,” and “slave” interchangeably, leaving it up to those along slavery’s border to define and give substance to these categories.⁴

The small size of pre-statehood Missouri’s free black population is likely one reason lawmakers placed little emphasis on distinguishing fugitive slaves from “free negroes and mulattoes,” and policing them as such. In 1804, Amos Stoddard, governor of the Upper Louisiana Territory, estimated that a quarter of St. Louis’ three to four hundred African Americans were free, totaling only 75 to 100 persons.⁵ Yet St. Louis’ free black population only increased to 196 by 1820, compared to the city’s 1,810 slaves.⁶ Indeed, how small “the number of free blacks and mulattoes was in comparison to the whole population” particularly struck the Reverend John Mason Peck when he migrated to St. Louis in 1817.⁷ Throughout Missouri, the free black population also remained small, even relative to the still-low white and enslaved populations. In 1810, Missouri’s free black population reached only 605, compared with 2,875 slaves and 16,303 whites, or three percent of the population.⁸ During this early period, officials could therefore assume that the vast majority of African Americans in St. Louis and on the Mississippi River were slaves, a situation that would change drastically during the 1840s and 1850s, when St. Louis’s free black population came to outnumber the city’s slaves, making it increasingly difficult for officials to distinguish among the enslaved, the free, and fugitive slaves.⁹

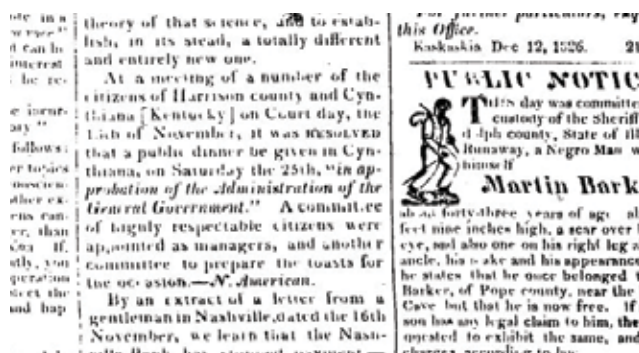
The fact that Missouri and the Northwest Territory initially shared a legal culture of slaveholding and fugitive slave recapture also explains why Missouri territorial lawmakers failed to promulgate strict legal regulation of black border crossing. The territorial statutes of the Indiana Territory (from which the Illinois Territory divided in 1809) created a presumption of servitude for all African Americans and restrained their mobility. The 1803 “Law Concerning Servants” prohibited “any person” to “harbor or entertain” a servant not having a certificate of freedom indicating that their period of servitude had expired. The statute deemed those without certificates of freedom “runaways,” codifying the presumption that all African Americans in the Indiana Territory were either bound “servants or slaves” or “runaways” unless they produced documentation that their term of servitude, which often exceeded their lifetime, had expired.¹⁰ After splitting from the Indiana Territory in 1809, and even after entering the Union as a “free state” in 1818, Illinois continued to treat all African Americans as possible fugitives, either from long-term indentured servitude in Illinois or from chattel slavery in nearby states.¹¹ In 1819, the new state’s legislature replaced “An Act Concerning Servants” with “An Act Respecting Free Negroes, Mulattoes, Servants and Slaves.” This statute, which remained in effect until the Civil War, deemed any “black or mulatto person” without a “certificate of freedom” a “runaway slave or servant” and authorized any inhabitant of Illinois to detain him or her as such.¹²

As a result of Illinois’s legal creation of African American bondage and the accompanying presumption of unfree status, the Northwest Territory remained a place of enslavement and trafficking of bound African Americans rather than a haven

for fugitives from nearby “slave states.” Missouri lawmakers could view those across the river as fellow slaveholders and fugitive slave catchers at least until the 1820s, and even through the 1840s in southern Illinois’s most proslavery counties.¹³ Revealingly, in April 1819, four months after Illinois entered the Union as a nominally free state, a Kaskaskia, Illinois, newspaper announced a one-hundred-dollar reward for “apprehending” the advertiser’s 22-year-old “negro man” Ezekiel. This young man had been held as a slave by, and escaped from, two consecutive masters within Illinois. His self-proclaimed master who placed the advertisement, Isaac D. Wilcox, stated that Ezekiel had “formerly belonged to” Field Bradshaw, near Edwardsville, Illinois, and that Ezekiel “has some pretensions to freedom which have been encouraged by a certain petty Lawyer by the name of Pugh, who resides at Edwardsville. Pugh encouraged him to leave Edwardsville and run to Kaskaskia, where he promised to follow and protect him, which he did until I purchased him.” Wilcox went on to state that, after buying Ezekiel, “I put him in the possession of three men to take him home, from whom he escaped, and I presume he will try to get to Edwardsville to his [lawyer] protector.”¹⁴ Underscoring the still widespread approval of such actions, these details were not forcibly evoked through a legal trial. Instead, Wilcox felt confident enough of his legal ability to purchase and hold Ezekiel as a slave in Illinois to advertise these facts in a newspaper.¹⁵

Tracing those who escaped slavery in this region, with a particular focus on the geographic paths of their escape, further illustrates how the Mississippi and Ohio river borders against slavery remained unsettled and fluid well into the nineteenth century. The escape routes of the region’s fugitive slaves demonstrate that Congress’s vision of ending slavery north of the Mississippi and Ohio rivers did not always correspond with lived reality. Fugitive slave advertisements in early Illinois newspapers reveal that the geography of slave escapes followed no clear northward, slave-to-free soil trajectory in the early national northwest. Because they show the choices that the enslaved made at the moment of escape, and the ways in which legal constraints on black freedom and geographic mobility in Illinois shaped those choices, these advertisements illuminate how African Americans in this border region actually experienced and engaged with federal and territorial law at the everyday level. In contrast to the more thoroughly studied eastern seaboard, however, fugitive slave ads from the early national and antebellum West have not been systematically studied.¹⁶ A recently published

Notices regarding escaped slaves were not unusual, but escapes across the Mississippi to Illinois were sometimes facilitated by both proximity to a slave state and the presence of common carriers. (Image: Missouri History Museum)



\$200 Reward.

RANAWAY from the subscriber, on the night of Thursday, the 30th of September.

FIVE NEGRO SLAVES,

To-wit: one Negro man, his wife, and three children.

The man is a black negro, full height, very erect, his face a little thin. He is about forty years of age, and calls himself *Washington Reed*, and is known by the name of Washington. He is probably well dressed, possibly takes with him an ivory headed cane, and is of good address. Several of his teeth are gone.

Mary, his wife, is about thirty years of age, a bright mulatto woman, and quite stout and strong.

The oldest of the children is a boy, of the name of *FIELDING*, twelve years of age, a dark mulatto, with heavy eyelids. He probably wore a new cloth cap.

MATILDA, the second child, is a girl, six years of age, rather a dark mulatto, but a bright and smart looking child.

MALCOLM, the youngest, is a boy, four years old, a lighter mulatto than the last, and about equally as bright. He probably also wore a cloth cap. If examined, he will be found to have a swelling at the navel.

Washington and *Mary* have lived at or near St. Louis, with the subscriber, for about 15 years.

It is supposed that they are making their way to Chicago, and that a white man accompanies them, that they will travel chiefly at night, and most probably in a covered wagon.

A reward of \$150 will be paid for their apprehension, so that I can get them, if taken within one hundred miles of St. Louis, and \$200 if taken beyond that, and secured so that I can get them, and other reasonable additional charges, if delivered to the subscriber, or to *THOMAS ALLEN, Esq.*, at St. Louis, Mo. The above negroes, for the last few years, have been in possession of *Thomas Allen, Esq.*, of St. Louis.

WM. RUSSELL.

ST. LOUIS, Oct. 1, 1847.

Slaves were valuable, as suggested by ads such as this one offering a substantial reward for the return of four escaped slaves from St. Louis. (Image: Missouri History Museum)

collection of such newspaper advertisements, printed in southern Illinois between 1816 and the eve of the Civil War by slaveholders, sheriffs, and jailers who detained fugitive and alleged fugitive slaves, suggests both the frequency with which African Americans escaped from bondage in Illinois, rather than to this “free” jurisdiction, as well as the extent to which some fugitives escaped southward rather than risk recapture in Illinois’s sometimes equally hostile legal climate.¹⁷

The advertisements reveal that, especially during the 1810s and 1820s, enslaved fugitives traveled not only up the Mississippi and Ohio rivers to the “free states” but also fled down these rivers, seeking anonymity in emerging western port cities rather than relying on the tenuous legal promise of the Northwest Ordinance. When a 22-year-old “bright mulatto” brick layer named Squire escaped from Hopkinsville, Kentucky, his master speculated that he “attempt[ed] to go down the river” to New Orleans, “as he has done before.” Although a more than six hundred mile journey, Squire evidently believed that New Orleans offered safer refuge than the “free” Illinois Territory, less than one hundred miles to the northwest.¹⁸ Although it is possible that lost kin drew

Squire to New Orleans, the runaway advertisement for him, unlike others, does not mention this motive for escape. It is therefore more likely that the city itself attracted him. Similarly, in 1820, John Forrester advertised that a young “Negro man, named Dick” escaped “down the river” to one of the “states or territories bordering on the Mississippi.”¹⁹ Other slaveholders admitted that they did not know whether a particular fugitive slave went north or south, suggesting that the “free” Northwest Territory was by no means an automatic or obvious destination for those fleeing bondage. One Tennessee slaveholder advertised in 1816 that Bob, a “young negro fellow,” would either head up the Ohio River to Pittsburgh or remain in Kentucky, his home before his most recent sale.²⁰ In the early 1820s, two slaveholders similarly advertised either Illinois or Kentucky as speculated destinations.²¹

To be sure, the Northwest Ordinance induced some slaves to flee northward during the first two decades of the nineteenth century. In 42 of the 200 collected fugitive slave advertisements, slaveholders either knew or speculated that those who escaped headed to states carved from the Northwest Territory.²² At the same time, references to the “free

states” appear most frequently in advertisements placed far south of Illinois, and often in vague rather than precise terms. One Alabama slaveholder, for instance, stated that he was “inclined to think” that those who escaped from his plantation “will push for those free states.”²³ Another Alabama slaveholder similarly “expected” that Peggy, a 22-year-old “negro woman,” will “endeavor to reach some of the states north of the Ohio.”²⁴ As these slaveholders’ speculations suggest, the western “free states,” particularly Illinois, appeared more “free” in deep southern slaveholders’ worried minds than in practice.

Indeed, zooming in on Illinois itself reveals that a sizable minority of those mentioned in the fugitive slave ads escaped bondage within Illinois, rather than fleeing to the state. Of the 200 collected fugitive slave ads, 17 sought the recapture of African Americans who had escaped from Illinois masters. One of these masters, John Choisser, specifically invoked Illinois’s long-term indenture laws when advertising for his “negro man,” Barney. He insisted that Barney was “regularly indentured and bound to serve me agreeably to the constitution and laws of the state,” and “I wish to treat him as a servant should be treated.”²⁵ The other Illinois slaveholders, however, simply advertised their property claims in persons, without any justification. Robert Collet of Wood River, Illinois, for instance, stated matter-of-factly that he had “purchased” Harry “3 months since at Harrisonville, [Illinois]” and offered a “liberal reward” for “apprehending said runaway and delivering him to the subscriber or confining him in the nearest jail.”²⁶ Similarly, Robert D. M’Lean offered a \$25 reward for the recapture of his “negro man,” John, “if taken within the state.”²⁷ That state was “free” Illinois, not a bordering slave state.

Well into the 1820s, Illinoisans worried about those they held as slaves escaping to cities in neighboring slave states. Tellingly, in 1828, Illinois Governor Ninian Edwards wrote a private letter to St. Louis Mayor William Carr Lane about ensuring “harmony between” Illinois and Missouri regarding fugitive slaves. Rather than highlight the issue of enslaved Missourians escaping to Illinois, Edwards decried the “encouragement that our negroes have received” from the city’s free African Americans to “run to St. Louis.” Writing not only as governor of Illinois but also as the self-proclaimed owner of a “French female slave” who escaped from his home in Belleville, Illinois, to St. Louis with the free black Paul Vallad, a “certain fellow who claims her as his wife,” Edwards threatened to repeal Illinois’s “very severe” law “against harbouring runaways” unless

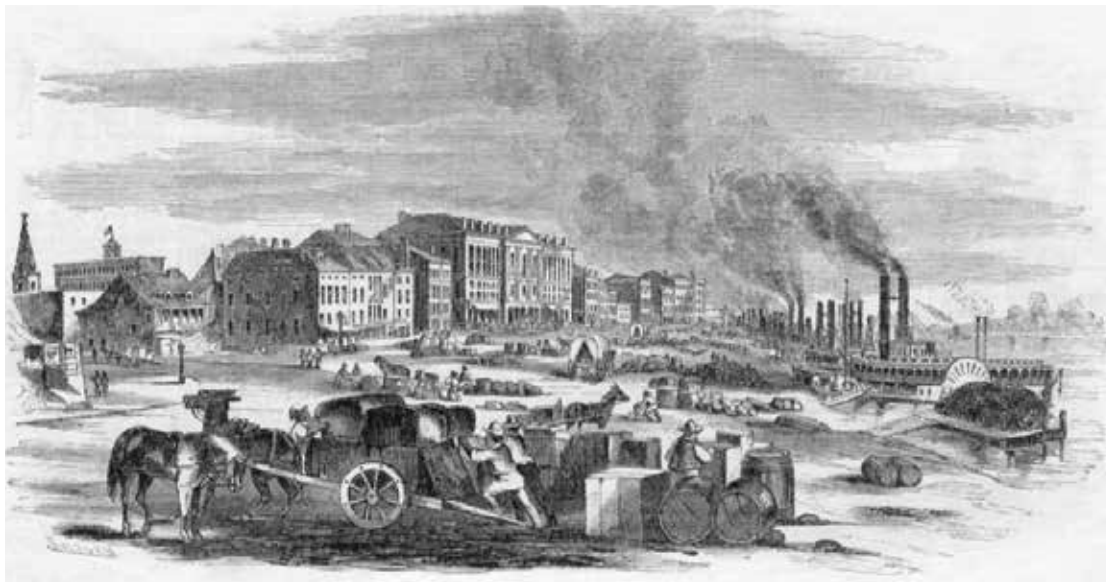
St. Louis officials did more to return fugitives slaves to Illinois.²⁸ He closed with the threat that “if our negroes are to find refuge in your state you ought not to complain if we should refuse to take up, or authorize our citizens to take up yours.” Although Illinois ultimately tightened rather than repealed its fugitive slave laws, the Illinois governor’s preoccupation with slaves escaping from Illinois rather than to his state, including his own “female slave,” interrupts any assumption that the Mississippi River served as an undisputed barrier between slave and free soil as long as four decades after Congress passed the Northwest Ordinance.²⁹

Finally, Illinois laws aside, technological limitations on upriver travel prior to the rise of the steamboat in the 1820s and 1830s posed a logistical barrier against slave escapes to Illinois. The fugitive slave ads reveal that most of those who did flee to Illinois headed down the Ohio and Cumberland Rivers, from Kentucky and a small section of northern Tennessee. In contrast, most slaves south of the Mason-Dixon Line had no hope of traveling upriver fast enough to avoid recapture. Some, such as 18-year-old Mason from St. Louis County, Missouri, and Clemmens and Lem from Obion, Tennessee, tried to escape upriver by canoe.³⁰ But the fugitive slave advertisement for Ben, a 40-year-old “negro man” whose ears had been cut off “close to his head for robbing a boat on the Ohio River,” presumably as part of an escape attempt, illustrates both the improbability of successfully escaping by non-steam powered boat as well as some slaveholders’ gruesome retaliations against those who tried.³¹

As we will see in the next section, however, the rise of immediate abolitionism throughout the U.S. North and West, Illinois’s increasingly anti-slavery legal and political culture, the rise of western river metropolises like St. Louis, and the steamboat revolution all converged to remake the borders between African American slavery and freedom along the western rivers. Moreover, by escaping slavery in greater numbers, the enslaved played an even larger role in shaping and reshaping these borders.

