

# the Confluence®

Empreintes Digitales

## CARTE D'IDENTITÉ

Nom Savet  
 Prénoms Henri  
 Profession comptable  
 Nationalité français  
 Né le 6 Mars 1898  
 à Dunkerque - Nord  
 Domicile Sebastien St Georges



### SIGNALEMENT

Taille 1.68 Cheveux gris roux  
 Bouche large Yeux bruns  
 Visage ovale Teint clair  
 Signes particuliers aucun

Signature du Titulaire,

*Henri Savet*

Etabli à Sebastien St Georges

Le 2 Avril 1944

Le Maire ou le Commissaire,

*Henri*

Enregistré sous le N° 155



## CHANGEMENTS SUCCESSIFS DE DOMICILE

*Mullent de 40/4 44*

Cachet

# the Confluence

## EDITORIAL BOARD

Mark Abbott, HARRIS STOWE STATE UNIVERSITY  
Steve Belko, MISSOURI HUMANITIES COUNCIL  
Lorri Glover, SAINT LOUIS UNIVERSITY  
Andrew Hurley, UNIVERSITY OF MISSOURI-ST. LOUIS  
Meredith Marsh, LINDENWOOD UNIVERSITY  
Robert J. Moore, Jr., GATEWAY ARCH NATIONAL PARK  
Kristine Runberg Smith, LINDENWOOD UNIVERSITY  
Andrew Theising, SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE  
Kenneth Winn

## ACKNOWLEDGMENTS

An undertaking like *The Confluence* doesn't happen without the help of many people, both within Lindenwood University and beyond. We owe particular thanks to Provost Marilyn Abbott and the Board of Trustees at Lindenwood for supporting this venture. We'd like to take this opportunity to extend our gratitude to the following people, institutions, and companies for their contributions to this issue of *The Confluence*; we could not have done it without you.

Zane Bell  
Jaime Bourassa  
Cristal Campocasso  
Jennifer Clark  
Chris Duggan  
Nancy Durbin  
María Escalona  
The Write Fox, LLC, Tim Fox, Principal  
Gateway Arch National Park  
Shenika Harris  
Hispanic Chamber of Commerce  
Holocaust Museum and Learning Center; Jewish Federation of St. Louis  
Paul Huffman  
Library of Congress  
Missouri History Museum  
Bob Moore  
Maria Isabel Morales Gomez  
Maite Nuñez-Betelu  
Carlos Restrepo  
Pedro Roca Rodriguez  
Gabriela Romero-Ghiretti  
St. Louis Mercantile Library Association  
Álvaro Torres Ramos

## STAFF

EDITOR, Jeffrey E. Smith, PhD  
ART DIRECTOR, Michael B. Thede  
ARCHIVIST, Paul Huffman

## SUBSCRIPTIONS

ISSN 2150-2633 *The Confluence* is a nonprofit semi-annual publication of Lindenwood University, St. Charles, Missouri. All rights reserved. *The Confluence* and Lindenwood University are not responsible for statements of fact or opinion expressed in signed contributions. Requests to reprint any part of *The Confluence* should be sent to Editor, The Confluence, c/o Lindenwood University, 209 South Kingshighway, St. Charles, Missouri 63301, or via email to [confluence@lindenwood.edu](mailto:confluence@lindenwood.edu).

© Lindenwood University 2019

Manuscripts. Any manuscripts should be sent to Editor, *The Confluence*, c/o Lindenwood University, 209 S. Kingshighway, St. Charles, Missouri 63301, or via e-mail to [confluence@lindenwood.edu](mailto:confluence@lindenwood.edu). Print submissions should be double-spaced, but will not be returned. For submission guidelines, citation format, and other particulars, consult <http://www.lindenwood.edu/confluence>.

Have you moved? Let us know if you have or will be changing your address so you don't miss an issue of *The Confluence*.

Subscription Rates. One year, \$20.

Visit us on the web at:  
<http://www.lindenwood.edu/confluence>.

ISBN 978-0-9600179-1-1

## COVER IMAGE

Herbert Schweich used this forged passport to escape Nazi Germany. His family ended up in St. Louis. For more, see "An Extraordinary Odyssey: One Man's Fight to Stay Free During World War II" by Diane Everman. (Image: Schweich Collection, Holocaust Museum & Learning Center, Jewish Federation of St. Louis)

## CONTENTS



3

**An Extraordinary Odyssey: One Man's Fight to Stay Free During World War II**

by DIANE EVERMAN

The Schweich family fled Nazi Germany in 1941 and landed in St. Louis. This is the story of their journey during World War II.

13

**So Much to Learn: Dye Tracing the Current River Landscape, Part III**

by QUINTA SCOTT

In this third installment of her work on the Current River, Quinta Scott looks at environmental change in the iconic Missouri Waterway.

31

**A Gateway to the East: An Exploration of St. Louis' Mexican History Through the Built Environment**

by DANIEL GONZALES

St. Louis had a relationship with Mexico dating to trade along the Santa Fe Trail starting in the 1820s. It came to include commerce, marketing, and migration starting in the late nineteenth century, as Daniel Gonzales details here.

43

**New Perspectives on the Great Fire of 1849**

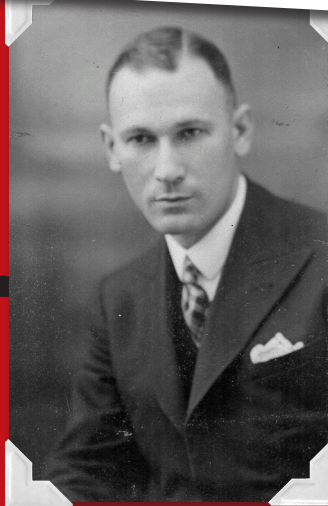
by BOB MOORE

The story of the fire in St. Louis started by the steamboat *White Cloud* in 1849 often focuses on the destruction to the business district. This article sheds new light on the happenings during the fire from court testimony surrounding the destruction of Phillips Music Store, through eyewitness accounts.

# An Extraordinary Odyssey:

One Man's Fight to **Stay Free**

during World War II



Herbert  
Schweich,  
1939

by DIANE EVERMAN

**The three of them stood** at the guard booth in St.-Laurent—45-year-old Herbert Schweich, his wife, Henriette (unwell and prone to nervous breakdowns and outbursts, especially at Germans), and little seven-year-old Marlene (also known as Dedee). They boldly approached the German lieutenant on duty and asked for a pass to cross into the French Free Zone for “a few hours.” Speaking in German, Herbert told the guard that his 80-year-old mother in nearby St. Pierre was very ill, and they hadn’t seen her in months. Dedee wanted, indeed needed, to see her grandmother before she died. Of course, they didn’t have a permit from the German garrison headquarters to cross. The guard unexpectedly turned to Dedee and asked if she loved her grandmother. The little girl, whether from anxiety and fear or from the truth of the statement, suddenly burst into tears. The tension was palpable. The lieutenant slowly pulled out his watch. The time was 11:45 a.m. He told them that they could go if they were back by 2:00 p.m. The German took their identity cards (not a problem, they were forged anyway), saying he would give them back upon their return as he turned to lift the gate. Could it be that they were really going to be a complete family again, and free? Or would they suddenly be shot in the back? Slowly, the three walked out of the guard booth and crossed the demarcation line. The French guard on the other side greeted them—in French!—and opened the gate. They replied and just kept walking, ever fearful that they would be caught, that the Germans would realize that it was all a lie.

# How did it come to be that this small Jewish family made it into Free France?

So, what brought the Schweich family to this point in the spring of 1941? How did it come to be that this small Jewish family made it into Free France? And how did they find themselves in St. Louis after the war with very few people knowing of their heroic past?

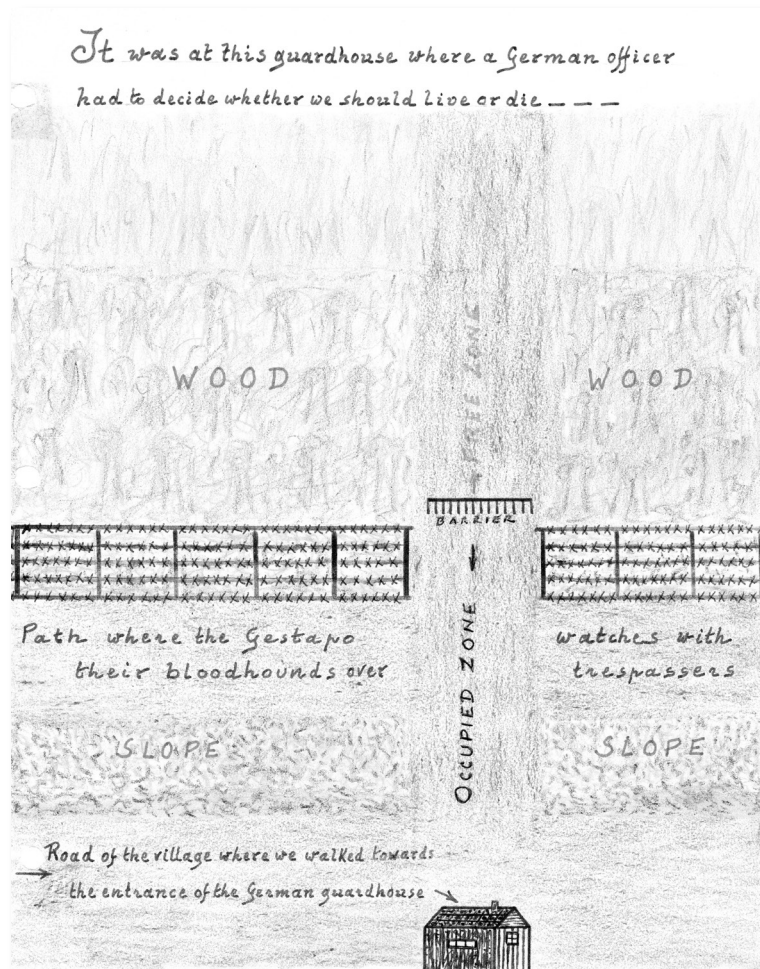
To answer these questions, it is necessary to go back to 1939, when the people of Alsace and Lorraine became the first victims of the German invasion into France. The Schweichs lived in Strasbourg, having moved there from a small Lorraine town right

after the Great War. Herbert and Henriette were married in August 1931, and daughter Marlene was born in 1934. Herbert and his father owned a small store that specialized in ladies' dresses, fine hosiery, and haberdashery. The family lived in a nice apartment with lots of space and toys for baby Dedee. Residing that close to the border with Germany, however, meant that they were acutely aware of the military build-up on the other side. In August 1939 the area became a "theatre of operations" and all civilians had to evacuate within

48 hours. Luckily, Herbert had withdrawn all his funds from the bank on the first of the month. Thus, they left their home with a few suitcases full of necessities, never to return. Because they had their own money, the family opted to go to Baccarat rather than to one of the locations provided by the French government.

Two days later, Herbert, who had served in World War I, went to the French recruiting office to enlist once again in the service of his country. Too old for the regular forces (he was 41 at the time) but believed to be of help to the military anyway, he was accepted—but not to serve in his beloved France. Instead, in February 1940 Herbert Schweich found himself in Marrakech, in the French Foreign Legion. He, and others of his age, were sent to North Africa to enable younger men in the Legion to return to France to serve in the regular military. To say the least, this was not what he had expected. But if it served his country, he would do it. After all, his family was safe away from the military zone.

Unlike in the movies and popular fiction of the day, service in the Legion was not glorious. In North Africa, heat was the primary enemy, although the dislike and harassment of the new men as well as the drunken debauchery of many of the Legionnaires was an equal problem. Receipt of news from France was delayed, but even in Marrakech they learned of the Germans marching into Paris in June of 1940, the armistice just days away, the cease fire, and then the partition of France into



Drawing by Schweich of where the family crossed in St.-Laurent. (Image: Schweich Collection, Holocaust Museum & Learning Center, Jewish Federation of St. Louis)



**French Foreign Legionnaire Herbert Schweich, stationed in Marrakech, 1940.** (Image: Schweich Collection, Holocaust Museum & Learning Center, Jewish Federation of St. Louis)



**Herbert Schweich's new (forged) identity card in the name of Henri Savet.** (Image: Schweich Collection, Holocaust Museum & Learning Center, Jewish Federation of St. Louis)

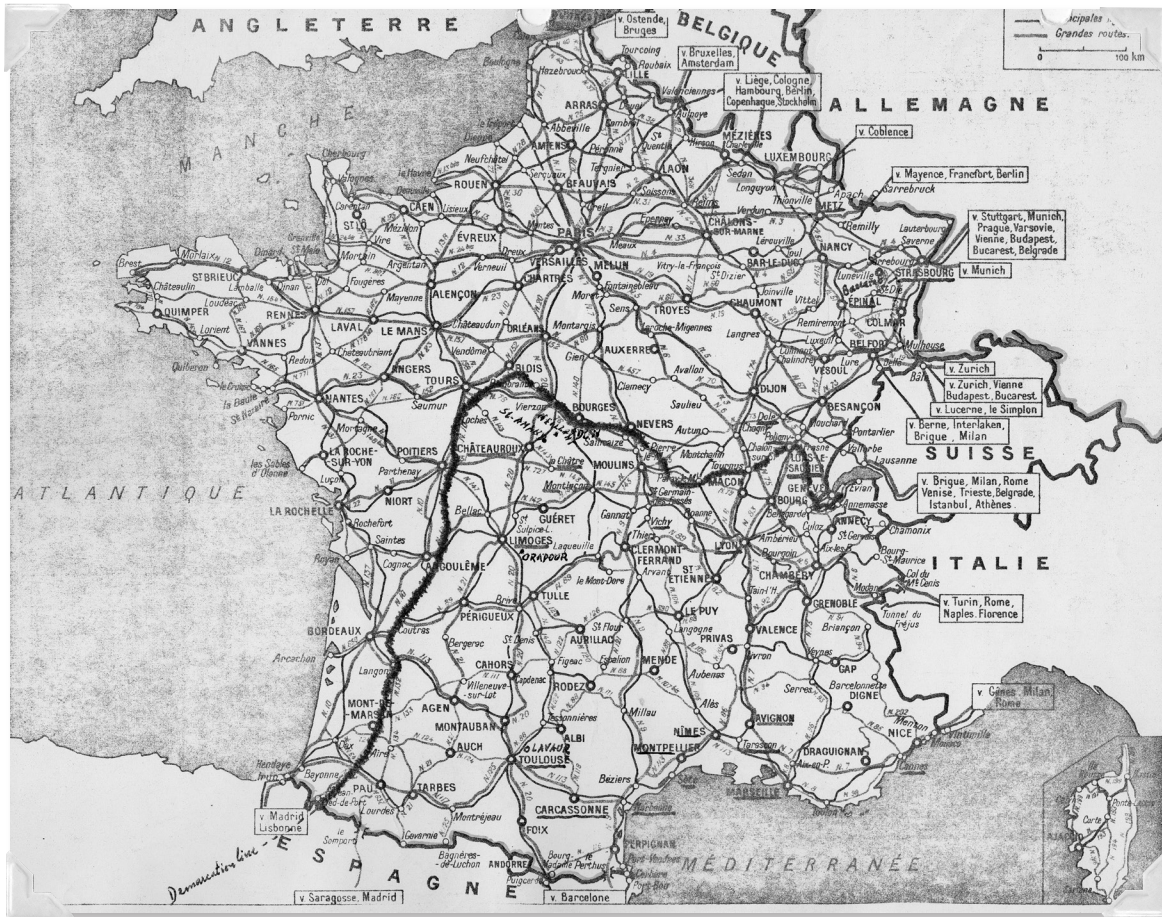
occupied and unoccupied zones. Slowly the Legionnaires were demobilized, and finally, in October, Herbert was discharged and could go home. Unfortunately, Baccarat, where his family lived, was under German occupation. Those Legionnaires who lived in the Occupied Zone were sent elsewhere, while those in the Free Zone could return to France. Luckily, Schweich's brother-in-law was in Lavour, under Vichy control.

In 1940 about 300,000 Jews were living in France. Approximately half that number were actual French citizens, with around 30,000 of them having come from Central Europe the previous decade and become naturalized citizens.

Two weeks after he left Marrakech, Herbert was a civilian once again, living in Lavour with a small monthly allowance, a bed with a straw mattress, and two blankets. He made friends immediately with Mr. and Mrs. Fidele and their son, Andre, and Mrs. Fidele's parents, the Escribes, a friendship that would last throughout the rest of their lives. But Herbert's wife and daughter, who he hoped were still alive, were miles away in a town under German control. So, he made a plan to cross into the Occupied Zone, retrieve his family, and get them to the safety of Lavour.

Through contacts, he found out the name of a town on the demarcation line and a place (the Café de la Paix) where he was to ask for "the captain." This man

would assist him in obtaining ID papers, contacts, and escorts. Thus, in late January 1941 Herbert Schweich boarded a train heading north to Lons-le-Saunier, a town close to the demarcation line. There he found the café, and after waiting until most had left, he approached the bartender to ask about seeing "the captain," who had also served in WWI. He was helping many individuals who, oddly enough, were trying to get into the Occupied Zone. It wasn't long before Herbert received his new identity papers—he was now Henri Savet (good that the initials were the same)—and information was conveyed about when and where to find the *porteur's* house to get him across the line. The only problem was that he also needed a new identity card for his wife, and he had no photograph of her.



**Map on which Schweich marked the demarcation line that separated the Occupied Zone (north) from the Free Zone (south).** (Image: Schweich Collection, Holocaust Museum & Learning Center, Jewish Federation of St. Louis)

After trying several photographers in the town, all of whom were “patriots” and willing to help, he still hadn’t found an image of a woman who looked like his wife. Strolling the streets in desperation, he saw a woman ahead who looked just like her! He followed her, trying to work up the nerve to ask her for a photo. The woman obviously realized she was being stalked, ran into a house, and slammed the door. Knowing she was his best chance, Herbert knocked on the door, only to be greeted by a large man who promptly punched him in the face and closed the door. Luckily, another photographer in a town nearby had an image of a woman

who looked enough like Henriette for it to work.

That evening Herbert found himself at the *passer*’s location with about 50 other individuals, all waiting to cross the next morning. Unfortunately, word soon came that a French traitor had given up the contacts on the other side of the line. They had nowhere to go, so the trip was postponed. Throughout the night, individuals and families slowly drifted away, losing their nerve to undertake such a dangerous crossing. By morning, only about half remained. A new person and place in the Occupied Zone had been secured so the trip was to go ahead—but in three days. Thus,

on January 28, 1941, only 18 people remained—10 men (including Herbert and a 90-year-old), four women, two children, and two babies. They had to walk 10 miles, eight of which were through the woods, arriving at the demarcation line before dawn. They were wet, muddy, and extremely cold. Before them loomed the barbed wire line with twelve German guards patrolling on bicycles on the other side. The patrols came through every 10 minutes. The *passer* told them they had six minutes maximum to get through the wire, cross the road, traverse the meadow, and get safely into the trees beyond. They were to go in small groups, and if one



*Knowing she was his best chance, Herbert knocked on the door, only to be greeted by a large man who promptly punched him in the face and closed the door.*

stumbled or was caught, they would all be caught.