The Path of the Law: Creating Slavery’s Border

In most historiography, the Missouri Compromise of 1820 represented the federal government’s final act of border-making along the northwestern frontier, ending a century-long Mississippi River Valley rivalry between French, Spanish, British, Native American, and, finally,



Free blacks and slaves mingled in places like St. Louis along the riverfront, where both would have found work on steamboats, along the wharf, and in nearby warehouses. (Image: Ballou's Pictorial Drawing Room Companion, Boston, 1857)

U.S. forces. Stephen Aron argues that, with the achievement of statehood in 1821, Missouri “shifted from being a frontier to having a frontier.”³² While there is much truth in this, Missouri’s entrance into the Union also began a decades-long struggle to constrain and control African American crossing of the new state’s Mississippi River border. In the decades following the Missouri Compromise, those present along this border engaged in the contentious process of defining and giving meaning to the Mississippi River border in law, in everyday life, and, to use Walter Johnson’s term, in the “everyday life of the law.”³³

At the time of the Missouri Compromise, how Missouri’s river border would be monitored to prevent slave escapes remained largely undefined in law. In the early 1820s, at the same moment Congress supposedly demarcated and finalized slavery’s western borders, the rise of steamboat travel allowed all people, including enslaved and free African Americans, to traverse these borders quickly and sometimes undetectably. Yet Missouri’s fugitive slave laws still reflected a pre-steamboat world, and, therefore, remained drastically incomplete from the perspective of those charged with policing Missouri’s border against the emerging free states. Missouri’s 1822 “Act Concerning Slaves” made “any ferryman or other persons” convicted of crossing “any slave from the state across the Mississippi river” without a written pass “particularly directed to such ferryman, or other person” responsible for the full value of the slave, “to be recovered by action on the case.”³⁴ Yet

this statute did not mention steamboat owners or crew, only “any ferryman or other persons” convicted of transporting a slave across the Mississippi River without a written pass, a fact which suggests that lawmakers did not yet interpret steamboats as a major threat to slave property.³⁵

Yet the Missouri legislature was soon forced to recognize that, perhaps most importantly, the steamboat made escape up the Mississippi and Ohio rivers more feasible, gradually solidifying slaves’ escape routes in a northerly direction. Fugitive slave advertisements published in Illinois reflect the swift and far-reaching effects of steamboats on slave escapes. Two years after the first steamboat plied the western rivers in 1817, for example, Isham and Dick escaped from Tennessee on a steamboat as it “ascended the Mississippi.”³⁶ Steamboats even connected the St. Louis border region with the Deep South. As escaped slave William Anderson recounted in his narrative, in the late 1820s he planned to steal a skiff and float twenty miles downriver from his plantation to Vicksburg, Mississippi, or to “get on a steamboat going up the river.” Only a few years earlier, Anderson would have depended upon a southerly moving current to carry him to the nearest city. Now the steamboat extended his potential escape route hundreds of miles northward along the Mississippi River.³⁷ Indeed, by 1829, twelve years after the first one arrived in St. Louis, the steamboat shortened travel between New Orleans and Louisville from nine months to nine days.³⁸ By the 1840s, western river cities annually received several

thousand steamboats laden with passengers and cargo, with more than one hundred steamboats often docked on St. Louis's levee at a time.³⁹ Between 1840 and 1860, moreover, steamboat arrivals to St. Louis, the most important port in the Upper South, nearly doubled.⁴⁰ Responding to this new reality, in 1835 the Missouri legislature amended state law to prohibit explicitly "any master, commander, or owner of a steam boat" from transporting any slave across the Mississippi River without the master's consent.⁴¹

Indeed, the steamboat revolution, coupled with growing sectional division over slavery, created a boom in slave escapes and intensified legal regulation and legal conflict over black border crossing during the 1830s and 1840s.⁴² In the 1830s, the rise of abolitionism among some Illinoisans made slave escapes across the Mississippi River by steamboat more feasible. By the late 1830s, a small but determined group of abolitionists was active in Illinois. Although immediate abolitionism took root slowly in the state, with only one abolitionist society in Illinois until 1836, the presence of abolitionists in this border state bolstered the escape efforts of Missouri slaves and enraged Missouri slaveholders.⁴³ St. Louis newspapers began to report abolitionist resistance to fugitive slave recapture in Illinois in the late 1830s, a movement that increased throughout the 1840s. The *St. Louis Republican* reported that abolitionists in Will County, Illinois, "collected in strong force, and threatened violence" against Benjamin Fowler, a St. Louis slaveholder, "should he attempt to remove" his three slaves who had fled there one year earlier. As this newspaper lamented, Fowler returned to Missouri without his escaped slaves.⁴⁴ By 1845, the abolitionist *New York Emancipator* proclaimed that "upwards of thirty" slaves had escaped from the St. Louis "region" during the previous two weeks alone, and that "scarcely a day passes that some of these fleshy riches do not take themselves legs and run away."⁴⁵ Enough slaves escaped annually "through the State of Illinois and finally find a secure place of refuge in Canada" that the Missouri General Assembly petitioned Congress in 1847 to seek a treaty with Great Britain that would guarantee their return.⁴⁶

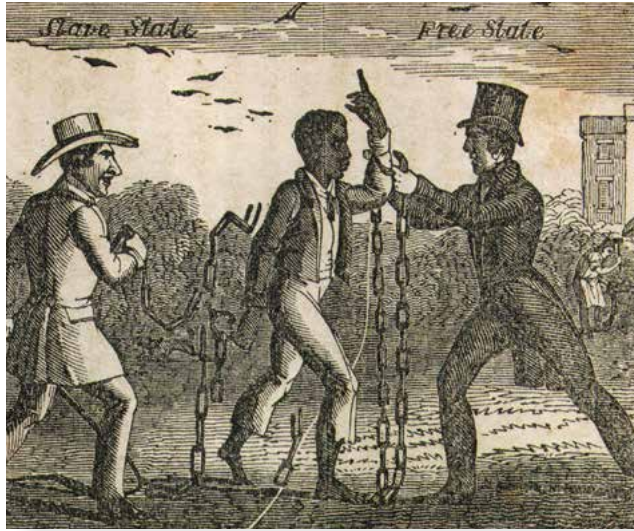
Even more than white abolitionists, the free black communities that coalesced in Illinois by the 1830s aided escaping slaves. As the *St. Louis Republican* stated with exasperation, the underground railroad's "conductors are white men," but the slaves' escape route is "laid with black rails."⁴⁷ Brooklyn, Illinois, which freed and fugitive slaves established across the Mississippi River from St. Louis in 1830 and is considered the United States' first all-black town

by a number of scholars, joined the more than 20 "organized Black communities" in antebellum Illinois in sheltering and otherwise aiding fugitive slaves.⁴⁸ Indeed, fugitive slaves' accounts of fleeing through this region underscore free African Americans' primary role in forging the underground railroad.⁴⁹ Upon reaching Illinois, for instance, fugitive slave John Brown remained "in safety" in a "settlement of colored people" for three weeks before continuing toward Canada.⁵⁰

Missouri legislators and judges responded by further restricting black movement across the Mississippi River. Because returning fugitive slaves from increasingly free Illinois became more difficult by the 1840s, lawmakers focused on preventing the enslaved from crossing into that state in the first place. Central to this process was the proliferation of civil suits against common-carrier owners and operators who transported fugitive slaves across the Mississippi River, whether intentionally or unwittingly.

Common Carriers, Case Law, and the Consolidation of the Mississippi River Border

On the Missouri side of the Mississippi River, the mid-1830s marked a drastic solidification of the river border between slavery and freedom, both politically and legally. The abolitionist mail campaign of 1835 gave slaveholders throughout the United States a growing sense of being under attack by an organized, radical movement.⁵¹ In response, St. Louis slaveholders held anti-abolitionist meetings that resolved to fortify restrictions on enslaved and free black movement, to guard against any abolitionist presence in St. Louis, and to tighten state slavery statutes. In turn, the events of 1835 resulted in a more explicit Missouri slave code, with statutes that removed the legal vagaries that had marked border policing during the two previous decades. The 1835 Missouri legislature particularly focused on preventing steamboat owners and crew from carrying slaves out of the state. As part of a revised, extensive legal code on "the introduction of slaves and police regulations concerning them," the legislature authorized common law suits for damages, in addition to a \$150 fine, against "any master, commander or owner of a steam boat or other vessel" who "shall transport or carry away any servant or slave, out of this state in such vessel" without the master's written permission.⁵² At the same time, the revised code kept in place the 1822 statute that made "any ferryman or other person"



A common method of selling slaves was at auction, including those in downtown St. Louis. This one was described by Henry Bibb in his *Narrative*. (Image: *Narrative of the Life and Adventures of Henry Bibb, An American Slave, Written by Himself, New York, 1849*)

liable for the full value of any slave they transported out of state without the master's written permission. In doing so, the Missouri legislature reaffirmed the liability of anyone who carried a slave out of the state without permission while also targeting steamboat owners and crew as a new category of persons requiring strict legal surveillance, even if they unintentionally aided fugitive slaves by transporting them. Before 1835, Missouri's "Act to Provide for Apprehending and Securing Runaway Slaves" defined as a runaway any slave found more than 20 miles from the "plantation, lots, tenement, or other place where he or she is employed, or required to be" without a "token or written pass."⁵³ But, with the rise of steamboat travel, a short walk to the levee could allow an enslaved person to flee hundreds of miles in just a few days. A 20-mile radius could not demarcate their world. Missouri lawmakers recognized this heightened threat to slave property and targeted steamboats accordingly.

Russell v. Taylor (1837), the first fugitive slave suit against a common carrier to reach the Missouri Supreme Court, reflected and subsequently bolstered Missouri lawmakers' effort to scrutinize all black border crossing. The case began with what had become a routine act along the western rivers. On April 1, 1835, the first mate of the steamboat *Utility* hired an enslaved young man, Dave, as a "hand on board said boat." The steamboat then crossed into increasingly free Illinois, where it stopped 30 miles upriver from St. Louis in Alton, Illinois, where Elijah Lovejoy would be killed by an anti-abolitionist mob

two years later. There, Dave switched clothing with another enslaved young man who then escaped, aware that slaveholders described fugitive slaves' clothing in advertisements for their recapture. Hoping to be less recognizable in his new outfit, Dave remained on the steamboat when it returned to St. Louis and hired himself to travel upriver on its voyage the next day, presumably planning to make his final escape then. That is when Dave's master, James Russell, recaptured him. Like many slaveholders, Russell retaliated by selling Dave.

The steamboat's stop in Illinois transformed the first mate's action into the basis for a major Missouri Supreme Court case. On April 9, 1835, a few days after he recaptured and sold Dave, Russell sued James Taylor, captain of the *Utility*, because the steamboat's first mate had carried his slave "across the Mississippi River without showing a pass or other written form of permission," a plea that evoked the 1835 statute. Russell, who owned 14 slaves by 1840, was a prominent attorney who had sat on the St. Louis Grand Jury, the St. Louis County Court, and the Board of St. Louis Road Commissioners.⁵⁴ Clearly familiar with the newly revised statute and determined to test the law's benefits for slaveholders like himself, Russell sued the steamboat captain for Dave's full \$600 value plus "the value of the services of said slave" and the additional \$400 "costs of reclaiming him."⁵⁵

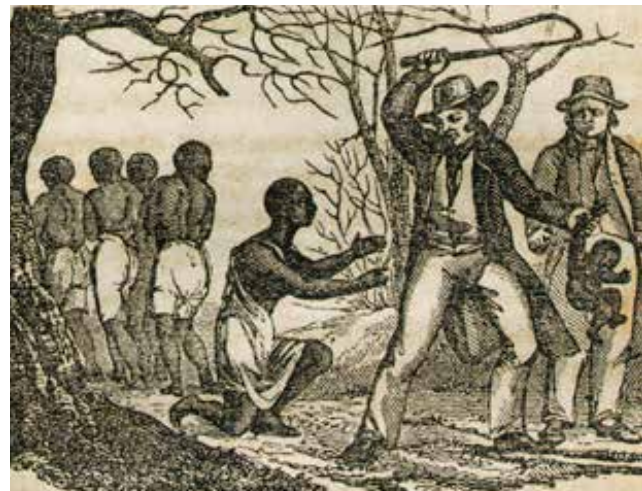
The St. Louis Circuit Court's opinion in *Russell v. Taylor* shows that, initially, at least some judges resisted legal efforts to hold common carriers liable for unintentionally helping slaves to escape. Although the plain meaning of the 1835 Missouri statute defined as a tort the very act of transporting any slave across the Mississippi River without his or her master's written permission, the jury and judge of the St. Louis Circuit Court focused on the defendant's intent in carrying Dave aboard his steamboat, not even considering the question of negligence. As Judge Luke Lawless insisted, the statute existed only to punish those whose "object" was to help slaves escape. Taylor, the judge reasoned, had hired Dave "bona fide, as a working hand aboard the steamboat." The testimony made no mention of the steamboat's captain seeing Dave before the first mate hired him, ruling out any intention on Taylor's part to help him escape.⁵⁶ Even during a second trial, Judge Lawless insisted on the steamboat captain's lack of liability. This time he stressed the ultimate outcome of Dave's attempted escape rather than the defendant's intent. Although Taylor had carried Dave to and from Illinois, his master soon recaptured and sold him. He had not permanently lost his slave or his

slave's value. "It seems to the court," Lawless wrote, "that it could not have been the intention of the legislature" to make a defendant like Taylor liable for the value of a transported slave "when that very slave was brought back to the state, and to the very county in which the plaintiff resides, and afterward actually sold by him."⁵⁷

Yet, upon a second hearing in 1838, the Missouri Supreme Court again reversed the Circuit Court's opinion and asserted a strict interpretation of the statutory prohibition against transporting any slave across the Mississippi River without a written pass.⁵⁸ Judge Mathias M'Girk stressed in his majority opinion that "the boy did not show any pass, nor did the defendant ask for any."⁵⁹ As M'Girk's reasoning suggests, the court found the steamboat captain liable because his employee not only took Dave aboard but, more importantly, also failed to perform the basic diligence of asking for a pass. As the Missouri Supreme Court insisted, it was this action by the defendant's employee, not whether Dave successfully escaped, that made the steamboat captain liable.

During the next two decades, St. Louis judges and juries grappled with the question of how much of the financial risk inherent in hiring and transporting slaves, who escaped whenever possible, should be assumed by slaveholders and how much to assign common carriers. As Jenny Bourne Wahl's analysis of appellate cases throughout the south reveals, at least until the deepening sectional crisis of the late 1840s, judges hesitated to hold common carriers strictly liable for slave escapes, a legal standard that could have limited masters' ability to hire and transport slaves. As Wahl argues, the law instead served to make slavery economically efficient, a goal that did not benefit individual masters in all circumstances but, as a whole, protected slaveholders' ability to adapt the institution to industrial modes of work and transportation, including the steamboat.⁶⁰

Consistent with Wahl's findings on the slaveholding states as a whole, Missouri courts initially hesitated to impose a strict liability standard on steamboat owners and officers. Although *Russell v. Taylor* sent a strong message that steamboat owners and crew should ask slaves to show a pass prior to hiring or otherwise transporting them, fugitive slaves' ingenuity and determination sparked related, hotly contested questions. Was a common carrier liable if a fugitive slave displayed a convincingly forged pass or forged free papers? Or if they stowed away undetected? During the 1840s, Missouri judges strove to distinguish fugitive slaves from free African Americans by assigning increasingly strict liability to common carrier owners and operators who mistook



Can a mother forget her suckling child?



The tender mercies of the wicked are cruel.

Corporal punishment of slaves, especially for escaping, was not uncommon, as described and portrayed here in *Henry Bibb's Narrative*. (Image: Narrative of the Life and Adventures of Henry Bibb, An American Slave, Written by Himself, New York, 1849)

fugitive slaves for free persons.

Toward a Strict Liability Standard

Eaton v. Vaughan (1846), more than any other case, aligned Missouri with the strict liability standard emerging throughout the slaveholding states, especially in border states and those with interstate waterways conducive to slave escapes.⁶¹ In his majority opinion, Missouri Supreme Court judge William Scott upheld the Howard County Circuit Court ruling against steamboat Captain Nathaniel J. Eaton, who had taken the slave Charles aboard his steamboat two years earlier, believing

him to be free. As witnesses testified, on August 31, 1844, the steamboat *Wappillo* departed for St. Louis from Glasgow, a Missouri River port city in central Missouri's slavery-dependent hemp and tobacco region. That morning a "mulatto man about 20 or 25 years of age" approached this steamboat when it stopped at the wharf in Boonville and asked the captain if "he could get a passage to St. Louis." Initially, Captain Eaton "did not reply to the boy," the plaintiff's witness John F. Nicholds recalled. Perhaps he was unwilling to assume the legal risk of transporting an African American passenger, who could turn out to be a fugitive slave, and felt that he owed Charles neither an explanation nor the courtesy of a reply. But Charles also knew, and was therefore able to break, the rules of steamboat travel. "I supposed you would like to see my [free] papers," he said to Eaton, who sat with Nicholds in front of the boiler deck. Eaton "replied positively he would that very thing." Charles handed him "some papers" which Eaton "read and handed them" to Nicholds and asked him if the local officials' signatures on them were genuine. Nicholds recognized the signature of Nathaniel Ford, clerk of the Howard County Court, and told Eaton that "the signatures were genuine and that Ford was the clerk" of the court when this free paper was issued.⁶²

Charles' use of these free papers, which he took from a local free African American named Pompey Spence, demonstrates that at least some enslaved people always managed to outmaneuver the many restrictions lawmakers placed on black mobility. By acquiring a document bearing an official court signature, something that Captain Eaton and Nicholds assumed he could not have obtained on his own, Charles destabilized even this most respected legal "proof" of an African Americans' legal status. By the time word of Charles' escape reached Captain Eaton, Charles had successfully boarded another steamboat in St. Louis. Although Charles' master hired a Mr. Busan to travel to St. Louis "in search of the boy," where he managed to get the St. Louis police captain to assemble and read the advertisement for Charles to all the "St. Louis Police," they failed to recapture him.⁶³

At the same time, the Missouri Supreme Court's 1846 strict liability ruling in *Eaton v. Vaughan* deterred many steamboat escapes. In sharp contrast with *Russell v. Taylor* nine years earlier, which assigned no liability without intent to help a slave escape, Judge William Scott declared that having believed an African American passenger or hired worker was free provided no defense against liability if he or she proved to be a fugitive



Henry Bibb (1815–1854) was born into slavery, escaped to Canada, and became a noted abolitionist and author. He returned to Canada after passage of the Fugitive Slave Act of 1850 and began publishing *The Voice of the Fugitive*, the first African American newspaper in Canada. (Image: Narrative of the Life and Adventures of Henry Bibb, An American Slave, Written by Himself, New York, 1849)

slave. Scott recognized that "slaves have volition" and "may impose themselves on others for free men." Missouri's location as a border state made it imperative that those common carrier owners and operators "who treat them as such should do it at their peril." Scott's opinion reflects the view that had emerged by this point that Illinois was a free state, at best Missouri's opposite and at worst its enemy, "inhabited by many who are anxious, and leaving no stone unturned to deprive us of our slaves." Separated only by "a navigable stream" from this hostile territory, Scott insisted that the law should hold common carrier owners and operators in Missouri and especially in St. Louis, "the city on our frontier" with Illinois, to the "strictest diligence" in ascertaining black passengers' status.⁶⁴

The legal repercussions of *Eaton v. Vaughan* were magnified by similar lawsuits. *Eaton v. Vaughan* emerged alongside at least thirteen cases in which slaveholders sued steamboat owners or operators in St. Louis for the escape of their slaves during the late 1830s and the 1840s. In addition to *Eaton v. Vaughan*, five of these thirteen St. Louis cases reached the Missouri Supreme Court.⁶⁵ Together with the legislature's periodic expansion of statutory regulations on black border crossing aboard common carriers, these cases sharpened the border by showing common carriers the potential danger in transporting any enslaved African American, whether or not the steamboat officer or crew member intended to aid the slave's escape and even if they believed that the African American passenger was free.