Herbert was in the first group along with a woman and her baby. He carried the baby and took off running when the *porteur* said go. They made it to the trees in plenty of time, as did many others. However, the 90-year-old man was having great difficulty crossing the meadow, and time was slipping by. Out of nowhere, the smuggler came up behind him and literally pushed/carried the elderly man to the tree line. They had done it; they were now in the Occupied Zone, a place most were trying to get out of. They all met at the rendezvous location, cleaned up as best they could, and went their separate ways. Herbert, unlike the others, however, needed to talk again to the *porteurs* to arrange how to get back across the line. He estimated that they

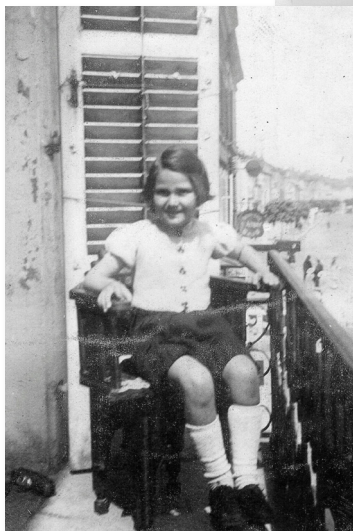
would be back in three weeks at most. He boarded a train for Baccarat and promptly fell asleep, only to be awakened by the sound of male voices speaking German. Opening his eyes, he found he was surrounded by German soldiers and officers. Fearing the worst, he closed his eyes again and pretended not to understand what was being said. Strangely enough, he fell asleep again, waking the next time to find the train car filled with French farmers.

After not having seen his family for 17 months, he stood before their house in Baccarat. Slowly, he opened the door only to find it occupied by German soldiers and prostitutes! Locating his former landlady, he found that after the Germans had requisitioned the family's apartment, she had found another one for Henriette and Marlene. And although the

Germans had begun deporting Jews, no one had turned his family in—yet. But she warned Herbert that his wife had suffered terribly. A drunken German soldier had accidentally injured Henriette when he furiously bayoneted the door while trying to get into the apartment. Since then, his wife hadn't left the apartment, leaving little seven-year-old Marlene to not only go to school but also to do the shopping, cleaning, and looking after her mother. Henriette's nervous condition was so bad that she didn't communicate much and often yelled out rude things whenever she heard that fearful sound of German boots.

Many things caused Herbert's planned three-week stay in Baccarat to turn into 12 weeks, with the journey becoming more perilous for the family daily.

**Marlene (Dedee) in 1940 in Baccarat.** (Image: Schweich Collection, Holocaust Museum & Learning Center, Jewish Federation of St. Louis)



**Sweich later marked this photograph showing the demarcation line at Lons-le-Saunier which he, and others, crossed with the assistance of the *porteur*.** (Image: Schweich Collection, Holocaust Museum & Learning Center, Jewish Federation of St. Louis)

## While the family was now “safely” in Free France, the war was far from over.

Finally, arrangements were made, Henriette was well enough for him to convince her to leave the house, and in April they left for the train station with their forged identity cards. When they got to the appropriate café to contact the  *passeur*  to go back across the demarcation line, they found that things had changed greatly. Now the Gestapo patrolled the line with bloodhounds, and most of the  *passeurs*  had been killed, caught, or stopped working. Everyone they spoke with about crossing told them the same thing—don’t do it, it’s too dangerous, and go back to Baccarat. But Herbert Schweich didn’t see that as an option. Luckily, a kindly farmer who had stopped into the café told them that there was a crossing in the nearby town

of St.-Laurent where a certain hotelier might help them.

Not only was St.-Laurent a possible crossing point, but because of its location, it was also the site of a German garrison, about a half mile from the demarcation line. A permit was needed to cross into the Free Zone from this headquarters. People did it all the time, farmers and merchants among them, but not a small Jewish family. Then, Herbert had an inspiration.

Because he spoke German fluently, he would just go to the garrison and ask for the permit. The hotelier thought he was crazy, and perhaps he was. Thus, Herbert Schweich found himself inside the German garrison headquarters where he told the commanding officer a story about

his ill 80-year-old mother in St.-Pierre. The officer tried many things to trick Herbert, including asking questions about his ability to speak German and about Cologne, where Schweich said he had learned the language. In the end, the officer told him he had to have a signed statement from the local mayor to get the permit. That was not going to happen. This was the situation that had brought the family to the guard house where they crossed the border.

While the family was now “safely” in Free France, the war was far from over. After arriving back in Lavaur in the Free Zone, Herbert had his wife examined by a doctor, found a school for Marlene, brought his mother from the city of Vichy to live with them, and enjoyed the company of his good friends—the Escribes and Fideles. Unfortunately, in 1942 the Germans occupied all of France. The Schweichs, along with other Jews in what had been Free France, had to register with the police and wear the yellow star (which Herbert burned immediately upon returning to their modest home). Rationing was imposed, and along with it came a thriving black market. Most of all there was fear: fear of being deported or killed. Once again, Herbert had to design a plan for survival.

The nearby Convent of Massac-Sean, five miles away, admitted Marlene for free and recorded her under the name Madeleine Wendel, parents unknown. The convent even allowed Herbert’s mother, Emma, to live with an associated farm



**Convent of Massac-Sean where the nuns admitted Marlene under the name Madeleine Wendel, parents unknown.** (Image: Schweich Collection, Holocaust Museum & Learning Center, Jewish Federation of St. Louis)

LAVAU  
Place de la Halle



- x The house where we lived
- o The warehouse of the grocery store
- F The grocery store
- K My escape through this street



← THE MARKET-HALL

Locations in Lavour associated with Herbert's escape from the local police in September 1943. (Image: Schweich Collection, Holocaust Museum & Learning Center, Jewish Federation of St. Louis)

family, although she didn't stay long. It was his presence, however, that endangered the family, their landlord, and their friends. By this time, the Schweichs were living on the square, across from the market hall. Their landlord lived next door and ran a small store there with his warehouse nearby. On September 9, 1943, the local police knocked on the door. As per their plan, Emma knocked on the ceiling of her room to alert Herbert, who was hiding in the attic room above. The police told her they were there to arrest her son. As planned, she replied that he was off in a nearby village helping a farmer with his grape harvest. It was the right time of the year, so it was certainly possible for the story to be true. With that, one officer left to go to the nearby village while the other stayed and patrolled around the square, rounding the market hall every few minutes.

entered through his open window. He went downstairs to the store from which he would get to the warehouse, retrieve his bicycle, and flee. All went well until he got to the warehouse door and found it locked! He had only a few seconds to get back to the store and retrieve the key. When clear, he retraced his steps, got the bike, and rode to the Fideles' garden, all the while worrying about whether he would encounter the policeman who had gone to the nearby village looking for him along the road. Luckily that didn't happen. Once safe, Herbert took a train, then a bus, to the nearby village of Meillant.

The mayor of this small village, Mr. Bouillon, was a friend of Schweich's brother-in-law, so he welcomed Herbert and introduced him to his best friend, a carpenter named Niederlender. These families risked all by helping him and also became life-long friends. Unlike some in the village, they were all French patriots. They were also part of the French resistance. In a couple of months, Herbert got a new, forged identity card—one not stamped "Jew"—and once again in the name of Henri Savet. The mayor also gave him an employment card and obtained a "job" for him as an office clerk in a forestry industry. In April, against the wishes of his new friends, Schweich returned to Lavaur to gather his family. Marlene was quite safe in the convent, but Henriette refused to leave. Thus, Herbert and his mother (with her new, false identity papers under the name Emilienne Savet) returned to Meillant. It was April 1944. Herbert Schweich, former

store owner, French Legionnaire, and survivor, now found himself involved in the activities of his friends and neighbors. He too became a *maquisard* (resistance fighter).

While Schweich recorded some stories about his activities with the resistance, most were about the people rather than his fellow fighters' actions. He spoke of his neighbors, Mr. and Mrs. Francois. Early in the war they had found themselves the substitute parents/protectors of a five-year-old Jewish boy whose father had shown up at their door and pleaded for them to take the boy in. He also told about the young man and woman, both members of the resistance cell, who fell in love with each other and decided to marry against the advice of others. Not long after their "forest wedding," the two were on a mission when the young man was killed. In her grief, the recent bride rushed to his side, firing her rifle, only to be killed herself.

The liberation of Paris in August 1944 brought new hope to everyone, and Herbert rejoined his family in Lavaur. Conditions were not great, but times had changed, and they didn't have to fear for their lives daily. Early in 1945 Alsace and Lorraine were freed from German domination, and all of France was liberated. Herbert celebrated by getting now 11-year-old Marlene a bicycle, something he had promised years before. That same year the family began to get letters from the International Red Cross that family members in St. Louis and Dallas were looking for them. They began to write, and packages



**Henriette and Marlene in Lavaur after the end of the war.**  
 (Image: Schweich Collection, Holocaust Museum & Learning Center, Jewish Federation of St. Louis)

As per their contingency plan, Herbert exited the attic window, crossed the landlord's roof, and

## The liberation of Paris in August 1944 brought new hope to everyone, and Herbert rejoined his family in Lavaur.

arrived. Although Herbert wanted to return to Strasbourg, two trips back to the city made him realize there were no jobs to be had there. Then, on Christmas day 1945, Emma died of a stroke. She would have been 78 the next month. With the tension of the war over, time seemed to fly. Herbert got a job in a local factory that produced men's shirts, and Marlene was in school. But immediate postwar France could not provide the life he wanted, nor the one he desired Marlene to have. Thus, in 1947, he decided to emigrate.

After several trips to and from the American Consulate in Marseille, gathering affidavits from family and acquaintances in the U.S., the Schweichs received their immigration status in March of 1948. Sadly, one member of the family, a little terrier named Bobby that Marlene adopted after the war, could not accompany them. So, the family packed up what few items they had, traveled from Lavaur to Marseille, then on to Cannes where they set sail on the SS *Sobieski* on May 27. Ten days later, they caught their first glimpse of the Statue of Liberty in New York harbor.

Although many American family members on both sides had communicated with the Schweichs while in France, such as Henriette's sister and her great aunt, it was members of Herbert's distant family, Julius S. Schweich and Edward S. Schweich, who provided affidavits to help clear the way for the family to come to the U.S. Herbert, Henriette, and Marlene arrived in St. Louis on June 8, 1948.

There was much to do upon arriving in the city, including getting assistance for Henriette, whose condition had not improved over the years. She became a resident of the State Hospital shortly thereafter. In 1950, Herbert filed his Declaration of Intention to Naturalize and had a job as an "IBM Operator." By the next year, he was already the head of the French department at the Berlitz School of Languages in St. Louis, a position he held for more than eight years. In the 1960s, Herbert held many language-related jobs, including teaching at Forest Park Community College, the University of Missouri-St. Louis, the downtown St. Louis YMCA, Priory School, and Clayton High School. He also helped prep future French teachers during their coursework at Washington University and was a private tutor for those Ph.D. students who needed help with their language exams. The Holocaust Museum & Learning Center estimates that at least 300 Jewish survivors of the Holocaust, like the Schweichs, arrived in St. Louis in the years immediately after WWII.

Marlene finished school then went on to Washington University. She continued her love of art by becoming a commercial artist and married Dr. Austin Tashma, an optometrist, on December 24, 1958. The reception was at Schneithorst Restaurant. Upon her death in 1986, the family wanted her obituary to be not only a tribute to her and her short life (she died at age 51), but also a recognition of her father who had died 10 years earlier—the man who helped them survive against

great odds during the war, gave her a new identity, placed her in a convent in southern France, and was a fighter in the French underground. His was truly an extraordinary odyssey.

According to Yad Vashem, by 1940 there were at least 15 concentration and work camps in Unoccupied France, including Gurs on the French/Spanish border. The Occupied Zone had 26 camps, including the notorious Drancy outside Paris. Drancy, originally a camp for French and British POWs, became a camp for Parisian Jews in 1941 and then a transit camp for Jews deported to the east in early 1942. Of the estimated 300,000 Jews who resided in France in 1940, it is believed that approximately one-quarter of that number were deported and died in either concentration or extermination camps.

---

\*The bulk of information about this extraordinary odyssey comes from the Herbert Schweich Collection, Holocaust Museum & Learning Center Archive, St. Louis MO.



# SO MUCH TO LEARN:

## *Dye Tracing the Current River Landscape, Part III*

by QUINTA SCOTT

Welch Spring: Halbrook  
Branch of Upper Gladden  
Creek-Meramec Headwaters

**It rained** hard a few days before Anne Keller injected dye into the Halbrook Branch of Upper Gladden Creek in the Meramec headwaters. She estimated that it was running at about 75 gallons per minute over a low water bridge in Dent County. A half-mile downstream of her injection point, the stream dried out and remained dry for several miles. She recovered her packets from Welch Spring with positive results.<sup>1</sup>

---

**Tuesday November 10, 1818:** *It was the edge of a prairie where we had halted. Wood was rather scarce; but we made shift to build a good fire.*

**Wednesday November 11, 1818:** *In passing two miles, we crossed a small stream running south-east, which evidently had its source in the little lake at our last night's encampment. The trail beyond this was often faint; in the course of eight or ten miles, we began to ascend elevations covered with pines, but of so sterile and hard a soil that we lost all trace of it. We wound about among those desolate pine ridges a mile or two, till, from one of the higher points, we descried a river in a deep valley, having a dense forest of hard wood, and every indication of animal life. Overjoyed at this, we mended our pace, and, by dint of great caution, led our pack-horse into it. It proved to be the river Currents, a fine stream, with fertile banks, and clear sparkling waters.*

- HENRY ROWE SCHOOLCRAFT, 1818<sup>2</sup>

---

Henry Rowe Schoolcraft described the progression of landscapes in the eastern Current River watershed in the journal he kept as he explored the Ozarks in 1818 and 1819. He began his tour in Potosi; traveled south through the Cortois and Huzzah valleys; crossed the West Fork of the Black River to the headwater streams of the Meramec; crossed upland savannas pockmarked by little lakes (sinkholes); entered the forested lands that clothe the valleys of Current River tributaries; and descended through their sheer valleys to the river itself. He crossed the river just south of Montauk Spring. Schoolcraft described the Current River landscape of 1818 in much the same way the Missouri Department of Conservation (MDC) would describe it in 2002 when it published its *Atlas of Missouri Ecoregions* and defined it as the Current River Hills ecoregion.

Millions of years ago the Ozarks region was a peneplain, a relatively flat plateau, across which the rivers the Meramec, the Current, the Gasconade, and others meandered. At least 320,000,000 years ago, maybe more recently, a slow uplift pushed up the plain. The rivers responded by cutting deep valleys, maintaining their meanders and leaving behind remnants of the peneplain—Schoolcraft's prairies—on ridges between watersheds. All are relatively level plains, where local relief is seldom more than 100 feet. Sinkholes litter all. Some deliver water to underground systems. Major tributaries to the Current, Big and Spring Valley creeks, which are also losing streams, head at the barren (prairie) edge and deliver water to springs. In Schoolcraft's time, stubby post oaks grew on fragipan, poorly drained soils on the ridges. Today, we find cattle grazing on fescue pastures. The MDC named such landscapes Oak Savanna/Woodland Plains.

**“It is based on lots of field work and lots of walking the hollows of the Ozarks. *It is a combination of art and science, and an ability to understand the land and how it functions.*”**

The MDC described Schoolcraft’s “desolate pine ridges” as the Oak-Pine Woodland/Forest Hills, where the soil is cherty. Historically, a woodland mix of oaks and pines covered the rolling hills, where the landscape rises and falls as

much as 250 feet. At the end of the nineteenth century, loggers moved in and stripped the woodlands. Today, dense second-growth oak and or oak-pine forests dominate the hills.

As he approached the Current

River, Schoolcraft crossed narrow, rugged ridges that dropped down as much as 500 feet along steep slopes, anchored by oaks, into the fertile Current River Valley. The MDC named this region the Current River Oak Forest Breaks. Unlike the oak/pine woodland,

Schoolcraft’s  
“desolate  
pine ridges”





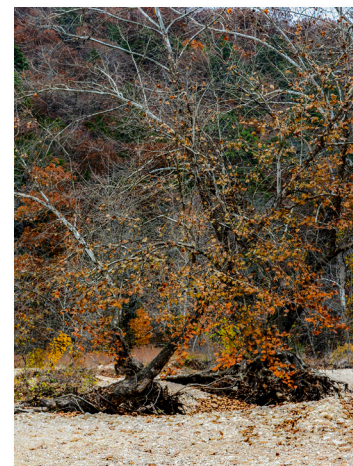
the forested breaks remain intact. Hardwoods covered the river floodplain, which is lined in tall bluffs. Huge springs, which draw water from all parts of the watershed, feed a steady stream of water to the river.<sup>3</sup>



This is the last of a three-part series on our understanding of the Ozark National Scenic Riverways in the Current River watershed since 1964. The first covered the establishment of the Ozark National Scenic Riverways and our early forays into understanding its watershed. Research began in 1912 when Thomas Jacob Rodhouse measured the flow of the Current above and below Big Spring and continues to this day. Between 1968 and 1973, Thomas Aley conducted his study of the Hurricane Creek watershed and delineated the extent of the Big Spring Recharge area. The creek, a classic losing stream and a tributary of the Eleven Point River, delivers water through subterranean channels that run under the drainage divide between the Eleven Point and the Current to Big Spring, a tributary to the Current River. Aley's conclusions focused on the interplay between land use on the surface and groundwater quality.<sup>4</sup>

The second part discussed the Doe Run applications to mine lead in the Hurricane Creek watershed and the explosion of research that followed. It focused on the efforts of the U.S. Geological Survey to map the karst landscape of the Current River watershed between 1995 and 2001. The project provided a geological inventory of the Ozark National Scenic Riverways. The Missouri Department of Conservation sorted out the progression of landscapes in the watershed, catalogued it in its *Atlas for Missouri's Ecoregions*, and published maps in 2002.

The third part explores Current River country, its prairies, its losing tributaries, and its springs. Again, Thomas Aley's work guides us through the landscape. In 1973 Aley completed the Hurricane Creek project, opened his Ozark Underground Laboratory at Protom, Missouri, and began working as a consultant on hydrogeology, caves, and the management of karst regions. One of his first clients was the Ozark National Scenic Riverways, for whom he delineated the recharge areas of the springs that feed the Current River.