Rather than suggest that border policing remained weak, the relatively small number of cases that reached the St. Louis Circuit Court and Missouri Supreme Court suggests the case law's effectiveness in putting captains and crews on guard against

slaves trying to escape across the Mississippi River. In his 1849 *Narrative*, Henry Bibb recalled of his escape through St. Louis, “I knew that the captain of a steamboat could not take a colored passenger on boat from a slave state without first ascertaining whether such person was bond or free; I knew that this was more than he would dare to do by the laws of the slave states.”⁶⁶ As Bibb recognized, by penalizing those who transported slaves across the river, the law coerced perhaps indifferent or even antislavery steamboat captains, who otherwise might have “dared” to “take a colored passenger on boat from a slave state” without question, into policing the Mississippi River border. In some instances, fear of legal liability similarly deputized steamboat companies as agents of the state. As an abolitionist Wisconsin minister, S.W. Dwinnell recalled in 1866, two decades earlier a steamboat company’s agent pursued the “slave girl Caroline” to Milwaukee. Caroline had “walked boldly upon the deck of an up river steamer just as it was leaving” and, because her “light yellow complexion” helped her to pass as free, no steamboat officer asked her to show a pass or free papers. She then fled from Milwaukee to Canada, narrowly escaping the steamboat company’s agent.⁶⁷

Like Caroline, William J. Anderson escaped up the Mississippi River only through a combination of ingenuity, determination, and luck. He posed as a valet carrying luggage in order to board a steamboat, and, finally, jumped overboard, and swam to the Indiana shore after being detected as a fugitive slave. Illustrating how thoroughly the law encouraged steamboat officers and crew to scrutinize all African Americans seeking passage, Anderson posed as an enslaved valet rather than a free man because, as he recalled in his 1857 *Narrative*, “for a colored man to make an application up the [Mississippi] river on a boat without the voice of some white man, would be looked upon with astonishment, and a close examination would follow.”⁶⁸

As the Missouri Supreme Court’s denunciation of the “many who are anxious to deprive us of our slaves” in *Eaton v. Vaughan* suggests, strict legal liability for common carriers grew in tandem with Missouri lawmakers’ increasing surveillance and criminalization of abolitionist activity. In particular, the establishment of Missouri’s first state penitentiary, opened in 1834, gave the state a new weapon for ferreting out abolitionists and others who intentionally aided slaves in escaping. Indeed, as scholars such as Taja-Nia Henderson have found, the incarceration of fugitive slaves, and of slaves condemned to sale and forced transportation, served as central functions of colonial and antebellum local



This image of slaves being hunted down while escaping was one of many that appeared in Henry Bibb’s *Narrative of the Life and Adventures of Henry Bibb, An American Slave, Written by Himself*, which first appeared in 1849. (Image: *Narrative of the Life and Adventures of Henry Bibb, An American Slave, Written by Himself, New York, 1849*)

jails and state prisons, penal practices that protected the institution of slavery and fostered statemaking.⁶⁹

Mobilizing the newly built state penitentiary in an effort to prevent slave escapes, the 1835 Missouri legislature set a seven-year minimum penitentiary sentence for “stealing a slave.”⁷⁰ Trial courts subsequently interpreted “slave stealing” as intentionally helping slaves escape across Missouri’s borders. The St. Louis Circuit Court alone convicted and sentenced dozens to the penitentiary for “slave stealing.” Between 1837 and 1862, Missouri circuit courts convicted some forty-two people for this “crime.”⁷¹ In his 1894 memoir, the Reverend Jordan W. Early recalled his narrow evasion of a “slave stealing” charge by the St. Louis Grand Jury in 1846. As Early explained, “our [African Methodist Episcopal] Church wherever established was called an abolition church, which made the slaveholders suspicious of its proceedings.” Through dissimulation and feigned ignorance, the free black minister managed to be released almost instantly. When the foreman of the grand jury asked what he knew about the underground railroad, Early “asked him to explain what it was, for I never had seen a railroad underground.” When asked what he would do if he saw a slave running away, “I told him I would give him a dollar and tell him to run with all his might! The last answer seemed to amuse them, and finding they could elicit nothing from me I was released.”⁷²

Despite narrow escapes like Early’s, the legal threat of the penitentiary loomed over him and all who wished to help slaves escape. As Early recalled, despite his skillful interaction with the Grand Jury, he “knew that I was in a critical condition, for if it could be proven that any man assisted in the least one who was making his escape, the punishment would be very severe.”⁷³ Indeed, these “very severe”



The ironically named Judge Luke Lawless ruled against trying any members of the mob that lynched Francis MacIntosh in 1836. MacIntosh was a free black who had been taken into custody by sheriffs, escaped, and was burned to death. Seeing his charred remains the next day converted Elijah Lovejoy into an abolitionist. (Image: Missouri History Museum)

punishments, including long penitentiary sentences, imbued Missouri's river border with enormous legal danger and consequence for fugitive slaves and those who aided their escape.

As this article has shown, Missouri legislators and judges increased common carrier owners' and operators' liability for transporting slaves across the river, shifting the bulk of the financial risk of slave escapes from slaveowners to common carriers. At the same time, African Americans, of course, bore the greatest risk of all, the risk of losing their freedom. Lawmakers' efforts to tighten and police the Mississippi River border against slave escapes also put all African Americans at increased risk of arrest and enslavement as suspected fugitive slaves, whether enslaved or free. By the eve of the Civil War, Missouri judges and legislators had helped transform what had been a partially defined, porous Mississippi

River border during the two decades following the Louisiana Purchase into a highly fortified and perilous one for all African Americans, both fugitive and free.

It is difficult for us to imagine today, but public executions were something of an event for some. In 1841, the *Eagle* advertised a one-day excursion from Alton, Illinois, to St. Louis to see four African Americans executed. (Image: The Illinois Reporter, December 12, 1826)

FOR SAINT LOUIS!

**The Regular Steam Packet
EAGLE!**

THE undersigned, having chartered the above Steam-boat, for the purpose of accommodating all the citizens of ALTON, and the vicinity, who may wish to see the

Four Negroes Executed,

At St. Louis, on **FRIDAY NEXT**, would inform the public that the Boat will leave this place at **SEVEN o'clock, A. M.**, and St. Louis at about **FOUR, P. M.**, so as to reach home the same evening.

The Boat will be repaired and fitted up for the occasion and every attention will be paid to the comfort of Passengers.

**FARE FOR THE TRIP TO ST. LOUIS & BACK
ONLY \$1 50!!!**

The Negroes are to be hung on the point of *Duncan's Island*, just below St. Louis. The Boat will drop alongside, so that ALL CAN SEE WITHOUT DIFFICULTY.

For Passage, apply to
**W. A. Wentworth,
P. M. Pinckard.**

ALTON, JULY 7, 1841

Congratulations

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Jacqueline Tatom, an architect, urban designer, and teacher whose work explored the metropolitan landscapes of St. Louis and its environs.

The St. Louis Metropolitan Research Exchange, The Des Lee Collaborative Vision at the University of Missouri-St. Louis, Washington University in St. Louis, and Lindenwood University sponsor an award for the best student paper on a case, issue, or topic relating to the St. Louis metropolitan area. The Award commemorates Jacqueline Tatom who explored the metropolitan landscapes of St. Louis as an architect, urban designer, and teacher. The Award is presented biannually, and published in *The Confluence*. This year, Jesse Nasta is the Tatom Award recipient; the article appears in this issue of *The Confluence*.

ENDNOTES

- ¹ I would like to thank Dylan Penningroth and Kate Masur for their thorough, thoughtful critiques of early drafts of this piece. I am also very grateful to Mike Everman, Patricia Barge, and Diane Everman for their warm and enthusiastic support during several years of assistance in finding obscure St. Louis sources. I also wish to thank the American Historical Association for an Albert J. Beveridge Grant, the Missouri State Archives for a William E. Foley Research Fellowship, the Illinois State Historical Society for a King V. Hostick Scholarship, and the Elgin, Illinois, Genealogical Society for a Chester A. Bowser Scholarship, all of which provided support for my archival research.
- Loren Schweningen, ed., *From Tennessee Slave to St. Louis Entrepreneur: The Autobiography of James Thomas* (Columbia: University of Missouri Press, 1984), 180. For more on James P. Thomas and his family's experience in slavery and freedom, see John Hope Franklin and Loren Schweningen, *In Search of the Promised Land: A Slave Family in the Old South* (New York: Oxford University Press, 2006).
- ² I particularly draw upon Laura Edwards' *The People and Their Peace* here, about how the focus on state-level law, printed legal texts, and legal professionals masks the legal change that occurred during the first decades of the nineteenth century, especially local legal contestation. See especially Edwards, *The People and Their Peace: Legal Culture and the Transformation of Inequality in the Post-Revolutionary South* (Chapel Hill: University of North Carolina Press, 2009), 3–25. On the interaction between “legal rules” and contestation of those “rules,” see also Norma Basch, *Framing American Divorce: From the Revolutionary Generation to the Victorians* (Berkeley: University of California Press, 1999).
- ³ “A Law Respecting Slaves,” in *Laws of a Public and General Nature, of the District of Louisiana, of the Territory of Missouri, and of the State of Missouri, up to the Year 1824, In Two Volumes*, Vol. 1 (Jefferson City, Missouri: W. Lusk & Son, 1842), 27–33.
- ⁴ *Laws of a Public and General Nature, of the District of Louisiana, of the Territory of Louisiana*, Vol. 1, 33.
- ⁵ Maximilian Reichard, “Black and White on the Urban Frontier: The St. Louis Community in Transition, 1800–1830,” *Missouri Historical Society Bulletin* 33, No. 1 (Oct. 1976), 4.
- ⁶ For these population statistics, see Richard C. Wade, *Slavery in the Cities: The South, 1820–1860* (London, Oxford, New York: Oxford University Press, 1964), 327.
- ⁷ Rufus Babcock, *Forty Years of Pioneer Life: Memoir of John Mason Peck, D.D., Edited From His Journals and Correspondence* (Philadelphia: American Baptist Publication Society, 1864), 84, 90.
- ⁸ Diane Mutti Burke, *On Slavery's Border: Missouri's Small-Slaveholding Households, 1815–1865* (Athens: University of Georgia Press, 2010), 309.
- ⁹ According to the 1840 U.S. federal census, St. Louis' enslaved population still outnumbered free African Americans by a nearly 3:1 margin, with 1,531 slaves and 531 free African Americans enumerated in the city that year. By 1860, the city's 1,755 free African Americans outnumbered the 1,542 slaves. See Wade, *Slavery in the Cities*, 327.
- ¹⁰ For the text of this law, see Stephen Middleton, *The Black Laws of the Old North: A Documentary History* (Westport, Connecticut: The Greenwood Press, 1993), 185–88.
- ¹¹ The “Act Concerning the Introduction of Negroes and Mulattoes into this Territory,” passed by the Indiana Territory's legislature in 1805, permitted any master bringing slaves into Illinois to continue to hold them in servitude, provided that they appear before the Court of Common Pleas to “determine and agree to and with his or her negro or mulatto upon the terms of years which the said negro or mulatto will and shall serve his or her said owner or possessor.” This law, not repealed until Illinois entered the Union in 1818, introduced what Paul Finkelman has called “de facto slavery” to Indiana Territory and Illinois Territory. Faced with no choice but to “agree” to a “term” of servitude in Illinois or return to their place of origin as a slave for life, up to one thousand African Americans “agreed” to terms of servitude that often exceeded their expected lifetimes, or up to 99 years. For more on these indenture laws and their effects, see Finkelman, “Slavery and the Northwest Ordinance: A Study in Ambiguity,” *Journal of the Early Republic*, No. 4 (Winter, 1986), 343–70. For the text of this law, see Francis S. Philbrick, ed., *The Laws of Indiana Territory, 1801–1809* (Springfield: Illinois State Historical Library, 1930), 136–39.
- ¹² Middleton, *Black Laws of the Old Northwest*, 295–98. See especially section 5, section 6, and sections 21–25. A more concise full text of the 1819 statute is reprinted in Helen Cox Tregillis, compiler, *River Roads to Freedom: Fugitive Slave Notices and Sheriff Notices Found in Illinois Sources* (Bowie, Maryland: Heritage Books, Inc., 1988), 2–10.
- ¹³ Fugitive slave newspaper advertisements reveal that, well into the 1840s, southern Illinois sheriffs and jailers continued to presume all African Americans to be fugitive slaves unless proven free. For example, on January 1, 1842, the sheriff of White County, Illinois, committed to jail “a negro man who calls himself Willis Wilson Thomas” although he “says he is a free man.” See the Shawneetown, Illinois, *Republican*, January 15, 1842, as reprinted in Tregillis, comp., *River Roads*, 94.
- ¹⁴ The Kaskaskia, Illinois, *Western Intelligencer*, April 14, 1819, as reprinted in Tregillis, comp., *River Roads*, 54. A brief notice in the Edwardsville, Illinois, *Spectator* reveals that this so-called “petty Lawyer” was Jonathan H. Pugh, a state representative from Bond County, Illinois, and an opponent of the 1824 Illinois

- constitutional convention to legalize slavery in the state. See Edwardsville *Spectator*, March 15, 1823.
- ¹⁵ Here I draw upon Edwards, *The People and Their Peace*, to distinguish between legal “rights,” which Edwards is correct to critique because “rights” imply a legal uniformity, systematization, and accessibility that did not exist in the early nineteenth century, neither for masters like Wilcox nor, especially, for the enslaved. See Edwards, *The People and Their Peace*.
- ¹⁶ For analysis of fugitive slave newspaper advertisements as a source, and of the prominence of the eastern seaboard in studies of this source, see Shane White, *Somewhat More Independent: The End of Slavery in New York City, 1770–1810* (Athens: University of Georgia Press, 1991), 114–49. Edward Baptist’s forthcoming, national database of fugitive slave ads, however, should help to remedy this regional unevenness in analysis of fugitive slave advertisements.
- ¹⁷ Tregillis, comp., *River Roads to Freedom*. The twelve newspapers are: in Shawneetown, Illinois; *The Illinois Gazette*, *The Western Voice* (later *The Voice and Journal*), *The Republican*, *The Democrat*, *The Illinois Journal/Intelligencer*; in Kaskaskia: *The Western Intelligencer*; in Vandalia: *The Illinois Intelligencer*; in Sparta, Illinois: *The Randolph County Record* and *The Sparta Register*; in Edwardsville: *The Spectator*; in Belleville: *The Advocate*.
- ¹⁸ Kaskaskia, Illinois, *Western Intelligencer*, August 14, 1816, as reprinted in Tregillis, comp., *River Roads*, 51.
- ¹⁹ Shawneetown, Illinois, *Gazette*, February 24, 1820, as reprinted in Tregillis, comp., *River Roads*, 16.
- ²⁰ The Kaskaskia, Illinois *Western Intelligencer*, July 24, 1816, as reprinted in Tregillis, comp., *River Roads*, 50–51.
- ²¹ Shawneetown, Illinois *Gazette*, August 23, 1821, as reprinted in Tregillis, comp., *River Roads*, 26; Shawneetown, Illinois *Gazette*, March 1, 1823, as reprinted in Tregillis, comp., *River Roads*, 37.
- ²² This calculation is based on all fugitive slave advertisements reprinted in Tregillis, comp., *River Roads*.
- ²³ Shawneetown, Illinois *Gazette*, November 16, 1822, as reprinted in Tregillis, comp., *River Roads*, 36.
- ²⁴ *Ibid.*, February 23, 1822, reprinted in Tregillis, comp., *River Roads*, 29.
- ²⁵ *Ibid.*, November 7, 1829, reprinted in Tregillis, comp., *River Roads*, 89.
- ²⁶ Kaskaskia, Illinois *Western Intelligencer*, June 9, 1819, reprinted in Tregillis, comp., *River Roads*, 55.
- ²⁷ Shawneetown, Illinois *Gazette*, March 13, 1823, reprinted in Tregillis, comp., *River Roads*, 37–38.
- ²⁸ Illinois courts insisted that the Northwest Ordinance failed to apply to those held as slaves in Illinois during the French colonial period, prior to the Northwest Ordinance, and their descendants, some of whom remained enslaved in Illinois well into the nineteenth century. The last of these Illinois “French slaves,” as they were called, finally gained freedom in 1845, when the Illinois Supreme Court’s opinion in *Jarrot v. Jarrot* declared all slavery and involuntary servitude illegal in Illinois. For more on French colonial slavery in Illinois and the long road to *Jarrot v. Jarrot*, see Newton N. Newborn, “Judicial Decision Making and the End of Slavery in Illinois,” *Journal of the Illinois State Historical Society* 98, No. 1/2 (Spring-Summer 2005): 7–33.
- ²⁹ Letter from Governor Ninian Edwards to Mayor William Carr Lane, September 21, 1828, William Carr Lane Papers, Missouri History Museum, St. Louis.
- ³⁰ Tregillis, comp., *River Roads*, 43–44, 53.
- ³¹ The Springfield, Illinois *Sangamo Journal*, July 12, 1832, reprinted in Tregillis, comp., *River Roads*, 46–47.
- ³² Stephen Aron, *American Confluence: The Missouri Frontier from Borderland to Border State* (Bloomington: Indiana University Press, 2006), xx–xxi.
- ³³ Walter Johnson, “Inconsistency, Contradiction, and Complete Confusion: The Everyday Life of the Law of Slavery,” *Law & Social Inquiry* 22, No. 2 (Spring 1997): 405–33.
- ³⁴ *Laws of A Public and General Nature, of the District of Louisiana*, Vol. 1, 990–91.
- ³⁵ “An Act directing the county courts to appoint patrolers [*sic*] and concerning slaves,” approved December 14, 1822, in *Laws of A Public and General Nature, of the District of Louisiana*, Vol. 1, 990.
- ³⁶ The Shawneetown, Illinois, *Gazette*, August 12, 1820, reprinted in Tregillis, comp., *River Roads*, 18–19.
- ³⁷ William J. Anderson, *Life and Narrative of William J. Anderson, Twenty-Four Years a Slave* (Chicago: Daily Tribune and Job Printing Office, 1857), 17, 31–36.
- ³⁹ Thomas C. Buchanan, *Black Life on the Mississippi: Slaves, Free Blacks, and the Mississippi Steamboat World* (Chapel Hill: University of North Carolina Press, 2004), 9. Buchanan acknowledges that some fugitives in St. Louis had “fled enslavement thinly veiled as indentured servitude in southern Illinois,” but, otherwise, he examines how steamboats facilitated escape from the slave to free states, not how slaves’ hitherto multidirectional escape routes came to be consolidated in a northward direction. See Buchanan, *Black Life on the Mississippi*, especially chapter 4. For antebellum travel times from St. Louis by stage, wagon, and steamboat, see Timothy R. Mahoney, *River Towns in the Great West: The Structure of Provincial Urbanization in the American Midwest, 1820–1870* (Cambridge: Cambridge University Press, 1990), especially chapter 5.
- ³⁹ Buchanan, *Black Life on the Mississippi*, 9–11.
- ⁴⁰ Wade, *Slavery in the Cities*, 15–16.
- ⁴¹ *The Revised Statutes of the State of Missouri* (St. Louis: The Argus Office, 1835), 586.
- ⁴² See, for example, Stanley Harrold, *Border War: Fighting over Slavery before the Civil War* (Chapel Hill: University of North Carolina Press, 2010).
- ⁴³ Merton L. Dillon found no antislavery societies in the state outside of south central Illinois’s Putnam County, heavily populated by antislavery Presbyterians, until 1836. See Merton L. Dillon, “Abolitionism Comes to