**Sunklands  
Conservation  
Area:  
McHenry  
Hollow**

Tom Aley described the process of selecting a dye injection site: "It is based on lots of field work and lots of walking the hollows of the Ozarks. It is a combination of art and science, and an ability to understand the land and how it functions. Losing stream segments are often ideal locations. They are best when most or all of the flow of the stream is sinking in a very localized area. This often means that you need to be there during or shortly after rainstorms. You

# “No Dumping.”

so said a sign at the sinkhole.

don't always guess right and may get to a point you have selected only to find that conditions are not suitable.

“You also need dye introduction points that will give you as much useful information as possible. If you are concerned with protecting water quality, then a site downstream of a source of contaminated water is routinely more useful than a site way out in the woods somewhere. A site near the potential boundary between a couple of recharge areas is more useful than a site where it is pretty obvious where the water is likely to go.”<sup>5</sup>

In 1972 soon after the dedication of the Ozark National Scenic Riverways in 1971, the National Park Service embarked on a series of studies on management of the new park, including a groundwater study of the Current River watershed. Aley's earlier Hurricane Creek study for the U.S. Forest Service prompted the fifteen-year effort to delineate the recharge areas of the major springs on the Current River. He worked from his Ozark Underground Laboratory in Protem. His first client was the University of Missouri-Rolla, where he worked on Round Spring with James Maxwell, a geologist with the Water Resources Research Center at the university.

With his work with Maxwell finished, he began performing contract work for the Ozark National Scenic Riverways on a regular basis. Between 1975 and 1976 he delineated the recharge areas of Alley, Round, and Pulltrite

springs and assessed areas that are hazardous to the water quality of each spring. In a second contract in 1977 and 1978 he delineated the recharge areas of springs north of the Jacks Fork and west of the Current. In 1982 Aley crossed the Current and began tracing the sources of springs in its eastern watershed and north of U.S. 60. By the time he and Catherine Aley published their *Groundwater Study: Ozark National Scenic Riverways* in 1987, they had conducted at least one trace of every major spring that feeds the Current. They included a series of maps delineating the recharge areas for all major springs.<sup>6</sup>



Pigeon Creek and Montauk Spring form the head of the Current River. The creek and the river provide the only surface water found in Montauk State Park. Losing sections of the creek's upper reaches contribute water to the spring.<sup>7</sup>

Or is it Montauk Springs? In 1892, heavy rains and flooding washed gravel into the bedrock opening of the spring, clogged it, but did not plug it. The spring

disbursed and emerged from several smaller pools, gravel bars, and creek beds. Walk along the creek that emerges from the spring. “You will see water springing from very small ponds, from seeps, from its gravel bed.”

The sources of Montauk Spring puzzled geologists for decades. It puzzled geologists James Maxwell and David Hoffman. In the fall of 1971 the pair toured the region east of Licking for their study of *Water Resources of the Current River* and speculated on suitable places where they could inject dye the following spring. They ruled out Monty Spring, which spills into a stream that cuts through a steep-sided hollow, where beaver had built a dam across the stream. They considered a huge sinkhole, 600 feet wide northeast of Licking, which drained runoff from the surrounding pastureland and could carry water into a subterranean system.<sup>8</sup>

April 18, 1978, Tom Aley took up the Montauk Spring puzzle in his study of water resources west of the Current River. He injected eight pounds of dye into an unnamed tributary of Bean Creek. The creek meandered across the woodland plain near Licking at the rate ten gallons per minute. He placed charcoal packets in both Montauk and Welch springs. The dye first showed up in Montauk on May 1. It also showed up in Welch Spring two days later. Big surprise. And it showed up in an unnamed spring in Bean Creek on about May 10. Only when he viewed the packets under very intense light could he read the

### Montauk Spring Brook



results: positive, but very weakly positive. Aley considered, for the first time, that the springs in the Current River watershed share recharge areas. A decade later when he recovered contradictory weak results from injection sites at the head and foot of Gladden Creek, east of the Current, he concluded that Current River springs often share common recharge areas.<sup>9</sup>

“No Dumping.” So said a sign at the sinkhole; so said Tom Aley. Aley concluded his Hurricane Creek study by noting:

---

Protection and management of the springs and rivers of the study area requires protection and management of the land tributary to these features. It is impossible to manage the spring effectively without managing the land, which supplies recharge water for the springs. In the study area, and in many other soluble rock lands as well, the surface and the subsurface are an intimately integrated system. The surface affects the subsurface and vice versa. Similarly, surface management affects the subsurface; subsurface management affects the surface.

---

Sinkholes and losing streams can speed contaminants directly into the underground system and foul groundwater. The earliest

demonstration of the role of sinkholes and losing streams in the contamination of groundwater came in 1920 when the Mid-Continental Iron Company disposed of waste isopropyl alcohol in Davis Creek, a losing stream, filled with sinkholes. The alcohol showed up in Big Spring, which carried it to the Current River, which fouled the drinking water of the City of Doniphan, 30 miles downstream.<sup>10</sup>

Right outside of Licking and a half-mile north of the site of Aley’s Bean Creek trace, Cameron Road dodges a sinkhole in the woodland plain, a natural place to inject dye. In September 1986 Marian Gooding, a naturalist at Montauk State Park who worked with James Vandike, a geologist with the Department of Natural Resources, did just that. She recovered her charcoal packet in Montauk Spring two weeks later.<sup>11</sup>

**Montauk Spring:  
Cameron Road  
Sinkhole  
Trash**





**Welch Spring:  
New Harmony,  
Missouri 32**

Anne Keller, a master's candidate in geology at the Missouri University of Science and Technology, confirmed Gooding's trace. During a thunderstorm in May 1999, she poured nine pounds of dye into a stream of water, spilling into the sinkhole at 20 gallons a minute. She recovered her dye packet at Montauk Spring, almost eight miles from the sinkhole.

Keller's focus, however, was Welch Spring, not Montauk. The four additional traces she ran for her thesis delineated the extent of the Welch Spring recharge area, which reaches north and east of the Current and into the losing streams that form the Meramec headwaters.<sup>12</sup>

Paddlers on the Current River put in at Akers Ferry, just

downstream of Welch Spring, the third largest spring in Missouri and the second on the Current River, for a very good reason. The spring spews from a cave at the rate of 229 cubic feet per second and turns the river from a lazy stream into a first-class float. Welch Spring's 214-square-mile recharge area reaches under the Ozark Plateau divide and into Meramec drainage area. Sinkholes, 284 of them, pockmark its recharge area. When it rains, those sinkholes drain surface water into the underground system. So do losing streams. Historically, poorly drained fragipan soils hosted post-oak barrens. Welch spring draws its water from a variety of landscapes: fragipan soils that have been converted to pasture; gravel-bedded losing streams

that run through woodlands; Gladden Creek, a broad losing stream bordered by forests.<sup>13</sup>

For visitors to the central Ozarks, the prairie ridges, where cattle graze in fescue pastures, are places to get through on the way to someplace else: Montauk Spring or Round Spring or the new Echo Bluff State Park along Sinking Creek. South of Salem, Missouri, 19 crosses Missouri 32 riding the ridge that separates the Gladden Creek watershed from the Sinking Creek watershed, eastern tributaries to the Current River that supply water to Welch and Cave Springs. Along the way, it cuts across plains in the Meramec watershed and woodlands in the Current watershed, and finally enters the Current River Forest Breaks. It crosses the Current River at Round Spring and continues its twisting way south.

Above Missouri 32, the Meramec is a gaining stream as it draws water from its headwater tributaries. Below Missouri 32, its headwater tributaries are losing streams. The sinking creek at New Harmony on 32 was not your conventional injection site. On March 23, 1982, when Tom Aley mixed the dye for the New Harmony trace, he decided to use more than normal. The stream—a tributary of Dry Creek, a losing stream in the Meramec Basin—flowed at a mere 15 gallons per minute. Aley's dye seeped into the underground system through a



**Welch  
Spring**

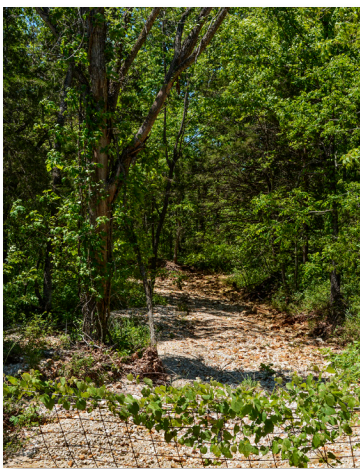
## The spring spews from a cave at the rate of 229 cubic feet per second *and turns the river from a lazy stream into a first class float.*

pg. 19

Description of Welch Spring coming out of a cave on the Current River

boggy place, lined with fine-grained sediments rather than coarse gravel.

Nevertheless, he set his packets in Welch Spring. Not until May 4th did dye show up at the spring and with weakly positive results. For 64 days after the March injection Aley continued to receive weak results. He attributed his results to his less-than-ideal site and speculated that because it is in the northern-most reach of the Welch recharge area and the Meramec River topographical basin, the dye might have been diverted to other springs to the north and northwest. He recommended further study.<sup>14</sup>



Welch Spring:  
Wofford Branch of the Upper Meramec

In 1999, Anne Keller studied the New Harmony trace and replicated Aley's trace without success. However, her trace in the Wofford Branch of the Upper Meramec extended the limits of the Welch Spring recharge area. It rained heavily on the night of May 4. The next day, Keller dropped dye into the Wofford Branch of the Meramec, which threads a densely treed hollow in

the Mark Twain National Forest. Water carried the dye a mile and a half downstream at 10 gallons per minute, where it sunk into the gravel bed of the losing stream. She recovered her packet from Welch Spring.<sup>15</sup>

The confluence of two losing streams, Standing Rock Creek and Gladden Branch, forms Gladden Creek, a tributary of the Current River. The large losing stream maneuvers a serpentine hollow through woodlands into the forest breaks and drains the region east of the Current.

If the New Harmony injection site was anything but ideal for a Welch Spring trace, the Gladden Creek site, just north of the Dent/Shannon County line, was. The spring was only 17,900 feet away. The water ran at the site at 20 gallons per minute and continued to do so for all 43 days of the May 1982 trace. Eight gallons of dye should have shown moderate or even strongly positive results at Welch Spring.

On May 12, 1982, the Aleys injected their dye into Gladden Creek and set their packets in Welch and Cave springs and two other places. The dye promptly sank into the sandy and gravel creek bed and showed up, with weakly positive results, at Cave Spring. Why?



Welch Spring:  
Gladden Creek

Maybe 43 days of sampling was not enough. Yes, but a wave of storms after May 12 should have flushed the dye into the underground system. Maybe the dye went to places they didn't sample, such as other springs along the Current. Maybe the layers and layers of deep sand and gravel in the creek bed soaked up the dye and it never entered the underground system to Cave Spring.

In 1985, Aley injected six pounds of dye into the head of Gladden Creek just south of the confluence of Standing Rock Creek and the Gladden Branch, where water ran at 75 gallons per minute. He set his dye packets in four places: Welch and Cave springs and Gladden Creek at KK Road in Dent County. Finally, he set packets in Montauk Spring to test whether it draws water from the east side of the river. Welch Spring tested strongly positive within three weeks. Montauk Spring tested negative.

Tom Aley's 1978 trace at Bean Creek had alerted him to the possibility that a single losing stream could deliver water to two, maybe even three, different springs.<sup>16</sup>

At 19, Jerry Vineyard descended into Devils Well for the first time. Five years later, in

**The Pulltite Springs complex, Round Spring, and the Current River Springs complex *all deliver water to an 11.3-mile stretch of the Current.***

1961, Vineyard—now a geologist, working on his master’s thesis at the University of Missouri—conducted the first Missouri dye trace to a Current River spring that used a charcoal packet to absorb dye. He was almost certain the well and the spring were connected. He secured a packet in Cave Spring on the Current River and dropped the dye in Devils Well—a mile away. He waited a week for the dye to show up in the spring. Thomas Aley’s traces, made in the last decades of the twentieth century, demonstrated that Cave Spring shares parts of its recharge area with Welch Spring.



**Cave Spring Photograph by Joyce Hoffmaster, Cave Research Foundation**

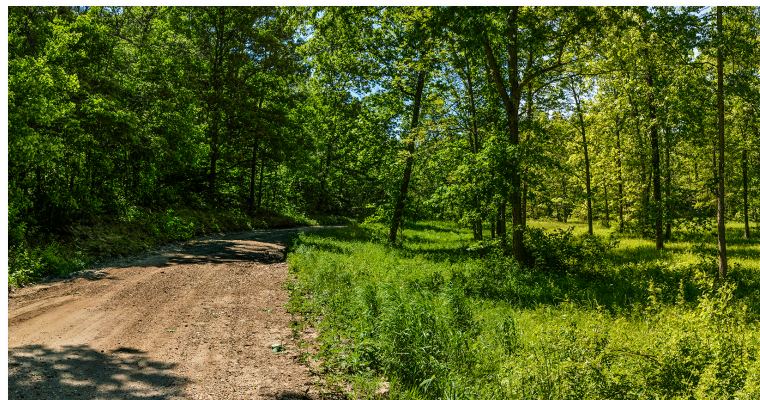
Like Gladden Creek, Sinking Creek collects water from a series of losing streams and delivers it to the Current River. Two traces 26 years apart proved that its losing branches deliver water to Cave Spring.

Tom Aley delineated the recharge area of Cave Spring 21 years after Vineyard’s 1961 trace and demonstrated that it draws water from east of the Current River. On March 9, 1982, Aley dropped dye in the Pankey Branch of Big Barren Fork of Sinking Creek in Dent County. He placed charcoal packets in Welch Spring, Cave Spring, others along the Current south of Cave Spring, as well as two places along the

Barren Fork. He left enough packets in Cave Spring to study the results for three months. By day 35 he had strongly positive results, but negative in the month after that. However, he uncovered weakly positive results over the next five weeks, which he attributed to a second trace he made to Cave Spring.

The Pankey Branch, a losing stream, runs through Asbridge Hollow, a pretty, narrow green hollow. Horses, a possible source of groundwater contamination, graze near its head. About a mile from its head, a spring in its west bank delivers water to it. Downstream a young bottomland forest finds anchor in its alluvium.

On July 17, 1998, Anne Keller poured five pounds of dye into the spring and set her charcoal packets in Cave Spring. The stream carried the dye a mile downstream at the rate of 75-100 gallons per minute. It disappeared into coarse gravel near the Bedwell Cemetery, never to reappear. Pankey Branch ran dry beyond the losing point. Tom Aley noted when he made his 1982 trace at Pankey Branch that the creek ran dry to within a half-mile of its confluence with Big Barren Fork.<sup>17</sup>



**Cave Spring: Pankey Branch of the Big Barren Fork, Asbridge Hollow**

The Pulltite Springs complex, Round Spring, and the Current River springs complex all deliver water to an 11.3-mile stretch of the Current. This series of springs draws from overlapping recharge areas that extend to the western limits of the Current River watershed. Some of the springs in the Current River complex rise in the river and are difficult to trace back to their sources. Aley used those that rise in its floodplain to trace the sources of the complex.

The Pulltite Spring complex—Pulltite, Fire Hydrant, Gravel, Boiling Sand, and two unidentified springs between Pulltite and Lewis Hollow—draw water from the Sunlands and the dissected region to the west. Tom Aley performed four traces on the complex from different sites, in 1976, 1978, and two in 1986.

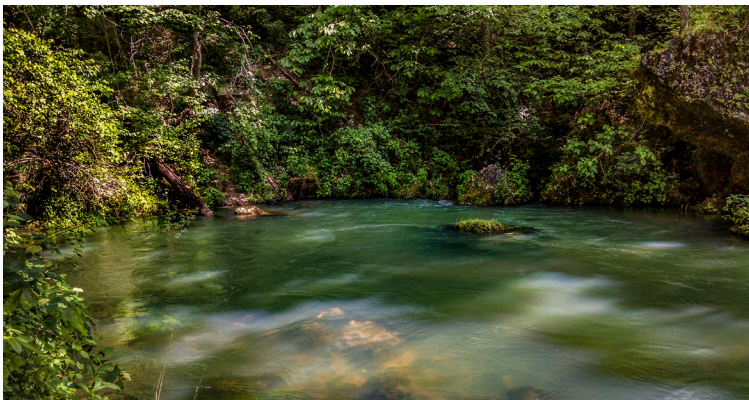
Big Creek rises at the eastern edge of the Summerville Savanna Plain outside the Current River Hills, flows northeast across the dissected Current River Plain, and reaches its confluence with the Current four miles north of Welch Spring.

Aley chose two sites along the creek to run traces. On June 16,



**Pulltite Spring Complex: Lower Big Creek**

**Pulltite Spring Photograph by Jennifer Swab,**  
(Courtesy of the Ozark National Scenic Riverways)



1978, Tom Aley injected eight pounds of dye into the confluence of Big Creek and Dry Bone Creek in rough country west of the Sunklands. He left carbon packets in Alley Spring and the Pulltite Spring complex. The Alley Spring packet proved negative. When Aley retrieved his packets in the Pulltite complex on June 27, his results were negative. However, the packets at Lewis Hollow showed very weakly positive results. He placed additional packets in the springs in the Pulltite complex on the 27th and left them there until

July 18, with very strongly positive results at all sites.

Missouri KK in Texas County drops more than 200 feet through the Current River Woodland Plain and through the Current River Forest Breaks to Lower Big Creek. Sycamores, bottomland trees, line its narrow bank. Everett Chaney, Aley's associate on the ONSR project, twice injected dye into the creek at its crossing with KK road. On April 2, 1986, he set packets at multiple sampling stations: Round Spring and above its spring branch on the Current

River; at Pulltite, Fire Hydrant, Gravel, and Boiling springs in the Pulltite complex; and at Cave, Welch, and Montauk springs. When he collected the packets two weeks later, all results proved negative save the weak results from the Pulltite complex, which surprised him. He had expected strongly positive results for all springs in the Pulltite complex. He repeated the trace on April 27 and added six additional sites to his test. He recovered positive results, strongly positive, only from springs in the Pulltite complex. Given their results from traces at two sites along Big Creek, Aley and Chaney concluded that the creek delivers water only to the Pulltite complex.

When Chaney added up the mean annual flow of each of the springs in the Pulltite complex plus the unidentified springs between Pulltite and Little Fields Hollow, he came up with a recharge area of 223 square miles, using the formula of one square

**Pulltite Complex to Current River Complex: Sunklands Conservation Area, Sinkhole Pond**



**Fire Hydrant Spring emerges from a cave about three feet above the Current River. (Photograph by Scott House, Cave Research Foundation)**



**Mill Hollow Creek-Current River Spring Complex**

mile of recharge area for every cubic foot of discharge. It's a region that covers both the Big Creek watershed and the Sunklands Conservation Area.<sup>18</sup>

Sunklands Conservation Area straddles the irregular boundary between the Summersville Oak Savanna/Woodland Plain and the Current River Oak-Pine Woodland Forest Hills. In December 1991 the Nature Conservancy and the Missouri Department of Conservation signed a deed for the purchase of 80,819 acres from the Kerr-McGee Corporation in Shannon, Carter, and Wayne counties. Kerr-McGee had managed the land conservatively, selectively cutting instead of clear-cutting its timber. Therefore, the Nature Conservancy was comfortable negotiating a deal for \$10.1 million. It planned to sell some of the land to the Missouri Department of Conservation and retain some for its own nature preserves.<sup>19</sup>

Almost half the MDC land went into the Sunklands Conservation Area, 37,440 acres of the Kerr-McGee acquisition. The MDC reserved 5,700 areas within the area as a natural area, off limits to logging, motor homes, wooden structures, and human occupation, though it is possible

to drive through it. At the core of the natural area is the Sunkland, the collapse of a massive cavern, a depression in the landscape, almost a mile long and 600 feet wide, containing a sinkhole or a series of sinkholes, some dry, some filled with water. A mile away in the Burr Oak Basin, Tom Aley performed two dye traces in one of three sinkholes, clustered together. The first, in March 1976, yielded inconclusive results. The second, ten years later, yielded stunning results.<sup>20</sup>

Everett Chaney performed the second trace on December 5, 1986. He dropped his dye in water, which was overflowing a small pond at the rate of five gallons per minute. It carried Chaney's dye into a sinkhole, one of three in the cluster in Burr Oak Basin. He set his packets in 14 places, including the springs in the Pulltite Complex and Round Spring. The dye showed up first in Fire Hydrant Spring. Soon after he recovered positive results from Pulltite, Gravel, and Boiling Sand springs in the Pulltite complex. The packet he set in Round Spring showed weakly positive results. Finally, dye showed up in packets in springs in the Current River Complex, downstream of Round Spring, giving him positive results on an 11.3-mile stretch

of river between Pulltite and Barn Hollow Spring. The trace demonstrated that the Pulltite complex shares a portion of its recharge area with Round Spring and the Current River complex, whose existence was unknown until April 1978, when Aley injected dye into a losing section of Mill Hollow Creek.<sup>21</sup>

Tom Aley made two traces in 1976, one from Cox Cave and the other from the Sunklands. He set his packets in springs in the Pulltite complex and saw no results. The dye had disappeared into a "black hole." Two years later, he trekked down into Mill Hollow, deep in the Current River Forest Breaks, where water trickles over rocks to the Current River at the rate of 0.1 cubic feet per second. At noon on April 5, 1978, Tom Aley injected dye into a losing section of the stream. It showed up the next morning in springs at the mouth of Mill Hollow with very strongly positive results. It also showed up at the mouth of Root Hollow with very weakly positive results two weeks later. The trace did not show up in Round Spring.

Because he suspected that the dye at Root Hollow came from surface water, he left packets in place. They absorbed more dye.



# “Suddenly, there was a roar of water...”

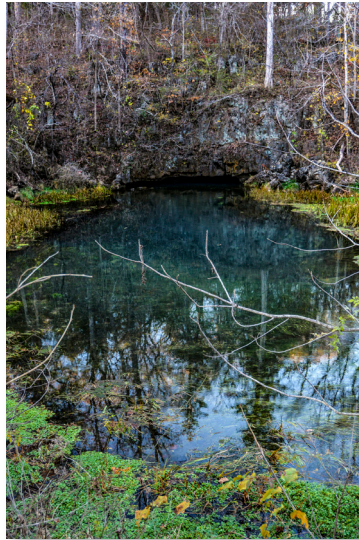
## Round Spring

Aley attributed these results to groundwater discharge from springs in the hollow. He had found an explanation for the “black holes” in the channel of the Current River and the Current River complex.<sup>22</sup>

For the untutored, Round Spring should stream out from under the natural arch of Eminence Dolomite, the remnant of a collapsed cave. Not so. When the roof of the Round Spring cavern collapsed, it revealed a spring, rising in a circular basin. Boulders from the fallen roof blocked the underground channel that supplies the spring, preventing divers from exploring the conduit beyond a depth of 55 feet.

Round Spring rises in its circular basin and streams under the arch to its spring brook, which carries it to Spring Valley Creek and the Current River. The spring draws water from a 119-square-mile recharge area and flows at the rate of 46.9 cubic feet per second.

When Missouri set up its system of state parks in the 1920s, Governor Arthur M. Hyde and his fish and game commissioner, Frank Wielandy, looked to the Ozarks, where land was cheap, the natural landscape intriguing, and therefore, the interest great. While Big Spring, the first park, came into the system in 1924, a year before Hyde left office, Round Spring did not until 1932. In 1967, the State of Missouri gave Round Spring, Alley Spring, and Big Spring, all state parks along the Current and Jacks Fork, to the National Park Service for inclusion in the Ozark National Scenic Riverways.<sup>23</sup>



“Suddenly, there was a roar of water and the previously dry bed of Spring Valley, by which we had camped, was filled with a rushing torrent 4 to 10 feet deep and 30 to 100 feet wide.” Edward Seymour Woodruff encountered Spring Valley Creek when he camped by it in 1908. It’s a classic losing stream that rises on the savanna/woodland plain west of Summersville and loops across the hills in the Sunlands Conservation Area. It makes one final large horseshoe turn at George Hollow before streaming past tall bluffs near its mouth.

Monsoon-like rains at the end of April 2017 flooded the Current River landscape, including its many losing streams. By mid-May, water still flowed in losing streams like Spring Valley Creek. Normally, it would not take three weeks to drain floodwater at George Hollow. Normally, in May, young crops would be sprouting on the agricultural fields that line the creek. But the April 2017 showers were no gentle spring rain, and the hollow remained flooded well into May.

On June 1, 1978, Tom Aley injected six pounds of dye into the mouth of George Hollow, which was running at 40 gallons per minute from a spring in the hollow. He set his packets in Round Spring, at the mouth of Spring Valley Creek at the Round Spring campground and at the mouth of Root Hollow. The results everywhere were very weakly positive. He set a second set of packets in Round Spring on June 15 and left them through June 26, with strongly positive results.<sup>24</sup>



**Round Spring: Spring Valley Creek, George Hollow**

Spring Valley Creek rises in the Summersville Plain and meanders across the Current River watershed to its confluence with the Current, a straight-line distance of about 18 miles. It loses water to both Alley Spring on the Jacks Fork near its head and Round Spring on the Current River near its mouth. In April 1978, Tom Aley located an injected site on Spring Valley Creek west of Summersville. He injected eight pounds of dye into a spring branch 50 feet north of its confluence with the creek. The dye disappeared into the losing stream. He placed charcoal packets in both Blue Spring on the Jacks Fork and Alley Spring. His trace arrived about two weeks later at Blue Spring, 47,500 feet away, and showed weakly positive results. His results at Alley Spring

**Spring Valley  
Creek West of  
Summersville-  
Blue Spring  
(Jacks Fork) and  
Alley Spring**



were very weakly positive during the same two-week period. However, the trace yielded strongly positive results two weeks later. The dye streamed at a rate of 211 feet per hour over a straight-line distance, or 76,000 feet between the creek and the Alley Spring.<sup>25</sup>

Blue Spring shares its catchment or recharge area with Alley Spring, and, while much of the Alley Spring recharge area is forested, much of the area it shares with Blue Spring has been cleared for pasture. The Jefferson City-Cotter formation, pockmarked with sinkholes, dominates its catchment area. Hydrologists suspect that rain, washing off pastures into sinkholes and underground channels, can carry non-point pollution to Blue Spring and the upper Jacks Fork. Algal blooms follow.

Jack Toll, speaking to oral historians with the U.S. Geological Survey in 1993, noted, “We never

had algae blooms. I mean big ones. They occur all up and down the river on both prongs. They get so bad in the summer that when they die and float to the top, you just can’t fish. Huge algae blooms. And they were not there two years ago. Seems like it starts in late July and then they bloom and there’s just this green stuff that’s everywhere.”<sup>26</sup>

A National Park Service study of water quality on Jacks Fork and Current rivers showed that springs in general had the highest concentrations of nitrates, and Alley Spring topped the list. The study concluded that springs are more likely to show the effects of land use in their watersheds than do the rivers they feed. Hence, if Alley Spring shares part of its catchment with Blue Spring and much of that area is devoted to pasture that has been fertilized with nitrates, then Alley Spring will have higher levels of nitrates than other springs.<sup>27</sup>

By 2016 the pasture that surrounds the Horton Davis sinkhole on the Summersville plain had turned to scrub. Trees grow on its sides. Not so on November 1, 1972.

It rained hard the day Thomas Aley and Everett Chaney dropped ten pounds of fluorescein dye in the Horton Davis sinkhole, which is 30 to 40 feet deep. Theirs was the first attempt to define the Alley Spring recharge area. Water drained off the surrounding pasture into the sinkhole at the rate of two cubic feet per second and ponded there to a depth of 15 feet. While Aley and Chaney recovered their charcoal packets from Alley Spring November 9, they figured the dye had arrived around November 5. The packets showed a moderately positive result. The dye had traveled 58,100 feet at the rate of 605 feet an hour and confirmed that the Summersville Plain forms the recharge area for Alley Spring.<sup>28</sup>

**Blue Spring Access, Jacks Fork**



In his 1930 study of the Eminence and Cardevara quadrangles, Josiah Bridge tells the story of the day Alley Spring stopped flowing for twelve hours. It seems a large sinkhole had formed and plugged the underground conduit with muddy debris. When flow resumed, mud flowed into the spring. It took days for it to clear.<sup>29</sup>

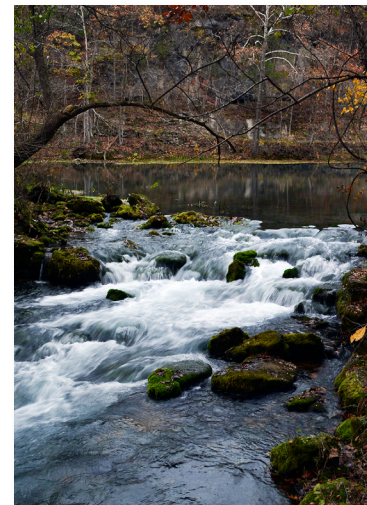
Thomas Aley tells a similar story with a different conclusion. In April 1974, flow from Alley Spring jumped to 2,750 cubic feet per second (cfs) after a heavy rain, 1,700 cfs more than the previous peak recharge of 1,060 cfs in March 1935. Aley noted that losing streams have a finite recharge capacity. Once exceeded, their surplus water flows on the surface. Hence, if losing streams were incapable of delivering such a huge quantity of water to Alley Spring, it must be the sinkholes that surround Summersville. He concluded that gullies lace the sinkhole plain and carry water to the sinkholes, like the Horton Davis, which form a “large capacity spring system capable of rapidly transporting subsurface waters.”<sup>30</sup>

South of the confluence of the Current and Jacks Forks rivers, the Eminence Caldera,

fifty isolated knobs of rhyolite, lies at the center of the Ozarks National Scenic Riverways. Much like the Early Cambrian seas, which deposited the Lamotte and Bonneterre Formations between the knobs of the St. Francois Mountains, the Late Cambrian seas seeped between the igneous knobs of the Eminence Caldera and deposited the Potosi and Eminence formations on the valley floors and the Gasconade and Roubidoux formations above. The Current flows past or threads between the knobs: Jerktail, Coot, Wildcat, Williams Mountains, and various unnamed knobs. It bends to the south at Owls Bend and flows south, touching the eastern edge of a series of knobs: Mill Mountain, Thorny Mountain, Stegall Mountain, and more unnamed knobs.

The geological maps of the Eminence Caldera, particularly the Stegall Mountain map, show that pockets of Cambrian sedimentary rocks are scattered between the knobs. The Late Cambrian seas flooded in, deposited the Potosi, Eminence, Gasconade, and Roubidoux formations, and buried the knobs. The streams, be it the Current River, the Jacks Fork, or even

Rocky Creek, meandered across them. When the knobs uplifted, the streams maintained their courses and simply eroded canyons into the saddles between the knobs and removed the sedimentary rocks clear down to rhyolite, forming shut-ins. Or possibly, the streams eroded headward, encountered a knob, found a weak place in the volcanic rock, and carved a narrow canyon, a shut-in, through it. While Rocky Falls looks more like a waterfall than a classic shut-in like Johnson’s Shut-in in Reynolds County, the creek wore down the Eminence and Gasconade formations between Buzzard and Mill mountains to form a unique shut-in.<sup>31</sup>



**Alley Spring**



**Alley Spring: Horton Davis Sinkhole**

*The Osage called it the "Spring of the Summer Sky,"*  
**for its deep blue color...**

**Rocky Falls  
Shut-in**



Plum Spring in the Peck Ranch Conservation Area draws its water from Upper Sycamore Creek north of Winona. The spring overflows into Mill Creek, where water falls into the underground system again and shows up in Mill Spring outside the refuge. Upper Sycamore also delivers water to Mill Spring, and Upper Sycamore, Plum Spring, and Mill Creek Spring all deliver water to Big Spring. Two traces established this complex scenario.

On August 1, 1984, Tom Aley and Everett Chaney cleared away a beaver dam that plugged a culvert on Mill Creek in the Peck Ranch refuge and increased its flow from 5 to 55 gallons per minute. Next, they poured in six pounds of dye and set their packets in Pike, House, and Mill creeks as well as Mill and Big Springs. About a half-mile upstream of their injection site, Plum Spring supplied the surface water for the creek at the rate of 1.5 cubic feet per second. Aley and Chaney had no results by August 6, but by the 22nd they had

strongly positive results at Mill Spring, 4.5 miles away and at Big Spring 12.4 miles away, straight-line travel. They concluded that Big Spring and Mill Creek Spring share a recharge area.<sup>32</sup>

The following March 19, Chaney injected dye into a losing section of Upper Sycamore Creek north of Winona. He placed packets in Mill Creek, Big, Plum Springs, and Mill Creek upstream of Mill Creek Spring. For the first week, his results proved negative. He continued testing. When he recovered packets from Mill Spring, 12.4 miles away, and Big Spring, 19.4 miles away, three week later, his results were moderately positive. His results from Plum Spring, 7.7 miles from Upper Sycamore Creek, were very weakly positive.

When Aley and Chaney examined the flow records of Mill Creek Spring, they learned that on November 20, 1942, flow at the spring dropped to zero when Big Spring was flowing at 594 cubic feet per second. When they received the results of the 1985 trace, they concluded that Big Spring is pirating water from its shared recharge area with Mill Creek Spring. That a small amount of dye showed up in Plum Creek in 1985 only adds to the complexity of the underground drainage system of the Big Spring recharge area.

The Osage called it the "Spring of the Summer Sky," for its deep blue color, a product of its depth and the load of dissolved limestone and dolomite carried through its underground channels. The spring, emerging from under

a bluff of Eminence Dolomite, looks so still, but its spring brook rushes 90 million gallons of water a day a quarter mile to the Current River.

Blue Spring draws its water from Logan Creek, a losing tributary of the Black River. Once water disappears into the sinks of the creek, it must pass under the divide between the Black River and Current River watersheds. It discharges through Blue Spring at an annual flow of 140 cubic feet per second. Using the rule of thumb of one mile to one cubic foot of discharge gives the spring a 140-square-mile recharge area. Divers have probed its depth to 256 feet.

Tom Aley started work on the Hurricane Creek watershed, expecting its losing sections to deliver water to Greer Spring, a tributary of the Eleven Point River. It didn't. He started looking for the "missing water." When he conducted his Blowing Spring trace in the bed of Hurricane Creek in 1968, the "missing water" spilled into the subterranean system, crossed under the drainage divide between the Eleven Point and the Current rivers, and emerged from Big Spring. Of the 34 traces Aley ran during the Ozark National Scenic River project, 13 wound up in Big Spring, two in Greer Spring.

Missouri's interest in Big Spring started with Thomas Jacob Rodhouse's 1912 study of the flow of the Current River above and below the spring, which proved it a tributary of the river. In 1923, the state ordered a survey of water resources that might be used to

generate power. Four years later hydraulic engineer Henry Claus Beckman issued a report that concluded that Welch, Blue, and Big springs deliver enough water to the Current to maintain a uniform flow. He determined that given good dam sites, south of its confluence with the Jacks Fork, the Current could be harnessed for waterpower.<sup>33</sup>

In 1924 Missouri made Big Spring its first state park. Twenty years later, Beckman and geologist Norman Shreve Hinchey published *Large Springs of Missouri*, a guide to state parks centered around springs, directed to tourists, scientists, educators, and residents who draw their water from springs. They provided readers with an understanding of the underground drainage systems that feed water to the springs.<sup>34</sup>

The 1962 McIntire-Stennis Act funded the Watershed Barometer Study within the U.S. Forest Service. Thomas Aley's Hurricane Creek Barometer study provided a template for the study and management of karst landscapes. Aley began his work on the karst landscape of the Current River four years later. After he completed the study in 1975, Aley went on to trace the recharge areas of the major springs along the Current River, a study he and Catherine Aley completed in 1987 for the National Park Service.

When, in 1983, USX, formerly U.S. Steel Corp, and Amax Exploration applied to the U.S. Forest Service for permission to explore for lead deposits in the Big Spring recharge area, the Aleys noted in their 1987 study

that the hydrology of the Hurricane Creek watershed was too complex to allow lead mining to go forward. In the following years the USX proposal set off an explosion of research into the landscape of the Ozark National Scenic Riverways.

Between 1995 and 2001 geologists mapped the karst landscape of the Current River Hills. The project provided a geologic inventory of Ozark National Scenic Riverways, a geology-based park. In 1998, geologists mapped out land use in Current River Hills: what is forested, what is open, what is cultivated, and what is urban. Collaborators with the MDC, the University of Missouri Department of Forestry, the U.S. Geological Survey, the National Park Service, and Nature



Mill and Big Springs: Plum Spring-Peck Ranch Conservation Area

Blue Spring



Big Spring  
Boil

Serve mapped the vegetative communities in the Current River Hills, which provided the model for mapping the rest of the state. The work culminated in the 2002 publication of the *Atlas of Missouri Ecosystems*. In 2009 geologists turned to Thomas and Catherine Aley's 1987 *Groundwater Study of the Ozark National Scenic Riverways* to investigate the geohydrologic and landscape characteristics of the recharge areas of major springs that feed the Current and Jacks Fork.