- Illinois,” *Journal of the Illinois State Historical Society* 53, No. 4 (Winter 1960): 389–403.
- ⁴⁴ *St. Louis Republican*, “Abolitionist Movements,” as reprinted in *The Liberator*, December 14, 1849, 199.
- ⁴⁵ *The New York Emancipator*, October 22, 1845.
- ⁴⁶ “A Memorial to Congress Concerning Fugitive Slaves,” January 25, 1847, in *Laws of the State of Missouri, Passed at the First Session of the Fourteenth General Assembly, Begun and Held at the City of Jefferson, On Monday, the Sixteenth Day of November, Eighteen Hundred and Forty-Six, and Ended on Tuesday, the Sixteenth Day of February, Eighteen Hundred and Forty-Seven* (Jefferson City, Missouri: James Lusk-Public Printer, 1847), 360.
- ⁴⁷ The *St. Louis Republican*, as reprinted in *The Ohio Observer*, September 27, 1854.
- ⁴⁸ See Sundiata Keita Cha-Jua, *America’s First Black Town: Brooklyn, Illinois, 1830–1915* (Urbana: University of Illinois Press, 2000), especially chapters 1 and 2.
- ⁴⁹ Since at least the publication of Larry Gara’s classic 1961 study of the underground railroad, historians have stressed the central role that African Americans themselves played in aiding fugitive slaves. See Larry Gara, *The Liberty Line: The Legend of the Underground Railroad* (Lexington: University of Kentucky Press, 1961). More recently, Keith Griffler has shown that free African American communities along the Ohio River border did not merely play an important part in the underground railroad but in fact spearheaded this on-the-ground struggle against slavery. See P. Griffler, *Front Line of Freedom: African Americans and the Forging of the Underground Railroad in the Ohio Valley* (Lexington: University Press of Kentucky, 2004).
- ⁵⁰ John Brown, *Slave Life in Georgia: A Narrative of the Life, Sufferings, and Escape of John Brown, A Fugitive Slave, Now In England* (London, 1855), 151–52.
- ⁵¹ For more on this mail campaign, see Bertram Wyatt-Brown, “The Abolitionists’ Postal Campaign of 1835,” *Journal of Negro History*, 50, No. 4 (October 1965): 227–38.
- ⁵² *The Revised Statutes of the State of Missouri*, 586.
- ⁵³ *Laws of A Public and General Nature, of the District of Louisiana*, 748.
- ⁵⁴ This information on Russell is pieced together from the following sources: *Laws of the State of Missouri, Passed at the First Session of the Eleventh General Assembly* (Jefferson City, Missouri: Jeffersonian Office, 1841), 253; *Laws of the State of Missouri, Passed at the First Session of the Fourteenth General Assembly*, 206; *St. Louis County Court Record Book*, Vol. 1, 1824–1835, 287, 285, 297, 363; *St. Louis County Court Record Book*, Vol. 2, 1836–1841, 75, 97, 383; *St. Louis County Court Record Book*, Vol. 3, 1841–1844, 22, 43, 59, 66, 84, 85, 86. Russell reported owning fourteen slaves on the 1840 federal census, St. Louis.
- ⁵⁵ *Russell v. Taylor*, June Term 1837, Case Number 17, Missouri Supreme Court Case Files, Missouri State Archives-Jefferson City.
- ⁵⁶ *Ibid.*
- ⁵⁷ *Ibid.*
- ⁵⁸ *Ibid.*
- ⁵⁹ *Ibid.*
- ⁶⁰ Jenny Bourne Wahl, *The Bondsman’s Burden: An Economic Analysis of the Common Law of Southern Slavery* (Cambridge: Cambridge University Press, 1998).
- ⁶¹ Wahl, *The Bondsman’s Burden*, especially chapter 4.
- ⁶² *Eaton v. Vaughan*, January Term 1846, Case Number 18, Missouri Supreme Court Case Files, Missouri State Archives-Jefferson City.
- ⁶³ *Ibid.*
- ⁶⁴ *Ibid.*
- ⁶⁵ *Calvert v. Steamboat Timoleon*, St. Louis Circuit Court, November Term 1849, Case # 181; *Finney v. Kinder*, St. Louis Circuit Court, March Term 1842, Case # 113, Missouri State Archives-St. Louis; *Harper v. Steamboat Western Belle*, St. Louis Circuit Court, November Term 1844, Case # 81, Missouri State Archives-St. Louis; *Hudson v. Miller*, St. Louis Circuit Court, November Term 1849, Case # 127, Missouri State Archives-St. Louis; *Jones v. Steamboat Prairie Bird*, April Term 1847, Case # 141, Missouri State Archives-St. Louis; *Lee v. McCune, Deane, Randolph, Whitney, Hazard, Carson, and Voorhles, owners of the Steamboat Edward Bates*, November Term 1848, Case # 189 and 190, Missouri State Archives-St. Louis; *Walker and Hundley v. Von Phul, et.al.*, St. Louis Circuit Court, April Term 1844, Case # 146, Missouri State Archives-St. Louis; *Wilkinson v. Baldwin*, St. Louis Circuit Court, July Term 1840, Case # 195, Missouri State Archives-St. Louis; *Price v. Thornton*, St. Louis Circuit Court, July Term 1841, Case # 50, Missouri State Archives-St. Louis; *Price v. Tatum*, St. Louis Circuit Court, July Term 1841, Case # 50, Missouri State Archives-St. Louis; *Lepper v. Chilton*, St. Louis Circuit Court, September Term 1841, Missouri State Archives-St. Louis; *Chouteau v. Keizer and Hope*, St. Louis Circuit Court, Missouri Supreme Court-St. Louis; *Horrell v. Fithian, master of the Steamboat Boreas*, St. Louis Circuit Court, November Term 1843, Case # 23, Missouri State Archives-St. Louis; *Perry and Van Houten v. Beardslee*, St. Louis Circuit Court, April Term 1844, Case # 16, Missouri State Archives-St. Louis; *Sarade v. Steamboat Bowling Green*, St. Louis Circuit Court, November Term 1842, Case # 47, Missouri State Archives-St. Louis.
- ⁶⁶ Henry Bibb, *Narrative of the Life and Adventures of Henry Bibb, An American Slave, Written by Himself* (New York: Published by the Author, 1849), 166.
- ⁶⁷ Rev. S.A. Dwinnell, *Wisconsin As It Was and As It Is. 1836 Compared With 1866. Its Material, Educational, and Religious History* (Milwaukee: Godfrey & Crandall’s Steam Printing House, 1866), 15–18.
- ⁶⁸ Anderson, *Life and Narrative of William J. Anderson*, 31–36.
- ⁶⁹ Taja-Nia Y. Henderson, “Crucibles of Discontent: Penal Practice in the Shadow of Slavery, Virginia, 1796–1865” (Ph.D. Diss., New York University, 2013).

⁷⁰ *The Revised Statutes of the State of Missouri*, 177–78.

⁷¹ Harriet C. Frazier, *Runaway and Freed Missouri Slaves and Those Who Helped Them, 1763–1865* (Jefferson, North Carolina: McFarland, 2010), 131.

⁷² Sarah J.W. Early, *Life and Labor of Rev. Jordan W.*

Early, one of the Pioneers of African Methodism in the West and South (orig. pub. 1894; reprint, Freeport, New York: Books for Libraries Press, 1971), 37–39.

⁷³ Early, *Life and Labor of Rev. Jordan W. Early*, 38.

Big Spring and Recharge Area

and the Possibility of Lead Mining

BY QUINTA SCOTT



Big Spring boils up beneath caves, old outlets in a wall of Eminence Dolomite. It delivers 286,000,000 gallons of water a day to a short spring branch, which carries it east to the Current River. However, Big Spring draws its water from the Eleven Point River watershed to the west in Shannon, Oregon, and Carter counties, Missouri. Its recharge area fans out to the eastern edge of Howell County near Fanton, close to 39.5 miles away. Within the watershed Hurricane Creek, a losing stream and tributary to the Eleven Point, contributes all its water to Big Spring in eight losing sections.¹

In 1983 USX, formerly U.S. Steel Corp., and Amax Exploration, Inc., applied to the U.S. Forest Service for an exploratory permit to drill for lead in the Hurricane Creek watershed. Through a series of mergers and acquisitions, the application ended up in the hands of the Doe Run Corporation. It raised several issues. Geologists with the U.S. Geological Survey and its Missouri counterpart realized they had no idea how lead mining would affect a watershed in a karst landscape. They lacked the basic knowledge of the Hurricane Creek landscape beyond Thomas J. Aley's 1975 study. Their available geological maps dated back to 1930, when Josiah Bridge completed his study of the *Geology of the Eminence and Cardareva Quadrangles*.

Over the next 15 years, geologists brought Bridge's maps up to date. Their work recognized the Ozark National Scenic Riverways as a geology-based national park. They took their studies beyond the Big



Opposite and above – Big Spring, Carter County.

Hurricane Creek at Missouri Route 19.

By 1975, Aley had proven that sinkholes and losing streams give access to the aquifer to deliver the water that pours through the karstic Big Spring recharge area. However, hydrogeologists had yet to define the aquifer's structure. The U.S. Geological Survey studied the structure of the Ozark and St. Francois aquifers and their confining unit over the next two decades. Aley's work helped the process along.

This is the second article, published in *The Confluence*, on the springs that feed the Ozark National Scenic Riverways, the Current and Jacks Fork rivers. The first article covers Aley's work in the 1960s and early 1970s tracing the subterranean conduits that lie under the riverways and the Eleven Point River watershed. On the surface, Hurricane



Creek is a tributary of the Eleven Point River, but it is a classic Ozark losing stream. Rain falls on the creek and disappears within a day or two into a subterranean system that delivers water to Big Spring, a tributary to the Current River. When Aley dropped dye into the middle fork of the Eleven Point at Fanchon—another losing stream—it showed up at Big Spring, 39.5 miles away.

This article covers the decades-long response to Doe Run’s desire to mine lead in the Hurricane Creek watershed. It set off a wave of research by the U.S. Forest Service, to whom the company made its application; the National Park Service, the owner of the Ozark National Scenic Riverways; the U.S. and Missouri Geological Surveys; and the Missouri Department of Conservation, which covered the whole of the Current River watershed.

While lead mining in Missouri began in 1710 at Mine la Motte, near Fredericktown, it prospered in the Old Lead Belt in Washington County along the Big River throughout the eighteenth and nineteenth centuries. By the middle of the twentieth century mining companies had exhausted the supply of lead and turned their attention to the Viburnum Trend in the Black River watershed. In the late 1970s and

early 1980s, the lead-mining industry looked at declining deposits in the Viburnum Trend, turned its eye to public lands in the Mark Twain National Forest, and sought a permit to begin exploratory drilling for lead and zinc in the karst landscape west of Big Spring and directly north of Greer Spring.

In the 1970s and 1980s, Doe Run and other mining companies made more than 300 test borings in the Hurricane Creek watershed to see if lead could be found in the Mark Twain Forest and, if so, where and how far down.

Environmentalists looked at the application to mine lead in the Mark Twain National Forest, objected, and held up the application for eight years. After the Forest Service and the Bureau of Land Management granted the permit in 1991 and as drilling began in late 1992, Roger Pryor of the Missouri Coalition for the Environment protested: “My basic fault with the whole thing is not so much the drilling of these holes. We’re opposed to mining in those areas. We believe the drilling permit is the first step toward mining.” Missouri’s new attorney general, Jay Nixon, elected in 1992, also opposed mining in the National Forest and echoed Pryor’s comment: “Mining inevitably follows successful

Doe Run Mine #29, in the Viburnum Trend on Indian Creek in the Courtois Watershed





Site Near Drill Hole 84-40 in the Doe Run Exploration Area of the Mark Twain National Forest, Oregon County

exploration.” Arkansas—whose governor, Bill Clinton, had just been elected president—also planned to appeal the permit. Pryor feared that Clinton would not be inaugurated soon enough to withdraw the permit.²

Once granted in 1991, the permit allowed the company to drill twenty holes, eight inches in diameter, at two sites, drill holes 84–40 and 801–148. The following November, the company’s drilling crew laid out “diapers,” black plastic tarps to prevent grease seeping off the drill from oozing into the soil, on a one-acre site that had been clear-cut several years earlier. Doe Run stopped exploratory drilling in 1993 when the price of lead fell, but it did not give up its permit until October 1998. It did so in the face of opposition from Bruce Babbitt, Secretary of the U.S. Department of the Interior, owner of the Ozark National Scenic Riverways, who told the company, “Mining is a valuable industry, and mining jobs are good jobs, but mining should not be allowed to threaten very special places like Yellowstone and the Ozark National Scenic Riverways.” Nor, he added, would he guarantee that Interior would allow mining should Doe Run exploratory efforts be successful.

And, maybe, Interior would not compensate the company for its exploratory costs. With that, Doe Run gave up its permit.³

That was not the end of it. In July 1999, Attorney General Nixon asked Secretary Babbitt to withdraw 400,000 acres in the Mark Twain National Forest from drilling. Within three weeks, Sen. Christopher “Kit” Bond (R-MO) attached an amendment to Interior’s spending bill to ban the agency from banning lead mining in the forest until 2001. After Senate Republicans withdrew Bond’s amendment, he came back in September and added \$250,000 for research into the environmental and economic impacts of drilling in the region. At the same time, he added a provision to ban Doe Run from exploratory drilling until 2001. The bill passed in November 1999.⁴

After the National Parks Conservation Association declared the Ozark National Scenic Riverways an endangered national park, Bond added \$750,000 to a new Interior appropriation for additional funding to study the effects of drilling, bringing the total to \$1 million. The money would go to the U.S. Geological Survey, which would lead

twelve other government agencies, experts from the mining companies, the University of Missouri at Rolla, and Tom Aley's Ozark Underground Laboratory. The bill passed.⁵

Understanding the Aquifers

In his 1975 report on the Big Spring recharge area, Aley wrestled with two concepts of an aquifer: the water-holding capacity of individual rock formations or that of the entire geological column. In the 1960s when Aley did his research, hydrogeologists still depended on well records that identified individual rock formations as individual aquifers. Early in the study, Aley referred to the importance of the Gunter Formation as an aquifer. Later in the report, he described the storage capacity of the "entire spring system," that is, water stored in soil on the uplands and on hillsides, in solution-widened joints in bedrock, and in bedrock itself, particularly in sandstone. In short, he described the aquifer as it would be defined five years later, using figures from his dye traces in the recharge area.⁶

In the wake of a severe nationwide drought in 1977, Congress mandated the Regional Aquifer-System Analysis, "a systematic effort to study a number of the nation's most important aquifer systems," the following year. In 1981, the U.S. Geological Survey published its plan of research for the Central Midwest Regional Aquifer System, including a study of the aquifers in southern Missouri, which was scheduled for completion

in 1986. However, geologists had been studying aquifers since the 1920s.⁷

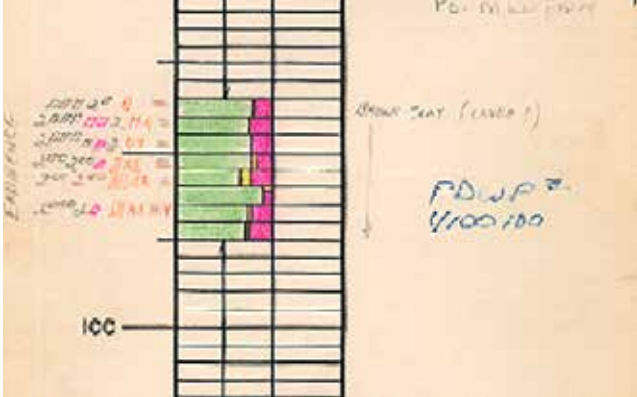
In his 1921 survey of Missouri's water resources, Henry Claus Beckman referred to the large underground storage-capacity of the springs feeding the Current, the Jacks Fork, and the Eleven Point rivers. Josiah Bridge's 1930 study noted that Eminence Dolomite is highly soluble along bedding planes, creating underground conduits capable of storing large quantities of water that come to the surface in springs.