This article would not have been possible without the help of Thomas Aley with the Ozark Underground Laboratory, who answered any questions I asked; Dena Mattesen with the Ozark National Scenic River, who arranged for Jennifer Swab's photographs of Pulltite Spring; Mike Gossett of the Ozark National Scenic River, who provided me with copies of Aley's *Groundwater Study of the Ozark National Scenic Riverways*; and photographers Scott House

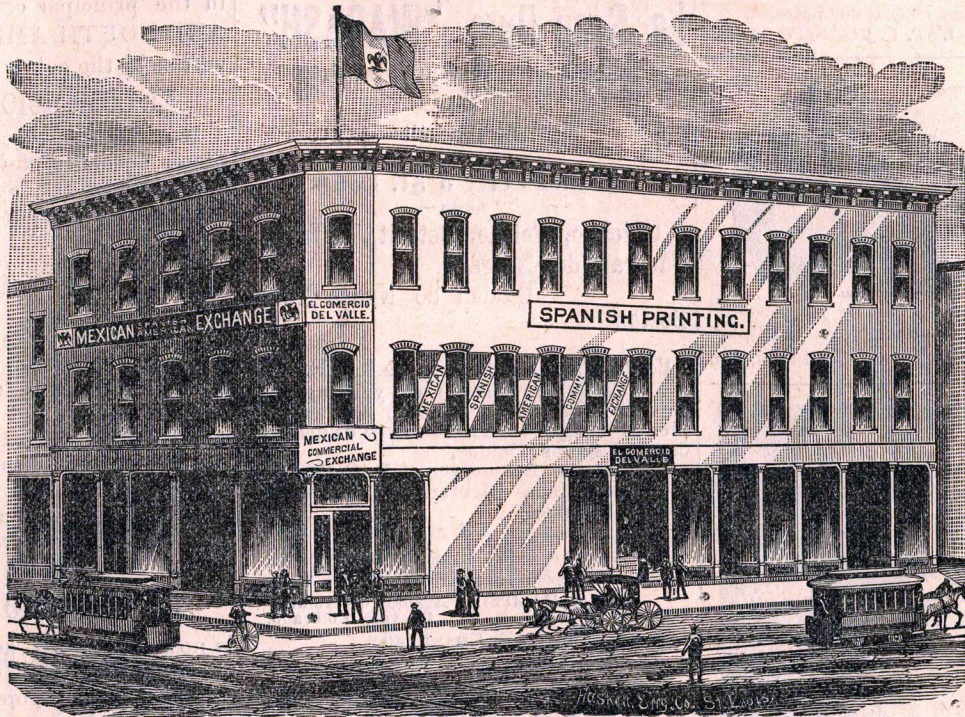
and Joyce Hoffmaster of the Cave Research Foundation.

Finally, geologists are a generous lot. Jerry Vineyard was no exception. After I started researching and writing this series, Jerry answered my questions and allowed me to use the graphic of Devils Well from his 1982 book *Springs of Missouri*, written with Gerald L. Feder. This article is dedicated to his memory.

## ENDNOTES

- <sup>1</sup> Anne Elizabeth Keller, "Hydrologic and Dye Trace Study of Welch Spring, Missouri," A Master's Thesis in Geology and Geophysics, University of Missouri-Rolla, 2000, 72.
- <sup>2</sup> Henry Rowe Schoolcraft, *Scenes and Adventures in the Semi-Alpine Region of the Ozark Mountains of Missouri and Arkansas* (Philadelphia: Lippincott, Grambo & Co., 1853), 56, 223.
- <sup>3</sup> Josiah Bridges, *Geology of the Eminence and Cardareva Quadrangles* (Rolla: Missouri Bureau of Geology and Mines, 1930), 53-54; Charles G. Spencer, *Roadside Geology of Missouri* (Missoula, Mont.: Mountain Press Publishing Company, 2011), 140-41; Timothy A. Nigh and Walter A. Schroeder, *Atlas of Missouri Ecoregions* (Jefferson City: Missouri Department of Conservation, 2002), 127-28, 160-65, 168-69, 172-73.
- <sup>4</sup> Kenneth Chilman, David Foster, and Thomas Aley, "River Management at Ozark National Scenic Riverways," in William Lee Halverson and Gary E. Davis, eds., *Science and Ecosystem Management in National Parks* (Tucson: University of Arizona Press, 1996), 303-35.
- <sup>5</sup> Email, Tom Aley, April 7, 2017.
- <sup>6</sup> Email, Tom Aley, June 6, 2017.
- <sup>7</sup> Thomas Aley and Catherine Aley, *Groundwater Study, Ozark National Scenic Riverways*, Vol. 1, Text, Prepared for the National Park Service under Contract 6000-4-0083, Protem, Missouri: Ozark Underground Laboratory, 1987, 4-37; Don E. Miller and James E. Vandike, *Groundwater Resources of Missouri* (Rolla: Missouri Department of Natural Resources, 1997), 71.
- <sup>8</sup> James C. Maxwell, *Water Resources of the Current River Basin Missouri* (Rolla: Water Resources Research Center, University of Missouri, 1972), 5-1-3.
- <sup>9</sup> Aley and Aley, 3-26-7, 4-33-4; David Weary, *Geological Map of the Montauk Quadrangle, Dent, Texas, and Shannon Counties, Missouri* (U.S. Geological Survey, 2015).
- <sup>10</sup> Thomas Aley, "Predictive Hydrologic Model for Evaluating the Effects of Land Use and Management on the Quantity and Quality of Water from Ozark Springs," *Quarterly Journal of the Missouri Speleological Survey* (1978), 141-53; Bridge, *Geology of the Eminence and Cardareva Quadrangles*, 40.
- <sup>11</sup> Missouri Department of Natural Resources, GeoSTRAT, Karst, Missouri Dye Traces Paths, A KMZ file that works with Google Earth to locate the sources of springs through dye traces, Vandike, 1987.
- <sup>12</sup> Keller, "Hydrologic and Dye Trace Study of Welch Spring, Missouri," 73-6, 126-7; Missouri Department of Natural Resources, GeoSTRAT, Karst, Missouri Dye Traces Paths, Keller, 1999.
- <sup>13</sup> Nigh and Schroeder, *Atlas of Missouri Ecoregions*, 108, 165.
- <sup>14</sup> Aley and Aley, 4-33-5.
- <sup>15</sup> Keller, "Hydrologic and Dye Trace Study of Welch Spring, Missouri," 76, 79, 87.
- <sup>16</sup> Aley and Aley, 3-35, 3-49-50, 4-33-4.
- <sup>17</sup> Aley and Aley, 3-30, 3-35; Keller, "Hydrologic and Dye Trace Study of Welch Spring, Missouri," 79, 87.
- <sup>18</sup> Aley and Aley, 3-56-60, 4-27.
- <sup>19</sup> Tom Ulenbrock, "Ozarks Tract Sold to Conservationists," *St. Louis Post-Dispatch*, December 19, 1991, 01A; "Conservation Areas Near Current River Get New Names," *St. Louis Post-Dispatch*, December 21, 1994, 5.
- <sup>20</sup> Aley and Aley, 3-34, 3-60, 4-27-30.
- <sup>21</sup> Aley and Aley, 3-60-2.
- <sup>22</sup> Aley and Aley, 3-26, 4-20-1.
- <sup>23</sup> Jerry D. Vineyard and Gerald L. Feder, *Springs of Missouri* (Jefferson City: Missouri Geological Survey and Water Resources, 1982), 85-86; Steve Kohler and Oliver A. Schuchard, *Two Ozark Rivers* (Columbia: University of Missouri Press, 1996), 65; Susan Flader, *Exploring Missouri's Legacy: State Parks and Historic Sites* (Columbia: University of Missouri Press, 1992), 5; Art Homer, *The Drown't Boy: An Ozark Tale* (Columbia: University of Missouri Press, 1994), 36; Douglas N. Mugel, Joseph M. Richards, and John G. Schumacher, *Geohydrologic Investigations and Landscape Characteristics of Areas Contributing Water to Springs, the Current River, and Jacks Fork, Ozark National Scenic Riverways, Missouri* (U.S. Geological Survey, Scientific Investigations Report 2009-5138), 6, 42, 50.
- <sup>24</sup> Aley and Aley, 3-27, 4-24.
- <sup>25</sup> Aley and Aley, 4-14-18.
- <sup>26</sup> Robert B. Jacobson and Alexander T. Primm, *Historical Land-Use Changes and Potential Effects on Stream Disturbance in the Ozark Plateaus, Missouri* (U.S. Geological Survey Water-Supply Paper, 2484, 1993), 56.
- <sup>27</sup> David L. Vana-Miller, *Water Resources Foundation Report, Ozark National Scenic Riverways* (Fort Collins, Colo.: National Park Service, Water Resources Division, April 2007), 36.
- <sup>28</sup> Aley and Aley, 4-14-18.
- <sup>29</sup> Bridge, *Geology of the Eminence and Cardareva Quadrangles*, 41.
- <sup>30</sup> Aley and Aley, 4-14-18.
- <sup>31</sup> Thomas R. Beveridge, *Geological Wonders and Curiosities of Missouri* (Rolla: Missouri Department of Natural Resources, 1990), 39; R. W. Harris, R. C. Orndorff, and D. J. Weary, *Geology of the Stegall Mountain 7.5 quadrangle, Shannon and Carter Counties, South-Central Missouri* (U.S. Geological Survey, Geological Investigations Series, 2002); Ozark Trails Association, Current River Section, <http://www.ozarktrail.com/current-river-2/>.
- <sup>32</sup> Aley and Aley, 4-6-7, 3-39-41, 3-46-7.
- <sup>33</sup> Henry Claus Beckman, *Water Resources of Missouri, 1857-1926* (Rolla: Missouri Bureau of Geology and Mines, 1927), 307, 343, 348.
- <sup>34</sup> Henry Claus Beckman and Norman Shreve Hinchey, *The Large Springs of Missouri* (Rolla: Missouri Geological Survey and Water Resources, 1944), 24-36, 54.

# MEXICAN & SPANISH - AMERICAN COMMERCIAL EXCHANGE



**VISITORS To ST. LOUIS. Are  
INVITED TO VISIT THIS EXCHANGE,  
SOUTHEAST CORNER EIGHTH AND OLIVE STREETS,  
St. Louis, Mo., U. S. A.**

**Those who wish to extend their trade between the U. S., }  
Mexico and Spanish America should send for prospectus. } { JOHN F. CAHILL  
Manager.**

**Mexican Mercantile Exchange—8th and Olive Streets. St. Louis** faced the daunting task of rebuilding physically, socially, and economically in the years following the Civil War. A number of civic and economic leaders in St. Louis believed that the answer to economic recovery lay in trade with our southern neighbors in Mexico and Central America. The timing for this was right, as the Mexican regime of Porfirio Diaz was committed to a program of "modernization" that actively encouraged investment from the United States. The goal of trade in America was led by a man named John F. Cahill, who ran a mercantile drug business and had lived and worked in Cuba and Mexico. Cahill established a bilingual newspaper in St. Louis and served as the city's first Mexican Consul.<sup>A</sup> In 1883, he established a Mexican and Spanish American Mercantile Exchange. The exchange building was three stories tall and contained the offices of the exchange itself as well as a Spanish printing office.<sup>B</sup> The exchange, along with the city's other efforts, were hugely successful, making St. Louis the leader in commerce with Mexico in the late nineteenth century with \$7.5 million in trade.<sup>C</sup> (Image: Missouri Historical Society)



# A GATEWAY TO THE EAST: An Exploration of St. Louis' Mexican History Through the Built Environment

by DANIEL GONZALES

In the early twentieth century, Mexican immigrants were attracted to the industrial Midwest as it provided ample job opportunities and lacked competition from previous generations of Mexican immigrants. Since that time, the population of Mexicans and Mexican Americans in the Midwest has continued to grow and diversify. Unfortunately, the long history of Mexican people in the Midwest has been tragically understudied.<sup>1</sup>

This is particularly apparent in the St. Louis region. Contributing to this lack of attention may be United States Census records, which show only a small presence of Mexicans in the Gateway City and surrounding areas. Census reporting, however, seems to have undervalued the population's size and the significance of Mexican immigration to the region.<sup>2</sup> Surveys done by community organizations, regional institutions, and mutual aid societies show that the population in the early twentieth century, as Mexicans began to enter the Midwest in significant numbers, was much larger than reported.<sup>3</sup>

---

“Mexico has been represented for several years among the students of Washington University, St. Louis University, and Christian Brothers’ College . . . every time a young Mexican returns home he sends back two or three others to take his place in the St. Louis school.”

*St. Louis Republic*, 1893

Evidence also shows that Mexicans in St. Louis were distinct from other regional populations in several key ways, such as their pattern of settlement socio-economic makeup. In addition, St. Louis Mexicans contributed significantly to the region’s economic development by facilitating the development of strong trading ties with their country of origin. Lastly, the city often served as a vital entry point for Mexican immigrants into the larger region as employers in cities like Chicago, Detroit, and St. Paul used it as a distribution center for Mexican labor.<sup>4</sup> For Mexicans looking for work and new opportunity in the Midwest, St. Louis was often a gateway, not to the west as it has traditionally been described, but to the east.

The first major wave of Mexican immigration to St. Louis began around 1910, but small numbers of Mexicans were living in St. Louis in the nineteenth century, as a robust trading relationship developed between the two regions.<sup>5</sup> That trade, which amounted to more than \$7 million annually by the 1890s, was an important part of the St. Louis

region’s economic growth in the post-Civil War period.<sup>6</sup> The trade was driven by a number of institutions in St. Louis, including a Spanish-language newspaper called *El Comercio del Valle* established in 1876, the Mexican Consulate established in 1878, and the Mexican Mercantile Exchange established in 1883. All of these institutions were spearheaded by John F. Cahill. A native of Virginia, Cahill had moved to Cuba in 1864, where he established a retail drug business. He left Cuba around 1871 after his property was confiscated in the wake of a rebellion against Spanish rule of the island. Arriving in St. Louis the following year, he opened a drug store at 6th and Chestnut streets and became involved in local commercial networks.<sup>7</sup>

The trade that Cahill fostered helped bring an increasing, if still modest, number of Mexican immigrants to the St. Louis region. It is estimated that there were roughly 100 Mexicans living in St. Louis in 1893. In that same year, the *St. Louis Republic* reported that “Mexico has been represented for





**Boxcar Community in North St. Louis. In the neighborhood of Baden on the extreme northern edge of St. Louis, a group of Mexican immigrants established a community built out of boxcars and other makeshift structures.** The community spread out along the railroad line that ran parallel to the Mississippi River.<sup>9</sup> The families living there received mail through a nearby store and used a central fire hydrant as their water source.<sup>5</sup> The Zuñigas, Agustin and Jesus, were one family living in this community. Their son, Agustin Jr., remembers it as a happy time. He said his family struggled financially, but explained, "when you are a poor family you don't know any different. You are just happy to have a roof over your head, and your family and friends."<sup>6</sup> (Image: Missouri Historical Society)



**John F. Cahill / El Comercio Del Valle.** John F. Cahill moved to St. Louis from Cuba in 1871, and published *El Comercio Del Valle* (Commerce of the Valley) starting about five years later until 1890. He distributed his paper, published in both Spanish and English, both locally and in Mexico. In St. Louis, *La Revista Mexicana* (The Mexican Magazine) competed with the paper, and *La Union de America* (The Union of America) appeared in the 1888 City Directory. Note the engraving of the St. Louis and Illinois (or Eads) Bridge on the masthead—a symbol of progress in St. Louis in the last quarter of the nineteenth century. (Images: Missouri Historical Society)



Several of the early Mexican residents in the St. Louis region were members of the Mexican Liberal Party. These men were radical dissidents who opposed President Porfirio Diaz, the dictator of Mexico.



**Our Lady of Covadonga—7100 Virginia Avenue. Beginning in 1912, a “Spanish Mission” was established responding to the influx of Spanish immigrants as well as refugees from Mexico after the Mexican Revolution.**<sup>6</sup> By 1915, the “Spanish Mission” had become well enough established to acquire its own building at the intersection of Virginia and Blow.<sup>11</sup> The building had originally been constructed around 1890 for use by the Methodist Church of Carondelet.<sup>1</sup> Once occupied by the “Spanish Mission,” it became known as Our Lady of Covadonga, in honor of a legend attributing the Spanish defeat of Muslim invaders in 722 at the Battle of Covadonga to the Virgin Mary. The first priests of the congregation were Father Jose Pico Jover and Father Jesus Ceja. Ordained in Mexico, both men arrived in St. Louis in 1914.<sup>7</sup> The parish was roughly 30 percent Mexican, with most remaining congregants coming from the neighboring Spanish colony.<sup>8</sup> The church closed in 1920, and the building was purchased by the Rosati Council of the Knights of Columbus as a Club House. At the urging of community members, the Rosati Council opened the building to be used as a “Spanish Mission” once again. This time the church continued until 1932. During that time there were a total of 183 baptisms and 43 weddings. Each year there were roughly 2,000 communions and confessions.<sup>1</sup> (Image: Jeffrey Smith)

several years among the students of Washington University, St. Louis University, and Christian Brothers’ College . . . every time a young Mexican returns home he sends back two or three others to take his place in the St. Louis school.”<sup>8</sup> The influx of students was certainly tied to trade, but it also appears to have been fostered by prominent Mexican citizens in St. Louis. Chief among them was Isabel Sandoval, the daughter of Clito and Amelia Sandoval. The Sandovals were a wealthy family that had taken up residence in St. Louis around 1890. Isabel was successful in using her family’s business and political connections in Mexico to develop a reputation in St. Louis. The growing number of aristocratic Mexicans living and connected through trade to St. Louis continued to grow into the twentieth century.<sup>9</sup> The high level of wealth that was present among the earliest immigrants to St. Louis sets it apart from the foundational populations in other midwestern cities like Chicago and Detroit, whose earliest Mexican immigrants came as economic migrants in the decades following the Mexican Revolution.<sup>10</sup>

Several of the early Mexican residents in the St. Louis region were members of the Mexican Liberal Party. These men were radical dissidents who opposed President Porfirio Diaz, the dictator of Mexico. The group, which gained a great deal of attention in the local and national press, were dubbed the “St. Louis Junta.”<sup>11</sup> The ideas they promoted would inspire leaders like Francisco Madero, who would eventually lead the revolution that would overthrow the Diaz regime, beginning the Mexican Revolution.<sup>12</sup>

When the Mexican Revolution began in 1910, the trade that had developed between St. Louis and Mexico flatlined. The number of Mexicans coming to the city only accelerated, however. This attraction of refugees led newspapers from North Carolina to Oregon to report in 1913 that “St. Louis is today being called the chief exile for wealthy Mexicans. . . .”<sup>13</sup> These early migrants helped establish a Spanish-language mission, called Our Lady of Covadonga, in the Carondelet area of South St. Louis.<sup>14</sup>

By the late 1910s and into the 1920s, immigration from Mexico accelerated as refugees were joined by economic migrants. These immigrants were increasingly attracted to the industrial Midwest as World War I and changes to immigration law in 1917 and 1924 led to a labor shortage in the region.<sup>15</sup>

During this period St. Louis, perhaps because of its existing Mexican community or its position along the rail line, became an important distribution center for Mexican workers to other areas of the Midwest and beyond.<sup>16</sup> The distribution of workers out of St. Louis was managed by a handful of employment agencies. The two largest seem to have been the Griswold Employment Agency and the Model Employment (sometimes Labor) Agency, both located around Market Street between 8th and 11th. In 1927, the Model Employment Agency alone recruited ten thousand Mexican laborers to and through St. Louis. These agencies would advertise for and recruit workers from Texas and northern Mexico and bring them to St. Louis aboard trains and later on busses.<sup>17</sup>



**In the 1910s and 1920s, a significant Mexican community developed just across the Mississippi River from St. Louis.** One of the largest concentrations of Mexican immigrants could be found in the Lincoln Place neighborhood of Granite City, Illinois. Here, many Mexican people found work with the nearby steel mill. In 1926, the Mexican community in Granite City organized the **Mexican Honorary Commission**, a mutual aid and heritage society. The organization provided aid to destitute members of the community and organized a number of cultural events, including fiestas that were often attended by local residents, both Mexican and not.<sup>11</sup> Eventually, the organization was able to purchase a building at 1801 Spruce St., which had previously served as the Hungarian Home, a center for immigrants from Hungary. The organization continues to operate from that location today. (Image: Jeffrey Smith)

While for many Mexican immigrants St. Louis was only a temporary stop on the way to their intended destination, by the 1910s and 1920s the permanent population of Mexicans and Mexican Americans living in the region began to grow significantly.<sup>18</sup>

Unlike in other Midwestern enclaves, St. Louis Mexicans never developed a significant population center. Instead, they settled in a disparate pattern across the region with most of the population in St. Louis City and a few communities in the Metro East and St. Louis County. This settlement was possible because of the availability of affordable housing near places of employment, and motivated by the reality that immigrants were attracted to St. Louis to work in a number of different types of employment, not concentrated in just one.<sup>19</sup>

It is difficult to accurately estimate how large the Mexican

community grew in this period. Census records are unreliable, and other surveys vary widely. For example, estimates from the Catholic Church and the International Institute, who surveyed only the City of St. Louis, put the numbers around 2,000-3,000.<sup>20</sup> However, the *Globe-Democrat* reported in 1934 that the population in the 1920s had been as large as 15,000 across the region.<sup>21</sup>

Unfortunately, as the influx of Mexicans to St. Louis reached its zenith, the Great Depression decimated the nation's economy. Mexican immigrants were hit particularly hard. In St. Louis, Mexicans faced discrimination in hiring and reported harassment by police.<sup>22</sup> Severo Guerrero explained his experience: "We had an awful time with the citizenry and also with the cops. . . . Wherever the cops saw two or three Mexicans together he came in here and he didn't come talking like they do now saying 'will you do this sir?'

They came in there with [night] sticks poking you in the stomach, the ribs, anywhere with big authority. Abusing their authority."<sup>23</sup> Additionally, the Mexican Consulate in St. Louis explained in a 1932 report, "things are worse this year than last, and jobs are hard to find. Plus the employers want to hire Americans and Europeans before Mexicans. . . . taking into consideration only men work, it can be calculated that 40-50% are unemployed."<sup>24</sup> As a result of these realities, many took the opportunity to repatriate to Mexico, a move encouraged by government policies.<sup>25</sup> The community did not begin to rebuild until after World War II.

In 1943, dealing with a wartime labor shortage, the federal government established the "Bracero" Guest Worker Program.<sup>26</sup> This program, which operated until 1964, brought significant numbers of Mexican immigrants to the area to work in agriculture in the west St. Louis



In 1943,  
dealing with  
a wartime labor  
shortage,  
the federal  
government  
established the  
“Bracero”  
Guest Worker  
Program.

**Mexican workers in the Midwest were often attracted by the region’s booming industrial sector.**<sup>N</sup> In St. Louis Mexican workers found opportunities with a number of employers. In a study done on St. Louis City’s Mexican community by the International Institute in 1929, only one company is mentioned by name as a large employer of Mexican workers. That company, **American Car and Foundry**, seen in these two views, was a manufacturer of streetcars.<sup>O</sup> One oral tradition about early Mexican immigrants to St. Louis explains that for many the words “American Car” were among the first they learned in the English language.<sup>P</sup> (Images: Missouri Historical Society)



Several Mexican musicians developed a following in St. Louis during the 1940s, 1950s, and 1960s. One of them was the Santa Cruz Orchestra, a Mexican jam band made up of brothers from the Santa Cruz family. According to one of the members, Enrique (Henry) Santa Cruz, one of the primary venues for Mexican music was the Ratskeller of the **German House**. He reported that he played there for eight-nine years in the 1950s and 1960s.<sup>9</sup> Additionally, for a portion of the period, a Mexican restaurant and bar operated in the basement of the venue.<sup>8</sup> (Image: Missouri Historical Society)

As Mexican immigrants continued to arrive, earlier waves of Mexican immigrants were putting down deeper roots, and a generation of St. Louis-born Mexican Americans began to develop.



communities of Chesterfield, Manchester, and Centaur (now part of Wildwood).<sup>27</sup> Employers including Hellwig Brothers and Raumbach Farms employed not only Bracero guest workers, but also Mexican American migrant workers. Estollio Abella worked for Hellwig's Farm for more than a decade. He began when he was nine years old, putting in 12–14 hours a day. Estollio remembered his experience, saying, “the housing was kind of poor, the Mexicans didn't want to stay there all year. I had seen how the people looked when they reached 50 years old, over worked, run down, and spent.”<sup>28</sup> Despite these challenges, some found better opportunities and made St. Louis and other areas of the Midwest their permanent home. Abella found opportunities in Indiana and Ohio.<sup>29</sup>

As Mexican immigrants continued to arrive, earlier waves of Mexican immigrants were putting down deeper roots, and a generation of St. Louis–born Mexican Americans began to develop. Mexican culture became much more visible to the broader community at this time. Clubs, musical groups, and restaurants began to be established as the Mexican community sought to share their heritage through music, dance, and food.<sup>30</sup>

In the early 1950s, the community was again set back by a program of mass deportation dubbed “Operation Wetback.” The program targeted undocumented immigrants, but it led to the expulsion of a large number of legal residents and citizens.<sup>31</sup> The government estimated that they had rounded up more than a million people nationwide, including some from the St. Louis region.<sup>32</sup>

The growth of the population continued, however, as Mexican immigrants began to arrive at a never-before-seen rate in the second half of the 20th century and into the early 21st century. Today, Mexicans represent the largest portion of the region's foreign-born population.<sup>33</sup> This still-growing community has become a vital part of the area, establishing businesses and continuing to broaden the cultural fabric of St. Louis and surrounding areas.

Despite the more than 100-year history of Mexicans in the region, identifying historic sites for the community in the built environment is challenging. One reason is the way that early Mexican immigrants settled. As discussed above, Mexicans in St. Louis did not concentrate on a particular neighborhood; instead, they found affordable housing near their places of work. Mexican communities also were often displaced, making it hard to establish long-lasting institutions.

Perhaps because of these challenges, history and historic preservation advocates have not previously sought to identify and commemorate sites of relevance to Mexicans and Mexican Americans in St. Louis. While understandable, this is certainly not satisfactory as Latinos, with Mexicans as the majority, continue to grow as a percentage of the region's population.

## Want to read this article in Spanish?

We'd be happy to send it to you!  
You can find it on our website:

[www.lindenwood.edu/confluence](http://www.lindenwood.edu/confluence)

Click the Spring/Summer 2019 tab, click on the article, scroll down and you'll see a tab for “Spanish Language Version.” Click that, and PDF that you can read, save, and print will appear.

### ¿Quiere leer este artículo en español?

¡Se lo enviaremos encantados! Puede encontrarlo en nuestra página web:

[www.lindenwood.edu/confluence](http://www.lindenwood.edu/confluence)

Haga clic en la pestaña Spring/summer 2019, haga clic en el artículo, desplace el cursor hacia abajo y verá una pestaña que dice “Spanish Language Version.” Haga clic ahí, y aparecerá un PDF que puede leer, guardar o imprimir.

## ARTICLE ENDNOTES

- <sup>1</sup> Juan R. Garcia, *Mexicans in the Midwest: 1900-1932* (Tucson: University of Arizona Press), 2003.
- <sup>2</sup> U.S. Census Bureau, "Foreign Born Population St. Louis City and County, 1930." Social Explorer. Web. July 27, 2015.
- <sup>3</sup> Annual Report of the International Institute, 1925. MS, International Institute of St. Louis Papers, State Historical Society of Missouri Research Center-St. Louis; Executive's Annual Report of the International Institute St. Louis, 1919-1920. TS, International Institute of St. Louis Papers, State Historical Society of Missouri Research Center-St. Louis.
- <sup>4</sup> Dennis Nodín Valdés, *Al Norte: Agricultural Workers in the Great Lakes Region, 1917-1970* (Austin: University of Texas Press, 1991), 11; Manuel Gamio, *Mexican Immigration to the United States* (New York: Arno Press, 1969), 27.
- <sup>5</sup> "The Spanish Language," *Brownsville* (TX) *Daily Herald*, January 5, 1893.
- <sup>6</sup> "Mexican Trade," *St. Louis Post-Dispatch*, February 20, 1895.
- <sup>7</sup> John Francis Cahill. MS, Mexican Commercial Exchange Papers, Missouri History Museum Archives.
- <sup>8</sup> "The Spanish Language."
- <sup>9</sup> "Wants St. Louis to Get Her Share of Mexican Trade." *St. Louis Post-Dispatch*, January 31, 1907; *Memorial Volume of the Diamond Jubilee of St. Louis University 1829-1904*, Saint Louis University, 1905; *Bulletin of Saint Louis University*. Vol. IV. Series 6. Saint Louis: Saint Louis University, 1909.
- <sup>10</sup> Gabriela F. Arredondo, *Mexican Chicago: Race, Identity, and Nation, 1916-1939* (Champaign: University of Illinois Press, 2008), 4-5; Carol McGinnis, *Michigan Genealogy: Sources & Resources* (Genealogical Publishing Company, 2005), 221.
- <sup>11</sup> "The Thrilling History of the St. Louis Junta," *St. Louis Post-Dispatch*, December 16, 1906.
- <sup>12</sup> Philip R. Mueller, "The Mexican Liberals in St. Louis: 1905-1906" (Master's thesis, Southern Illinois University at Carbondale, 1983, 1-50.
- <sup>13</sup> "Exiled Mexicans," *Durham* (N.C.) *Morning Herald*, July 30, 1913.
- <sup>14</sup> Address List for Our Lady of Covadonga Congregation, 1923. MS, Our Lady of Covadonga, Archives of the St. Louis Archdiocese, Saint Louis.
- <sup>15</sup> Juan R. Garcia, *Mexicans in the Midwest: 1900-1932* (Tucson: University of Arizona Press, 2003), 27-28.
- <sup>16</sup> Valdés, *Al Norte*, 11.; Manuel Gamio, *Mexican Immigration to the United States* (New York: Arno Press, 1969), 27.
- <sup>17</sup> Florence W. Eldridge and Elena Torres, The Report of the St. Louis International Institute to the National International Commission on Mexicans in the Five Leading Cities in the United States, 1929. TS, International Institute of St. Louis, State Historical Society of Missouri Research Center-St. Louis.
- <sup>18</sup> *Ibid.*; Annual Report of the International Institute. 1925.
- <sup>19</sup> "HeritageQuest Online." 1920, 1930 Census. Accessed August 14, 2017. <http://www.heritagequest.com/>; Eldridge and Torres, 1929 Report of the St. Louis International Institute.
- <sup>20</sup> Thomas Matischock, C.M.F. to Rev. John J. Glennon, D.D., Archbishop of St. Louis. November 26, 1934, Archives of the St. Louis Archdiocese, St. Louis, Missouri. International Institute Board Meeting Minutes, November 26, 1926. MS, International Institute of St. Louis Papers, State Historical Society of Missouri Research Center-St. Louis.
- <sup>21</sup> Louis La Coss, "Loyal Mexican Expatriates," *St. Louis Globe-Democrat Sunday Magazine*, October 7, 1934.
- <sup>22</sup> T245 Interview with Rodolfo V. Siller and Gonzalo and Severo Guerrero, 1973. MS, Oral History Collection, State Historical Society of Missouri Research Center-St. Louis; Ann Manry Rynearson, *Hiding within the Melting Pot: Mexican Americans in St. Louis, 1980*, 10; Informe proteccion 1932. IV-333-3. Archivo Histórico Genaro Estrada. Acervo Histórico Diplomático. Secretaría de Relaciones Exteriores. 27
- <sup>23</sup> T245 Interview with Siller and Gonzalo and Severo Guerrero, 1973.
- <sup>24</sup> Informe proteccion 1932. IV-333-3. Archivo Histórico Genaro Estrada. Acervo Histórico Diplomático. Secretaría de Relaciones Exteriores. 27
- <sup>25</sup> "Text of the President's Message to Congress," *St. Louis Post-Dispatch*, December 2, 1930; Informe proteccion 1932. IV-333-3. Archivo Histórico Genaro Estrada. Acervo Histórico Diplomático. Secretaría de Relaciones Exteriores. 28; "'Deportation Special' Stops in St. Louis," *St. Louis Post-Dispatch*, March 17, 1935; La Coss, "Loyal Mexican Expatriates."
- <sup>26</sup> "The Bracero Program." UCLA Labor Center, 29-Oct. 2015, [www.labor.ucla.edu/what-we-do/labor-studies/research-tools/the-bracero-program/](http://www.labor.ucla.edu/what-we-do/labor-studies/research-tools/the-bracero-program/).
- <sup>27</sup> "Mexican Farm Labor Treated Worse Than Prisoners of War," 9/24/1954, Newspapers Clippings from Archive of the Archdiocese of St. Louis RG07816
- <sup>28</sup> Estollio Abella, interview with the author, 2016.
- <sup>29</sup> Monty Montez, interview with the author, 2016; "Mexican Farm Labor Treated Worse Than Prisoners of War."
- <sup>30</sup> Rynearson, *Hiding within the Melting Pot*.
- <sup>31</sup> Juan Ramon Garcia, *Operation Wetback: The Mass Deportation of Mexican Undocumented Workers in 1954* (Westport, Conn: Greenwood, 1980).
- <sup>32</sup> Ronald L. Mize and Alicia C. S. Swords, *Consuming Mexican Labor: From the Bracero Program to NAFTA* (Toronto: University of Toronto, 2011); "33 Mexicans Held Here in Roundup of 'Wetbacks'," *St. Louis Globe-Democrat*, February 12, 1952.
- <sup>33</sup> U.S. Census Bureau. "2009-2013 American Community Survey 5-Year Estimates"

## CAPTION ENDNOTES

<sup>A</sup> John Francis Cahill. MS, Mexican Commercial Exchange Papers, Missouri History Museum Archives.

<sup>B</sup> Postcard, Mexican and Spanish American Mercantile Exchange, ND, Mexican Commercial Exchange Papers, Missouri History Museum Archives.

<sup>C</sup> Michael A. Ridge, "The Future Great City of the World Seeks to Fulfill Its Destiny: St. Louis and Mexico, 1878-1911," *Missouri Historical Review* 106, no. 4 (July 2012): 203-4; "Mexican Trade," *St. Louis Post-Dispatch*, February 20, 1895.

<sup>D</sup> International Institute Board Meeting Minutes November 26 1926. MS, International Institute of St. Louis Papers, State Historical Society of Missouri Research Center-St. Louis.

<sup>E</sup> Annual Report of the International Institute, 1919-1920. MS, International Institute of St. Louis Papers, State Historical Society of Missouri Research Center-St. Louis.

<sup>F</sup> Agustin Zuñiga Jr., interview with the author, April 15, 2016.

<sup>G</sup> "Rosati Council's Spanish Mission." Silver Jubilee Rosati Council No. 795 Knights of Columbus Souvenir Program, 1928-1929.

<sup>H</sup> "Spanish Colony Opens Its Church," *St. Louis Republic*, September 17, 1915.

<sup>I</sup> Michael Allen, "Central Carondelet Historic District," National Register of Historic Places Inventory/Nomination Form, Landmarks Association of St. Louis, St. Louis, February 22, 2006.

<sup>J</sup> Jose Pico Jover and Jesus Ceja Personnel File Appointments, 1915-1920. MS, Our Lady of Covadonga, Archives of the St. Louis Archdiocese, Saint Louis.

<sup>K</sup> Address List for Our Lady of Covadonga Congregation, 1923. MS, Our Lady of Covadonga, Archives of the St. Louis Archdiocese.

<sup>L</sup> Alvin J. Baumann, "The Spanish Mission of South St. Louis," *The Mariner*, November 1932, Our Lady of Covadonga, Archives of the St. Louis Archdiocese.

<sup>M</sup> Tresa Ortiz, "Mexican Culture in Lincoln Place," *Madison County Historical Society News* 3 (May 2015): 6.

<sup>N</sup> Garcia, *Mexicans in the Midwest*.

<sup>O</sup> Eldridge and Torres, Report of the St. Louis International Institute, 5; "American Car Company (St. Louis)." American Car Company. April 9, 2006. Accessed April 05, 2016. [http://www.midcontinent.org/rollingstock/builders/american\\_carco.htm](http://www.midcontinent.org/rollingstock/builders/american_carco.htm).

<sup>P</sup> Joan Suarez, interview with the author.

<sup>Q</sup> Henry Santa Cruz, interview with the author, 2016.

<sup>R</sup> Jim Merkel, *Beer, Brats, and Baseball: St. Louis Germans* (St. Louis: Reedy Press, 2012), 67.

New Perspectives

on the

# GREAT FIRE

of  
1849

by BOB MOORE



**On May 17, 1849**, St. Louis was ravaged by a huge fire that burned much of the city's business district. In one of the most dramatic incidents of the fire—and of the history of St. Louis—firemen set gunpowder charges with the intention of blowing up a row of six buildings to create a firebreak to eliminate fuel for the fire and prevent the destruction of the Old Cathedral. Thomas Targee, a captain of one of the volunteer fire companies, entered a building with charges, not knowing that gunpowder had already been placed there. The building exploded when Targee was still inside, killing him and making him a symbol for the sacrifice of St. Louis firefighters over the century and a half since.



The Great Fire, Nathaniel Currier (1850)  
(Image: Missouri Historical Society)

# I knew Phillips Store 4 or 5 years before the fire—I saw it on

The building that exploded around Targee was the Phillips Music Store, located near 2nd and Market streets, a 2½ story former residential structure converted to commercial use, as were many of the buildings in the riverfront area. A large portion of Nathaniel Phillips' stock of sheet music, musical instruments (including several pianos and a harp), and military paraphernalia was lost in the explosion.

Phillips was insured for \$10,000 with the Protection Insurance Company of Hartford, Connecticut, but when he appealed for restitution for

his losses, they refused him, citing several procedural errors he made in providing them with the required information. Phillips took them to court in a case that dragged on for many years. The records of the St. Louis Circuit Court—now under the care of the Missouri State Archives, which is overseeing their restoration and preservation—contain many case files of the period, but few are anywhere near as thick as the file on the Phillips Music Store case. That is because Nathaniel Phillips paid a stenographer to write out longhand notes during the trials. All of the testimony

heard from witnesses was transcribed in longhand.