Springs, according to Bridge, supplied domestic water in the 1920s. The town of Eminence pumped its water from a small spring, set on a hill above the village. Bridge also noted that the water table in porous rock runs deep, and water flows through a system of underground drainage. While shallow wells went dry in the summer, wells drilled deep into bedrock yielded water from Gunter Sandstone through all seasons.⁹

Montauk Spring: According to the *U. S. Geological Survey*, "a spring is the result of an aquifer being filled to the point that the water overflows to the land surface. They range in size from intermittent seeps, which flow only after much rain, to huge pools flowing hundreds of gallons daily."⁸

Mark Twain National Forest: McCormack Lake Recreation Area in the Hurricane Creek watershed





Well records or drill logs tell geologists where water and minerals can be found under the landscape. In 1977, Amax Exploration drilled a mineral test well in the Hurricane Creek watershed. (Image: Record from the Missouri Department of Natural Resources, Geologic Well Logs of Missouri, Shannon County Well Log, 025627)

In 1967, at the behest of senators Stuart Symington and Edward V. Long of Missouri, Edward J. Harvey of the U.S. Geological Survey and Dale L. Fuller and Robert D. Knight of the Missouri Geological Survey detailed which rock formations yielded the most groundwater. Based on well records, they found that five principal water-bearing formations in the Ozarks yielded the most water: Lamotte Sandstone, Potosi and Eminence dolomites, the Gunter Member of the Gasconade Formation, the Roubidoux Formation, and St. Peter Sandstone. They labeled each as an individual aquifer.

Of the five, researchers listed Potosi Dolomite as the most productive aquifer, capable of yielding as much as 500 gallons per minute. The large storage capacity of Potosi and Eminence dolomites feeds the springs of the Current and Black river valleys, with a yield of as much as 90,000 gallons a minute from the largest springs. Openings and fractures in the upper hundred feet of Eminence Dolomite are capable of delivering moderate quantities of water for small industry and towns. Wells in Gunter Sandstone yield as little as forty gallons a minute or as much as a thousand, depending on the locations of the wells. Finally, farmers drilling shallow wells draw water from the Roubidoux Formation at the rate of 15 to 20 gallons a minute.

Below the Potosi Formation, Lamotte Sandstone yields small amounts of water from wells on the northern and eastern edges of the St. Francois Mountains in towns like Bismarck and Farmington. Larger yields could be obtained west of the mountains. While the Bonnetterre Formation, where lead is found, yields adequate supplies for domestic use, very little is to be had from the shale of the Davis and Derby-Doe-Run formations, but the authors give no explanation as to why.¹⁰

In 1972, Harvey returned to the study of aquifers under the Ozark plateaus. At the time, the Environmental Protection Agency was considering designating the region as a sole-source aquifer. The U.S. Geological Survey published Harvey's report in late 1980. While he understood from his earlier research that wells drilled in Potosi Dolomite produce the largest quantities of water in the Ozark plateaus, he concluded that the size and thickness of the Potosi Formation does not explain the "three-dimensional flow of water through the entire body of dolomite" land surface to the base of the Potosi. To understand the extent of the aquifer, he looked at 1,000 feet or more of dolomites and sandstones, which extend past the Potosi to Derby-Doe Run Dolomite and the Davis Formation.¹¹

To illustrate his point, he consulted the work of Thomas Aley and Laszlo Jakucs, a Hungarian geologist. Aley, while still at work on his study of the Big Spring recharge area, sent Harvey the results of traces he made between various losing streams and sinkholes in the Big Spring recharge area, noting the formation in which he dropped the trace and the formation from which he retrieved it. Hence, when Aley dropped a trace in Jam Up Creek, a losing stream in the Jefferson City-Cotter Formation, water carried the dye down through the Gasconade Formation and Gunter Sandstone to emerge from Big Spring in the Eminence Formation.¹²

Based on Aley's work, Harvey noted that water enters the underground system through upland infiltration, sinkholes, and losing streams. Once it sinks into the underground system, water flows in three dimensions across descending rock formations through "cavernous connections" that reach down as much as 1,500 feet from the surface. Harvey estimated that Ozark Aquifer holds 100 to 500 cubic miles of water in underground conduits. Like Aley, Harvey concluded that sinkholes and losing streams could feed pollution into the underground system through accidental spills or the purposeful dumping of toxic substances.

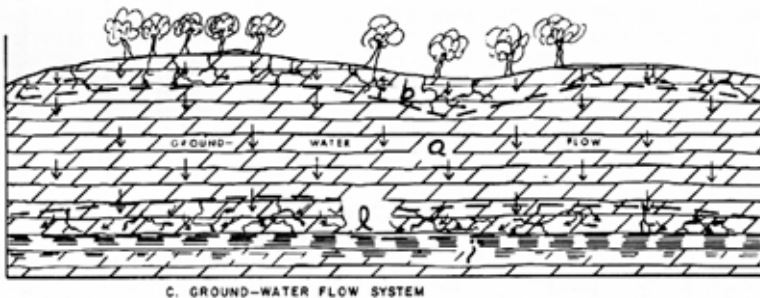
Jakucs proposed that shale in the Davis Formation prevented water from seeping below Potosi Dolomite and into the Bonnetterre Formation. It acted as a barrier between two aquifers. He provided visualization of the process in his 1977 book, *Morphogenetics of Karst Regions*. It was the same process that Aley had outlined in the Big Spring recharge study. Water enters the underground system through the infiltration of the soil in the uplands and through sinkholes and losing streams (see page 40, lower left). Once it sinks into the underground system, water filters down along



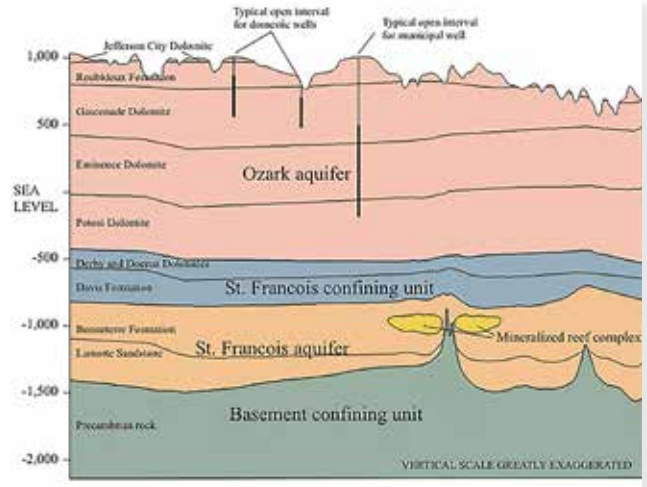
Jam Up Creek

vertical joints through a thousand feet of rocks (a). The underground flow of water under high pressure dissolves dolomite and creates conduits that run as much as a thousand feet below the surface (wiggly lines). Jakucs departed from Aley by noting that at bottom, shale in the Davis Formation (dashed lines) limits the permeability of the aquifer.¹³

Jeffrey L. Imes and L. F. Emmett completed their study of the Ozark plateau's aquifers in 1994. The aquifer system covers Missouri south of the Missouri River before bleeding into northwestern Arkansas, northeastern Oklahoma, and the southeastern corner of Kansas. The system in Missouri includes the impermeable Precambrian rocks at the base of Missouri's geological column, the St. Francois Aquifer at bottom, the St. Francois Confining Unit, the Ozark Aquifer under the Salem Plateau, the Ozark Confining Unit, the Springfield Plateau aquifer in Mississippian formations, Chouteau Limestone in Southeastern Missouri, and Northview Shale in the Springfield Plateau.



Harvey provided Laszlo Jakucs' 1977 illustration of his concept of Davis Shale (dashed lines) as the confining unit between aquifers. (Image: Edward J. Harvey, "Ground Water in the Springfield-Salem Plateaus of Southern Missouri and Northern Arkansas")



The 1994 Imes and Emmett Study of the Ozark Aquifer and Aley's Response to the Doe Run Application generalized Geohydrologic Section Of Ozark and St. Francois Aquifers across Lead Exploration Area, Including Probable Location of Lead in the Mineralized Reef Complex.¹⁴

The thickness of the St. Francois Aquifer is about 300 feet in southern Missouri. The thickness of the St. Francois Confining Unit in the Salem Plateau ranges from 0 to 400 feet. While the thickness of the Ozark Aquifer is about 1,500 feet at the Missouri-Arkansas border, it ranges from 800 to 3,000 feet thick overall. Mississippian rocks confine the Ozark Aquifer in the Springfield Plateau.¹⁵

Thomas Aley first weighed in on lead mining in the Big Spring Recharge Area in 1987, when he and Catherine Aley published their work on the recharge areas of the Current River springs. In their update of the Big Spring Recharge Area, they noted that its hydrological complexity mitigated lead mining.¹⁶

Two years later, Aley examined the drafts and the accompanying maps that would go into the Imes and Emmett report. He noted that the Davis and Doe-Run formations in the targeted mining area just north of the confluence of Hurricane Creek and the Eleven Point River are 200 to 300 feet thick, thinner than in other places. He also remarked that it is only 20 percent shale and that the remaining dolostones in the formations are semipermeable. From this, Aley questioned whether the St. Francois Confining Unit in the target area was capable of retarding leakage of the Ozark Aquifer into the St. Francois Aquifer below, should mining happen.¹⁷

He listed the possible sources of contamination



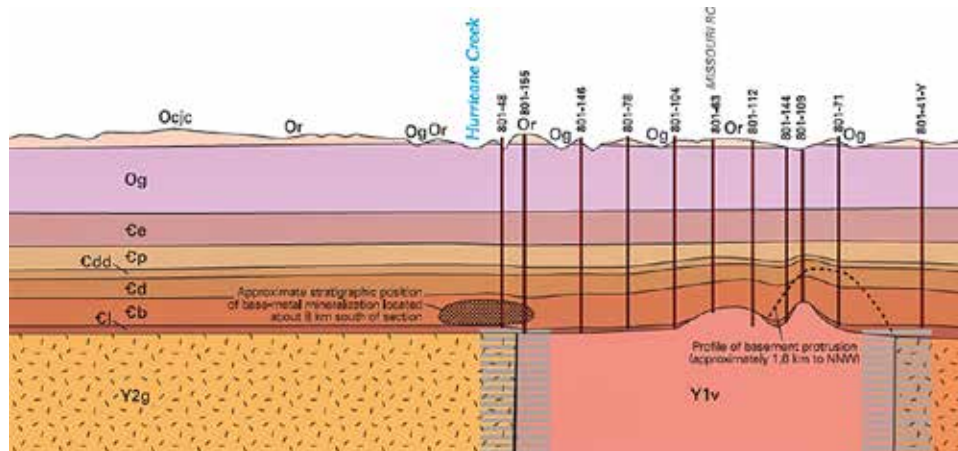
Clearwater Lake

to the watershed. Lead mining could damage the aquifer above and below the surface of the watershed. Mine drainage could direct heavy metals into streams and the underground system. So could the leaching of mine tailings. The failure of tailings dams could empty ponds into clear streams and muddy them. He gave the example of a 1977 tailings pond dam break in the wake of a spring storm that polluted Logan Creek clear to Clearwater Lake, 40 miles away. Finally, processed ore wastes can leach into streams. Should such contamination get into sinkholes or losing streams, the subterranean flow of water through conduits would feed it into local wells, Big Spring, and the smaller springs in the Hurricane Creek Watershed. He recommended against mining in the Hurricane Creek Watershed.¹⁸

Imes and Emmett noted in their report that Missourians draw approximately 200 million gallons of water a day from the Ozark Plateaus aquifer for domestic, industrial, and agricultural consumption. Yet, there was no evidence that the system was being depleted. However, dewatering the Bonneterre Formation in the Viburnum Trend draws 26 million gallons a day from the St. Francois Aquifer at a point where the Ozark Aquifer is very thin.¹⁹

Hydrogeologists continued their work on the aquifers after the publication of the 1994 report. They used mining company logs of boreholes and some well logs to determine the thickness of the St. Francois Aquifer and its confining unit. The logs, some more than 2,500 feet deep and made in the Hurricane Creek watershed, helped determine whether Davis shale impeded movement of water between the two aquifers. In 2000, they published a report that concluded that, barring faults or fractures in the confining unit that could open conduits between the two aquifers, Derby-Doerun Formation would stop the Ozark aquifer from leaking into the St. Francois. In 1999, geologists made a similar study in the Viburnum Trend and came to a similar conclusion.²¹

In 2005, hydrogeologists from the USGS sunk a monitoring well near boreholes 80-48 and 84-40, the location of Doe Run's exploratory drilling sites. They drilled down through Davis shale 2,098 feet to the Bonneterre Formation where lead can be found. Previous studies found that samples taken from drill hole 80-148 were found to contain 11 percent lead and 2.9 percent zinc; those from drill hole 84-40 were found to contain 35.9 percent lead and 12.2



Location of a cluster of boreholes in the hurricane Creek Watershed. Doe Run's actual exploratory sites were five miles south of Drill Hole 801-48, which reaches down to a mineralized reef complex in the Bonne Terre Formation.²

percent zinc. These amounts are comparable to mines in Viburnum Trend and offer great potential should the sites ever be mined. The two are located within a half-mile of each other. Once they sunk their well through the St. Francois Confining Unit, researchers could determine the rise or fall of the St. Francois and Ozark aquifers within the confines of the well. They could also measure the character of the water in both aquifers.²²

As they drilled, they encountered bedding planes, caves, mudstone, and shale. Between 500 and 1,440 feet, large quantities of water flowed out of the well at the rate of more than 500 gallons per minute. In measuring the flow of the well, hydrogeologists found that the St. Francois aquifer rose above its confining unit an average of 13.4 feet during the fall and winter, when water levels in the Ozark aquifer dropped. During the summer, March to August, when rain recharged the Ozark Aquifer, the reverse was true. Water rose an average of 53.84 feet higher than the St. Francois Aquifer. When examining water quality, the researchers found large quantities of sodium, chloride, and sulfate and trace quantities of lithium and boron in the St. Francois, but no lead, because lead is not soluble in water. The Aquifer was low in water containing traces of calcium-magnesium-bicarbonate. However, the Ozark Aquifer was high in such water, as much as 250 milligrams per liter, derived from dissolved rock formations.

Done, the hydrogeologists capped the well. Should mining ever happen in its vicinity, they would have a means of monitoring changes in water quality

in the aquifers, particularly the Ozark, which serves as the major source of domestic and industrial water in southern Missouri.²³

Just as Doe Run started drilling its exploratory holes in the Mark Twain National Forest, lead contamination of the Big River from chat pile-piles of mining waste—in the Old Lead Belt to its confluence with the Meramec River came to light. It alerted geologists with both the U.S. and Missouri Geological Surveys to the need to learn more about the possibility of lead contamination in the karst terrain of the Hurricane Creek Watershed.²⁴

Geologists needed to learn if lead and other metals from mining could leach into the karst landscape of the riverways drainage area. They started with a study of lead contamination in the New Lead Belt, the Viburnum Trend. Shaped like a hockey stick, the Viburnum Trend stretches from the Huzzah and Courtois creeks in Crawford and Washington counties, south through Reynolds County, and ends at the Reynolds/Shannon County line. Mining began on Indian Creek, a tributary of the Courtois, at the northern end of the hockey stick in the 1960s. Mining companies moved south through Dent County into Reynolds, opening new mines as old mines played out. Researchers took samplings of lead and other minerals in streambeds in Viburnum Trend, the Ozark National Scenic Riverways, and the Eleven Point River, including its tributary Hurricane Creek (A18 on the map on page 44).

A study conducted between 2002 and 2005 found tailings ponds to be the source of lead contamination



Lead Contamination in the Old and New Lead Belts. A Bonne Terre mine chat pile rises over a Bonne Terre Cemetery. It lies close to the banks of the Big River in Washington County.

on the Black River Watershed. They found increased levels of lead, particularly after heavy rains in 2002, in the middle and west forks of the Black River, in Bee Fork, in Logan Creek near Ellington, and in Clearwater Lake.

In 1930, Josiah Bridge speculated, correctly, that Blue Spring drew its water from Logan Creek, but carried it to the Current River. Three different hydrogeologists performed dye traces between 1969 and 1984. Each confirmed Bridge's guess that Logan Creek delivered water to Blue Spring, with each result more detailed than the last. All traces were made within the vicinity of the tiny Church of Latter Day Saints, located northwest of Ellington.

The upper reaches of Logan Creek flow year 'round. Once the creek streams past the church, it disappears into its gravel bed. Only in the strongest storms does water fill its fifty-foot width and overflow onto its floodplain, which lies eight to twelve feet above its channel. Normally, the creek remains dry until it reaches its confluence with Dickens Valley.²⁶

In October 1969, when upper Logan Creek was

Monitoring Well Installed Near the Doe Run Exploratory Drill Sites in the Mark Twain National Forest





Mark Twain National Forest: West Fork Black River, Sutton's Bluff Recreation Area



Logan Creek below the Church of Latter Day Saints

The Viburnum Trend, its relationship to the Ozark National Scenic Riverways, Hurricane Creek, the Eleven Point River, and the proposed Doe Run Lead exploration site (in yellow) in the Mark Twain National Forest.²⁵

running a low 3.2 cubic feet per foot, G. L. Feder and J. M. Barks injected dye into the creek. Water and dye disappeared downstream, within a mile of the Mormon Church. They recovered their charcoal packets from Blue Spring. They also recovered a second packet from the creek near Ellington.²⁷

James C. Maxwell took his research into Logan Creek a step further. He identified a series of caves and sinkholes into which water could vanish. Unless the flow in the upper creek was higher than normal, water seldom made it past a pair of elongated sinks, lined with coarse gravel, four to six feet wide, and no more than three feet deep.²⁸

Thomas Aley and Catherine Aley conducted their traces of Logan Creek in 1984 and 1986. They first confirmed the work of Bridge, Feder, and Barks, and Maxwell. They injected the 1986 trace in Christian Hollow, which showed up in several places, including Blue Spring.²⁹

The U.S. Geological Survey started taking water quality samples from Blue Spring as early as 1925. The agency started taking water quality samples of Logan Creek in the vicinity of the Mormon Church and below its confluence with Sweetwater Creek in 1965, three years after the Ozark Lead Mine Company drilled for lead at the Sweetwater Mine and three years before the company began producing lead in 1968.