Today we are used to seeing the transcripts of a trial, because a court reporter takes down every word that is said. In 1850, this was not the case; trials were recorded with the barest descriptions of plaintiff, defendant, motions made by counsel, and verdicts. The lively exchange of human beings and their testimony is sorely lacking from the record, except in the cases of written depositions prepared prior to a trial. So the Phillips Music Store case is exceptional. Interwoven with testimony about the amount of stock that Phillips had in the store at the time of the fire is dialogue regarding the fire itself and the valiant efforts of Phillips and some of his friends to move his stock of merchandise to other locations before the fire arrived.

Initially, Phillips lost his case in the St. Louis Circuit Court in 1850, but on appeal the Missouri Supreme Court overturned the verdict in 1851 and returned the case to the Circuit Court for another trial, which was held in 1853.

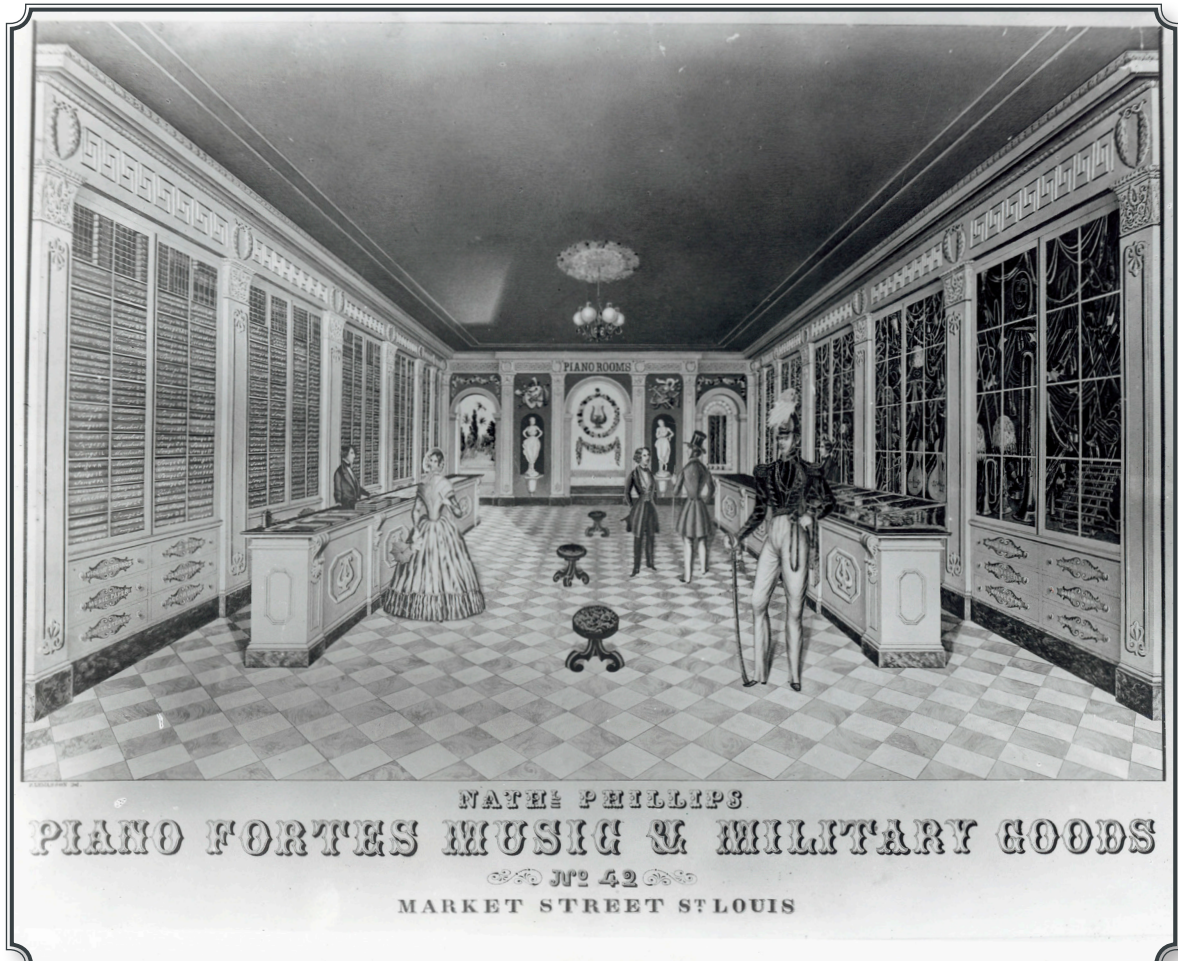
The transcriptions contain fascinating testimony, including that by Thornton Grimsley, a well-known St. Louis saddler, who described his journey to the St. Louis Arsenal to acquire the gunpowder and his delivery of the powder to the vicinity of the Phillips Music Store. Unfortunately, because the testimony was taken down in longhand with pen and ink, it reads more like hurried notes than conversational dialogue; however,



**Walnut Street looking east from 3rd Street, 1848, by Thomas Easterly;** the Old Cathedral is prominent on the left. The Phillips Music Store was located behind the Cathedral on the next street to the north (left), Market Street. (Image: Missouri Historical Society)

# the night of the fire — I was there —

Phillips Music Store as it looked before the fire.  
(Image: Missouri Historical Society)



readers can fill in the blanks to get a flavor for what the testimony was like in its original form. They can also enjoy some dramatic language regarding the fire itself. One other note—the dashes in the testimony, I believe, are areas where the attorneys posed their questions, which were not written down. As a result, when reading these excerpts, readers are only seeing the responses and not the questions. This testimony was given between the dates of May 30–June 4, 1850, during the first trial of the Phillips case in the Old Courthouse.

## Thursday May 30, 1850

### William Catherwood<sup>1</sup> for Pltfs.

I knew Phillips Store<sup>2</sup> 4 or 5 years before the fire—I saw it on the night of the fire—I was there—my own place had burned + I was walking by there about 3 o'clock A.M.—the fire was then at the N.W. corner of Main + Market and not there—Phillips was there trying to get teams [of horses and a wagon]—I told him I thought the fire was coming there in answer to his inquiry + we bustled about + got teams—it was some time before we could

get any—there was great demand for teams—I tried in vain for a team—I lost my goods except \$50 worth + was not insured—I was at the corner of Chesnut + Levee — Phillips secured a team—a 2-horse sand wagon I think—have seen the man since hauling sand—the fire had then got up to Jacoby's nearly opposite<sup>3</sup> + it was very hot as we began loading up—the wind was from the north + blew the fire over—then we began loading—Phillips, myself & Henry & one or two more—in that wagon Music mostly went—some was down on

# The fire began about 10 o'clock—

**The Great Fire**, Henry Lewis (1858)  
(Image: Missouri Historical Society)



the counter & off of the shelves— we worked pretty hard—it was getting hot there—we got a fresh load + I went up with it to his house + while I was there another load came + after getting off that I returned + there was a cry of powder + I kept off—Phillips' house [residence] was on Olive between 8th & 9th—I piled the goods in the door + on the stoop—then came the 2nd load—partly music—I didn't stay to unload—went across to my home + then off downtown—but I couldn't get to the store—there was cry of powder & grimly [sic] was riding about warning every body off—great confusion—notice was given that the buildings were to be blown up—I got down only as far as 3rd Street & there heard the cry—I know of no other goods saved from

that store except the 2 loads— afterwards I saw goods which I had seen before the fire in Phillips' store—from the time I first spoke to Phillips up to the explosion of powder I don't know how long it was—not exceeding 1/2 an hour—I heard some talk of powder before I went up with the load—saw Targee<sup>5</sup> + heard him talking of it—we seized the Music because easiest to get at—I seized the first things I could get hold of—The fire began about 10 o'clock—don't know the hour my store caught—I was at the theatre—went up to the Virginia Hotel<sup>6</sup> with a person—Staid there some time—had no idea of the fire reaching my store—hurried down + my store was on fire—they got out most of my stock of liquors in casks into the street but they burned—

I + Phillips were the first person I think who took anything from his store—this was about 3 I suppose—Phillips I know had a Show case there but I didn't observe it that night—part of the time Phillips was there + part of the time getting another team—I saw no military goods removed—they might have been on the last load—I didn't tell him to save his most valuable goods—I knew the military goods were valuable—

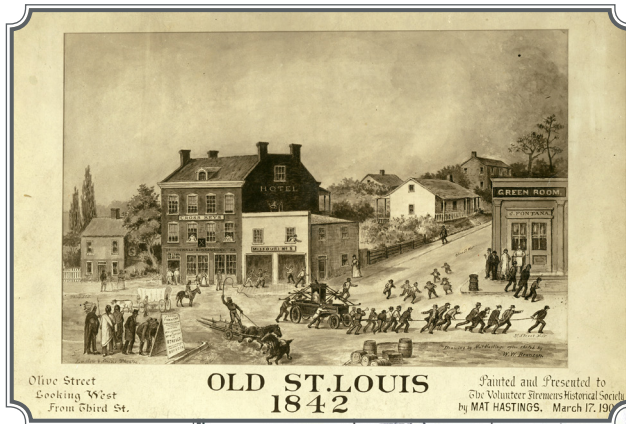
**Friday May 31, 1850**

**Frederick Kretschmar<sup>7</sup> for Pltfs.**

I was in the city at the time of the fire—I was at the fire—my residence was opposite to the Paul House + I had to move my family—I watched as high up as



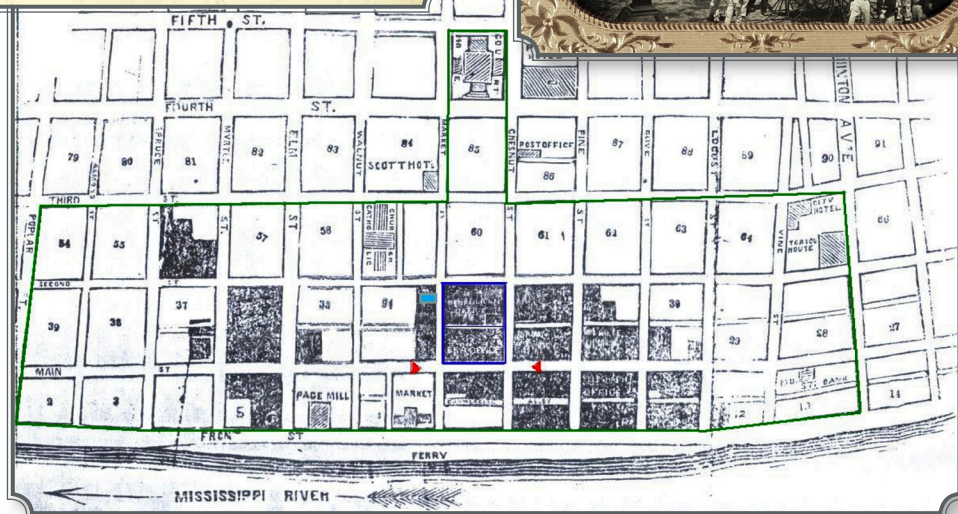
**The Fire House of Missouri Volunteer Fire Company #5,** southwest corner of Olive and 3rd streets in 1842, with the company rushing to a fire. (Image: Missouri Historical Society)



**Daguerriest Thomas Easterly captured the arrival of a new fire engine** with members of Union Fire Company No. 2 in 1852. (Image: Missouri Historical Society)



**Map from the May 22, 1849 Missouri Republican newspaper;** the green line indicates the Arch grounds, the red triangles the Arch. The Phillips Music Store was in Block 34, marked with the light blue square.



Market St. the approaching fire— it came nearer + nearer.

**Cross Examined.**

... I was near the corner and saw the fire raging so that Phillips' house on the opposite me was on fire— then came an explosion of gunpowder but in what building it was I couldn't tell—I began to move my family between 12 + one—I then thought Market St. was in danger—I thought nothing in all that region would be saved—the wind was N.E. + cinders fell—I took my family to Olive St. to Mr. Harts—I think a man ought to have moved his goods between 12 + one—but it was difficult to get help—I couldn't get drays to move my furniture before daybreak—I got carriages for my family—don't

know when it raged worst—when I began moving the Town Hall was on fire long before I could move my family. . . .<sup>8</sup>

**Re-Examined.**

It was near day before I could get vehicles to move my furniture though I hunted very hard. . . .

**James Shoeb<sup>9</sup> for Pltfs.**

Phillips had his store in '49 in Market St. between 2nd and Main—I was a musician by profession + was often there—was there night of fire—about 2 o'clock perhaps—the fire was then in the Hat Store opposite a little below—Phillips was there in front of the store—the door was open—at 1st I didn't stop—I went home and staid 5 or 10

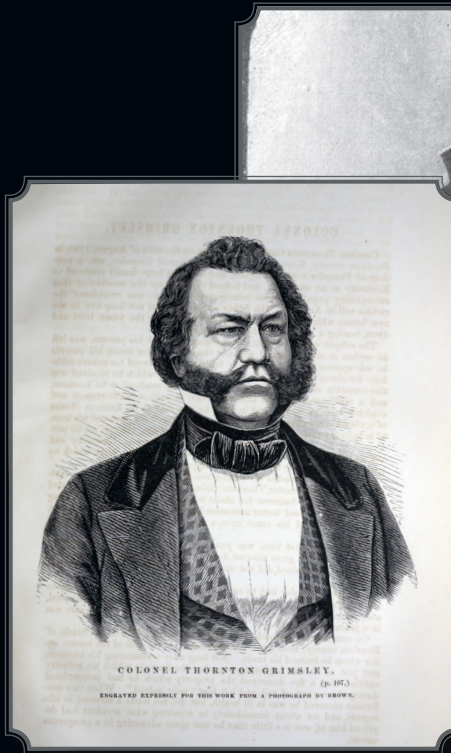
minutes + then came back to assist him to move—he asked me at 1st to help and I said I would soon be back + assist—then when I returned we began to move—one of my brothers was there + a man in his store + a man painting Regalias or printing music—there were no carts then there—we carried the things to a house on market between 2nd + 3rd North Side—I + my brother + the two others helped carry things . . .

**Monday June 3, 1850**

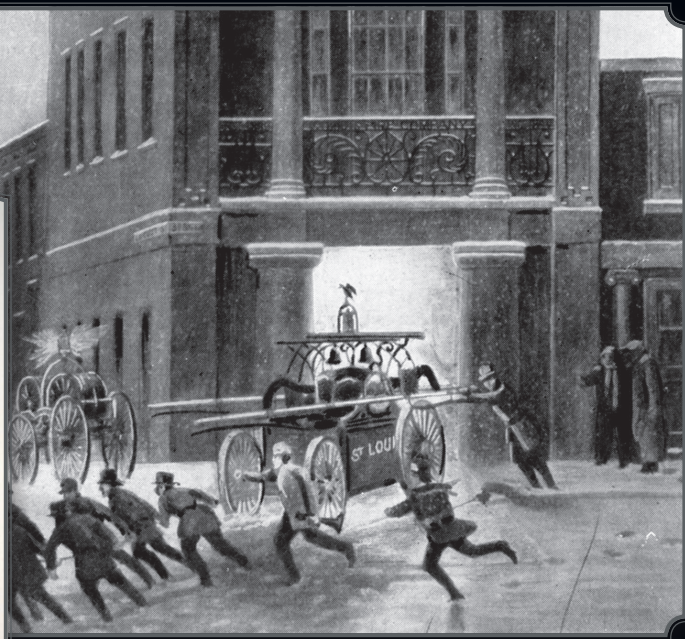
**Thornton Grimsley<sup>10</sup> for Pltfs.**

I was present at Fire of '49—I saw it directly after it struck in from the boats at Locust St—had not reached Olive—about 11 o'clock—I knew Phillips Store

The Fire House of St. Louis Volunteer Fire Company #4, one of the ten volunteer companies that responded to the fire, was located at the southeast corner Locust and 3rd Streets, 1841, by Charles Pond. (Image: Missouri Historical Society)



**Thornton Grimsley.**  
(Image: Gateway Arch National Park)



**I was sent by the Mayor to the Arsenal for Powder to blow up houses to stop the fire — I procured 500 or 600 pounds — 6 casks I think —**

ever since established—6 or 7 years—don't know the number or the block—it was a brick house on south side of Market 2nd door I think east of 2nd St—it was in a row called Mrs. Perry's Row—from Main to 2nd St.—that Row all burnt—don't know when it struck the Row—I was moving my own things from Main between Olive and Chestnut—I was sent by the Mayor to the Arsenal for Powder to blow up houses to stop the fire—I procured 500 or 600 pounds—6 casks I think—perhaps two of 50 pounds each—didn't notice the time of night then—I brought it up 4th Street + kept it out + [of] sparks—brought it down Elm to 2nd & then up to Walnut—Phillips' house was on fire + all the houses below were burnt + the opposite row of houses were on fire—I am satisfied that nearly all the houses below the

ally [*sic*] were burnt down + all on fire—several persons rushed up + I drove them off + sent + reported to the Mayor that the Powder was there—Targee<sup>11</sup> + George Morton<sup>12</sup> had charge of the powder + Morton I think put it into Phillips' Store by order of the Mayor—on the north side it was ordered to be put into Johnsons Do'ench + P's house<sup>13</sup>—an explosion took place in both houses near the same time—all the insides of the houses were blown out + all the ballance [*sic*] was burned up—nothing could be saved after the powder was in there I think—I proclaimed in every possible [way] that everybody should get away—after fixing the train I brought the balance of the powder up to the Court House<sup>14</sup> for safety—I suppose Phillips was doing as everyone else was + trying to save his goods—My house in Main St.<sup>15</sup>

was all in flames when I left for the arsenal—I was insured—I saved all I could—I never saw a large fire before but I thought that it went very fast—the wind was blowing right high from the N.E.—the fire companies were all broke down when the powder was got—we rallied a company 3 times—they were completely disconcerted + there was lack of water I think—there was not the least probability of saving Phillips' Store—if not blown up it would have burnt up—I know the character of Phillips' business but not the amount—I bought all kinds of military appurtenances of him—gilt eagles, stars, laces—costly—75 cts to \$1.50 pr. yard for laces—Some laces are higher than that—the laces I used for Saddle covers—he had customers in officers of the army—Swords + pistols—he also sold laces to



**Heroic portrait of fire captain Thomas Targee** commissioned by the St. Louis Fire Department many years after his death in the Great Fire of 1849. (Image: Missouri Historical Society)

**Thomas Easterly Daguerreotype of the fire damage;** the steeple in this view is the Old Cathedral.  
*(Image: Missouri Historical Society)*



**Panoramic watercolor painting depicts the aftermath of a fire that destroyed much of the St. Louis riverfront in 1849, showing burned out buildings, the wreckage of steamboats and damaged docks.** Although often attributed to Henry Lewis, it is signed lower right "Lemasson." In the testimony, Lemasson was identified as an artist who worked for Phillips painting decorative work and scenes on items Phillips sold, including military items. The St. Louis Mercantile Library, which owns the work, lists both artists. *(Images: St. Louis Mercantile Library Association at the University of Missouri-St. Louis)*



# the wind was quite Strong— as to danger to houses on Market St.

the priests for robes—I was in the Store very often + have been a constant customer for 5 or 6 years—I had been there recently before the fire—as to his stock I don't know—he was often out + constantly missing articles I needed—just before the fire I suppose he had as great a stock as usual—he had just furnished laces +c.

for the general officers burnt in my store.