Early samples of water taken from both Blue Spring and Logan Creek reflected that spring water is normally loaded with calcium plus magnesium and bicarbonate, derived from dissolved limestone and dolomite. Only after 1968 did increased levels of sodium, sulfate, and chloride from the St. Francois Aquifer appear in both places. Hydrogeologists attributed the rise to the Sweetwater Mine. They measured the Blue Spring results against water quality at Big Spring and Greer Spring to establish a baseline.



Logan Creek above the Church of Latter Day Saints

Changes at Blue Spring in light of seepage from the Sweetwater Mine could forecast similar water quality changes at Big and Greer springs, should mining take place in their recharge areas.³⁰

The 1977 Sweetwater Mine tailings pile breach that released mine tailings into Adair Creek, a tributary of Logan Creek, also muddied Blue Spring. Because lead cannot be found dissolved in water, researchers sampled sediment in the bed of Logan Creek, Blue Spring Brook, and the Current River

downstream of the spring and compared it to sediment samples from Big and Greer springs. Later they sampled the river at Van Buren, Big Spring, and two other areas. These samples established a base line for lead contamination in a non-mining area. Researchers found contamination in Blue Spring's spring branch in 2001. They found none in their samplings in 2002 or thereafter in spite of a heavy rain.³¹



Blue Spring Branch in Shannon County, a tributary to the Current River Watershed

Joshua Bridge published his geological map of the Current River Watershed in 1930. When Doe Run sought permission to explore for lead in the Big Spring recharge area, geologists realized they could not depend on Bridge's maps to understand the karst landscape that feeds Current River springs.

Even before Doe Run gave up its exploration application, the U.S. Geological Survey had started mapping the karst landscape of the Current River Watershed. Funding for the mapping project came from the U.S. Geological National Cooperative Geologic Mapping Program, created in 1992, with additional funds coming from the National Park Service Resources Division. The Missouri Geological Survey contributed additional mapping. The Ozark National Scenic Riverways subsidized the project with lodging, canoe shuttles for the river work, the loan of vehicles, and parking. Its natural resource

specialists coordinated the exchange of data between geologists and other scientists working on the project.³⁵

Between 1995 and 2001, geologists mapped the bedrock geology between Hurricane Creek, which feeds water to Big Spring and the Current River, with attention to the cracks, joints, and faults in the rock. They also documented bedding planes along which cave systems develop and groundwater flows.³⁶ In the larger Current River Watershed, geologists poured over field notes made by geologists with the Missouri Geological Survey. They drove most of the roads between the head of Spring Valley Creek on the west and Big Spring on the east to observe outcrops and floats, loose rocks not attached to outcrops. They examined drill hole and well logs to identify contacts between rock formations. Because they had difficulties identifying faults in the field, where

vegetation and residuum covered rock exposures, well records helped them locate faults in the bedrock. Finally, they noted the locations of lead company drill holes, such as 801–148 and 84–40, on their maps.³⁷

The project served three purposes. First, it provided a better understanding of how karst functions generally. Second, it provided a geological inventory of the Ozark National Scenic Riverways. Finally, it afforded the framework for future multidisciplinary studies geared to understanding the migration of groundwater contaminants released into the karstic landscape by underground exploration for lead and zinc. When geologists set about making detailed geologic and hydrogeologic studies of the region to understand how groundwater moves through karst terrain, they looked to the work of Josaih Bridge, Thomas Aley, and Jerry Vineyard.³⁸

Bridge stated, “the large number of springs in the Eminence region implies a well developed system of subterranean drainage.” The underground system stores so much water that the flow of streams in the region is constant. Floods are seldom, brief, happen only after very heavy rains, and are absorbed by losing streams soon after. He added a list of known losing streams that deliver water to local springs: Pike Creek at the town of Midco to Big Spring, ten miles away, and Blue Spring, which rises after heavy rains on upper Logan Creek.³⁹

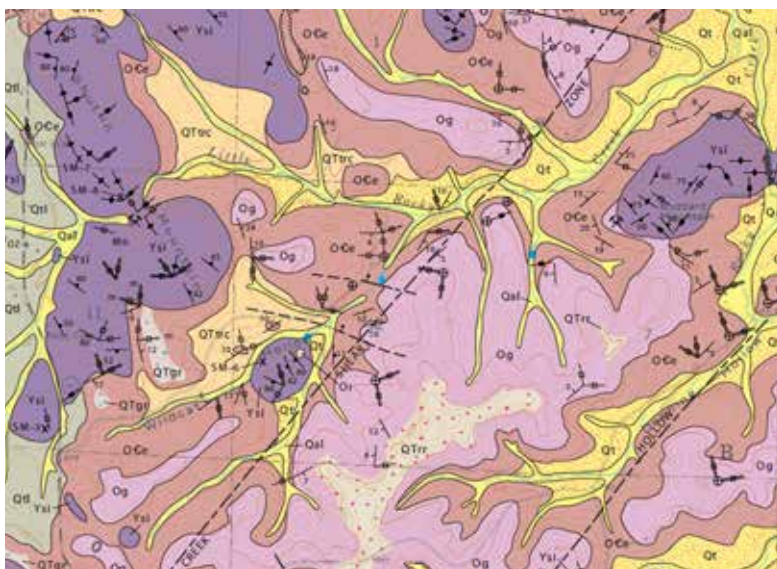
In 1958, Vineyard explored the idea that Devils Well and Wallace Well, located close to Cave Spring, were storage reservoirs for the spring. To prove their connection to the spring he dropped dye traces in both wells. Both failed. Later, he performed a

successful trace from Wallace Well to the spring. Based on those results, he speculated that Devils Well was also connected to Cave Spring but was unable to perform the trace, proving it, until 1961. That trace demonstrated that a main conduit, located 120 to 130 feet below the water table, linked Devils Well and Wallace Well to Cave Spring.⁴⁰

In June 2015, Vineyard guided a group from the Cave Research Foundation to Devils Well. He watched as his younger counterparts donned hard hats and wet suits, lowered four inflatable rafts, and rappelled 90 feet down to the lake. Hazy water spoiled their attempt to document aquatic life in the well.⁴¹

In his 1975 study of the Big Spring Recharge Area, Aley measured the amount of water disappearing underground in eight losing sections of Hurricane Creek, including Blowing Spring south of New Liberty. Blowing Spring contributes the only water flowing in the creek at the rate of 0.1 cubic feet per second. An estavelle, ten feet in diameter and downstream of the spring, swallows it up. However, given a heavy rain, the estavelle is also a resurgent, capable of spewing water at the rate of 24 cubic feet per second into the creek. It took ten days for dye injected into the estavelle to reach Big Spring.⁴²

Geologists studied the role of sandstone in the development of sinkholes and conduits, the underground channels that speed water to springs. They relied on the work of the Cave Research Foundation, whose members had mapped hundreds of caves in the Current River Watershed, including caves found in the valley walls of streams and those accessed through sinkholes, like Devils Well.



Understanding the Karst Landscape of the Ozark National Scenic Riverways. This is a topographical section of the Updated Stegall Mountain Quad, 2002. It illustrates the Rhyolite of Shut-in Mountain (Ysi, purple); the upper Cambrian/Lower Ordovician rocks (OCe, beige) that lapped the sides of the mountain; residuum (QTgr, blue spots on light ground) eroded from the Gasconade Formation; the Gasconade Formation (Og, pink) above the OCe; residuum (QTrr, red spots on white ground) eroded from Roubidoux Formation, terrace-like landforms (QTrc, creamy yellow) of silt, clay, sand, and gravel commonly found adjacent to volcanic rocks; and Recent Terrace deposits (Qt, bright yellow) cobbles and peddles of chert and sandstone that lie above Alluvium (Qal, pale yellow), steam deposits.³⁴



Devils Well, Photograph by Dan Lamping, Cave Research Foundation

Foundation maps provided an excellent opening into the structure of the system of conduits. Geologists also studied the work of the Ozark Cave Diving Alliance at Alley Spring, where divers had been exploring the conduits that supply the spring for 25 years.⁴³

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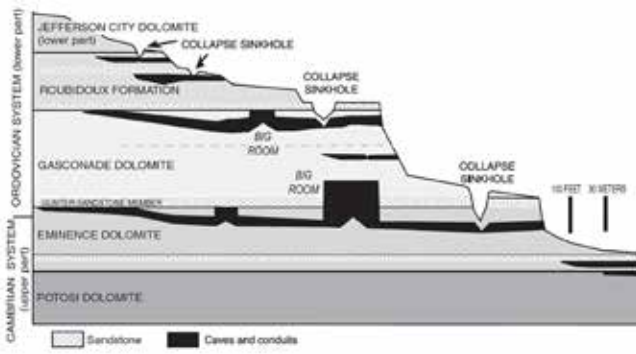
Hurricane Creek: Blowing Spring Estavelle

also studied the work of the Ozark Cave Diving Alliance at Alley Spring, where divers had been exploring the conduits that supply the spring for 25 years.⁴³

Sinkholes form in all formations—Jefferson City Dolomite on down through Potosi Dolomite—in the Salem Plateau. Most occur in the sandstone members of the Jefferson City and Roubidoux formations, which form the uplands. However, that they form in the Roubidoux Formation is misleading, because they develop when the uppermost part of Gasconade Dolomite underneath dissolves and collapses. Sandstone confines water moving under great pressure to the underlying dolomites, dissolving them and causing collapse. A sinkhole forms, its edge rimmed in sandstone. This happens where water runs under sandstone members in the Roubidoux Formation, causing sinkhole collapse in both



Alley Spring: Rise Pool



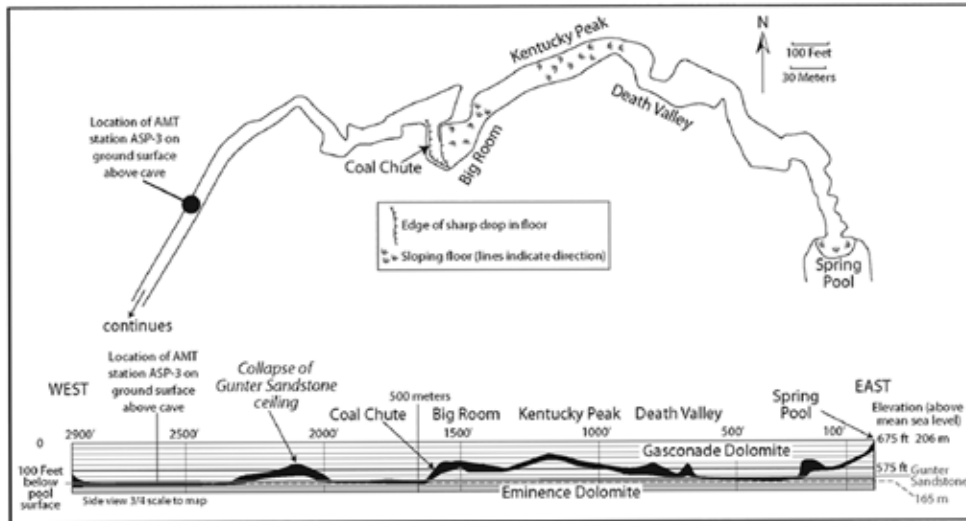
Model of How Sinkholes Form in the Formations in South-Central Missouri, Graphic by David Weary, U.S. Geological Survey.

underlying Roubidoux Dolomite and Gasconade Dolomite. This happens where water runs under a Gunter Sandstone Member of the Gasconade Formation, causing a sinkhole collapse in the underlying Eminence Dolomite. This happens where water runs under a sandstone member of the Eminence Formation, causing a sinkhole to form underneath.⁴⁴

By 2005, divers had charted the geology of Alley Spring, where the average flow is 125 cubic feet per

second or 81 million gallons a day. Water, flowing through the underground conduit or cave passage to Alley Spring, is confined to Eminence Dolomite under impermeable Gunter Sandstone. Here water, containing both sulfates and carbonates, mixes with and increases the dissolution of the Eminence Dolomite, enlarging the passage. High pressure within the confines of the cave passage—that is, hydraulic pressure—drives water along bedding planes in Eminence Dolomite. Water finally breaks through the confining sandstone where the Gunter Sandstone ceiling has collapsed. It is still under pressure and it still has a long way to travel to its rise in the spring pool. It rises and falls through Gasconade Dolomite, falls through the Coal Chute and into the Big Room, up across Kentucky Peak and down into Death Valley, and finally rises into the spring pool at a 25-degree angle.⁴⁵

Finally, the geologists mapped out land use in the region that feeds the Current and Jacks Fork rivers: what is forested, open, cultivated, and urban. At the surface, different rock formations and their residuum, the soils derived from their erosion, support different ecosystems. In 1998, the Missouri Department of Conservation began developing the Missouri Ecological Classification System, identifying and



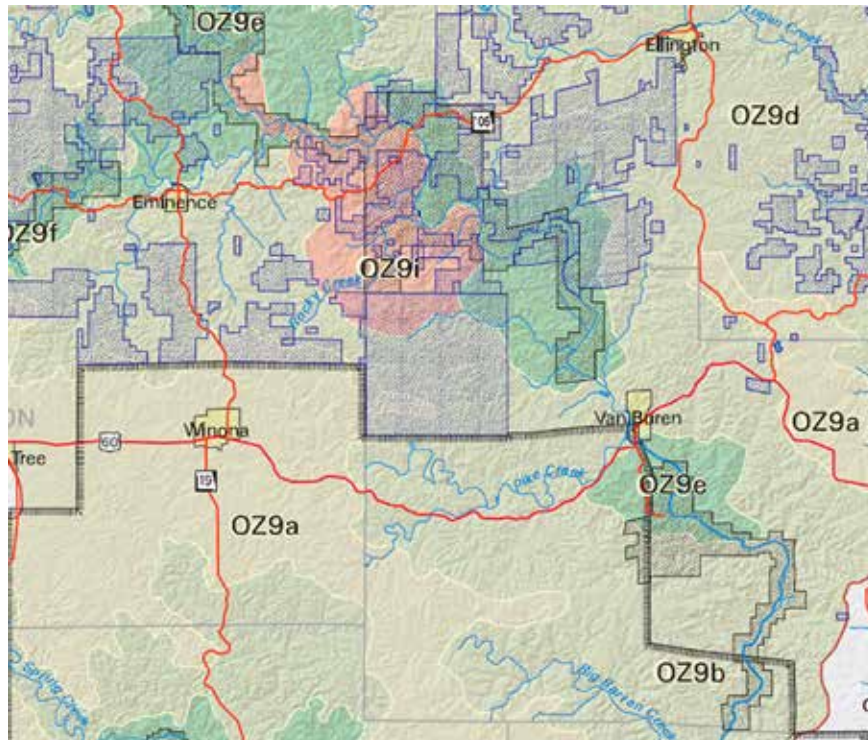
Cave Map and Profile of the Geology of Alley Spring, Drawn by David Weary, U.S. Geological Survey.

mapping the unique characteristics of vegetation, soils, topography, and geology of the varied regions across the state.

Using the system, resource managers can map discrete sites that have similar physical and biological characteristics and manage them for the

vegetation and critters they support. With the help of field researchers from the U.S. Forest Service, the National Park Service, and the Nature Conservancy, the MDC field-tested various sites within the recharge regions of springs that feed the Current and Jacks Fork rivers, a region they call the Current

Landtype Associations of the Current River Hills, from *Atlas of Missouri Ecosystems*: OZ9a Current River Pine-Oak Woodland Dissected Plain; OZ9b Current River Oak-Pine Woodland Forest Hills; OZ 9d Black River Oak-Pine Woodland/Forest Hills; OZ9e Current River Oak Forest Breaks; OZ9f Jacks Fork River Oak-Pine Forest Breaks; OZ9g Eleven Point Oak-Pine Forest Breaks; OZ9i Eminence Igneous Glade/Oak Forest Knobs.





The Stegall Mountain Natural Area at Peck Ranch Conservation Area, Carter County. Southwest of the confluence of the Current and Jacks Fork rivers are the Eminence Igneous Glade/Oak Forest Knobs, one of the nine LTAs. Here, the crowns of rounded knobs of Precambrian rhyolite support igneous glades and woodland communities. Mixed-oak forests occupy the side slopes, where the soil is deeper.



Alley Spring Natural Area and the central part of the vast 39,245-acre Angeline Conservation Area lie within the Jacks Fork River Oak-Pine Forest Breaks LTA. The Jacks Fork River Oak-Pine Forest Breaks LTA and the Current River Oak Forest Breaks LTA surround the Igneous Knobs LTA. The two are similar, but drainages in the Current River Breaks cut slightly deeper than those in the Jacks Fork Uplands. Narrow ridges, falling to steep slopes, characterize both. Sinuous valleys, up to 250 feet deep, cut down through the Roubidoux Formation to the Upper Gasconade in the Jacks Forks Breaks, where an oak-pine forest anchors cherty soils, derived from both formations.



Peck Ranch Conservation Area: Shortleaf pine forest grows on an eroded bed of Roubidoux rocks, called residuum.

River Hills. Ecologists divided the Current River Hills, a subsection of the Salem Plateau, into nine Landtype Associations or LTAs—places with similar topography, geology, soils, and vegetation. The work culminated in 2002, with the publication of the *Atlas of Missouri Ecosystems*.

In 2006, collaborators from the MDC, the University of Missouri Department of Forestry, the U.S. Geological Survey, the National Park Service, and Nature Serve boiled down the ecosystems in the Current River Hills Subsection even more in an effort to map the vegetation communities in the Ozark National Scenic Riverways. Collaborators took the Eminence Igneous Glade/Oak Forest Knobs LTA and the surrounding Current River Oak Forest Breaks and the Jacks Fork River Oak-Pine Forest Breaks. They noted that when the Roubidoux Formation breaks down, it forms an acidic soil, conducive to shortleaf pine. When the Gasconade Formation breaks down, it forms a more neutral soil, conducive to oak and hickory on the northern and northeastern slopes of the hills. Where bedrock is close to the surface or exposed and the soil thin or non-existent, glades, surrounded by open woodlands, take up residence on southern and western slopes. Post oak and blackjack

oak dominate the woodlands surrounding igneous glades, while oak and hickory grow on the slopes of igneous domes, where the soil is deeper.⁴⁶

The collaborators used the Current River Hills as a model for developing other subsections across Missouri's ecologically diverse regions from the glaciated prairies in the north to the Ozark Highlands in the south, the Osage Plains in the west, and the Mississippi Lowlands in the extreme southeast.

The work to understand the karst landscape of the Ozark National Scenic Riverways continued under the 1998 National Parks Omnibus Management Act, requiring park managers to inventory the natural resources in their parks and to monitor long-term trends. In the Ozark National Scenic Riverways, scientists have studied invasive plants throughout the park, and especially in Powder Mill and the Big Spring Pines natural areas. They have developed a fire management plan, using prescribed fire to expand and maintain glades. When they turned to woodlands, they used fire to reduce shade-tolerant understory plants and open the tree canopy to sunlight. When setting fire to woodlands, fire managers had to understand how the timing of their fires in the late spring and early summer might impact the nesting



The Angeline Conservation Area extends east to the Current River Oak Forest Breaks LTA.



Big Spring Pines Natural Area

The Summerville Oak Savanna/Woodland Plain, pitted with sinkholes and laced with losing streams, delivers both water and contaminants to springs on the Jacks Fork and Current rivers. The landscape is a patchwork of pasture and oak forest and woodlands.



habitat of endangered species like the Indiana Bat and the Swainson's warbler.⁴⁷

Finally, in 2009 geologists finished an investigation of the geohydrologic and landscape characteristics of the recharge areas of major springs that feed the Current and Jacks Fork rivers. Their work took them from Montauk Springs at the head of the Current River to Big Spring at the southern end of the national park. While the springs are found within limits of the Ozark National Scenic Riverways, most of their recharge areas are not. Starting with Thomas

Aley's 1987 groundwater study of the Ozark National Scenic Riverways, geologists located sinkholes in the uplands that gathered water and delivered it to the underground system. Dye tracings told them which sinkhole delivered water to which spring and which losing streams delivered water to which springs. They identified the recharge areas where groundwater crossed under surface water divides. When they measured the water temperature of the Current River, they found it dropped downstream of the springs.

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- ⁴⁴ Orndorff, Weary, and Harrison, “The Role of Sandstone in the Development of an Ozark Karst System,” 31–38; Lowell, “Rift-Related Volcanism and Karst Geohydrology,” 125.
- ⁴⁵ Orndorff, Weary, and Harrison, “The Role of Sandstone in the Development of an Ozark Karst System,” 31–38; Lowell, “Rift-Related Volcanism and Karst Geohydrology,” 125; Vineyard and Feder, *Springs of Missouri*, 64–66.
- ⁴⁶ U.S. Department of Agriculture, Natural Resources Conservation Service, Missouri Ecological Classification System Project, http://www.nrcs.usda.gov/wps/portal/nrcs/detail/mo/technical/?cid=nrcs144p2_012553; Timothy A. Nigh and Walter A. Schroeder, *Atlas of Missouri Ecoregions* (Jefferson City: Missouri Department of Conservation, 2002), 125–28; R. A. Chastain, M. A. Struckhoff, K. W. Grabner, E. D. Stroh, H. He, D. R. Larson, T. A. Nigh, and J. Drake, “Mapping Vegetation Communities in Ozark National Scenic Riverways—Final Technical Report to the National Park Service,” U.S. Geological Survey, Open File Report 2006-1354.
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“The City is filled
with Exhibitions & Places
of Amusement”:

George and Clara Catlin
in London



Only about a generation had passed between the return of the Corps of Discovery, led by William Clark and Meriwether Lewis, and the arrival in the trans-Mississippi West of George Catlin. Clark, now sixty, was still alive and serving as U.S. Indian Commissioner when Catlin arrived in St. Louis in 1830, and allowed the young artist to accompany him on a diplomatic mission up the Mississippi River. Catlin made four more journeys into the West over the next six years, visiting some 50 tribes. It was the beginning of a life dedicated to documenting and preserving Native American culture that led to a life marked by financial ruin and disappointment. Part of that ruin came from Catlin's ill-fated attempts to exhibit his paintings in American cities and, starting in 1839, London and Paris. His wife, Clara, accompanied him for parts of his journey before her death in Paris in 1845. Four letters from Catlin's time in Boston and England—three by Clara and one by George to his father—are in the collections of the Missouri History Museum, reprinted here.

George Catlin (1796–1872) came by his interest in the West and native tribes honestly. He grew up with Indian captivity narratives at the knee of his mother, who regaled him with stories of her capture by Indians as a girl. But Catlin also spent a great deal of time in the woods, learning to hunt, fish, and read the landscape despite his family's aspirations that he become a lawyer. "The early part of my life was whiled away, apparently, somewhat in vain," Catlin wrote, "with books reluctantly held in one hand, and a rifle or fishing-pole firmly and affectionately grasped in the other." Finding himself ill-suited to the law, Catlin gave it up and sold everything "save my rifle and fishing-tackle" to learn to paint in Philadelphia. He started painting native peoples when a diplomatic delegation arrived there. He spent most of the 1830s in the Great West, using St. Louis as his base of operations, painting and describing the tribes and lives he saw in five journeys in the West.

George married Clara Bartlet Gregory (1807–1845) in 1828 while he was in Albany to paint the portrait of DeWitt Clinton, who died later that year. Clara joined George on one of his trips west, but disliked it. She and their young son died in Paris in 1845 while George was convincing Louis Philippe to purchase copies of some of his paintings. He returned to the east in 1838 to assemble "Catlin's Indian Gallery" to show in most major American cities as far west as Pittsburgh and Cincinnati. He opened the Gallery in Boston in 1838 and, as his

letter here suggests, was constantly short on money to market the exhibition. He expanded the Gallery to take on tour in Europe, including more than 600 artworks along with artifacts he had collected—and even a delegation of Native Americans to perform. Much of Catlin's life was marked by financial problems; he lost the collection once to pay debts, and more to damage from storage and neglect. His great dream was to sell his collection to the United States government to house at the Smithsonian, a measure that failed by one vote in the U.S. Senate (which he blamed in part on a vote against it by his friend, Sen. Jefferson Davis); note that Clara's letters refer to his exhibitions and efforts to sell art. His works were exhibited briefly in the 1880s and at the White House in 1961, but otherwise largely ignored until the late 1980s. In the last quarter-century or so, he has finally been recognized for his work in documenting the people, culture, and lives of native tribes that had limited contact with Europeans and Americans when he visited them.

On the one hand, it is easy to see Catlin's art and writings as sentimental, Eurocentric, and perhaps even racist. But we need to see Catlin in the context of his time. There was great interest in native peoples in the trans-Mississippi West in the early nineteenth century in both Europe and the United States. The Corps of Discovery was part of this interest, with Lewis and Clark documenting an array of qualities about the landscape, flora, fauna, and peoples in the West. Subsequently, a number of writers traveled west over the next generation, all of whom stopped at William Clark's museum at his Council House in St. Louis to consult the former explorer.

Catlin believed that native tribes were on the verge of extinction, and that their culture would be lost forever unless someone documented it. There were even those who wondered if they were one of the Lost Tribes of Israel. His language can bristle today, like many of his day, and he clearly saw Americans as "civilized" as a juxtaposition to the "natural" Indians. Still, he gives us the most complete eyewitness account of many tribes, both in words and pictures, from the time. His collected works are a vivid snapshot of these tribes at a critical moment, on the edge of white contact and on the eve of many being decimated by smallpox in the late 1830s. When his works appeared in Paris, one critic said that he "captured the proud, free character and noble expression of these splendid fellows in a masterly way." Catlin was, no doubt, proud.

William Fisk painted this portrait of George Catlin in London in 1849. It portrays Catlin as the quintessential showman and artist, wearing buckskin over his shirt, palette and brush in hand, with native peoples stoically behind him. (*Image: National Portrait Gallery*)

**Boston,
Sep 29th 1853**

Dear Sister Abigail,

I feel very guilty for neglecting you so long, but now in your affliction, I can be no longer silent. I sympathise with you in the loss of your little one. It brings before me so freshly, the death of my own sweet bud, and the truth of these lines occur at once to my mind.

*This lovely bud, so
young so fair
Called home by early doom
Just came to show how sweet a flow'r
In Paradise would bloom."*

Oh dear sister, if we could only realise the truth of this, we would not mourn. How sweet the thought I have a babe in Heaven! Its sweet voice, mingling with the thousands that surround the throne. Shall I meet it there? What a thrill it sends through my frame. When I look upon my sweet babe, its mental faculties developing every hour, and think of the immensity of the trust committed to my care, and how inadequate I am to the task, I tremble. Has any being on earth a charge more fearfully important than the mother. Some writer has said, that the three first months of infancy are a spot of brightness to a faithful and affectionate mother; a dream of bliss from which she wakes to more complicated duties." I cannot thus limit the pleasure, for I think the whole time they derive sustenance from you, is one of peculiar pleasure. To be able to hush its meanings, to sooth its pains, how delightful. You will say, it is new to me. Perhaps so, I am just thinking of weaning my "Libby" now ten months old, and it is a hard trial to make up my mind to it I assure you. We are peculiarly favored in having a very healthy and good natured child. I wish you could see George acting the parental part. I often think of Mr. Dart's description of James' and Porter's nursing Antoinette and Daniel.

"Libby" will be a painter beyond all doubt, if she lives, for she has a most remarkable perception of colours and pictures. Every body says she is the



George Catlin's wife Clara (1807-1845) sat for this portrait for Scottish-born painter George Linen around 1840, before leaving for Europe with George. It is quite small—only 6 X 5 inches unframed—unlike the paintings her husband created. She died in Paris in 1845. (Image: Christie's)

image of her father, and of course she is very pretty.

A letter from Elisa today tells me you are going to locate near them. I am glad of it, for I shall see you once in a while, but

if you stay south, I am afraid I never shall, though I long for the wings of dove to be with you this winter.

You see we are in Boston, the Athens of America. George's reception here has been truly gratifying. He lectured three weeks, to a good audience every night, although it was at a most unfavorable time, as most of the wealthy inhabitants are out of town. He was unable to find a room large enough for his collection, and from a suggestion of the Mayor, was induced to ask for Fanweil Hall, which is called the Cradle of Liberty and a most sacred edifice, with the inhabitants, and is never used for any thing but public meetings—he had very little hope of getting it, but it was granted him free for a month, without a dissenting voice. His collection makes a fine show on the walls, and it elicits praise from all. He has had invitations from all the neighbouring towns, to visit them and I have no doubt he would do well for three months here. His portraits are becoming more valuable every day [page torn] number of the far western tribes, having become totally extinct, by the small pox, during the past year. If the bill for its purchase is not passed this winter and George will probably go to Europe early in spring. What is if gets ready. I am much pleased with Boston and its inhabitants. I have been treated with much kindness and friendship. The environs are beautiful, in every direction the roads are as smooth and hard as the floor and the numerous villages and country seats are perfectly beautiful.

The ladies here I find attend much to intellectual pursuits. There are lectures every day and night, upon something interesting. I have been attending lectures on Anatomy and Physiology given by a lady! She admits no gentlemen, and her manner is pleasing, and her lectures are very instructive.

I spent a very pleasant summer with Elisa, became acquainted with Mrs. Gregory and Mrs Wise formerly of Deposite, but now of Whitesborough. I regretted that I never became acquainted with their amiable daughters who they lost by consumption.

My paper is almost filled, and I must be brief—I hope you will write, as soon as you get able. Tell James he must not wait for George to write, for his time both night and day is so continually taken up, that I see him only at meals and late at night. He joins me in love to you all.

Very Affectionately your sister,
Clara

London Aug 31st 1840

My Dear Father,

I read your letter by the British Queen, two

weeks since, and one from Brother Francis at the same time. by each I learned that “all were well” as you both mention; and at the same time, from both, that your health was precarious, which has raised in our minds some apprehensions as to the state that this letter may find you in. We both have learned from long and repeated absence from those whom we love so dearly, not to magnify or borrow trouble, but to trust all to that protecting Providence Who has so long watched over and protected them and us. We will therefore trust that this will find you all well, as we left you; we surely hope so & pray constantly that such may be the case. Our little family (or rather large family of 7) are all well, and our little parlour & bed rooms resound day and night with “Good Ganpa” & dear Ganma, - “berries some” - & many other such phrases as tend to cheer us up and turn our thoughts constantly back to the Great Bend, on the banks of the lovely Susquehana. We can exactly imagine you there, all together as you are, and if we had the money, would soon be with you & make you glad, but such is not yet the case. If I could sell my collection for anything like a price, at this time I would be doubly and trebly happy in the power

Egyptian Hall in London was a popular venue for large exhibitions and performances in the 1840s. Catlin rented it for his Indian Gallery, which became a financial disaster. Later, P.T. Barnum rented the same hall for performances by Gen. Tom Thumb. (Image: Engraving by A. McClatchy, Jones and Company, London, 1828)



I would then have of helping some of my friends, in these extraordinary times of need. Many people think, no doubt, that I am making a great deal of money, but they are much mistaken. perhaps it is as well that the world should think so, as otherwise, if they will: but for me and my friends, sufficit that we know better. My expenses have necessarily been enormous, and my receipts, at a shilling per head (which is the price of all Exns. in London) are not calculated to make a man rich short of a very long and very fair trial. London is to be sure,

a wonderful place, almost a world of itself, and one would suppose the place of all in the world to fill an Exn. but the City is filled with Exns. & places of amusement in proportion to the numbers of its inhabitants, and all such strive & struggle for their proportion of visitors, who seem divided and drawn so many ways as to be unable to give each more than an ordinary share of support. At this immediate season the fashionable portion of the community are all on the move, out of Town & travelling, and no Exhns. are more than paying their own expenses. The

For all of Catlin's rhetoric about preserving native culture before extinction, he saw his collection of paintings and artifacts as a commercial venture as well, as these advertisements from the 1840s suggest. (Images: Toronto Public Library)

[← Will leave London on 20th March.]

Ojibbeway Indians

EGYPTIAN HALL, PICCADILLY.

The Party of NINE OJIBBEWAY INDIANS, Loyal Subjects of *Her Majesty*, from the North-East Shore of *Lake Huron*, Upper Canada, now on a visit to London, will,

UNTIL 20th MARCH, ILLUSTRATE

Catlin's North-American INDIAN COLLECTION,

With their **War Dances, Songs, Games, War-whoops, &c.**

AS GIVEN IN PRESENCE OF

HER MAJESTY AND PRINCE ALBERT,

AT WINDSOR CASTLE.

The Party consists of two *Chiefs*—four young Men, *Warriors*, two Women, and a Girl ten years old: all dressed in the curious and picturesque Costumes of their Country: well illustrating the extensive and unique Collection, in the centre of which their Dances and other Amusements are performed.

THE NAMES OF THE INDIANS:—

AH-QUE-WE-ZAINTS,	The Boy—Chief. Age 75 Years.
PAT-AU-AH-QUOT-A-WEE-BE,	The Driving Cloud—War-Chief. Age 31 Years.
WE-NISH-KA-WEE-BE,	Flying Gull.
GISH-EE-GOSH-E-GHEE,	The Moonlight Night.
SAH-MA,	Tobacco.
NOT-EEN-A-AKM,	The Strong Wind. (The Interpreter.)
WOS-SEE-ABE-NEUH-QUA,	Woman, (the Squaw of the Moonlight Night.)
NIB-NAB-E-QUAH,	Girl, (the Daughter of the Moonlight Night.)
NE-BET-NEUH-QUA,	Woman, (the Squaw of Tobacco.)

This extraordinary Group of Nine Wild Indians from the Forests of America, and all full Bloods, with the exception of the Interpreter, a half-breed; and acting out, in their own way, so many of their rude and exciting modes in the heart of the civilized world, is an occurrence that has not happened, and probably will not again happen, in the lifetimes of the Readers, and affording them the opportunity of witnessing, in London, the Wild Feats of the Wildernesses of America.

THE EGYPTIAN HALL has been recently improved, and now affords to the Visitors every convenience and attention required in the most fashionable Exhibitions.

THE INDIAN COLLECTION, (for the short time the Indians will remain.)
WILL BE OPEN DAILY,
FROM 1 TO 4 IN THE DAY, AND FROM 7 TO 10 AT NIGHT.

The Indians in the Room,

FROM HALF-PAST 1 TO 3, AND FROM HALF-PAST 7 TO 9,
GIVING THEIR DANCES, &c.

On which occasions Mr. CATLIN will be in the Room, explaining.

After which, they will mingle with the Visitors in the Room, for the purpose of Shaking Hands, &c.

Admittance, in the Day or in the Evening, One Shilling. Children, One Shilling.

Printed by J. Mitchell and Co. (late Bellini), Rupert Street, Haymarket.