## Cross Examined.

Don't know when the fire reached Phillips' Store or when it was burned up—my store was a Square + a half distant from Phillips'—the fire was coming in

the east corner of Pine + Levee when I began moving—the wind was quite Strong—as to danger to houses on Market St, I didn't think my house in danger till it got very near—a block of brick lay between the fire and me—there were no iron shutters on any of the stores + no Slate roofs<sup>16</sup>—I don't think I was gone over over



# I didn't save my goods — I lost several thousand dollars — I saved nothing — we moved all our goods to another building called fire proof directly opposite during the fire but that burnt —

[sic] two hours to the Arsenal — Armstrong the Comptroller<sup>17</sup> receipted for it — I was sick or I should have gone at first — many were appealed to but declined — I went down as quick as my horse would carry me — I had never examined Phillips' Stock — merely looked at it — he used to telegraph for goods to come express for me — I needed much — the laces +c. for the equipments for the general officers got by me just before the fire of Phillips were costly — Stars \$5 each — Eagles \$10 — designed for the housings of the saddle — not many were used for each.

## E.N. Parker<sup>18</sup> for Pltfs.

... — I was not at the store during the fire — I saw it shortly after it began — when the first boat floated down stream + between Locust + Olive on Main I had my Store + watched the fire most — I was on the east midway of the block in business — I didn't save

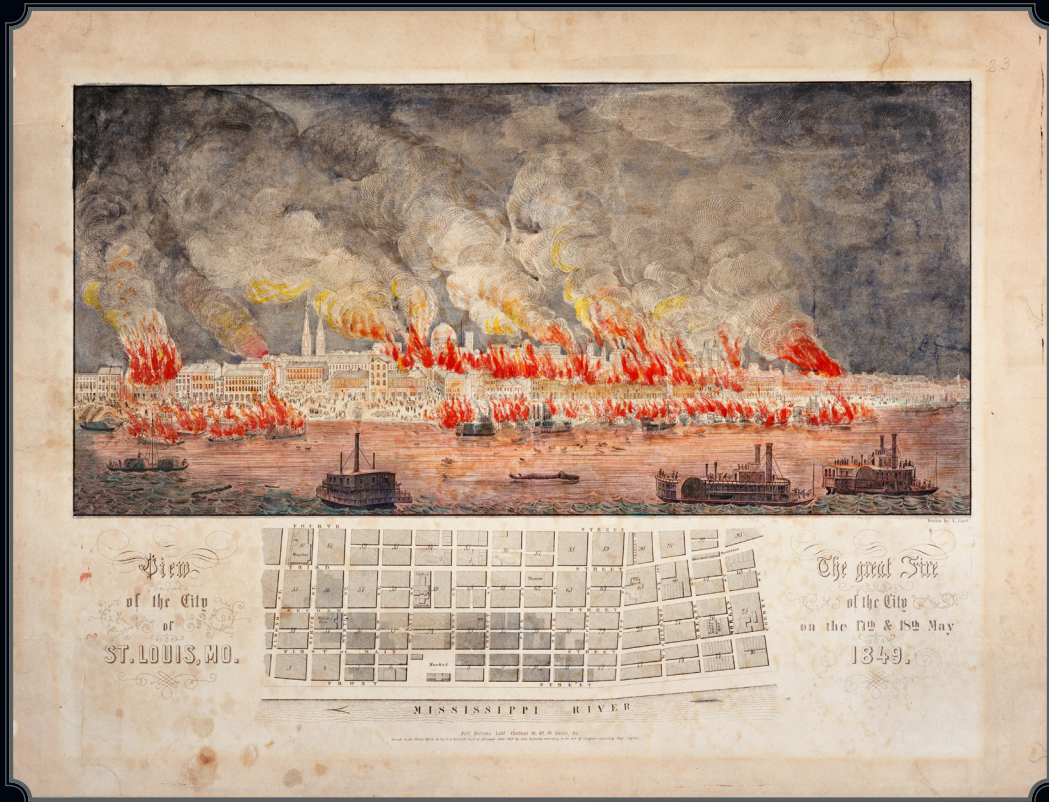
my goods — I lost several thousand dollars — I saved nothing — we moved all our goods to another building called fire proof directly opposite during the fire but that burnt — my goods were furnishing goods — shirts, drawers, +c., +c., -

## **Tuesday June 4, 1850**

### Francis Lammerson<sup>19</sup> for Pltfs.

I knew Phillips' Store for five years before the Fire — I was in it after — every day — I was there at the night of the Fire — don't know the exact hour — the fire was then burning on Main St. — it was at the corner of Market + Main — I lived then below the city + I went up 2nd St. - went into a gate + saw shingles burning + went to the hydrant + got no water + then went into the green house + broke open the door of Phillips Store — I helped Phillips — I took Folios from the Shelves — as soon as a wagon arrived I loaded it with the Folios — 3 or 4 were there

working — they were Shoab — Werner + Catherwood — ... we continued working until the house blew up — I was in the next Ally [sic] behind the Cathedral — they brought powder — I saw it — + people got frightened + stopped work — the powder was brought in at the back door — no one but myself was in at the time — I went once more up stairs — I heard Appolo [sic] Hall<sup>20</sup> opposite was to be blown up but didn't believe it — only two persons were there + they carried the powder in — I went up stairs once more to save my papers — Drawings + Sketches — my work — they were in the 3rd story in the drawer of my table — I got them — I happened to think of it + particularly wanted the things — this was when they began rolling the powder in — at the moment I started up to get my papers they were just entering the back door with the powder — I knew it could be nothing else — I got only my papers — ...



**The Great Fire by Julius Hutawa, 1849.** Although the fire started to the north (on the right) in the commercial district, a southern fire began when the steamboat *Edward Bates* caught fire and touched the shoreline. Winds blew the blaze ashore where it caught the small homes and shacks of primarily poor immigrants along with a candle factory. (Image: Missouri Historical Society)



PARADE UNIFORMS OF THE ST. LOUIS VOLUNTEER FIRE DEPARTMENT, 1840-1860.

**The St. Louis Volunteer Fire Department wore uniforms like these for parades, but not for fighting the fire in 1849.** (Image: Missouri Historical Society)

## ENDNOTES

<sup>1</sup> Catherwood was the St. Louis merchant who assisted Phillips in moving some of his stock before the Phillips store was engulfed in flames. As it transpired, the building was blown up before the fire reached it—but the result was the same. In the 1848 City Directory there is no William Catherwood listed, but there is a Robert H. Catherwood, profession rectifier (maker of distilled liquors), listed at the corner of Chesnut and Front, which is precisely where Catherwood says his store was located in the testimony. Catherwood's residence is listed at Olive between 8th and 9th streets. It seems likely that these two men—William and Robert—are one in the same, and that a mistake was made either in the City Directory or in the court transcription. See the *1848 St. Louis City Directory*, J.H. Sloss, Printed by Charles and Hammond, Book and Job Printers, Corner of Main and Olive Streets, St. Louis, MO, accessed online at <http://repository.wustl.edu/concern/texts/1544br47h>, p. 50.

<sup>2</sup> The 1848 City Directory contains an advertisement for the store: "Nathaniel Phillips, old established music & military store, No. 42 Market Street, St. Louis, sign of the golden eagle. Piano Fortes, music, and Musical Instruments. The subscriber keeps constantly on hand the largest and most complete assortment to be found in the western country. Travelers are particularly invited to examine this stock, which will be sold at eastern prices. CHICKERING'S PIANOS—These instruments, for superiority of touch, readiness of tone, and elegance of workmanship, have always obtained the Gold Medal, and are not equalled by any in the country. A most satisfactory guarantee is given with every instrument sold, and great care taken packing. Music published and constantly received from all parts of the country. Seminaries, Music Dealers, Military Bands and Officers of the Army, supplied on the most reasonable terms. MASONIC AND ODD-FELLOWS' REGALIA; ALSO—FLAGS AND BANNERS, OF ALL KINDS, constantly on hand, and made to order. sole agent for CHICKERING'S PIANOS, J. F. BROWN'S HARPS, AND CARHART'S IMPROVED MELODIAN. This establishment has no connection with any other in the city. All orders must be addressed to N. Phillips, 42 Market Street." *1848 St. Louis City Directory*, 241.

<sup>3</sup> This would be the store run by Charles and Frederick Jacoby at 33 Market Street. See the *1848 St. Louis City Directory*, 122.

<sup>4</sup> A signal that the firemen were about to explode gunpowder charges and a warning to all to take cover.

<sup>5</sup> Much has been written about Thomas Targee and his death during the Great Fire of 1849. The testimony presented in this insurance lawsuit refutes some of the information usually cited about his death. In particular, the final witness quoted here, Francis Lammerson, states that he was still in the music store on the second floor when "they began rolling the [powder] casks in," meaning that Targee entered the store after everyone else had left and the powder casks were already set in place. Thomas Targee was born in New York City in 1808 and moved to St. Louis in October 1836. He was an auctioneer, and he was later appointed to the important and lucrative position of City Weigher, in which he was in charge of weighing items shipped in and out of the city and charging fees and duties for them. He would have had an office in the City Market Building and been in charge of the many large scales positioned along the levee. In that era it was fashionable for prominent citizens to join volunteer fire companies—St. Louis did not have a professional fire department until 1857. By the time of the Great Fire the city had ten volunteer companies. Targee joined the Union Fire Co. in 1836, and in 1839 he helped to form Missouri Fire Co. No. 5, where he became a captain. According to historian Walter Barlow Stevens, Targee "advocated the blowing up of houses in advance of the flames as the most effective means of stopping the spread." Accounts of his death state that "the explosion was almost instantaneous, and [that] poor Targee's body was found in pieces here and there, his head being discovered on the roof of a building nearly a block away." See Thomas Lynch, *The Volunteer Fire Department of St. Louis 1819-1859* (St. Louis: R. & T. A. Ennis, 1880), 89, and Walter Barlow Stevens, *St. Louis, the Fourth City 1764-1911*, Volume I (St. Louis: The S. J. Clarke Publishing Co., 1911), 121.

<sup>6</sup> The Virginia Hotel, John H. Sparr, proprietor, was listed at the northwest corner of Main and Green Streets (in the area today known as Laclede's Landing) in *Green's 1851 St. Louis City Directory*, 354, accessed online at <http://repository.wustl.edu/concern/texts/6h440v98r>

<sup>7</sup> Frederick Kretschmar is listed in the *1848 St. Louis City Directory*, 136, as "justice of the peace, office corner Walnut and Second, residence 32 Walnut."

<sup>8</sup> The Town Hall was then located inside the St. Louis City Market Building fronting the river. Accounts of the period say that the roof caught fire but that it was extinguished quickly. The building survived the fire but was torn down by 1852 to make way for new commercial buildings being built along the riverfront.

<sup>9</sup> James Shoeb is not listed in the 1848 City Directory. As a musician he may not have been a resident of St. Louis but may have traveled frequently and rented a hotel room when in town.

<sup>10</sup> Thornton Grimsley is listed in the 1848 City Directory, 102, with "saddlery ware rooms, 41 north First, residence Fourth between Myrtle [Clark] and Elm." Grimsley was a nationally known figure, most famous for his design of new types of saddles, first for the fur trade and then in 1833 for the U.S. military. The Grimsley Saddle was the regulation army saddle for 26 years. Grimsley was born in Kentucky in 1798 and moved to St. Louis in 1822, where he was one of the leading businessmen and involved in community affairs. He raised a unit for service in the Mexican-American War but was not called up for service. A Whig, Grimsley served as a city alderman and in both the Missouri House of Representatives and later the State Senate. Grimsley had ten children. His daughter Minerva married Henry Taylor Blow, and their daughter Susan Elizabeth Blow founded the free kindergarten movement in the United States. Grimsley died in 1861 in St. Louis. See the Lawrence O. Christensen, William E. Foley, and Gary Kremer, eds., *Dictionary of Missouri Biography*, (Columbia: University of Missouri Press), 1999.

<sup>11</sup> Thomas Targee, listed in the 1848 City Directory as "city weigher, 67 Front."



<sup>12</sup> George Morton, listed in the 1848 City Directory as living at 140 Spruce Street, was one of St. Louis' first practicing architects. In partnership with Joseph C. Laveille, Morton formed the first architectural firm west of the Mississippi in St. Louis about 1823. His firm designed not only the first courthouse for St. Louis (1828), but also the Old Cathedral (1834, the only one of their buildings still standing), the first Episcopal church on the northwest corner of 3rd and Chestnut (1825-1826), St. Louis University at Christy and 9th streets, and the first buildings at Jefferson Barracks (1826) south of the city. George Morton was born in Scotland in 1790 and immigrated to the United States, first settling in Pittsburgh. He moved his family to St. Louis in 1818. Morton first formed a partnership with Philip Rochblave as carpenters and builders, but by 1823 was linked with Laveille. Morton also served as a city alderman. In later years he retired due to ill health. Despite having single-handedly designed most of early St. Louis' most notable public buildings, in 1834 Morton and Laveille dissolved their partnership; Laveille went into the lumber business, while Morton went into real estate. Joseph Laveille died in 1842, while George Morton lived until 1865.

<sup>13</sup> Do'ench & Pelloux, wholesale druggists, were located at the "northeast corner of Second and Market," according to *Green's 1847 City Directory*, Published by James Green, and Cathcart & Prescott, accessed online at [http://repository.wustl.edu/concern/texts/9g54xm452\\_59](http://repository.wustl.edu/concern/texts/9g54xm452_59).

<sup>14</sup> Today known as the Old Courthouse.

<sup>15</sup> Grimsley's saddlery business was located at 41 North Main (or First) Street. The 1848 City Directory contains an advertisement for the establishment: "Thornton Grimsley's Patent Dragoon Saddle, Manufactured at No. 41 N. First Street, St. Louis. All kinds of Military Work constantly on hand, or made to order, at short notice." *1848 St. Louis City Directory*, 290. This store was completely destroyed in the Great Fire.

<sup>16</sup> After the fire, buildings were mandated to be built of brick in the business district, with cast-iron shutters on the windows and roofs of sheet iron or slate.

<sup>17</sup> David H. Armstrong is listed as the City Comptroller in the *1848 St. Louis City Directory*, introductory pages.

<sup>18</sup> Edward N. Parker, of Parker & Co. The business was listed at 85 North First Street in the *1848 St. Louis City Directory*, 180.

<sup>19</sup> Francis Lammerson was not listed in the 1848 City Directory. He said in his testimony that he lived "below the city," that is, south of the city.

<sup>20</sup> Apollo Hall was a rival store to the Nathaniel Phillips Music Store. Apollo Hall was run by James Phillips (no relation to Nathaniel, so far as is known) and was located at 39 Market Street, almost directly across the street from the Phillips Music Store. The fact that two stores run by men named Phillips selling almost identical merchandise and being located across the street from one another has been a source of confusion to historians. Apparently, it was also confusing to St. Louisans of the era; advertisements for both music stores take pains to state that they are "not connected with any other Music Store in this city." In the 1848 directory is an advertisement for Apollo Hall which reads: "Has constantly on hand and for sale, at his Music and Umbrella Store, a complete catalogue of Vocal and Instrumental Music. Also, a large and well selected assortment of Piano Fortes, among which are Grow & Christopher's, of New York, and Hallet, Cumston & Allen's, of Boston. These manufacturers have received gold medals from the three last Fairs in Boston and New York, for fine touch and good toned Piano Fortes. Musical Instruments and Musical Merchandise. Umbrellas, Parasols, Canes, And every variety of Fancy and Military Goods. Wrought, Shell and Buffalo Combs, of new patterns; Work Boxes, Card Cases, Card Receivers, Jewel Boxes, Jenny Lind Silver Candlesticks, Silver Fruit Knives, Polka Bells, Fans, elegant Dressing Cases, Odor Cases, Head Ornaments, Purses, Trimmings, & c. Dr. Ward's Tooth Powder, of Boston; Lubin's and Roussel's Perfumery, & c.

\*The above establishment is not connected with any other Music Store in this city. "Remember, there is but One Apollo Hall—39 Market Street." *1848 St. Louis City Directory*, 292.

## ABOUT THE AUTHORS



DIANE EVERMAN

**Diane Everman** is the archivist for the Holocaust Museum and Learning Center in St. Louis. She is also archivist for the St. Louis Jewish Community Archives as well as the corporate archivist for Enterprise Holdings Inc. Since 1985, she has participated in surveys, archaeological excavations, and research studies in Israel, as well as in Greece and Italy. She has a BA and MA in history from Oklahoma State University and a Ph.D. from University of Maryland-College Park.



QUINTA SCOTT

In the years since she published *The Mississippi* (University of Missouri Press, 2010), **Quinta Scott** has been documenting the landscape of Missouri's Ozark. She has published six articles in *The Confluence* under the title, "So Much to Learn." The first series covered the establishment of the Missouri Conservation Commission in 1937 and the work of its young biologists between its founding and the beginning of World War II. The second covered the issues surrounding the springs that deliver water to the Current River, including the establishment of the Ozark National Scenic Riverways within the National Park Service and the threat of lead mining to the springs. This issue includes the last of the series, the sources of water for the springs, some of which extend beyond the Current River Watershed.



DANIEL GONZALES

**Daniel Gonzales** earned his M.A. in museum studies from the University of Missouri-St. Louis in the spring of 2010 as an E. Desmond Lee Fellow. Following graduation he began work as a researcher at the Missouri History Museum. In 2013, Daniel took on the position of Museum Curator with the St. Louis County Parks system, eventually being promoted to Historian for St. Louis County. In 2018, he took the position of Director of Exhibitions Research at the Indiana Historical Society.



BOB MOORE

**Bob Moore** has been the historian for the National Park Service at Gateway Arch National Park since 1991. He holds a Bachelor of Fine Arts degree from Syracuse University, and master's and Ph.D. degrees in history from Washington University in St. Louis, where he teaches as a senior lecturer in American Culture Studies and the Graduate School of Architecture. He is the author of eight books, including *The Gateway Arch: An Architectural Dream*; *Lewis and Clark: Tailor Made, Trail Worn*; and *Native Americans: The Art and Travels of Charles Bird King, George Catlin, and Karl Bodmer*.



# LINDENWOOD

209 South Kingshighway  
Saint Charles, MO 63301-1695  
[www.lindenwood.edu/confluence](http://www.lindenwood.edu/confluence)