CATLIN'S NORTH AMERICAN INDIAN GALLERY, Egyptian Hall, Piccadilly; containing 500 Paintings, made by his own hand, during seven years' travel amongst the Wildest Tribes of Indians in North America: and also an immense Collection of Indian Curiosities, Dresses, Weapons, &c.; and a Crow Wigwam, twenty-five feet high—a magnificent specimen. Open from 10 a.m. to 6 p.m. Admittance, One Shilling. Lecture in the Room by Mr. Catlin each day of this week, at half-past 3, with splendid costumes and weapons displayed on living figures.

season will soon come round again however, when the town becomes thronged, and at that season I hope (& my friends all tell me so) to attract more company than I have heretofore done. I have four or five months longer to occupy my expensive apartments yet, or I think I should have been ere this in some of the interior Towns where I could at this time be making more money than in London. I have resolved however to hold on here until the end of my Lease, & perhaps for a year longer, all will depend on the encouragement I may find during the month or two to come. There seems to be, as I said in my last letter some considerable talk yet about the purchase of the collection, but I have not much faith in it—I never sold anything in my life time, and I recollect, and it will be more than I expect of good luck, if I turn anything to good cash account until it is too late to enjoy its products.

I am just commencing on the troublesome and expensive task of publishing my notes, and shall, I think put forth 3 octavo vols. with engraved outlines of [page torn] my paintings. I am at this very time making the enquiries as to price, terms, time &c. and shall probably conclude to strike the blow in a few days, if so I shall employ at once six or eight expert engravers to come to my own rooms (one large one of which I hold vacant) and there together we will etch and put forth all the plates in a very short time. This, if I undertake it will engross my time much more than it has yet been engrossed & make me for a time, more of a slave than ever, but I confidently trust that I should in the end be well paid for this labour. The Great Western will leave here on the 15th of September by which I will be able to transmit to you 500. dols. I wish I could send you 5000. I have felt bound (peculiarly) to remit to D. L. Gregory as punctual as I could & therefore, with all active expenses, I am not on this day as able to send to you the amount as I will be at a little further time. I think I will be able to pay for the house by hard shifting & I wish thereby to hold it in the family—however, if you get a cash offer for it so that it will assist you

in any way, I will authorize you to sell it for 2500. Dols. (i.e.) for part cash—& if for all cash at the price standing agreed on between us.

(Clara joins me in love to all)

With love to Dear Mother, to Eliza & children—to Francis and his Lady—and to all others of the family who may be about you. I must take leave of you for my paper is nearly run out—Stimulate all the unfortunates in these hard times with hope that there will be yet some way to get along and finally to flourish in the world. Steamers are so frequent now that we can hereafter write to you every fortnight.

Adieu; till you hear again. Your affectionate son
Geo. Catlin

London January 30th 1842
Mr. Matthew Gregory
Park Place
Albany N York

My dear Uncle,

I had determined in my mind before the commencement of this year that I would greet all of you at home, with the familiar words, peculiar to my country, "Happy New Year". I have sit down to keep my determination, although I do it with a heavy heart. May it prove to you, to all in your family circle, so dear to me, a "Happy new year". It dawned upon us, and our little family, with happy hearts, for the intelligence I have recently received from home was so satisfactory regarding my dear fathers health, that I seemed to think it was always to be so, but a cloud has shaded my hopes of his prolonged life, and I have a melancholy presentiment that I shall never see him again. It gives me feelings that I cannot express to you when I think I may not see his dear face again in the flesh, but if God wills it so, I must endeavor to acquiesce in his divine will, and strive to live in such a manner that our parting may not be eternal. It has been a source of great gratification to



When Catlin created this painting of a Crow tipi, he was in a profoundly active period, creating some 135 paintings in one month. He considered it an essential part of his tour in England. He exhibited a tipi like this one when he exhibited his works in Washington, D.C., as well. While in London, he hired some 20 local boys and men to dress and act like the Crows in the exhibit hall. (Image: *National Portrait Gallery*)

me that you have been kept in such perfect health—and have lived near him, that you might see each other daily. In my dear father's last letter he speaks particularly of your kindness in visiting him every day—although it must be distressing to you to see him endure such agonising pain. His last letter is a precious memento for me to recur to for consolation, it speaks of that peace within that passeth all understanding. That he is willing to suffer all things, so that he may not be cast away in that day, when our blessed Redeemer makes up his jewels.” He has found “the pearl of great price” and oh, how much more precious to him in this dying hour, than to look back upon heaps of worldly gain. When we can contemplate such a triumph over death, of our dearest friends—it gilds the parting hour, it takes away the sting of separation, though far distant from the dear object and all anxiety that remains is for ourselves, that we join them in a better world, to be parted no more for ever. In the course of nature my dear uncle, you are fated soon to bid adieu to all the cares, vexations and pleasures of this world. You have long since ceased to look upon it as your “abiding place”, and I trust you are prepared to go, when the summons

comes. I often take a retrospect of my past life—and as I grow older and have my children around me, I more fully realise than I ever did, the very great kindness and care I have experienced from the hands of my dear departed aunt, cousin, and yourself. I have ill-rewarded yours and their kindness—but you will be rewarded for your care of the motherless. There is a subject on which I wish to speak to you for it has been ever present to me, since I took my last farewell of you, and I trust you will pardon me for recurring to it. I hope that my wish is already complied with, for I have heard nothing on the subject since. It is this, that all unkind feelings, towards the husband of your dear departed daughter, have passed forever away. For the future peace and happiness of your dear grand children, I trust it is so. We are commanded by our dear Saviour, to “forgive as we hope to be forgiven” and when we consider how much he forgave should we not imitate his example—if we call ourselves his followers? Forgive me for mentioning this, but I feel my separation from home and my dear friends so painfully—and I feel as if we should not harbor an unkind feeling towards our dearest friends or even those we esteem our enemies, for we have all

an account to render to Him who has given us that (illegible).

I have written to my father hoping my letter will find him in better health. You will see by the paper I send that my husband has had the honour of appearing before Queen Victoria—My little daughters are all well and my time is fully occupied. Give my love to all the members of your family, a letter from any of them would be most acceptable. Adieu, may your last days be your happiest—and if it is the wish of God—that we meet no more here may He grant us to meet in a brighter world in the prayer of your affectionate niece.

Clara B. Catlin

Catlin first met Assiniboin chief Wi-Jun-Jon (Pigeon's Egg-Head) in St. Louis in 1831 and traveled with him on board the steamboat *Yellow-Stone* up the Missouri River in 1832. "In his nature's uncovering pride," Catlin wrote, "he stood a perfect model." But when Catlin met him later, Wi-Jun-Jon had traveled to Washington, acquired a colonel's uniform, and started lecturing his people on the customs of Americans, for which he was denounced and killed near the mouth of the Yellowstone River. Catlin created the dual portrait to document the perils of mixing western culture with native peoples. (Image: National Portrait Gallery)



Rosa Cottage London July 14th 1842

**Mr. Mathew Gregory Esq
Parks Place, Albany, New York**

My dear Uncle,

It is only when we are deprived of our dear friends that we feel how dear to us are those that are left. If I can give you any gratification by writing—it will serve to obliterate I trust all feelings of my former neglect of you in this way—for I feel such pleasure in hearing from those at home. I flatter myself that although I never have received a line from Albany since my beloved fathers death, that they will be glad to hear from me. I hear from various sources of your good health and the common exclamation of "What a surprising man your uncle Matthew is—as sprightly and active as ever." —Mr. Hyde, Mr. Bammans soninlaw, is here, and told me he had seen you in New York, a short time before he left, and Mr. H. R. Schoolcraft of Mackinaw or Sault [ineligible] St Marie took tea with us a few days ago and said he saw you as he passed through Albany. I received a note from him a few days since, saying he had received intelligence of the death of his wife. Mr. Hyde was an old acquaintance, and I was very glad to see him—he has visited me frequently and gave me a history of all things going on at Albany and New York. Some news of my little cousins at Albany—which partly accounts for the silence Miss Libby has maintained towards me.

It is gratifying to hear that you yet retain good health. few my dear uncle, can look back upon such a long life of such perfect health. In my life, which has been much shorter than yours—how many I can think upon that have dropped away—that once had as great promise of health and long life as me. In your life of three score and ten years, you can reckon hundreds who have gone to the silent grave. While in church last Sabbath, something caused my thoughts to dwell upon the seat you still occupy—and the scene came so vividly before me of the days I sat there, Mr Guest behind us, Mr. Cruterden—his son Warren—Mary & Charlotte—Mrs Cobb—Mr Gibbons and many others—all in their seats—all gone so rapidly one after another—and then the thought perhaps I too may be numbered with them is another year! Now the question I asked myself was this, am I ready for the summons? Oh how solemn the thought—are my sins forgiven—and have I forgiven as I hope to be forgiven. The last death I saw noticed and which gave me a shock, for I had no notice of her alarming illness, was Lucy Tyler. Her whom I had known so well, Cut down by that

ruthless destroyer “Consumption, in the prime of her life. I thought of Betsy Clark—how many she has had to tend and watch. The last time I saw Lucy—Betsy was doing the same kind offices to that she had to perform for my dear Cousin Mary. Oh how short is life at the longest—We have but a brief time to prepare for the presence of Him, who has so kindly watched over and protected us. Since my dear fathers death—I have felt a deeper interest in the world to which he has gone, and while I contemplate his long illness and suffering and think how tranquil his last moments were, I feel that there is a strong incentive for me to live devoted to that Saviour who bore him through all his trials—and death &c go gently with him in the [page torn] hour.

My husband has removed his things to Liverpool—and is doing very well there. I have staid behind in my country residence for I felt unwilling to leave it until he decided whether he would remain at Liverpool. I have a pretty little cottage—and my children are healthy—I have just weaned my youngest, now eleven months old. The Income tax is just going in force, a notice has been left today—What if our income is less that \$150—we must give notice to the Assessor of the parish. It will make sad work. The people are nearly in a state of rebellion—The Queen was shot at for the third time on Sunday last. God grant our country may never see the extremes of wealth and beggary as they exist here.

I should be very happy to hear from you dear uncle or from any of the family. Give my love to Libby, Mary, Charley & Jimmy—and the Doctor—to Betsy Clark—and remember me to all inquiring friends—

Every your affectionate niece, Clara B. Catlin

March 23d. 1843

**Mathew Gregory, Esq
Park Places
Albany, N York**

My dear Uncle,

Since I wrote you last, I have been to the city of York, in this old world—and have been so gratified with all I saw there. I will give you brief account of its antiquity, and some description of its noble minster or Cathedral, whose beauty and grandeur however, can never be half imagined from any description of the pen or pencil, for it must be seen to realize its sublimity.

My husband was lecturing there, and he wrote for me to join him there, to see this curious old town. I therefore left my children here in the care

of a faithful nurse, and seated myself in the cars at Sheffield two miles from here, at two P.M. and at 5 was safely landed at York, 55 miles from here. After tea, I went with George to his lecture room, one of the largest in the city called the “Musical Festival room”—Its dimensions were 25 feet by 60 broad—45 feet high—with a gallery 20 feet deep and calculated to hold 2000 persons. The receipts of the last musical festival held three days—amounted to \$16,174. My husband was honoured with a fine and enlightened audience each night of the week he remained there—his receipts were \$25 the night.

After the lecture was over, I went to take my first view of the Cathedral by the bright moonlight—and as I gazed upon its vastness, I felt a degree of awe I cannot describe. It stands near the centre of the city

Mato-Topo, or Four Bears, (1795–1837) was a Mandan chief who convinced other Mandan men to allow Catlin to portray them by sitting for this portrait himself. Karl Bodmer also portrayed Mato-Topo in 1833 as the illustrator for Prince Maximilian’s expedition that resulted in publication of *Travels into the Interior of North America*. Mato-Topo died in the smallpox epidemic that decimated the Mandan and Hidatsa tribes by some 90 percent. (Image: National Portrait Gallery)



—with a considerable space of clear ground around three sides of it. The east side—or opposite end from the two towers—being too near a row of buildings to see to advantage the large east window said to be the largest and finest in the world. But my feeling of awe was increased on entering the interior next morning—The extreme length is 524 feet its greatest breadth 222—and its height 235. The windows are all of richly stained glass—representing Scripture subjects—the dimension of the large east window are 75 by 32—illustrating nearly the whole of the New Testament—and is a perfect picture of itself as you enter the door under the two towers and look through the entire length of its clustered columns and vaulted ceiling, with the beautiful windows on each side throwing a dim light, the effect is indescribably beautiful. The choir or chapel where service is held is just under the square tower—and is 157 feet by 46. This is only walled around by plate glass—and oak—twelve feet high—so that you can walk in the aisles all around—and the whole length of the nave—and hear the service. The organ is on a stone screen—immediately under the square tower—and has 4,200 pipes. The music on Sunday was very fine—the psalms of the day were chanted—and the voices of the singers (all male) with the sweet tones of the immense instrument, as they rose and echoed through the vaulted roof exceeded any thing I ever heard. Three years ago it was set on fire by a maniac who concealed himself behind one of the tombs, and at midnight he collected all the cushions and piled them up under the organ, and setting fire to them escaped by a window. The organ was completely destroyed—and the repairs cost \$65,000. Six centuries have elapsed since the oldest part of this Cathedral was erected by the Catholics—and it is said to have been one hundred and fifty years in building. The Romans held possession of York for three centuries. During the Reformation under Cromwell the fanatics injured the Cathedral very much in their exertions to purify the building from its former faith. York is entirely surrounded by a wall—with a gate and towers at each entrance to the city—one of which is still preserved with its outer barbican and portcullis. This wall forms a fine promenade around the city—and being high you look down upon the houses—and streets—The Cathedral standing prominent above every thing else. On the outer side there are still marks of the fosse or ditch. The oldest streets are very narrow and the houses stand with gable end to [page torn] street and each story jetting over the other, and it is said [page torn] in former times the opposite neighbors could shake hands from the upper stories. The newer parts are finely built like the West End of London.

The River [whited out], a small stream, clear and pretty, runs through a part of the city—and has one bridge across it. The other ferries are crossed in small boats for a half penny. York Castle is a fine old Fort—now used as a prison—and is the place where the veritable Eugene Aram was confined—and from whose history Bulwer has woven so interesting a story.

I spent a week very pleasantly in York—visiting its curious places—many Roman antiquities and relics are preserved in the museums—and while one pursues its history for a past age, it becomes doubly interesting.

I have written so blurred a letter that I fear you will scarcely be able to read it for the paper is very bad. While I have been writing, I have been thinking of my dear father to whom I used to take pleasure in relating what interested me, and I take pleasure in relating to you my dear uncle scenes in this far off world—and I hope they may beguile an hour for you. I find my domestic cares to occupy so much time that I find but little leisure for writing excepting in the evening when all is quiet—then memory brings the scenes of my home before me, and I sigh to think that I cannot speak assuredly of ever seeing that dear land and friends very soon again. I hope I shall exercise Christian patience—and be willing to leave all things in the hands of Him who has so graciously watched over me and mine.

We shall probably remove to Edinburgh from this. If a room can be procured for the collection. Mr. Combe is endeavoring to find one. And then I shall be able to tell you something of that place—which I have long had a desire to visit. Give my love to all your family circle—I remember them all with affection—although I fear they have forgotten me.

Adieu my dear uncle—May God in his continued mercy to you grant you health—and guide you at last to that haven of peace where I trust we shall all be reunited to part no more for ever.

Ever your affectionate niece C. B. Catlin

ABOUT THE AUTHORS



Josh Burbridge grew up in the small town of Elsberry in rural Lincoln County, Missouri, but St. Louis was never too far away. He attended Saint Louis University, and received bachelor's and master's degrees in history at the University of Missouri - Columbia, focusing primarily on the history of several neighborhoods on St. Louis' north side. For several years, he worked as a buyer of rare soul and jazz records for the world-renowned Chicago record store Dusty Groove, and upon returning to the St. Louis area, he served as a research intern at the Landmarks Association and as a technician for the St. Louis Public Library. He now works as an archives technician at the National Archives and Records Administration in Spanish Lake, and in his free time, he writes about food and local history on his website, Chicago Pizza Hound. He and his wife, Kate, live in south St. Louis with their basset hound, Ernie, and they cannot wait to meet their first child, arriving this summer.



Jesse Nasta is a Ph.D. candidate in U.S. history at Northwestern University, with specializations in African American and socio-legal history. His dissertation, "Making Slavery's Borders: Legal Culture and the Transformation of Slavery's Northwestern Frontier, 1787-1860," explores the formation and legal meanings of slavery's Mississippi River border. Nasta's research has been supported by grants from the American Historical Association, the Missouri State Archives, and the Illinois State Historical Society.



Quinta Scott is the author of *The Mississippi: A Visual Biography*. She is also the author of *Along Route 66: The Architecture of America's Highway*, a great read-aloud guidebook of the old road. She is the photographer/author of *Route 66: The Highway and Its People* with Susan Croce Kelly and of *The Eads Bridge: Photographic Essay by Quinta Scott; Historical Appraisal by Howard S. Miller*. She and her husband, Barrie, live in Waterloo, Illinois, close to the American Bottom and the great Mississippi River Bluffs.



Andrew Weil is a native of St. Louis and has lived in the Tower Grove East neighborhood for the last 12 years. As an undergraduate he studied anthropology and biology at the University of Colorado at Boulder and later completed his Master's Degree in applied anthropology with a focus on historic archaeology at the University of Maryland. He returned to St. Louis in 2005 when he went to work as a Principal Investigator with the Archaeological Research Center. In 2007, Weil became a Research Associate with Landmarks Association of St. Louis and in 2011 was named Executive Director. Weil is also a lecturer in the graduate program at the Sam Fox School of Design and Visual Arts at Washington University and is regarded as an expert on historic preservation and St. Louis' historic architecture.

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